



CENAB-EN-HM

**U.S. Army Corps of Engineers
Baltimore District**

FINAL

**Site Investigation
Fort Monmouth, New Jersey
Main Post and Charles Wood Areas**

Site Investigation Report

Contract Number DACA31-92-D-0018

Delivery Order 0041/0045/0047

December 1995

Prepared for:

U.S. ARMY CORPS OF ENGINEERS
10 South Howard Street
Baltimore, Maryland 21201

95P-4674

 **PRINTED ON RECYCLED PAPER**

Prepared by:

WESTON
MANAGERS DESIGNERS/CONSULTANTS

Roy F. Weston, Inc.
West Chester,
Pennsylvania 19380-1496

200.1e
FTMM_01.08_0505_a

FINAL
SITE INVESTIGATION
FORT MONMOUTH, NEW JERSEY
MAIN POST AND CHARLES WOOD AREAS

Prepared For:

U.S. ARMY CORPS OF ENGINEERS
Baltimore District
10 South Howard Street
Baltimore, MD 21201

Under:

Contract DACA31-92-D-0018

Prepared By:

ROY F. WESTON, INC.
1 Weston Way
West Chester, PA 19380-1499

December 1995

TABLE OF CONTENTS

<u>Section</u>	<u>Title</u>	<u>Page</u>
	EXECUTIVE SUMMARY	ES-1
1	INTRODUCTION	1-1
1.1	Project Objectives	1-1
1.2	Facility Description	1-2
1.2.1	Owner/Operator Information	1-2
1.2.2	Location of Fort Monmouth	1-2
1.2.2.1	Main Post	1-5
1.2.2.2	Charles Wood Area	1-5
1.2.3	Mission Statement	1-5
1.2.4	History of Fort Monmouth	1-7
2	ENVIRONMENTAL SETTING	2-1
2.1	Climate	2-1
2.2	Topography	2-1
2.2.1	Main Post	2-1
2.2.2	Charles Wood	2-2
2.3	Surface-Water Drainage and Wetlands	2-2
2.3.1	Main Post	2-2
2.3.2	Charles Wood	2-5
2.4	Soils	2-5
2.4.1	Main Post	2-5
2.4.2	Charles Wood	2-10
2.5	Geology	2-12
2.5.1	Regional Geology	2-12
2.5.2	Local Geology	2-12
2.6	Hydrogeology	2-14
2.7	Vegetation and Wildlife	2-15
3	INVESTIGATION ACTIVITIES	3-1
3.1	Geophysics	3-1
3.1.1	Electromagnetic (EM) Terrain Conductivity Surveying Methods	3-1
3.1.1.1	Description	3-1
3.1.1.2	Methodology	3-2
3.1.2	Magnetic (MAG) Methods	3-3



TABLE OF CONTENTS (Continued)

<u>Section</u>	<u>Title</u>	<u>Page</u>
	3.1.2.1 Description	3-3
	3.1.2.2 Methodology	3-3
3.1.3	Ground Penetrating Radar (GPR) Methods	3-4
	3.1.3.1 Description	3-4
	3.1.3.2 Methodology	3-5
3.2	Sediment Sampling	3-5
3.3	Surface-Water Sampling	3-7
3.4	Surface Soil Samples	3-9
3.5	PCB Transformer Site Sampling	3-10
	3.5.1 General	3-10
	3.5.2 Sample Collection Procedures	3-13
3.6	Soil Borings	3-16
3.7	Groundwater Monitor Well Installation	3-18
	3.7.1 Well Development	3-19
	3.7.2 Well Abandonment	3-22
3.8	Groundwater Sampling	3-23
3.9	Tidal Monitoring	3-25
 4	 RESULTS OF INVESTIGATION	 4.1-1
4.1	Comparison with New Jersey Standards and Background	4.1-1
4.2	Main Post	4.2-1
	4.2.1 Background Samples	4.2-1
	4.2.1.1 Hydrogeologic Interpretation	4.2-5
	4.2.1.2 Soil Sampling Results	4.2-5
	4.2.1.3 Groundwater Sampling Results	4.2-6
	4.2.1.4 Surface-Water Sampling Results	4.2-7
	4.2.1.5 Sediment Sampling Results	4.2-8
	4.2.2 Landfill 2 (M-2)	4.2-15
	4.2.2.1 Site Location	4.2-15
	4.2.2.2 Site History	4.2-15
	4.2.2.3 Sampling Effort	4.2-16
	4.2.2.4 Hydrogeologic Interpretation	4.2-16
	4.2.2.5 Groundwater Sampling Results	4.2-17
	4.2.2.6 Surface-Water Sampling Results	4.2-19
	4.2.2.7 Tidal Monitoring	4.2-21

TABLE OF CONTENTS
(Continued)

<u>Section</u>	<u>Title</u>	<u>Page</u>
	4.2.2.7.1 Conductivity and Salinity Results	4.2-22
	4.2.2.8 Recommendations	4.2-23
4.2.3	Landfill 3 (M-3)	4.2-33
	4.2.3.1 Site Location	4.2-33
	4.2.3.2 Site History	4.2-33
	4.2.3.3 Sampling Effort	4.2-33
	4.2.3.4 Geophysical Results	4.2-34
	4.2.3.5 Hydrogeologic Interpretation	4.2-35
	4.2.3.6 Groundwater Sampling Results	4.2-35
	4.2.3.7 Surface-Water Sampling Results	4.2-38
	4.2.3.8 Recommendations	4.2-40
4.2.4	Landfill 4 (M-4)	4.2-57
	4.2.4.1 Site Location	4.2-57
	4.2.4.2 Site History	4.2-57
	4.2.4.3 Sampling Effort	4.2-57
	4.2.4.4 Hydrogeologic Interpretation	4.2-57
	4.2.4.5 Groundwater Sampling Results	4.2-58
	4.2.4.6 Recommendations	4.2-60
4.2.5	Landfill 5 (M-5)	4.2-63
	4.2.5.1 Site Location	4.2-63
	4.2.5.2 Site History	4.2-63
	4.2.5.3 Sampling Effort	4.2-63
	4.2.5.4 Hydrogeologic Interpretation	4.2-64
	4.2.5.5 Groundwater Sampling Results	4.2-64
	4.2.5.6 Recommendations	4.2-67
4.2.6	Burning Area (M-6)	4.2-69
	4.2.6.1 Site Location	4.2-69
	4.2.6.2 Site History	4.2-69
	4.2.6.3 Sampling Effort	4.2-69
4.2.7	Landfill 8 (M-8)	4.2-71
	4.2.7.1 Site Location	4.2-71
	4.2.7.2 Site History	4.2-71
	4.2.7.3 Sampling Effort	4.2-72
	4.2.7.4 Hydrogeologic Interpretation	4.2-72
	4.2.7.5 Groundwater Sampling Results	4.2-73
	4.2.7.6 Tidal Monitoring	4.2-76
	4.2.7.6.1 Conductivity and Salinity Results	4.2-77



TABLE OF CONTENTS
(Continued)

<u>Section</u>	<u>Title</u>	<u>Page</u>
	4.2.7.7 Recommendations	4.2-78
4.2.8	Landfill 12 (M-12)	4.2-87
	4.2.8.1 Site Location	4.2-87
	4.2.8.2 Site History	4.2-87
	4.2.8.3 Sampling Effort	4.2-87
	4.2.8.4 Geophysical Results	4.2-87
	4.2.8.5 Hydrogeologic Interpretation	4.2-89
	4.2.8.6 Groundwater Sampling Results	4.2-89
	4.2.8.7 Tidal Monitoring — Landfill 12 and Landfill 14 (M-12 and M-14)	4.2-92
	4.2.8.7.1 Conductivity and Salinity Results	4.2-93
	4.2.8.8 Recommendations	4.2-93
4.2.9	Landfill 14 (M-14)	4.2-107
	4.2.9.1 Site Location	4.2-107
	4.2.9.2 Site History	4.2-107
	4.2.9.3 Sampling Effort	4.2-107
	4.2.9.4 Geophysical Results	4.2-108
	4.2.9.5 Hydrogeologic Interpretation	4.2-108
	4.2.9.6 Groundwater Sampling Results	4.2-109
	4.2.9.7 Surface-Water Sampling Results	4.2-111
	4.2.9.8 Recommendations	4.2-113
4.2.10	Water Tank (M-15)	4.2-119
	4.2.10.1 Site Location	4.2-119
	4.2.10.2 Site History	4.2-119
	4.2.10.3 Sampling Effort	4.2-119
	4.2.10.4 Soil Sampling Results	4.2-119
	4.2.10.5 Recommendations	4.2-121
4.2.11	Former Pesticide Storage Building (M-16)	4.2-125
	4.2.11.1 Site Location	4.2-125
	4.2.11.2 Site History	4.2-125
	4.2.11.3 Sampling Effort	4.2-125
	4.2.11.4 Hydrogeologic Interpretation	4.2-126
	4.2.11.5 Soil Sampling Results	4.2-126
	4.2.11.6 Groundwater Sampling Results	4.2-129
	4.2.11.7 Recommendations	4.2-131
4.2.12	Former Training Area (M-18)	4.2-139
	4.2.12.1 Site Location	4.2-139



TABLE OF CONTENTS
(Continued)

<u>Section</u>	<u>Title</u>	<u>Page</u>
	4.2.12.2 Site History	4.2-139
	4.2.12.3 Sampling Effort	4.2-139
	4.2.12.4 Geophysical Results	4.2-140
	4.2.12.5 Hydrogeologic Interpretation	4.2-141
	4.2.12.6 Soil Sampling Results	4.2-141
	4.2.12.7 Groundwater Sampling Results	4.2-145
	4.2.12.8 Recommendations	4.2-148
4.2.13	Former Main Post Sanitary Treatment Plant (AOC-3)	4.2-163
	4.2.13.1 Site Location	4.2-163
	4.2.13.2 Site History	4.2-163
	4.2.13.3 Sampling Effort	4.2-163
	4.2.13.4 Soil Sampling Results	4.2-164
	4.2.13.5 Sediment Sampling Results	4.2-166
	4.2.13.6 Recommendations	4.2-168
4.2.14	Pre-1941 Sanitary Treatment Plant (STP)	4.2-171
	4.2.14.1 Site Location	4.2-171
	4.2.14.2 Site History	4.2-171
	4.2.14.3 Sampling Effort	4.2-171
	4.2.14.4 Sediment Sampling Results	4.2-171
	4.2.14.5 Recommendations	4.2-173
4.2.15	PCB Transformers	4.2-177
	4.2.15.1 Site Location	4.2-177
	4.2.15.2 Site History	4.2-177
	4.2.15.3 Sampling Effort	4.2-177
	4.2.15.4 PCB Sampling Results	4.2-177
	4.2.15.5 Recommendations	4.2-179
4.3	Charles Wood	4.3-1
4.3.1	Background Samples	4.3-1
	4.3.1.1 Hydrogeologic Interpretation	4.3-5
	4.3.1.2 Soil Sampling Results	4.3-5
	4.3.1.3 Groundwater Sampling Results	4.3-6
	4.3.1.4 Surface-Water Sampling Results	4.3-7
	4.3.1.5 Sediment Sampling Results	4.3-8
4.3.2	Wastewater Treatment Lime Pit 1 (CW-1)	4.3-13
	4.3.2.1 Site Location	4.3-13
	4.3.2.2 Site History	4.3-13
	4.3.2.3 Sampling Effort	4.3-14



TABLE OF CONTENTS
(Continued)

<u>Section</u>	<u>Title</u>	<u>Page</u>
	4.3.2.4 Hydrogeologic Interpretation	4.3-14
	4.3.2.5 Soil Sampling Results	4.3-15
	4.3.2.6 Groundwater Sampling Results	4.3-18
	4.3.2.7 Recommendations	4.3-19
4.3.3	Wastewater Treatment Lime Pit 2 (CW-2)	4.3-27
	4.3.3.1 Site Location	4.3-27
	4.3.3.2 Site History	4.3-27
	4.3.3.3 Sampling Effort	4.3-27
	4.3.3.4 Hydrogeologic Interpretation	4.3-28
	4.3.3.5 Soil Sampling Results	4.3-29
	4.3.3.6 Groundwater Sampling Results	4.3-31
	4.3.3.7 Recommendations	4.3-33
4.3.4	Landfill 3 (CW-3)	4.3-35
	4.3.4.1 Site Location	4.3-35
	4.3.4.2 Site History	4.3-35
	4.3.4.3 Sampling Effort	4.3-35
	4.3.4.4 Recommendations	4.3-36
4.3.5	Debris Site (CW-3A)	4.3-39
	4.3.5.1 Site Location	4.3-39
	4.3.5.2 Site History	4.3-39
	4.3.5.3 Sampling Effort	4.3-39
	4.3.5.4 Geophysical Results	4.3-39
	4.3.5.5 Recommendations	4.3-40
4.3.6	Range (Small Arms) (CW-4)	4.3-51
	4.3.6.1 Site Location	4.3-51
	4.3.6.2 Site History	4.3-51
	4.3.6.3 Sampling Effort	4.3-51
	4.3.6.4 Soil Sampling Results	4.3-52
	4.3.6.5 Recommendations	4.3-54
4.3.7	Former Sanitary Treatment Plant (CW-5)	4.3-59
	4.3.7.1 Site Location	4.3-59
	4.3.7.2 Site History	4.3-59
	4.3.7.3 Sampling Effort	4.3-59
	4.3.7.4 Soil Sampling Results	4.3-60
	4.3.7.5 Sediment Sampling Results	4.3-62
	4.3.7.6 Recommendations	4.3-63
4.3.8	Pesticide Storage Building T-2044 (CW-6)	4.3-65



TABLE OF CONTENTS
(Continued)

<u>Section</u>	<u>Title</u>	<u>Page</u>
	4.3.8.1 Site Location	4.3-65
	4.3.8.2 Site History	4.3-65
	4.3.8.3 Sampling Effort	4.3-66
	4.3.8.4 Hydrogeologic Interpretation	4.3-66
	4.3.8.5 Soil Sampling Results	4.3-67
	4.3.8.6 Groundwater Sampling Results	4.3-69
	4.3.8.7 Recommendations	4.3-71
4.3.9	Sludge Dump (CW-9)	4.3-79
	4.3.9.1 Site Location	4.3-79
	4.3.9.2 Site History	4.3-79
	4.3.9.3 Sampling Effort	4.3-79
	4.3.9.4 Hydrogeologic Interpretation	4.3-80
	4.3.9.5 Soil Sampling Results	4.3-80
	4.3.9.6 Groundwater Sampling Results	4.3-83
	4.3.9.7 Recommendations	4.3-85
4.3.10	Former Hazardous Waste Storage Area (AOC-7)	4.3-87
	4.3.10.1 Site Location	4.3-87
	4.3.10.2 Site History	4.3-87
	4.3.10.3 Sampling Effort	4.3-88
	4.3.10.4 Soil Sampling Results	4.3-88
	4.3.10.5 Recommendations	4.3-90
4.3.11	PCB Transformers	4.3-93
	4.3.11.1 Site Location	4.3-93
	4.3.11.2 Site History	4.3-93
	4.3.11.3 Sampling Effort	4.3-93
	4.3.11.4 PCB Sampling Results	4.3-93
	4.3.11.5 Recommendations	4.3-95
5	DATA QUALITY	5-1
5.1	Introduction	5-1
5.2	Quality Control Procedures	5-5
5.2.1	Field and Laboratory Quality Control Samples	5-5
5.2.2	Field Activities	5-6
5.2.3	Laboratory Activities	5-7
5.2.3.1	Laboratory Equipment Quality Control	5-7
5.2.3.2	Laboratory Data	5-7



TABLE OF CONTENTS (Continued)

<u>Section</u>	<u>Title</u>	<u>Page</u>
5.3	Data Quality	5-8
5.3.1	Data Reporting	5-8
5.3.2	Data Validation/Usability Review	5-8
5.3.3	Results of Data Validation/Usability Review	5-9
5.3.4	Results of Field and Trip Blanks	5-10
5.3.5	Duplicates	5-16
5.3.5.1	Groundwater	5-16
5.3.5.2	Surface Water	5-16
5.3.5.3	Sediments	5-18
5.3.5.4	Soils	5-18
5.4	Tentatively Identified Compounds (TICs)	5-18
5.5	Comparison of Analytical Detection Limits and Remediation Standards	5-19
6	CONCLUSIONS AND RECOMMENDATIONS	6-1
6.1	Main Post	6-1
6.1.1	Landfill 2 (M-2)	6-1
6.1.1.1	Conclusions	6-1
6.1.1.2	Recommendations	6-4
6.1.2	Landfill 3 (M-3)	6-5
6.1.2.1	Conclusions	6-5
6.1.2.2	Recommendations	6-6
6.1.3	Landfill 4 (M-4)	6-7
6.1.3.1	Conclusions	6-7
6.1.3.2	Recommendations	6-7
6.1.4	Landfill 5 (M-5)	6-8
6.1.4.1	Conclusions	6-8
6.1.4.2	Recommendations	6-9
6.1.5	Landfill 8 (M-8)	6-9
6.1.5.1	Conclusions	6-10
6.1.5.2	Recommendations	6-10
6.1.6	Landfill 12 (M-12)	6-11
6.1.6.1	Conclusions	6-12
6.1.6.2	Recommendations	6-12
6.1.7	Landfill 14 (M-14)	6-12
6.1.7.1	Conclusions	6-13
6.1.7.2	Recommendations	6-13



TABLE OF CONTENTS
(Continued)

<u>Section</u>	<u>Title</u>	<u>Page</u>
6.1.8	Water Tank (M-15)	6-13
6.1.8.1	Conclusions	6-14
6.1.8.2	Recommendations	6-14
6.1.9	Former Pesticide Storage Building (M-16)	6-14
6.1.9.1	Conclusions	6-14
6.1.9.2	Recommendations	6-15
6.1.10	Former Training Areas (M-18)	6-15
6.1.10.1	Conclusions	6-15
6.1.10.2	Recommendations	6-16
6.1.11	Former Main Post Sanitary Treatment Plant (AOC-3)	6-16
6.1.11.1	Conclusions	6-17
6.1.11.2	Recommendations	6-17
6.1.12	Pre-1941 Sanitary Treatment Plant	6-17
6.1.12.1	Conclusions	6-17
6.1.12.2	Recommendations	6-17
6.1.13	PCB Transformers — Main Post	6-18
6.1.13.1	Conclusions	6-18
6.1.13.2	Recommendations	6-18
6.2	Charles Wood	6-19
6.2.1	Wastewater Treatment Lime Pit 1 (CW-1)	6-19
6.2.1.1	Conclusions	6-19
6.2.1.2	Recommendations	6-19
6.2.2	Wastewater Treatment Lime Pit 2 (CW-2)	6-21
6.2.2.1	Conclusions	6-21
6.2.2.2	Recommendations	6-22
6.2.3	Landfill 3 (CW-3)	6-23
6.2.4	Debris Site (CW-3A)	6-23
6.2.4.1	Conclusions	6-23
6.2.4.2	Recommendations	6-23
6.2.5	Range (Small Arms) (CW-4)	6-24
6.2.5.1	Conclusions	6-24
6.2.5.2	Recommendations	6-24
6.2.6	Former Sanitary Treatment Plant (CW-5)	6-25
6.2.6.1	Conclusions	6-25
6.2.6.2	Recommendations	6-25
6.2.7	Pesticide Storage Building T-2044 (CW-6)	6-25
6.2.7.1	Conclusions	6-26

TABLE OF CONTENTS (Continued)

<u>Section</u>	<u>Title</u>	<u>Page</u>
	6.2.7.2 Recommendations	6-26
6.2.8	Sludge Dump (CW-9)	6-26
	6.2.8.1 Conclusions	6-27
	6.2.8.2 Recommendations	6-27
6.2.9	Former Hazardous Waste Storage Area (AOC-7)	6-27
	6.2.9.1 Conclusions	6-27
	6.2.9.2 Recommendations	6-27
6.2.10	PCB Transformers — Charles Wood	6-27
	6.2.10.1 Conclusions	6-28
	6.2.10.2 Recommendations	6-28

LIST OF ACRONYMS	Acr-1
-------------------------	--------------

REFERENCES	R-1
-------------------	------------

APPENDIX A — MAIN POST AND CHARLES WOOD BOREHOLE LOGS AND WELL COMPLETION SUMMARIES
--

APPENDIX B — SURVEY DATA

APPENDIX C — WELL DEVELOPMENT LOGS

APPENDIX D — SAMPLING RESULTS

APPENDIX E — TIDAL MONITORING GRAPHS

APPENDIX F — GPR PROFILES (To be provided at a later date)



LIST OF FIGURES

<u>Figure No.</u>	<u>Title</u>	<u>Page</u>
1.1-1	Location of Main Post and Charles Wood	1-3
2.3-1	Main Post and Charles Wood Wetlands	2-3
2.4-1	Main Post and Charles Wood Soil Series Map	2-7
3.5-1	Transformer Site Sampling Locations at Building 1220, Main Post	3-14
3.5-2	Transformer Site Sampling Locations at Buildings 2000 and 2018, Charles Wood	3-15
4.2-1	Main Post Site Location Map	4.2-11
4.2-2	Main Post Background Sample Locations	4.2-13
4.2-3	Landfill 2 (M-2) Sampling Locations	4.2-25
4.2-4	Landfill 2 (M-2) Approximate Groundwater Flow Directions	4.2-27
4.2-5	Distribution of Contaminants in Site Groundwater and Surface-Water Samples	4.2-29
4.2-6	Main Post Surface-Water and Sediment Sampling Locations	4.2-31
4.2-7	Landfills 3, 4, and 5 (M-3, M-4, and M-5) Sampling Locations	4.2-43
4.2-8	Magnetometer Survey Total Magnetic Field — Site M-3	4.2-45
4.2-9	Magnetometer Survey Magnetic Gradient — Site M-3	4.2-47
4.2-9A	Representative Radar Profile Depicting Landfill Boundary at Site M-3	4.2-49
4.2-9B	Radar Profile Showing Surface Drum and Hyperbolic Radar Signatures at Site M-3	4.2-51
4.2-10	Landfills 3, 4, and 5 (M-3, M-4, and M-5) Approximate Groundwater Flow Directions	4.2-53
4.2-11	Landfills 3, 4, and 5 (M-3, M-4, and M-5) Distribution of Contaminants in Site Groundwater	4.2-55



**LIST OF FIGURES
(Continued)**

<u>Figure No.</u>	<u>Title</u>	<u>Page</u>
4.2-12	Incinerator (M-7) and Landfill 8 (M-8) Sampling Locations	4.2-81
4.2-13	Incinerator (M-7) and Landfill 8 (M-8) Approximate Groundwater Flow Directions	4.2-83
4.2-14	Incinerator (M-7) and Landfill 8 (M-8) Distribution of Contaminants in Site Groundwater	4.2-85
4.2-15	Landfills 12 (M-12) and 14 (M-14) Sampling Locations	4.2-95
4.2-16	Magnetometer Survey Total Magnetic Field — Site M-12 NE	4.2-97
4.2-17	Magnetometer Survey Magnetic Gradient — Site M-12 NE	4.2-99
4.2-18	Magnetometer Survey Total Magnetic Field — Site M-12 SW	4.2-101
4.2-19	Magnetometer Survey Magnetic Gradient — Site M-12 SW	4.2-103
4.2-20	Landfills 12 (M-12) and 14 (M-14) Approximate Groundwater Flow Directions	4.2-105
4.2-21	Magnetometer Survey Total Magnetic Field — Site M-14	4.2-115
4.2-22	Magnetometer Survey Magnetic Gradient — Site M-14	4.2-117
4.2-23	Water Tank (M-15) Sampling Locations	4.2-123
4.2-24	Water Tank (M-15) Distribution of Contaminants in Site Soil	4.2-124
4.2-25	Former Pesticide Storage Building (M-16) Sampling Locations	4.2-133
4.2-26	Former Pesticide Storage Building (M-16) Approximate Groundwater Flow Directions	4.2-135
4.2-27	Former Pesticide Storage Building (M-16) Distribution of Contaminants in Site Soil	4.2-137
4.2-28	Former Training Area (M-18) Sampling Locations	4.2-151
4.2-29	Electromagnetic Survey Quadrature Component — Site M-18	4.2-153

LIST OF FIGURES
(Continued)

<u>Figure No.</u>	<u>Title</u>	<u>Page</u>
4.2-30	Electromagnetic Survey in Phase Component — Site M-18	4.2-155
4.2-30A	Radar Profile Depicting Potential UST at Site M-18	4.2-157
4.2-31	Former Training Area (M-18) Approximate Groundwater Flow Directions	4.2-159
4.2-32	Former Training Area (M-18) Distribution of Contaminants in Site Soil and Groundwater	4.2-161
4.2-33	Former Sanitary Treatment Plant (AOC-3) Soil and Sediment Sampling Locations	4.2-169
4.2-34	Pre-1941 Sanitary Treatment Plant (Distribution of Contaminants in Site Sediment)	4.2-175
4.2-35	Main Post Transformer Site Sample Locations	4.2-181
4.3-1	Charles Wood Site Location Map	4.3-9
4.3-2	Charles Wood Background Sample Locations	4.3-11
4.3-3	Acid Neutralization Lime Pits (CW-1 and CW-2) Sampling Locations	4.3-21
4.3-4	Acid Neutralization Lime Pits (CW-1 and CW-2) Approximate Groundwater Flow Directions	4.3-23
4.3-5	Acid Neutralization Lime Pits (CW-1 and CW-2) Distribution of Contaminants in Site Soil and Groundwater	4.3-25
4.3-6	Landfills 3 (CW-3) and 3A (CW-3A)	4.3-37
4.3-7	Electromagnetic Survey Quadrature Component — Site CW-3A	4.3-41
4.3-8	Electromagnetic Survey in Phase Component — Site CW-3A	4.3-43
4.3-9	Magnetometer Survey Total Magnetic Field — Site CW-3A	4.3-45
4.3-10	Magnetometer Survey Magnetic Gradient — Site CW-3A	4.3-47
4.3-10A	Radar Profile Showing Subsurface Anomaly at Site CW-3A	4.3-49



**LIST OF FIGURES
(Continued)**

<u>Figure No.</u>	<u>Title</u>	<u>Page</u>
4.3-11	Small Arms Range (CW-4) and Former Sanitary Treatment Plant (CW-5) Sampling Locations	4.3-55
4.3-12	Small Arms Range (CW-4) and Former Sanitary Treatment Plant (CW-5) Distribution of Contaminants in Site Soils	4.3-57
4.3-13	Pesticide Storage Building (CW-6) and Sludge Dump (CW-9) Sampling Locations	4.3-73
4.3-14	Pesticide Storage Building (CW-6) and Sludge Dump (CW-9) Approximate Groundwater Flow Directions	4.3-75
4.3-15	Pesticide Storage Building (CW-6) and Sludge Dump (CW-9) Distribution of Contaminants in Site Soil	4.3-77
4.3-16	Soil Boring Locations — Former Hazardous Waste Storage Area (AOC-7)	4.3-91
4.3-17	Charles Wood Transformer Site Sample Locations	4.3-97
4.3-18	Extent of Remediation at Transformer Site — Building 2000	4.3-99

LIST OF TABLES

<u>Table No.</u>	<u>Title</u>	<u>Page</u>
2.5-1	Geologic and Hydrogeologic Units in the New Jersey Coastal Plain	2-13
2.7-1	A Partial List of Trees and Shrubs Found in Monmouth County	2-17
2.7-2	Mammals Found in Monmouth County	2-18
2.7-3	Reptiles and Amphibians Found in Monmouth County	2-19
2.7-4	Endangered Birds and Very Rare Fish Found in Monmouth County	2-20
3.3-1	Summary of Surface-Water Field Parameters	3-8
3.5-1	Sampling at Former PCB Transformer Sites	3-11
3.6-1	Main Post and Charles Wood Soil Sampling Analytical Parameters	3-17
3.7-1	Main Post Well Completion Summary	3-20
3.7-2	Charles Wood Well Completion Summary	3-21
3.8-1	Main Post and Charles Wood Sampling Parameters Table for February and March 1995 Sampling Rounds	3-24
4.1-1	NJDEP Groundwater Quality Criteria — Class II-A and Practical Quantitation Levels — February 1993	4.1-2
4.1-2	NJDEP Soil Cleanup Criteria — February 1994	4.1-6
4.1-3	Surface-Water Quality Standards for Fresh and Saline Waters	4.1-11
4.1-4	Sediment Guidance Values for Detected Contaminants	4.1-15
4.1-5	Potentially Applicable PCB Cleanup Levels	4.1-16
4.1-6	Main Post — Summary of Site-Specific and Monmouth County Soil and Groundwater Maximum Background Concentrations	4.1-19
4.1-7	Charles Wood — Summary of Site-Specific and Monmouth County Soil and Groundwater Maximum Background Concentrations	4.1-20
4.1-8	Main Post Surface-Water and Sediment Maximum Background Concentrations	4.1-25



LIST OF TABLES (Continued)

<u>Table No.</u>	<u>Title</u>	<u>Page</u>
4.1-9	Charles Wood Surface-Water and Sediment Maximum Background Concentrations	4.1-26
4.2-1	Site Investigation Summary — Main Post	4.2-2
4.2-2	Differences Between the Proposed and Actual Work at Main Post	4.2-4
4.2-3	Summary of Average Concentrations of Detected Compounds in Groundwater — Site M-2	4.2-18
4.2-4	Summary of Detected Compounds in Site Surface Water — Total and Soluble — Site M-2	4.2-20
4.2-5	Summary of Average Concentrations of Detected Compounds in Groundwater — Site M-3	4.2-36
4.2-6	Summary of Detected Compounds in Site Surface Water — Total and Soluble — Site M-3	4.2-39
4.2-7	Summary of Average Concentrations of Detected Compounds in Groundwater — Site M-4	4.2-59
4.2-8	Summary of Average Concentrations of Detected Compounds in Groundwater — Site M-5	4.2-65
4.2-9	Summary of Average Concentrations of Detected Compounds in Groundwater — Site M-8	4.2-74
4.2-10	Summary of Average Concentrations of Detected Compounds in Groundwater — Site M-12	4.2-90
4.2-11	Summary of Average Concentrations of Detected Compounds in Groundwater — Site M-14	4.2-110
4.2-12	Summary of Detected Compounds in Surface Water — Total and Soluble — Site M-14	4.2-112
4.2-13	Summary of Detected Compounds in Soil — Site M-15	4.2-120
4.2-14	Summary of Detected Compounds in Soil — Site M-16	4.2-127



LIST OF TABLES
(Continued)

<u>Table No.</u>	<u>Title</u>	<u>Page</u>
4.2-15	Summary of Average Concentrations of Detected Compounds in Groundwater — Site M-16	4.2-130
4.2-16	Summary of Detected Compounds in Soil — Site M-18 (VOCs and TPH Only)	4.2-143
4.2-17	Summary of Detected Compounds in Soils — Site M-18 Sample SB06-A02	4.2-144
4.2-18	Summary of Average Concentrations of Detected Compounds in Groundwater — Site M-18	4.2-146
4.2-19	Summary of Detected Compounds in Soil — Site AOC-3	4.2-165
4.2-20	Summary of Detected Compounds in Sediment — Site AOC-3	4.2-167
4.2-21	Summary of Detected Compounds in Sediment — Site Pre-1941 Sanitary Treatment Plant	4.2-172
4.2-22	Results of Transformer Site Sampling on Main Post	4.2-178
4.3-1	Site Investigation Summary — Charles Wood	4.3-2
4.3-2	Differences Between Proposed and Actual Work at Charles Wood	4.3-4
4.3-3	Summary of Detected Compounds in Soil — Site CW-1	4.3-16
4.3-4	Summary of Average Concentrations of Detected Compounds in Groundwater — Site CW-1	4.3-17
4.3-5	Summary of Detected Compounds in Soil — Site CW-2	4.3-30
4.3-6	Summary of Average Concentrations of Detected Compounds in Groundwater — Site CW-2	4.3-32
4.3-7	Summary of Detected Compounds in Soil — Site CW-4	4.3-53
4.3-8	Summary of Detected Compounds in Soil — Site CW-5	4.3-61
4.3-9	Summary of Detected Compounds in Sediment — Site CW-5	4.3-64



LIST OF TABLES (Continued)

<u>Table No.</u>	<u>Title</u>	<u>Page</u>
4.3-10	Summary of Detected Compounds in Soil — Site CW-6	4.3-68
4.3-11	Summary of Average Concentrations of Detected Compounds in Groundwater — Site CW-6	4.3-70
4.3-12	Summary of Detected Compounds in Soil from Boring Location SB-01 — Site CW-9	4.3-81
4.3-13	Summary of Detected Compounds in Soil from Surface Locations — Site CW-9	4.3-82
4.3-14	Summary of Average Concentrations of Detected Compounds in Groundwater — Site CW-9	4.3-84
4.3-15	Summary of Detected Compounds in Soil — Site AOC-7 (CW-7)	4.3-89
4.3-16	Results of Transformer Site Sampling on Charles Wood	4.3-94
5.1-1	Analytical Methods for Sample Analysis	5-2
5.1-2	Summary of Sample Containers, Volume, Preservation, and Maximum Holding Times	5-3
5.3-1	Main Post Samples Collected	5-11
5.3-2	Charles Wood Samples Collected	5-12
5.3-3	Summary of Field/Rinsate and Trip Blanks	5-13
5.3-4	Duplicate Sample Data Within Given Ranges of Percent Variation	5-17
5.5-1	Compounds for Which the Analytical Detection Limit Exceeds NJDEP Remediation Standards	5-20
6.1-1	Main Post Site Summary and Recommendations	6-2
6.2-1	Charles Wood Site Summary and Recommendations	6-20

EXECUTIVE SUMMARY



EXECUTIVE SUMMARY

BACKGROUND

The U.S. Army Corps of Engineers (USACE), Baltimore District, contracted Roy F. Weston, Inc. (WESTON®) to perform a field investigation at Fort Monmouth, NJ. This investigation was conducted at two separate areas of Fort Monmouth, i.e., the Main Post and Charles Wood. Suspected hazardous waste sites were initially identified at Fort Monmouth in a report prepared by the U.S. Army Toxic and Hazardous Materials Agency (USATHAMA) in 1980. This report identified 37 sites with known or suspected waste materials on the Main Post and the two subposts (Charles Wood and Evans Area). A background investigation was conducted of the 37 sites and 8 additional sites that were identified by Fort Monmouth and the New Jersey Department of Environmental Protection (NJDEP). WESTON's recommendations were described in a report titled *Investigation of Suspected Hazardous Waste Sites at Fort Monmouth, New Jersey*. Additional investigations (including sampling and other field work) were recommended at 22 of the sites on the Main Post and Charles Wood areas (WESTON, 1993). NJDEP approved the recommendations on 20 April 1995. Additional investigations were also recommended at the Evans Area, but since the Evans Area will be closed, further investigations there will be completed under the Base Realignment and Closure (BRAC) program.

This report presents the results of field investigation activities that were performed at 13 sites at the Main Post area and 8 sites at the Charles Wood area. Field investigation activities were performed between November 1994 and March 1995. The field investigation activities included surface geophysical investigations, sediment and surface-water sampling, transformer site sampling, surface and subsurface soil sampling, groundwater monitor well installation and sampling, and tidal monitoring. At one site in the Charles Wood area (CW-3) the presence of construction rubble prohibited sample collection as planned. The rubble was removed in June 1995 and exploratory trenches are planned at this site.

The geophysical investigations were performed between 29 November and 15 December 1994 to delineate the landfill boundaries at Main Post areas M-3, M-12, M-14, and M-18, and at



Charles Wood area CW-3A. The sediment and surface-water samples were collected on 1 and 2 December 1994 from locations along Parkers Creek on the Main Post and in a tributary to Wampum Brook on the Charles Wood site. The purpose of collecting the surface-water and sediment samples was to evaluate the potential impact of the areas of concern on sediment and surface water, and to confirm sample results collected as part of a previous investigation. The sampling of eight transformer areas at Main Post and three transformer areas at Charles Wood was conducted on 1 and 2 December 1994. The transformer area sampling consisted of collection of concrete chips and soil samples from areas potentially impacted by leaking transformers.

Subsurface soil samples were collected as part of soil boring and monitor well installation program, which was conducted between 13 December 1994 and 23 January 1995.

Soil borings were completed at the following Main Post sites: M-16, M-18, and AOC-3; and at Charles Wood sites: CW-1, CW-2, CW-4, CW-5, CW-6, CW-9, and AOC-7. A total of 45 shallow groundwater monitor wells were installed and developed at both the Main Post and Charles Wood areas. Additionally, at Landfill 8 (M-8), a total of 11 previously installed wells were abandoned because of suspect well integrity (six 4-in. diameter monitor wells and five 2-in. diameter piezometers).

Groundwater monitor wells were sampled twice. Both rounds of sampling were conducted in conjunction with a 72-hr tidal monitoring study to evaluate the effect of tidal fluctuations on water levels in site monitor wells. Round 1 tidal monitoring was performed on 30 January to 3 February 1995, followed by round 1 of groundwater sampling on 13 to 22 February 1995. Round 2 tidal monitoring was performed on 20 to 24 March 1995, which was preceded by round 2 groundwater sampling on 7 to 15 March 1995. Two existing monitor wells, one at site M-18 on the Main Post, and one at site CW-6 on Charles Wood, were sampled for two rounds in May 1995. The two rounds of groundwater sampling were conducted within 30 days of each other as specified in the *Technical Requirements for Site Remediation* (NJAC 7:26) to provide for averaging the analytical results.

The concentrations were then compared to the NJDEP criteria and then to maximum background concentrations. Background concentrations are based on sampling at on-site background locations and a review of Monmouth County data.

The results of and recommendations for the investigated sites follow.

MAIN POST

M-2: Chlorobenzene concentrations were detected in all three wells indicating a potential upgradient source. Other volatile organic compounds (VOCs) were detected in surface-water samples. Samples will be collected on a long-term basis from existing groundwater and surface-water sampling locations.

M-3: Low chlorobenzene concentrations were detected in one downgradient well. No surface-water concentrations exceeded NJDEP criteria and background. Samples will be collected on a long-term basis from existing groundwater and surface-water sampling locations. Additionally, a partially exposed drum was observed in the northeast corner of the site. The location of the exposed drum will be investigated by excavation.

M-4: One pesticide compound was detected at a concentration just above the NJDEP Groundwater Quality Criteria (GWQC) in the upgradient well in both the routine and duplicate samples. The pesticide was not detected in downgradient monitor wells. Existing monitor wells will be sampled on a long-term basis.

M-5: Tetrachloroethene (PCE) was detected in the upgradient well. Existing monitor wells will be sampled on a long-term basis.

M-8: VOCs were detected in upgradient and downgradient wells. Existing monitor wells will be sampled on a long-term basis.

M-12: Compounds of concern were not detected in groundwater samples collected at the site. Existing monitor wells will be sampled on a long-term basis.

M-14: No compounds of concern were detected in groundwater samples. Compounds of concern were not detected in surface-water samples collected at the site. Existing monitor wells and surface-water sampling locations will be sampled on a long-term basis.

M-15: Pesticides, lead, cadmium, and zinc were detected in soil samples collected near the water tank. Paint chips and affected soil will be removed and confirmation samples will be collected following removal.

M-16: Compounds of concern were not detected in the groundwater samples collected at the site. Pesticide concentrations were detected in soil samples collected around the former pesticide storage building. The contaminated soil will be excavated in conjunction with confirmatory sampling and the monitor well will be abandoned.

M-18: Semivolatile organic compound (SVOC) concentrations were detected in soil samples collected from one soil boring and pesticides were detected in groundwater samples from one monitor well. Geophysical results indicate an area where anomalous readings may indicate an underground storage tank (UST). Trenching will be performed at the suspected UST location and the SVOC-contaminated soil will be removed at the soil boring location. Additionally, the monitor wells will be sampled on a long-term basis.

AOC-3: Former Main Post Sanitary Treatment Plant (AOC-3): No compounds of concern were identified in soil borings and sediment samples. No additional action will be taken.

STP: Pre-1941 Sanitary Treatment Plant: Metals were detected in a sediment sample at the outfall of the pre-1941 sanitary treatment plant (STP). No further action will be taken because access to the site is restricted.

PCB Transformers—Main Post: Polychlorinated biphenyl (PCB) levels in stained concrete were found to exceed NJDEP criteria in three indoor vaults. PCBs were also detected above applicable

soil standards in the soil beneath one pole-mounted transformer near Building 292. Since the indoor vaults are normally locked and access is restricted, remedial work will be performed when the transformers are removed from service and the stained areas are made accessible. In addition, the soil beneath the former location of the pole-mounted transformer will be resampled to determine the extent of contamination.

CHARLES WOOD AREA

CW-1: Compounds of concern were not detected in soil samples. VOC concentrations were detected in groundwater samples from three of the four wells. The extent of VOC concentrations in groundwater will be investigated by soil-gas survey techniques. The results of the soil-gas survey will be used to locate two additional monitor wells. The new and existing wells will be sampled on a long-term basis.

CW-2: PCB concentrations were detected slightly above the NJDEP Soil Cleanup Criteria (SCC) in one sample from the 7- to 9-ft interval. VOC concentrations were detected in one well in one of the two sampling rounds. The extent of VOC concentrations in groundwater will be investigated by soil-gas survey techniques. The results of the soil-gas survey will be used to locate two additional monitor wells. The new and existing wells will be sampled on a long-term basis.

CW-3: Investigation activities were not conducted as part of this investigation because of construction rubble that was present at the site during the field effort, which prohibited sample collection as planned. The rubble was removed in June 1995, and exploratory trenches are planned to determine if any subsurface debris or soil staining is present.

CW-3A: The results of the geophysical surveys indicated possible buried material at two areas. Exploratory trenching will be conducted at each area to evaluate the nature of the geophysical anomaly.

CW-4: Lead was detected in one soil sample exceeding background concentrations and the NJDEP SCC. Impacted soils will be removed and confirmation samples will be collected at the base of the excavation.

CW-5: No compounds of concern were identified in soil and sediment samples. No further action will be taken.

CW-6: Dieldrin and cadmium were detected in separate soil samples above NJDEP SCC and site background concentrations. The average concentrations of dieldrin and cadmium in surface soil samples collected at CW-6 and CW-9 do not exceed the NJDEP criteria. Benzene was detected in one monitor well. The existing monitor wells will be sampled on a long-term basis.

CW-9: The average concentration of cadmium in surface soil samples at CW-6 and CW-9 does not exceed the NJDEP criteria. No further action will be taken at this site.

AOC-7: No compounds of concern were identified in soil samples. No further action will be taken at this site.

PCB Transformers—Charles Wood: PCBs were detected above NJDEP criteria in soil samples taken near the former location of a transformer pad (see Figure 4.3-18). The contaminated soil will be removed in conjunction with confirmatory sampling.

REPORT ORGANIZATION

Section 1 of this report is the Introduction and describes project objectives, facility information, site descriptions, sampling strategy, and site history. Section 2, Environmental Setting, summarizes environmental conditions such as climate, topography, surface-water drainage, soils, geology, hydrogeology, vegetation, and wildlife. Section 3, Investigation Activities, describes the procedures and methodologies used for the various site investigation activities. Section 4 summarizes the results of the investigation. Section 5 documents the data quality objectives (DQOs) and quality control (QC) procedures. Section 6 presents site-specific conclusions and recommendations. Field investigation data are presented in the appendices. Ground-penetrating

radar (GPR) profiles are contained in a separate volume (Appendix F), and are available upon request.



SECTION 1 INTRODUCTION

SECTION 1
INTRODUCTION

1.1 PROJECT OBJECTIVES

The objectives of this investigation are as follows:

- Perform site investigations to determine if contamination exists, and, if present, to evaluate the extent and degree of contamination at the 22 sites (presented in Figure 1.1-1). These sites were originally identified as potential hazardous waste sites in the Installation Assessment (IA) (USATHAMA, 1980).
- Evaluate the results of the investigation and compare with the following criteria:
 - New Jersey Soil Cleanup Guidance Criteria, 3 February 1994, and winter 1995.
 - NJDEP Groundwater Quality Standards, February 1993.
 - NJDEP Surface-Water Quality Standard, December 1993.
 - Cleanup Standard for Contaminated Sites, New Jersey Administrative Code 7:26D (proposed and withdrawn).
 - NJDEP Sediment Quality Standards, 1991, or marine/estuarine biological effects screening levels (Long et al., 1995).
- Recommend one of four alternatives for each site:
 1. No additional investigation or remediation is required.
 2. Additional field investigations are necessary.
 3. Conduct long-term groundwater and/or surface-water monitoring.
 4. Sufficient data exist to proceed with remedial design and interim or final remedial action.

Refer to the Executive Summary for background information regarding this effort.

WESTON performed the investigation activities as set forth in the U.S. Army Corps of Engineers (USACE) Scopes of Work dated 10 August 1994 for Charles Wood and 12 August 1994 for Main Post. Site investigation activities included:

- Planning documents preparation:
 - Chemical Data Acquisition Plan and Field Sampling Plan (CDAP/FSP).
 - Safety, Health and Emergency Response Plan (SHERP).
- Field investigations:
 - Geophysical investigation.
 - Sediment sampling.
 - Surface-water sampling.
 - Surface and subsurface soil sampling.
 - Transformer site sampling.
 - Groundwater well installation and sampling.
 - Tidal monitoring.
- Report preparation:
 - Draft and final site investigation reports.

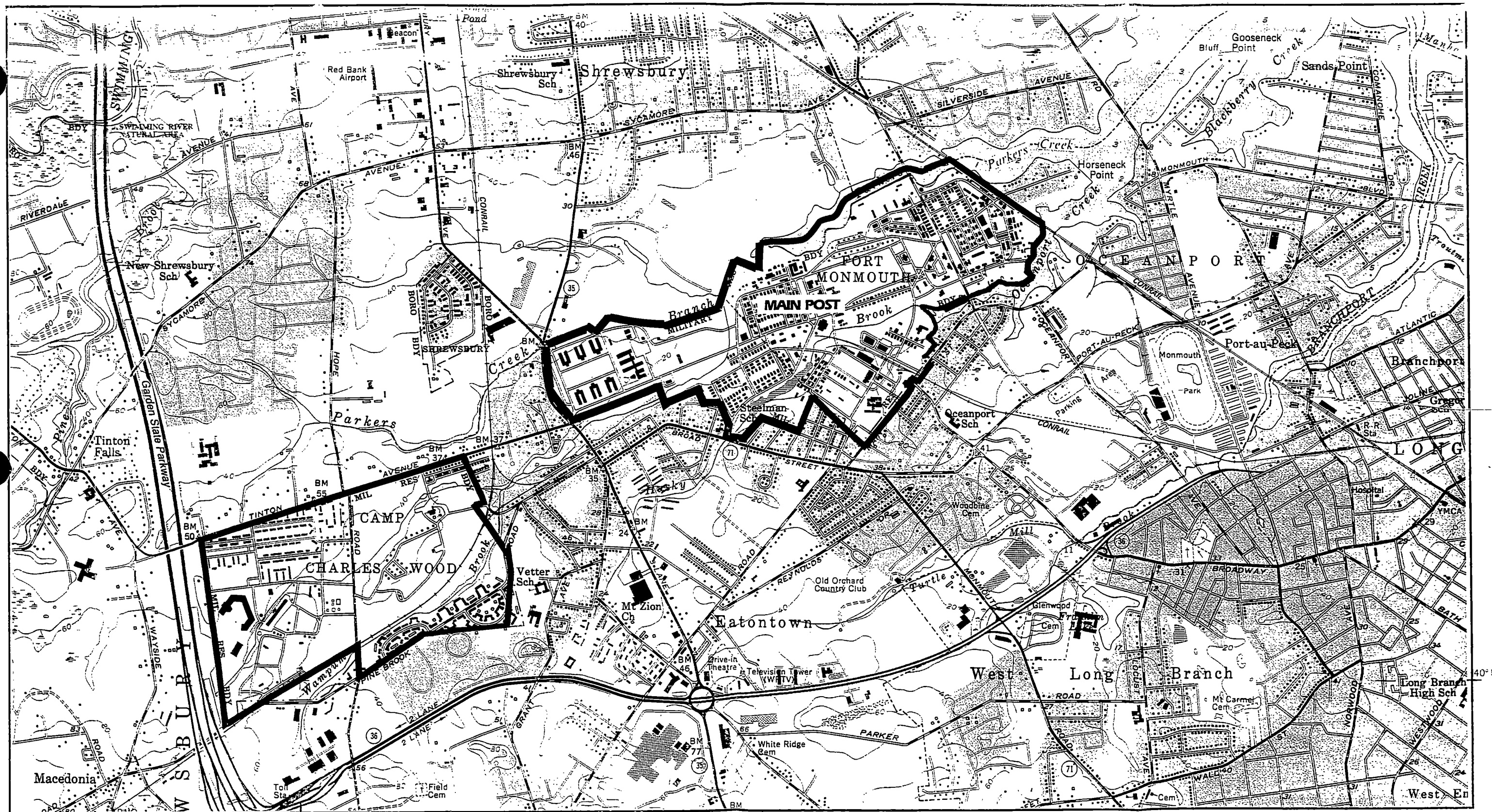
1.2 FACILITY DESCRIPTION

1.2.1 Owner/Operator Information

Fort Monmouth is a government-owned, government-operated (GOGO) military installation that provides command, administrative, and logistical support for Headquarters, U.S. Army Communications and Electronics Command (CECOM).

1.2.2 Location of Fort Monmouth

Fort Monmouth is located in the central-eastern portion of New Jersey in Monmouth County (see Figure 1.1-1). The installation contains two subposts (Charles Wood Area and Evans Area), in addition to the Main Post, which are located within a 12-mile radius of the Main Post. Descriptions of the Main Post and Charles Wood are presented in the subsections that follow.



Contour Interval: 20 Feet

Source: USGS Long Branch, New Jersey Quadrangle (1981)

2017-0595 10/19/93

0 1000 2000 3000 4000

SCALE IN FEET

Fort Monmouth, Main Post and Charles Wood

FIGURE 1.1-1

LOCATION OF MAIN POST AND CHARLES WOOD

MONMOUTH COUNTY, NEW JERSEY

1-3

The Evans Area will be handled under the Base Realignment and Closure (BRAC) Program and will not be discussed in this report.

1.2.2.1 Main Post

The Main Post (Figure 1.1-1) encompasses an area of approximately 630 acres and is bounded by State Highway 35 to the west, Parkers Creek and Lafetra Creek to the north, the New Jersey Transit Railroad to the east, and a residential neighborhood to the south. The Main Post provides supporting administrative, training, and housing functions as well as many of the community facilities for Fort Monmouth.

1.2.2.2 Charles Wood Area

The Charles Wood Area (Figure 1.1-1), is composed of approximately 511 acres, and is located 1 mile west of the Main Post and is bounded by Tinton Avenue to the north, residential development and Pine Brook Road to the south, and the Garden State Parkway to the west. This area is used primarily for research and development (R&D), and testing, and provides the greatest number of housing units available on-post.

1.2.3 Mission Statement

The primary mission of Fort Monmouth is to provide command, administrative, and logistical support for Headquarters, CECOM. CECOM is a major subordinate command of the U.S. Army Materiel Command (AMC) and is the host tenant. The support provided is used by tenant activities in the performance of R&D, procurement, and production of prototype electronic communication material for use by the U.S. Armed Forces.

The major tenant activities to which Headquarters, CECOM is the host tenant include:

- U.S. Army Laboratory Command (LABCOM)
- U.S. Army Aviation Research and Development Activity (AVRADA)



- U.S. Army Information System Management Agency (ISMA)
- Joint Tactical Communications Office (TRI-TAC)
- U.S. Army Chaplain Board
- U.S. Army Chaplain Center and School (USACHCS)
- U.S. Army Military Preparatory School (USAMPS)
- U.S. Army Medical Department Activities (MEDDAC)
- U.S. Army Dental Activity (DENTAC)
- U.S. Army Audit Agency
- Small Business Administration (SBA)
- U.S. Army Information Systems Command (ISC)
- U.S. Army Special Security Detachment
- 902nd Military Intelligence Group
- U.S. Army Criminal Investigation Command
- U.S. Army Commissary
- U.S. Army Newark District Recruiting Command
- U.S. Army Corps of Engineers (USACE), New York District
- Defense Contract Administration Services Management Area, Springfield District
- Defense Investigation Services (DIS)
- Defense Contract Audit Agency (DCAA)
- 513th Military Intelligence Brigade
- Joint Interface Test Force
- 535th Engineer Detachment
- 54th Ordnance Detachment



1.2.4 History of Fort Monmouth

This subsection presents a history of Fort Monmouth with emphasis on environmentally significant activities. The subsection is based primarily on the books, *A Concise History of Fort Monmouth, New Jersey*, and *Fort Monmouth History and Place Names, 1917-1959*.

The Main Post of Fort Monmouth was established on 17 June 1917 as Camp Little Silver. The site of the Main Post had formerly been a horse racetrack, but the track had not been used since 1890. The name of the Camp was changed after 3 months to Camp Alfred Vail. The initial mission of the Camp was to train Signal Corps operators for service in World War I. In the first 19 months of the Camp's existence, 129 semipermanent structures were built, a tent camp was established on the site of a former swamp, and a parade ground was established on the site of a former marsh. A radio laboratory and an airfield were developed in 1918. After the war, Camp Vail was designated as the site of the Signal Corps School, the only training area for Signal Corpsmen in the country. All but four of the World War I structures were demolished by 1924.

In 1925 the facility became a permanent post and its name was changed to Fort Monmouth. The primary mission of Fort Monmouth continued to be Signal Corps training and electronics research. In 1934 the laboratory was consolidated in a new building, Squier Laboratory (Building 283), and research on radios and radar continued. During World War II, the pace of training increased tremendously at Fort Monmouth. The expanded laboratory effort was accomplished by starting laboratories at other Army facilities. Squier Laboratory continued to be the principal laboratory on Main Post until 1954, after which laboratory operations moved to Charles Wood. In 1955 and 1956, 72 World War II wooden structures were demolished to accommodate permanent structures. These new buildings were used for residential, administration, commercial, and recreational purposes. A small number of additional administrative buildings were constructed during the 1970s and 1980s.

Camp Charles Wood was purchased in 1941 by the U.S. Army and opened in 1942. The eastern half of the property was formerly a golf course, and the western half was residential and

farmland. During World War II, the Camp was used for training Signal Corpsmen. Antenna shelters were constructed on 26.5 acres of land and used by the Signal Corps Laboratory for R&D purposes. This operation was placed under the command of the Army Air Force until 1951, when the operation moved to another post. Signal Corps training ceased after World War II.

A new R&D laboratory, the Hexagon (Building 2700), was completed in 1954. Research activities that had formerly been conducted at Squier Laboratory on the Main Post, and some activities from the Evans Area, were transferred to Charles Wood. The laboratory continued to develop electronic equipment. A large amount of residential housing was built from 1953 to 1970. In 1956, 90 World War II wooden structures were razed. The Pulse Power Laboratory was built in the early 1980s.

The document, *A Concise History of Fort Monmouth, New Jersey*, describes a number of R&D activities that were performed by the laboratories at Fort Monmouth. The document does not generally say where these activities were conducted. A partial list of research activities that were conducted in the Fort Monmouth laboratories includes:

- Radios, including vacuum tubes.
- Radar.
- Field TV cameras.
- Radiation dosimeters.
- Satellite instrumentation.
- Solar batteries.
- Laser communication, range-finding, and relay devices.
- Microelectronics.
- Night vision devices.
- Defibrillator pacemakers.
- Lithium batteries.

SECTION 2

ENVIRONMENTAL SETTING

SECTION 2

ENVIRONMENTAL SETTING

2.1 CLIMATE

The temperate-humid climate of Monmouth County, NJ, is characteristic of the temperate zone of the Mid-Atlantic states. The mean annual temperature for Monmouth County is 53 °F; the summers are generally warm, with an average temperature of 72 °F and a maximum temperature of 103 °F, recorded in July 1954. Winters are moderate, with an average temperature of 33 °F. The winter temperatures rarely drop below 0 °F, although the lowest recorded temperature was -8 °F, recorded at Freehold, NJ in February 1961 (Jablonski and Baumley, 1989).

Precipitation in Monmouth County averages 45.18 inches per year; slightly more than half the total annual precipitation falls between April and September (Jablonski and Baumley, 1989). Thunderstorms generally occur in the summer and may combine high winds with heavy rainfall. Heavy rains have occurred in connection with hurricanes or tropical storms that move northward along the Mid-Atlantic coast. Snow has fallen in Monmouth County in every month between October and April. The average seasonal snowfall is 25 inches, with the greatest amounts falling in December, January, and February (Jablonski and Baumley, 1989).

2.2 TOPOGRAPHY

2.2.1 Main Post

The land surface at the Main Post is relatively flat and ranges in elevation from 4 ft above mean sea level (msl) in the east at Oceanport Creek to 32 ft msl at the western end of the post, near Highway 35. The eastern half of the post is generally 10 ft msl in elevation. The greatest elevation is at Landfill 8, located on Parkers Creek, and along Lafetra Creek, Mill Creek, and Husky Brook.

2.2.2 Charles Wood

At Charles Wood the land surface slopes from 72 ft msl in the southwest, to 20 ft msl at the eastern end of the golf course. In general, the southwestern corner of Charles Wood is gently rolling and has the greatest relief.

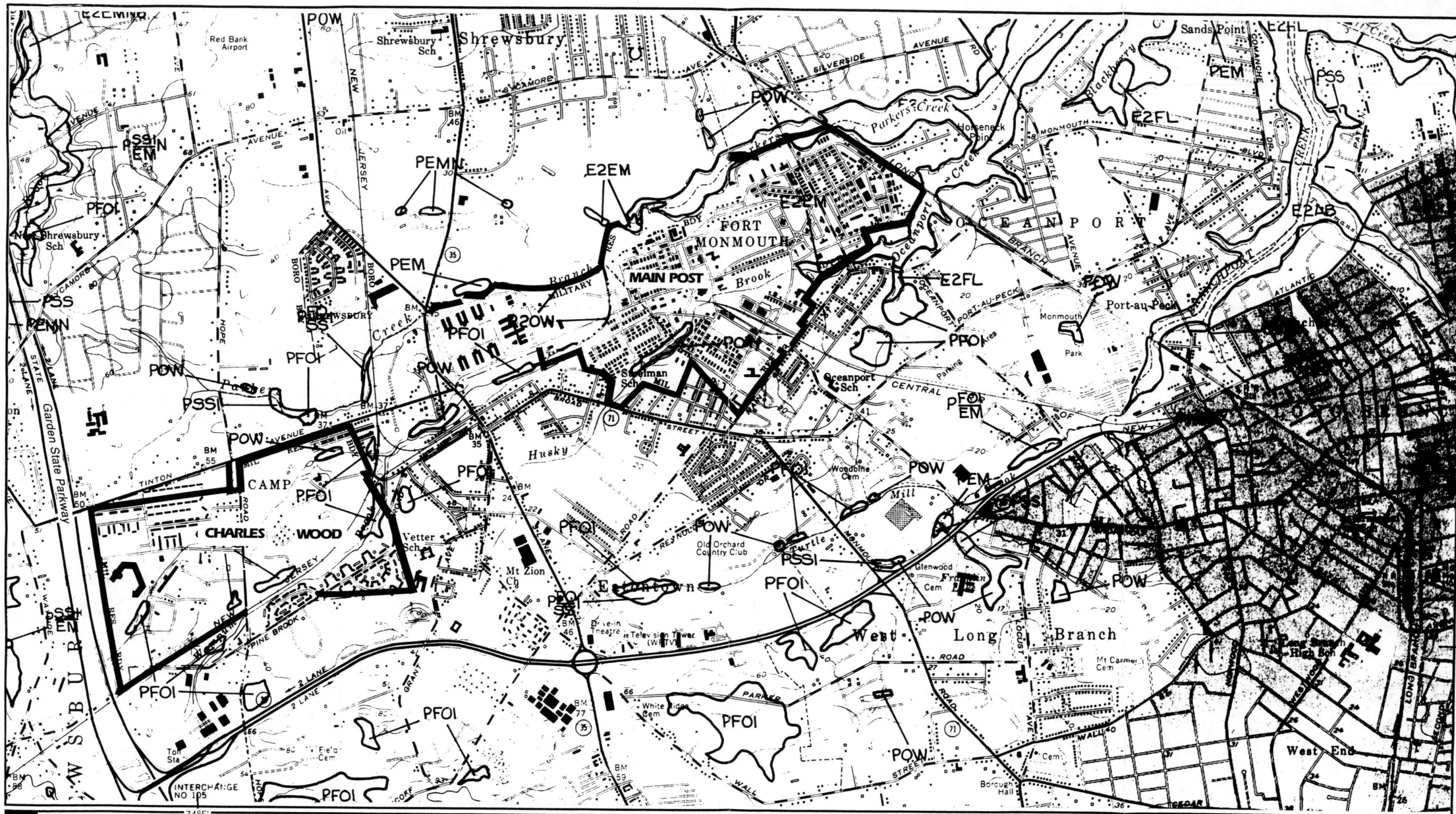
2.3 SURFACE-WATER DRAINAGE AND WETLANDS

2.3.1 Main Post

Surface-water runoff from the western part of the Main Post flows into Lafetra Creek to the north or into Mill Creek to the south. The names of streams indicated on U.S. Army site maps are used in this report. The USGS map (Figure 1.1-1) shows Lafetra Creek as Parkers Creek Branch and Mill Creek as Wampum Brook. Both Mill Creek and Lafetra Creek originate off-post. Mill Creek flows along the southern boundary of Main Post until it turns north just past the Auto Craft Shop. Mill Creek is channelized and flows past several landfills. Lafetra Creek forms the northern boundary of the Main Post and joins Mill Creek to form Parkers Creek. Parkers Creek flows eastward along the northern boundary and joins Oceanport Creek east of the post. Most of Parkers Creek, Lafetra Creek, and Mill Creek are tidally influenced.

Husky Brook originates off-post and, shortly after it flows onto the post, enters Husky Brook Lake. Surface-water drainage from the southern half of the post flows into Husky Brook and Husky Brook Lake through a series of drainage ditches and outfalls. Husky Brook exits Husky Brook Lake and flows into Oceanport Creek, which forms the southern boundary of the eastern post area. Oceanport Creek and Husky Brook are tidally influenced below Husky Brook Lake.

The U.S. Fish and Wildlife Service (FWS) National Wetland Inventory Long Branch quadrangle maps indicated the presence of wetlands at the Main Post (Figure 2.3-1). Parkers and Oceanport Creeks are classified as estuarine intertidal aquatic beds. The area of Parkers Creek northwest of Building 294 and the part of Oceanport Creek/Husky Brook west of Murray Drive and east of Building 551 are classified as estuarine intertidal emergent wetlands. Lafetra Creek and

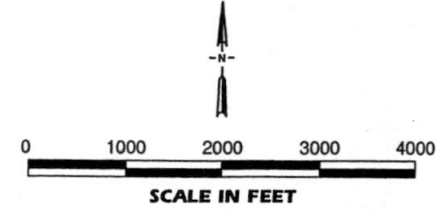


LEGEND

- E2AB Estuarine Intertidal Aquatic Bed
- E2EM Estuarine Intertidal Emergent Wetland
- R2OW Riverine Lower Perennial Open Water/Unknown Bottom
- POW Palustrine Open Water/Unknown Bottom
- PFO1 Palustrine Forested Wetland, Broad-leaved Deciduous

Source: USFWS National Wetlands Inventory
Long Branch, New Jersey Quadrangle Map, 1981

2017-0600



Fort Monmouth, Main Post and Charles Wood

**FIGURE 2.3-1
MAIN POST AND CHARLES WOOD
WETLANDS**

10/20/93

Mill Creek are classified as riverine lower perennial open water/unknown bottom. Husky Brook Lake is classified as palustrine open water/unknown bottom.

2.3.2 Charles Wood

The Charles Wood area is drained principally by two unnamed tributaries of Wampum Brook; one tributary flows eastward through the center of the camp, and the other flows along the southern boundary (Figure 1.1-1). East of Charles Wood, Wampum Brook is joined by several other unnamed tributaries before it becomes Wampum Lake. Wampum Lake discharges into Mill Creek, which flows through Main Post. Some runoff from the northwestern part of the golf course flows into Lafetra Creek, which is located just north of Tinton Avenue.

At Charles Wood, several wetland areas were identified on the FWS National Wetland Inventory Long Branch quadrangle map (Figure 2.3-1). The lake on the golf course is classified as palustrine open water/unknown bottom. Several areas along the unnamed tributaries to Wampum Brook are classified palustrine forested wetland, broad-leaved deciduous.

2.4 SOILS

2.4.1 Main Post

According to the Monmouth County Soil Survey (MCSS) (Jablonski and Baumley, 1989), much of the Main Post is covered by urban land (developed land with disturbed soils). The following soil series and classification units are mapped in the Main Post area:

- DoB Downer sandy loam, 2 to 5% slopes
- FrB Freehold sandy loam, 2 to 5% slopes
- FUB Freehold sandy loam — urban land complex, 0 to 10% slopes
- HV Humaquepts, frequently flooded
- KvA Kresson loam, 0 to 5% slopes
- UA Udorthents, smoothed
- UD Udorthents — urban land complex, 0 to 3% slopes

Figure 2.4-1 illustrates the distribution of these soil series. The Unified Soil Classification (USC) descriptors are shown in parentheses.

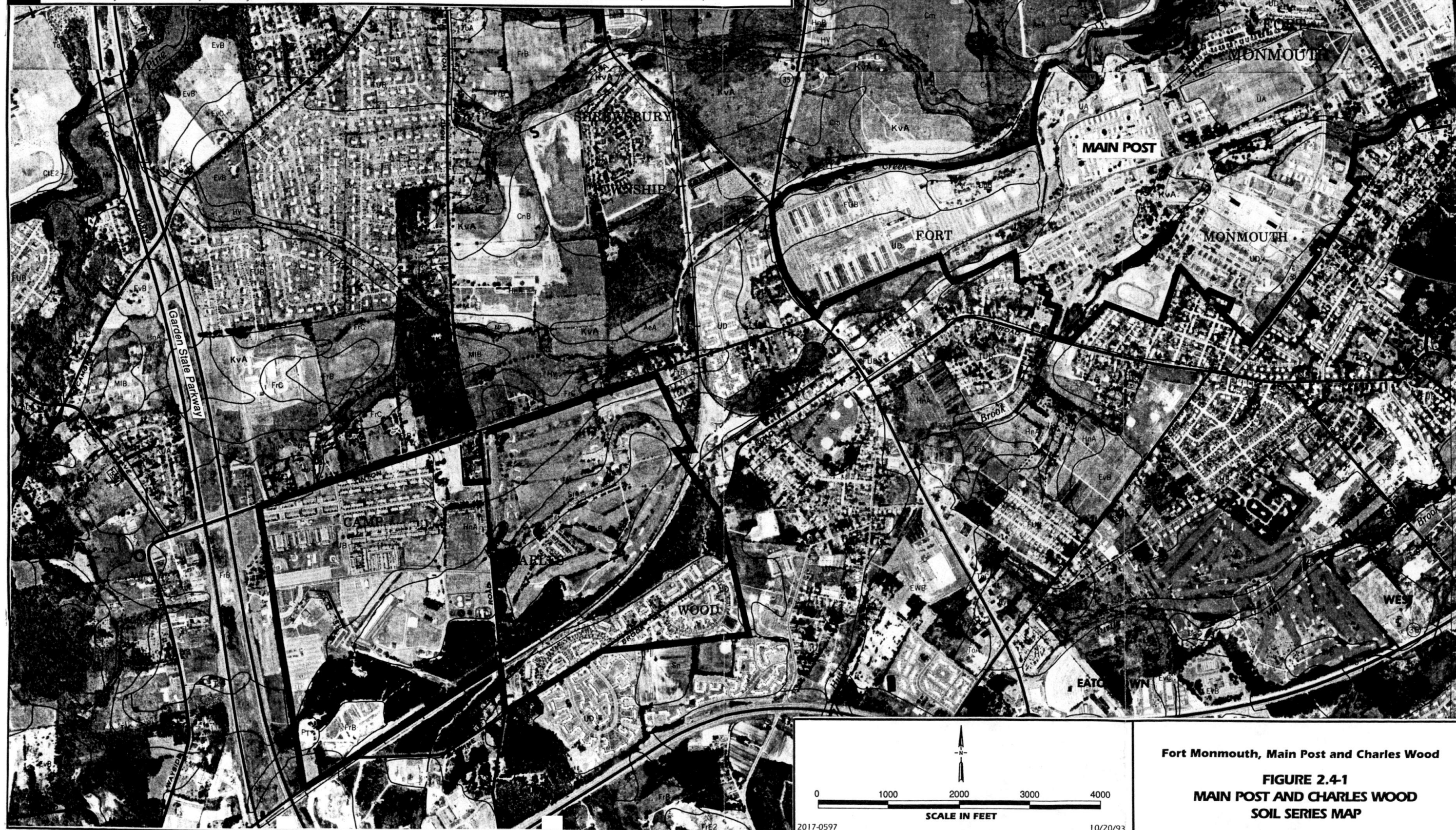
Downer series soils are well-drained soils found on uplands and terraces. These soils formed in acid, silty coastal plain sediments. The upper 10 inches are a very friable dark brown sandy loam, which has fine and medium roots and 2% pebbles (sandy silt: SM). The subsoil is 16 inches of strong brown sandy loam with faint clay in bridges between grains, fine and medium roots, and 10% pebbles (sandy silt to sandy clay: SM to SC). The substratum is a strong brown gravelly loamy sand with 35% pebbles, which is strongly acidic (sandy silt to sandy clay to poorly graded sand: SM, SC, SP). Permeability is moderate or moderately rapid in the subsoil and moderately rapid in the substratum, and as a result runoff is slow. The available water capacity is moderate. The seasonal high water table is at a depth of greater than 6 feet. The Downer series is represented on-site by the Downer sandy loam, 2 to 5% slopes (DoB). Downer soils are classified as nonhydric (Jablonski and Baumley, 1989).

Freehold soils are well-drained soils that formed in acid, loamy, coastal plain sediments that, by volume, are 1 to 10% glauconite and are found on uplands. The surface layer is a 9-in. thick, dark yellowish-brown sandy loam (sandy silt, sandy clay, silt, clay: SM, SC, ML, CL). The subsoil is 26 inches thick. The upper 16 inches of the subsoil are dark brown sandy loam and sandy clay loam with some glauconite. The lower 10 inches are brown sandy loam with glauconite. The substratum is yellowish-brown loamy sand with much glauconite to a depth of 70 inches (sandy silt: SM). Permeability is moderate in the subsoil and moderate or moderately rapid in the substratum and surface runoff is medium. The available water capacity is high. Two Freehold soils are found at Main Post: Freehold sandy loam, 2 to 5% slopes (FrB), and the Freehold sandy loam — urban land complex, with 0 to 10% slopes (FUB). Urban land consists of areas covered by impermeable surfaces, such as buildings, roads, and parking lots. The FUB soils were mapped as a complex because Freehold soils and urban land are found in an intricate pattern that made it impractical to map the Freehold soil separately. Freehold soils are classified as nonhydric (Jablonski and Baumley, 1989).

LEGEND

At	Atsion Sand	HUA	Holmdel Sandy Loam - Urban Land Complex, 0-10% Slopes
DoB	Downer Sandy Loam, 2-5% Slopes	HV	Humaquepts, Frequently Flooded
EvB	Evesboro Sand, 2-5% Slopes	KvA	Kresson Loam, 0-5% Slopes
FrB	Freehold Sandy Loam, 2-5% Slopes	PT	Pits, Sand and Gravel
FUB	Freehold Sandy Loam - Urban Land Complex, 0-10% Slopes	Sn	Shrewsbury Sandy Loam
HnA	Holmdel Sandy Loam, 0-2% Slopes	UA	Udorthents, Smoothed
		UD	Udorthents, Urban Land Complex, 0-3% Slopes

Source: Soil Survey of Monmouth County, New Jersey, USDA-SCS, 1989.



Fort Monmouth, Main Post and Charles Wood

FIGURE 2.4-1
MAIN POST AND CHARLES WOOD
SOIL SERIES MAP

Humaquept soils are somewhat poorly to very poorly drained soils formed in stratified, sandy, or loamy sediments of fluvial origin. These soils are located on the flood plain and are subject to flooding several times a year. Humaquept soils are nearly always hydric. These soils differ in stratification from place-to-place. Typically, the surface layer and subsoil consist of stratified layers of sandy loam, loam, and silt loam (sandy silt, silt: SM, ML). The substratum consists of stratified layers of loamy sand, sandy loam, loam, and silt loam (sandy silt, silty clay, poorly graded sand: SM, SC, SP). In some areas, the stratified layers are gravelly or mucky. Permeability is moderate or moderately rapid in the subsoil and the substratum, and as a result runoff is slow. The available water capacity is high. The apparent seasonal high water table is between the surface and 1.5 feet. Organic matter varies from low to high. The soil is subject to frequent flooding in the early spring and during heavy rainfall (Jablonski and Baumley, 1989).

The Kresson loam is a nearly level to gently sloping, somewhat poorly drained, soil found on low divides and in depressions. The surface layer is dark brown loam, 9 inches thick (silty clay, sandy silt, sandy clay: CL, SM, SC). The first 22 inches of the subsoil are mottled olive-brown clay loam, and below that is a mottled olive-gray clay to a depth of 40 inches. The substratum is mottled, dark grayish-brown stratified sandy loam and sandy clay loam to a depth of 60 inches or more. The permeability of this soil is slow in the subsoil and the substratum. The available water capacity is high. The perched seasonal high water table is at a depth of 1 to 1.5 feet from December to May. Runoff is slow to medium. Organic content is moderate. The soil on-site is found in areas with 2 to 5% slopes (Jablonski and Baumley, 1989).

Udorthent soils have been altered by excavating or filling (Jablonski and Baumley, 1989). In filled areas, these soils consist of loamy material that is more than 20 in. thick. Filled areas include flood plains, tidal marshes, and areas with moderately well-drained to very poorly drained soils. Some Udorthent soils contain concrete, asphalt, metal, or glass. Two Udorthent soils are found at Main Post: Udorthents, smoothed (UA), which may also include old sand and gravel pits that have been smoothed or filled in, and Udorthents — urban land complex, with 0 to 3% slopes (UD).

2.4.2 Charles Wood

The Monmouth County Soil Survey (Jablonski and Baumley, 1989) identified nine soil types at Charles Wood (Figure 2.4-1) as follows:

- At Atsion sand
- EvB Evesboro sand, 2 to 5% slopes
- FrB Freehold sandy loam, 2 to 5% slopes
- FUB Freehold sandy loam — urban land complex, 0 to 10% slopes
- HnA Holmdel sandy loam, 0 to 2% slopes
- HUA Holmdel sandy loam — urban land complex, 0 to 5% slopes
- PT Pits, sand, and gravel
- Sn Shrewsbury sandy loam
- UD Udorthents — urban land complex, 0 to 3% slopes

Freehold and Udorthents soils were previously discussed in Subsection 2.4.1 and are not discussed in this subsection.

The Atsion sand is a nearly level, poorly drained, soil found in depressional areas and on broad flats. The uppermost 2 inches are matted, partly decomposed organic material and roots with 6 inches of black sand below. The subsurface layer is a 14-in. thick grayish-brown sand (sandy silt to poorly graded sand: SM, SP). The subsoil is a dark reddish-brown loamy sand, 18 in. thick, with approximately 10 inches of mottled brown sand in the lower layer (sandy silt, sandy clay to poorly graded sand: SM, SC, SP). The substratum is a mottled yellowish-brown fine sand to a depth of at least 60 inches. Permeability is moderately rapid or rapid in the subsoil and rapid in the substratum. The available water capacity is low. Between November and June the seasonal high water table ranges from the surface to 1 foot (Jablonski and Baumley, 1989).

Evesboro soils are excessively drained soils that developed in acid, sandy, coastal plain sediments located on uplands. These soils have a 4-in. surface layer where the upper 2 inches are matted decomposed organic matter with 2 inches of grayish-brown sand in the lower layer. The subsurface layer is 5 inches of yellowish-brown sand (poorly graded sand to silty sand: SP, SM). The subsoil and substratum are yellowish-brown sand (poorly to well graded sand: SP, SW). Permeability is rapid in the subsoil and substratum. The available water capacity is low. The

seasonal high water table is at a depth of more than 6 feet. Runoff is slow. At Charles Wood, Evesboro soils are represented by the Evesboro sand with 2 to 5% slopes (EvB) (Jablonski and Baumley, 1989).

Holmdel soils are level, moderately well-drained to somewhat poorly drained soils found in depressions and on low divides. The surface layer is a 12-in. thick dark grayish-brown sandy loam (silty sand, sandy silt, sandy clay, clay, silt: SM, SC, CL, ML). The subsoil has two layers: the upper is a yellowish-brown sandy loam, 12-in. thick, and the lower layer is mottled yellowish-brown sandy clay loam to a depth of 38 inches. The substratum is mottled, yellowish-brown and light olive-brown sand and sandy loam to a depth of at least 60 inches (poorly graded sand, clayey sand: SP, SC). Permeability is moderate in the subsoil and the substratum, and the available water capacity is high. The seasonal high water table ranges from 1.5 to 4 feet between December and May. Runoff is slow. Two Holmdel soils are found at Charles Wood: the Holmdel sandy loam, 0 to 2% slopes (HnA), and the Holmdel sandy loam — urban land complex, with 0 to 5% slopes (HUA) (Jablonski and Baumley, 1989).

Soils classified as Pits, sand and gravel, have been excavated for sand and gravel. These areas are sand with varying amounts of gravel. The properties of these soils vary from place-to-place (Jablonski and Baumley, 1989).

The Shrewsbury sandy loam is a level poorly drained soil found in depressions, along drainageways, and on broad flats. The first inch is dark reddish-brown matted, partly decomposed organic material and roots with 8 inches of black sandy loam below. The subsurface layer is a 4-in. thick dark gray sandy loam (sandy silt, sandy clay, silt, clay: SM, SC, ML, CL). The subsoil has a 9-in. thick mottled grayish-brown sandy clay loam and 9 inches of mottled olive-gray sandy clay loam. The substratum is a mottled dark greenish-gray loamy sand (poorly graded sand, silty sand: SP, SM). Permeability is moderately slow or moderate in the subsoil and moderately rapid or rapid in the substratum, and the available water capacity is high. The seasonal high water table is between the surface and a depth of 1 foot from October to June. Runoff is slow and water ponds on the surface (Jablonski and Baumley, 1989).

2.5 GEOLOGY

2.5.1 Regional Geology

Monmouth County lies within the New Jersey section of the Atlantic Coastal Plain physiographic province. Main Post and Charles Wood are located in the Outer Coastal Plain subprovince, or the Outer Lowlands.

In general, New Jersey Coastal Plain formations consist of a seaward-dipping wedge of unconsolidated deposits of clay, silt, sand, and gravel. These formations typically strike northeast-southwest with a dip ranging from 10 to 60 feet per mile and were deposited on Precambrian and lower Paleozoic rocks (Zapeczka, 1989). Coastal Plain sediments, predominantly derived from deltaic, shallow marine, and continental shelf environments, date from the Cretaceous through the Quaternary Periods. The mineralogy ranges from quartz to glauconite.

The formations record several major transgressive/regressive cycles and contain units that are generally thicker to the southeast and reflect a deeper water environment. More than 20 regional geologic units are present within the sediments of the Coastal Plain (Table 2.5-1). Regressive, upward-coarsening deposits are usually aquifers (e.g., Englishtown and Kirkwood Formations, and the Cohansey Sand), while the transgressive deposits act as confining units (e.g., the Merchantville, Marshalltown, and Navesink Formations). The thicknesses of these units vary greatly (i.e., from several feet to several hundred feet). The Coastal Plain deposits thicken to the southeast from 0 foot at the Fall Line to greater than 6,500 feet in Cape May County (Brown and Zapeczka, 1990).

2.5.2 Local Geology

Based on the regional geologic map (Jablonski, 1968), the Cretaceous Age Red Bank and Tinton Sands outcrop at the Main Post. The Red Bank sand conformably overlies the Navesink Formation and dips to the southeast at a slope of 35 feet per mile. The upper member of the Red Bank sand (Shrewsbury) is a yellowish-gray to reddish-brown clayey, medium- to coarse-grained sand that contains abundant rock fragments, minor mica, and glauconite (Jablonski, 1968). The

Table 2.5-1 Geologic and Hydrogeologic Units in the New Jersey Coastal Plain

System	Series	Geologic Unit	Lithology	Hydrogeologic Unit	Hydrologic Characteristics
Quaternary	Holocene	Alluvial deposits	Sand, silt, and black mud	Undifferentiated	Surficial material, often hydraulically connected to underlying aquifers. Locally some units may act as confining beds. Thicker sands are capable of yielding large quantities of water.
		Beach sand and gravel	Sand, quartz, light-colored, medium- to coarse-grained, pebbly		
Tertiary	Pleistocene	Cape May Formation		Kirkwood-Cohansey aquifer system	A major aquifer system. Groundwater occurs generally under water-table conditions.
		Pensauken Formation	Sand, quartz, light-colored, heterogeneous, clayey, pebbly		
		Bridgeton Formation			
		Beacon Hill Gravel	Gravel, quartz, light-colored, sandy		
		Cohansey Sand	Sand, quartz, light-colored, medium- to coarse-grained, pebbly; local clay beds		
	Miocene	Kirkwood Formation	Sand, quartz, gray and tan, very fine to medium-grained, micaceous, and dark-colored diatomaceous clay	Composite confining bed	Thick diatomaceous clay bed occurs along coast and for a short distance inland. A thin water-bearing sand occurs within the middle of this unit.
	Eocene	Piney Point Formation	Sand, quartz, and glauconite, fine- to coarse-grained	Piney Point aquifer	Yields moderate quantities of water locally.
		Shark River Formation	Clay, silty and sandy, glauconitic, green, gray, and brown, fine-grained quartz sand		
		Manasquan Formation			
	Paleocene	Vincetown Formation	Sand, quartz, gray and green, fine- to coarse-grained, glauconitic, and brown, clayey, very fossiliferous, glauconite and quartz calcarenite	Vincetown aquifer	Yields small to moderate quantities of water in and near its outcrop area.
		Hornerstown Sand	Sand, clayey, glauconitic, dark green, fine- to coarse-grained		
Cretaceous	Upper Cretaceous	Tinton Sand	Sand, quartz, and glauconite, brown and gray, fine- to coarse-grained, clayey, micaceous	Red Bank Sand	Yields small quantities of water in and near its outcrop area.
		Red Bank Sand			
		Navesink Formation	Sand, clayey, silty, glauconitic, green and black, medium- to coarse-grained		
		Mount Laurel Sand	Sand, quartz, brown and gray, fine- to coarse-grained, slightly glauconitic		
		Wenonah Formation	Sand, very fine to fine-grained, gray and brown, silty, slightly glauconitic		
		Marshalltown Formation	Clay, silty, dark greenish-gray, glauconitic quartz sand		
		Englishtown Formation	Sand, quartz, tan and gray, fine- to medium-grained; local clay beds		
		Woodbury Clay	Clay, gray and black, micaceous silt		
		Merchantville Formation	Clay, glauconitic, micaceous, gray and black; locally very fine-grained quartz and glauconitic sand		
		Magothy Formation	Sand, quartz, light-gray, fine- to coarse-grained; local beds of dark-gray lignitic clay		
	Lower Cretaceous	Raritan Formation	Sand, quartz, light-gray, fine- to coarse-grained; pebbly, arkosic, red, white, and variegated clay	Potomac-Raritan Magothy aquifer	A major aquifer system. In the northern Coastal Plain, the upper aquifer is equivalent to the Old Bridge aquifer and the middle aquifer is the equivalent of the Farrington aquifer.
		Potomac Group	Alternating clay, silt, sand, and gravel		
Pre-Cretaceous		Bedrock	Precambrian and lower Paleozoic crystalline rocks, metamorphic schist and gneiss; locally Triassic basalt, sandstone, and shale and Jurassic diabase	Bedrock confining bed	No wells obtain water from these consolidated rocks, except along the Fall Line.

lower member (Sandy Hook) is a dark gray to black medium- to fine-grained sand with abundant clay, mica, and glauconite.

The Tinton sand conformably overlies the Red Bank sand and ranges from a clayey medium- to very coarse-grained feldspathic quartz and glauconite sand to a glauconitic coarse sand. The color varies from dark yellowish-orange or light brown to moderate brown, and from light olive to grayish olive. Glauconite may constitute 60 to 80% of the sand fraction in the upper part of the unit (Minard, 1969). The upper part of the Tinton sand is often highly oxidized and iron-oxide encrusted (Minard, 1969).

Both the Tinton sand and the Hornerstown sand (or marl) crop out at Charles Wood. The Hornerstown unconformably overlies the Tinton sand and is a dusky-green to grayish-olive or grayish-olive-green clayey glauconitic sand that may oxidize to moderate reddish-brown and dusky red. The percentage of quartz sand ranges from a few percent to 30%. Approximately half of this formation is composed of silt and clay.

The Kirkwood Formation (part of the Kirkwood-Cohansey system) crops out southeast of the Main Post and dips to the southeast at a slope of 20 feet per mile (Jablonski, 1968). The Kirkwood Formation consists of alternating layers of sand and clay. The upper unit is a light gray to yellowish-brown fine-grained quartz sand with quartz nodules and small pebbles. The lower unit is a brown silt in Monmouth County (Jablonski, 1968).

2.6 HYDROGEOLOGY

Fort Monmouth lies in the Atlantic and Eastern Gulf Coastal Plain groundwater region (Meisler et al., 1988). This groundwater region is underlain by undeformed unconsolidated to semiconsolidated sedimentary deposits. The chemistry of the water near the surface is variable with low dissolved solids and high iron concentrations. The water chemistry in areas underlain by glauconitic sediments (such as the Red Bank and Tinton sands) is dominated by calcium, magnesium, and iron. The sediments in the area of Fort Monmouth were deposited in fluvial-deltaic to nearshore environments.

The water table aquifer at the Main Post area is identified as part of the "composite confining units," or minor aquifers. The minor aquifers include the Navesink Formation, the Red Bank sand, Tinton sand, Hornerstown sand, Vincentown Formation, the Manasquan Formation, Shark River Formation, Piney Point Formation, and the basal clay of the Kirkwood Formation.

According to Jablonski (1968), wells drilled in the Red Bank and Tinton sands produce from 2 to 25 gallons per minute (gpm). Water in these upper hydrogeologic units is typically encountered at shallow depths (2 to 9 ft bgs). However, domestic wells are generally screened deeper in these upper hydrogeologic units. The shallow water table conditions in the Tinton and Red Bank sands, and the similar composition of these sands within the Kirkwood Formation, suggest that the Tinton-Red Bank-Kirkwood sequence forms a single, laterally continuous aquifer. Some well owners have reported acidic water that requires treatment to remove iron. Water in this water table aquifer will flow east toward the Atlantic Ocean. Local topography (stream valleys, etc.) will tend to deflect the flow toward local depressions.

Because of the high silt and clay content, the Hornerstown sand most likely serves as an aquitard or aquiclude rather than as an aquifer. Jablonski (1968) reports that localized areas may yield enough water for domestic use.

2.7 VEGETATION AND WILDLIFE

The information in this subsection was originally reported in the Installation Assessment (IA) (USATHAMA, 1980). Information on vegetation and wildlife of the Evans Area is not discussed in this document, but is presented in the IA.

The Fort Monmouth complex (Main Post and Charles Wood areas) lies within the outer Atlantic Coastal Plain, a region characterized by salt marsh wetlands. Both areas of Fort Monmouth have flood plain salt marshes along or within their boundaries. The ecosystem includes marsh grasses (*Phragmites*, *Spartina*, *Distichlis*, and *Scerpus*), small mammals, reptiles, amphibians, and migratory waterfowl. Parkers Creek is an ecologically unique area proximal to Fort Monmouth and its subposts. It is designated as a wildlife habitat bordering the Main Post.

Tables 2.7-1 through 2.7-4 were adapted from Appendix B of the IA report. Appendix B of the IA report also contains a list of vegetation and wildlife found during a survey of the Naval Weapons Station Earle, located approximately 10 miles from Fort Monmouth. Table 2.7-1 lists trees and shrubs found in Monmouth County. Monmouth County mammals are listed in Table 2.7-2, and reptiles and amphibians found in Monmouth County are listed in Table 2.7-3. Table 2.7-4 lists endangered birds and very rare fish in Monmouth County.

The FWS of the U.S. Department of the Interior (DOI) stated in a letter (included as Appendix E of the IA) that there are no federally listed or proposed threatened or endangered flora or fauna on Fort Monmouth. The letter also contains a list of federally endangered and threatened or candidate species in New Jersey. The Office of Natural Lands Management of NJDEP stated in a letter that there was one observance of a New Jersey listed endangered plant, the clustered sedge, in 1992, but there have been no other observances of federal or state rare species. The letter contained a list of rare species in the general vicinity of each area and in Monmouth County.

Table 2.7-1

A Partial List of Trees and Shrubs Found in Monmouth County

Trees	
White ash	Green ash
Big-toothed aspen	Quaking aspen
Atlantic white cedar	Basswood
American beech	Black birch
Gray birch	Black gum
Box elder	Black cherry
American chestnut	Flowering dogwood
Eastern red cedar	American elm
Eastern hemlock	Pignut hickory
Shagbark hickory	American holly
Ironwood	Black locust
Honey locust	Norway maple
Red maple	Silver maple
Red mulberry	White mulberry
Black oak	Swamp white oak
Chestnut oak	White oak
Pin oak	Willow oak
Pitch pine	Red pine
White pine	Sassafras
Black spruce	Norway spruce
Tree-of-heaven	Water tupelo
Black walnut	Black willow
Crack willow	Weeping willow
Shrubs	
Pink azalea	Swamp azalea
Wild azalea	Southern bayberry
Blackberry	Blackhaw
Blueberry	Common buttonbush
Chokeberry	Sand cherry
Coralberry	Large cranberry
Red osier dogwood	Swamp dogwood
Common elderberry	Fetter bush
Hawthorn	Huckleberry
Inkberry	Mountain laurel
Sweet pepperbush	Raspberry
Shadbush	Spicebush
Staghorn sumac	Poison sumac
Winged sumac	Arrowwood viburnum
Winterberry	Witch hazel



Table 2.7-2

Mammals Found in Monmouth County

Mammals	
Opossum	Gray fox
Smokey shrew	Woodchuck
Least shrew	Eastern chipmunk
Short-tail shrew	Eastern gray squirrel
Star-nose mole	Red squirrel
Eastern mole	Southern flying squirrel
Keen's myotis (bat)	Beaver
Little brown myotis	White-footed mouse
Small-footed myotis	House mouse
Silver-haired bat	Norway rat
Eastern pipistrel	Southern bog lemming
Red bat	Boreal redback vole
Big brown bat	Meadow vole
Hoary bat	Pine vole
Raccoon	Muskrat
Longtail weasel	Meadow jumping mouse
Mink	Eastern cottontail rabbit
River otter	New England cottontail*
Striped skunk	Virginia white-tailed deer
Red fox	European hare

*Candidate for Federal List of Endangered Species.

Table 2.7-3

Reptiles and Amphibians Found in Monmouth County

Reptiles	
<u>Lizards</u>	
Northern fence	Five-lined skink
	Mud salamander*
<u>Turtles</u>	
Common snapping	Bog*
Wood*	Spotted
Musk	Eastern mud
Diamond-backed terrapin	Eastern painted
Eastern box	Red-eared
<u>Snakes</u>	
Eastern smooth earth	Red-bellied
Northern brown	Northern water
Eastern garter	Eastern ribbon
Eastern hognose	Eastern worm
Northern ringneck	Rough green
Northern black racer	Northern pine*
Black rat	Corn
Scarlet	Eastern milk
Eastern king	Timber rattler*
Amphibians	
<u>Toads</u>	
Eastern spadefoot	Fowlers
<u>Tree Frogs</u>	
Spring peeper	Gray
Pine barrens*	New Jersey chorus
<u>True Frogs</u>	
Cricket	Carpenter
Pickerel	Green
Northern leopard	Wood
Bull	

*On list of endangered or threatened species or candidate for Federal List of Endangered Species.

Table 2.7-4

Endangered Birds and Very Rare Fish Found in Monmouth County

Birds	
Bald eagle ^{a,b}	Black skimmer ^b
Peregrine falcon ^a	Least tern ^b
Osprey — Fish hawk — Salt marsh ^b	Eskimo curlew — protected by U.S. Government
Coppershawk	
American bittern ^b	
Barred owl ^b	
Black call ^b	
Bobolink ^b	
Cooper's hawk ^b	
Grasshopper sparrow ^b	
Great blue heron ^b	
Loggerhead shrike ^b	
Merlin ^b	
Northern harrier ^b	
Pied-billed grebe ^b	
Piping plover ^b	
Red-shouldered hawk ^b	
Roseate tern ^b	
Savannah sparrow ^b	
Short-eared owl ^b	
Upland sand piper ^b	
Vesper sparrow	
Fish	
Short nose sturgeon	

^aFederal endangered and threatened species.

^bNew Jersey endangered and threatened species.



SECTION 3

INVESTIGATION ACTIVITIES

SECTION 3

INVESTIGATION ACTIVITIES

The site investigation (SI) at Fort Monmouth was performed in accordance with the CDAP (WESTON, 1994). A description of procedures used during the field investigation is provided in the following subsections.

3.1 GEOPHYSICS

A geophysical investigation was performed as part of the site investigation at Fort Monmouth between 29 November 1994 and 15 December 1994. The investigation was performed at locations within the Main Post and Charles Wood areas using electromagnetic (EM) conductivity, magnetometry (MAG), and/or ground penetrating radar (GPR) surveying methods. The objective of the geophysical investigations was to evaluate the location and extent of the known or suspected waste disposal areas at sites M-3, M-12, M-14, M-18, and CW-3A. The geophysical survey data were used to confirm planned subsequent monitor well and soil boring locations at each area.

Prior to the start of the geophysical investigation, a reference grid was established by a licensed surveyor at 20-ft by 100-ft centers to provide surface control for data collected at each site. The survey grid was established based on a local relative coordinate system using existing monuments and was later surveyed to a state-plane coordinate system. All field data collected at the Main Post and Charles Wood sites were referenced to the established grid coordinates.

3.1.1 Electromagnetic (EM) Terrain Conductivity Surveying Methods

3.1.1.1 Description

An EM survey was conducted at sites M-18 and CW-3A on 1 and 8 December 1994, respectively, using a Geonics, Ltd. EM-31™ terrain conductivity meter. The EM-31 is battery-powered and operates at a frequency of 9.8 kiloHertz (kHz). This system consists of a transmitting coil (primary field source), receiving coil (sensor), phase-sensing circuits, and an

amplifier. A fixed 3.7-meter intercoil spacing is standard for the EM-31. The instrument measures apparent conductivity in units of milliSiemens per meter (mS/m) in materials with true conductivities ranging up to 1,000 mS/m.

The EM-31 was operated in both the quadrature and in-phase components. The quadrature component is sensitive to conductors with low induction numbers (i.e., low conductivity materials). Relative conductivity values associated with in-phase measurements have a greater sensitivity to buried metal objects.

3.1.1.2 Methodology

Prior to conducting each survey, the EM-31 was calibrated in accordance with the instrument operating manual. No anomalies were observed in the calibration data. After calibration was completed, both the quadrature and in-phase components of the EM field were measured at the sites. Conductivity measurements were obtained in the vertical dipole mode of operation for single layer mapping. The effective depth of exploration associated with this mode of operation is approximately 18 feet (McNeill, 1980b).

The EM-31 was operated in a "continuous" mode along pre-established survey grid lines. Measurements were recorded at 5-ft intervals as the operator traversed the line. These measurements were digitally recorded and stored in memory in an Omni Data Logger™. Random quality assurance/quality control (QA/QC) readings were obtained from the EM-31 analog meter and manually recorded in the field notebook. The data in memory were downloaded from the data logger to a field computer. The computer-generated output files were edited and formatted, then compared against the random QA/QC readings recorded in the field logbook. Based on the QA/QC review of the data, no deficiencies were observed in the digitally recorded data.

Conductivity data point postings and contour plots were prepared from the field data using Geosoft™ contour plotting software. These maps (presented in Section 4) were interpreted initially for cultural features on the surface, such as fences. If it was determined that anomalies could be attributed solely to surface features, the anomalies were disregarded. The contour plots

were interpreted with regard to site soil characteristics, site-specific geology, and the suspected presence of buried waste materials. The results of the EM survey are presented and discussed in Section 4.

3.1.2 Magnetic (MAG) Methods

3.1.2.1 Description

The MAG survey was conducted at sites M-3, M-12, M-14, and CW-3A on 6 through 8 December 1994, using a GSM-19 Walking Gradiometer/Magnetometer. The instrument operates on the principle that protons or nuclei of hydrogen atoms in a hydrocarbon fluid behave as spinning magnetic dipoles where the protons are aligned or polarized by an induced current. When the current is removed, the natural spin of the proton causes them to precess about the direction of the earth's ambient magnetic field. This precession generates a small signal with a frequency proportional to the intensity of the total magnetic field. Local perturbations (induced magnetization) generated by anthropogenic (i.e., buried ferrous drums) and natural (i.e., magnetic mineral deposits) features add to the intensity of the ambient magnetic field. The magnetometer measures the vector sum of the earth's magnetic field and the anomalous induced magnetic field in standard nanoTesla (nT) units.

3.1.2.2 Methodology

Prior to conducting the survey, a base station magnetometer was established at each site in an area suspected to be representative of background conditions. The purpose of the base station was to monitor diurnal variations in the regional or "ambient" magnetic field during the actual survey. Both the base station and field magnetometers were calibrated and synchronized in accordance with the manufacturer's operating manual. No anomalies were observed in the calibration data. When calibration was completed, both the total field and magnetic gradient were measured at each station point. Additional QA/QC checks included taking readings at several locations periodically over the survey period to verify the repeatability of field results along with a swing sensor test, which was conducted to identify whether any directional bias existed in the instrument.

Consistent with the EM-31 survey, the magnetometer was operated in a "continuous" mode along the same pre-established survey grid lines. In the continuous mode, MAG measurements were recorded on at least 3-ft spacing intervals as the operator traversed the line. The MAG measurements were digitally recorded and stored in memory in the instrument's data logger.

The data in memory were downloaded from both data loggers to a field computer. Diurnal effects were monitored throughout the survey period but were considered to be negligible relative to the overall range of magnetic data. Therefore, postings of the data points and contour plots of both the total magnetic field and magnetic gradients were prepared from the field data using Geosoft™ contour plotting software. Each magnetic anomaly, as defined by a relatively high vertical gradient, was analyzed with respect to cultural features present on the surface, and the potential for buried ferrous material in the subsurface.

3.1.3 Ground Penetrating Radar (GPR) Methods

3.1.3.1 Description

A GPR survey was conducted at site M-18 on 30 November 1994 and at sites M-3, M-12, M-14, and CW-3A on 9 through 15 December 1994 using a Subsurface Interface Radar™ (SIR) System 10 model. The System 10 is a computer-controlled, multichannel unit that automatically displays, processes, and records cross-sectional color profiles of the subsurface.

The GPR method uses high frequency radio waves to acquire relatively shallow subsurface information. Short pulses of EM energy are radiated downward into the subsurface from a transmitting antenna. A portion of the energy is then reflected back to a receiving antenna, where variations in the reflected signal are continuously processed by a control unit, graphically recorded, and digitally stored on magnetic tape. The amplitude and frequency of the reflected signal are caused by variations in the electrical properties of subsurface materials. These variations may be caused by natural geologic conditions, such as composition, moisture content, salinity, and structure, as well as manmade objects such as utilities, underground storage tanks (USTs), and other buried objects.

The ability of the GPR system to resolve buried targets depends on the physical size and relative electrical contrast of an object/feature with respect to the surrounding materials. Consequently, not every subsurface feature can be identified using the GPR method. Also, since the GPR investigation is a nonintrusive surface electronic testing method, it is not possible to determine the exact description of subsurface anomalies.

3.1.3.2 Methodology

The GPR system was calibrated to site-specific conditions prior to implementation of the survey. To calibrate the system, either the dielectric constant of the survey medium or the depth to a buried object or interface must be known. The GPR system was field calibrated using an averaged dielectric constant for the survey medium. Based on assumed geologic and site conditions a dielectric constant of approximately 5 for the unsaturated unconsolidated soils and 10 for saturated unconsolidated soils was calculated for the materials underlying the sites. QA/QC checks included collecting a duplicate profile at each site to field-verify the repeatability of results.

The GPR survey was referenced to the surface control grid that was previously established at each site. Surveying was accomplished by traversing each area with a 300-megaHertz (MHz) antenna along the same grid lines previously surveyed with the EM and MAG. The product of the GPR survey is a series of real-time subsurface field profiles. The GPR data profiles were processed and interpreted using the GSSI RADAN3 software package. Select color profiles were reproduced in the office from the data tape to enhance subtle features that were not easily recognized on the gray scale of the black-and-white field profiles. These results were integrated with the EM and MAG data and are discussed in Section 4.

3.2 SEDIMENT SAMPLING

Sediment samples were collected by WESTON personnel from seven locations on and in the vicinity of Fort Monmouth on 1 and 2 December 1994. Sediments were sampled from two locations in Parkers Creek on the Main Post and one location in a tributary to Wampum Brook

on the Charles Wood site. Sediments were also collected at two locations upstream from the Main Post, one in Parkers Creek, and one in Mill Creek for background comparisons. Two background samples for Charles Wood were taken in Wampum Brook.

Sediment was collected from the top 3 to 6 inches of the substrate, using either with a stainless-steel trowel or a hand corer, depending on the water depth and compaction of the sediments. A trowel was used in shallow water with loose sediments, whereas a corer was used in deep water with compacted sediments. Sampling was based in areas of fine-grained sediment because some potentially site-related contaminants preferentially adsorb onto fine-grained sediment particles (U.S. EPA, 1982).

At all but one location, sediment samples were submitted for laboratory analysis of the following parameters:

- Target Compound List volatile organic compounds (TCL VOCs).
- TCL semivolatile organic compounds (TCL SVOCs).
- Target Analyte List (TAL) metals.
- Pesticides/polychlorinated biphenyls (PCBs).
- Cyanide.

In accordance with the CDAP, the sediment sample collected at the downstream location in Parkers Creek on the Main Post was only analyzed for TAL metals. This site was a sewage treatment plant in the 1940s, and metals are the only suspected contaminants.

To minimize the potential for volatilizing sediment samples collected for VOC analysis, VOC samples were collected first at each location. The sediment was placed directly into precleaned, prelabeled bottles. Sediment samples collected for all other analyses were then put in a stainless-steel bowl and mixed thoroughly before being transferred to bottles.

Sediment was collected for an original sample, a duplicate sample, a matrix spike (MS) sample, and a matrix spike duplicate (MSD) sample at the location suspected to have the greatest potential for contamination originating from the site and where the full suite of parameters was being analyzed (MP08, near Landfill 8 in Parkers Creek). After all samples collected for VOC

analysis were prepared at that location, sufficient sediment was collected in the bowl and mixed thoroughly to provide for both the original sample and duplicate samples.

Stainless-steel bowls and trowels, and the hand corer were decontaminated prior to use at each location according to instructions in the *Chemical Data Acquisition Plan for Site Investigation at Fort Monmouth, New Jersey* (WESTON, 1994). A laboratory-prepared trip blank was carried throughout the collecting effort for TCL VOC analysis.

After filling, sample bottles were sealed with a signed and dated custody seal, and put into polyethylene bags. Prepared bottles were packed in vermiculite in coolers. Bagged ice was put in the coolers, which were custody sealed and shipped according to U.S. Army Sampling Protocols ER 1110-263 and International Air Transport Association (IATA) regulations for next morning delivery to the laboratory.

3.3 SURFACE-WATER SAMPLING

Surface-water samples were collected from 10 locations on and in the vicinity of Fort Monmouth on 1 December 1994. Table 3.3-1 presents a summary of the surface-water parameters collected at the selected locations prior to sampling.

Surface-water samples were collected from six locations on the Main Post: two from Oceanport Creek, two from Parkers Creek, and two from Mill Creek. Surface water was also collected from both Lafetra Creek and Mill Creek upstream from the Main Post for background comparisons. Both background locations were selected because they are upstream from the head-of-tide and, therefore, were thought to be isolated from releases on the Main Post. Two surface-water samples were also collected on the Charles Wood site from a tributary to Wampum Brook for background comparison.

Surface-water samples were collected directly by submersing laboratory-cleaned sample bottles to a depth of 3 to 6 inches below the surface until completely filled. At locations where surface

Table 3.3-1

Summary of Surface-Water Field Parameters

Location ID	Temperature (°C)	Dissolved Oxygen (mg/L)	pH	Conductivity (µmhos)	Water Depth (inches)	Channel Width (feet)	Sediment Type	Tidally Influenced
Main Post								
Background								
Lafetra Creek	6.5	9.8	7.6	260	12	15	Sand	No ^a
Wampum Creek	8.5	9.0	7.6	220	12	25	Large cobble	No ^a
Lafetra Creek								
MP10	6.5	9.6	7.7	270	3	25	Sand	Yes ^a
MP06	5.0	10.0	7.5	410	5	40	Sand	Yes ^a
Wampum Brook (MP02)								
SW01	9.0	9.2	8.0	230	12	20	Sand	No ^a
SW02	8.5	10.0	7.8	220	12	25	Sand	No ^a
Oceanport Creek (MP14)								
SW01	8.0	10.5	7.6	510	3	20	Sand	Yes ^a
SW02	8.0	9.4	7.7	980	36	20	Sand	Yes ^a
Charles Wood Background								
CW02	5.0	11.2	8.3	1,000	12	3	Sand, gravel, small cobble	No ^b
CW05	10.0	3.0	7.4	220	3	15	Silty sand, leaf choked	No ^b

^aResults determined from conductivity and salinity measurements collected during tidal monitoring tests.

^bResults based on field observations.

water was not sufficiently deep, a hole was made in the sediment to facilitate sample collection. Disturbed sediment was allowed to settle before water samples were collected. Clean surgical gloves were worn during surface-water sample collection and when handling sample bottles for shipping. Gloves were changed between sample locations.

Surface water was analyzed for the following parameters:

- TCL VOCs.
- TCL SVOCs.
- TAL total metals (unfiltered).
- TAL soluble metals (filtered).
- Pesticides/PCBs.
- Cyanide.

Samples for soluble metals were filtered with a peristaltic pump through a high capacity 0.45-micron filter.

Surface water was collected for an original sample, a duplicate sample, an MS sample, and an MSD sample at the location suspected to have the greatest potential for contamination originating from the site (sample MP06, near Landfill 6 in Parkers Creek). No equipment was used to collect surface water, so no rinsate blanks were collected.

Filled sample bottles were handled in the same manner as sediment sample bottles (see Subsection 3.2).

3.4 SURFACE SOIL SAMPLES

Surface soil samples were collected by WESTON personnel from 17 locations on and in the vicinity of Fort Monmouth, NJ on 29 and 30 November 1994. Of the surface soil locations, 6 were on the Main Post and 11 were on the Charles Wood site.

Surface soil was collected from within the upper 6 inches with a decontaminated stainless-steel trowel. To minimize the potential for volatilization, surface soil samples submitted for VOC

analysis were collected first at each location, placing the soil directly into laboratory-prepared bottles. Soil samples collected for all other analyses were then put in a decontaminated stainless-steel bowl and mixed thoroughly before being transferred to laboratory-prepared bottles.

At Main Post, the soil from all six sampling locations was analyzed for pesticides/PCBs and TCL SVOCs; the soil from the two locations at site M-15 was also analyzed for TAL metals and cyanide; and the soil from the four locations at site M-16 was also analyzed for TCL VOCs. Of those Charles Wood site locations where soil was analyzed for more than PCBs, all were analyzed for TAL metals and cyanide, and soil from location CW-6 was also analyzed for pesticides, TCL VOCs, and TCL SVOCs.

Rinse blanks submitted for TCL VOC analysis were collected or labeled at a Main Post location (MP-16) and a Charles Wood site location (CW-9). A duplicate soil sample for TAL metals and cyanide analysis was also collected at the Charles Wood site location (CW-9). Sufficient soil was collected at each duplicate sample location and mixed thoroughly in the bowl to provide for both the original and duplicate samples. Handling of soil samples was similar to that of sediment (Subsection 3.2).

3.5 PCB TRANSFORMER SITE SAMPLING

3.5.1 General

Two types of samples were collected (soil samples and concrete chip samples) to determine whether PCB contamination exists at any of the former PCB class transformer locations. Soil samples were taken under the former location of pole-mounted transformers and on each side of a pad-mounted transformer. Concrete chip samples were taken at stained areas on the concrete pads or vault floors. Table 3.5-1 summarizes PCB transformer sampling. All samples were analyzed for PCBs.

Table 3.5-1

Sampling at Former PCB Transformer Sites

Transformer Code	Location	Size (kVA)	Remarks	Description	Sampling
CW010	Building 2276-W side on Bataan Ave., pole	37	Replaced by CW261, CW262, and CW263.	Pole over grass-covered soil. No stain.	Collected soil sample (CWAE-TR01) at pole under former location of transformer.
CW035	Building 2000-NE side, pad	300	Replaced by CW268, CW269, and CW270.	On old approximately 4-ft by 6-ft concrete pad. Dark stains on pad.	Concrete pad had been removed. Collected four soil samples (CW07-TR01 to TR04) downgradient of former pad location (see Figure 3.5-2).
CW039, CW040	Building 2018-S side, pole	25	Replaced by CW265.	Pole over grass-covered soil. No visible stains.	Collected soil samples (CW07-TR05 and TR06) at poles. Because of uncertainty of exact location of former PCB transformers, sampled two pole sites (see Figure 3.5-2).
MP-007	Building 718, pole located approx. 75 ft east of Wilson.	37	Replaced by MP-495.	Pole located over grass-covered soil. No visible stain.	Collected soil sample (MPT4-TR01) at pole under former location of transformer.
MP-062	Building 292-NW side, pole	75	Removed, replaced.	Three on pole replaced by 3 on old pad that is directly under pole. No visible oil stain on pad.	Collected soil sample (MPT5-TR01) at pole under former location of transformer.
MP-104	Building 686-east, pole	37	Replaced by MP-489.	Located over grass-covered soil. No visible stain.	Collected soil sample (MPT6-TR01) at pole under former location of transformer.
MP-124	Building 1220-west side, pad	500	Replaced by MP-493.	On old approximately 8-ft by 10-ft concrete pad. Approximately 1-ft diameter brown stain on west side of pad.	Collected four soil samples and one concrete chip sample from pad (see Figure 3.5-1).
MP-280	Building 1002, indoor vault	750	Replaced by MP-494.	Concrete floor not refurbished; in good condition. Stains visible under front and back of new transformer. Stains may be connected; in which case stain would be about 5 ft in diameter.	Collected concrete sample from stained area under transformer (MPT7-CC01).

Table 3.5-1

**Sampling at Former PCB Transformer Sites
(Continued)**

Transformer Code	Location	Size (kVA)	Remarks	Description	Sampling
MP-282, MP-283	Building 1004, pole located approx. 50 ft west of corner of Razor and Stephenson	10	Removed, no replacement.	Pole over pavement and grass-covered soil. No visible stain.	Collected soil sample (MPT8-TR01) at pole under former location of transformer.
MP-347, MP-348, MP-349	Building 1208, indoor vault	250	Replaced by MP-496.	Two small stains about 1 ft in diameter, one between MP-347 and MP-348 and one on NE side of MP-349.	Collected concrete sample from stained area (MPT2-CC01).
MP350, MP351, MP352	Building 1209, indoor vault	250	Replaced by MP-499.	Concrete was not refurbished; it is in good condition. Very slight stain, about 1 ft in diameter, between MP-352 and wall.	Collected concrete sample from stained area (MPT1-CC01).

Location:

CW — Charles Wood
MP — Main Post

3-12

WESTON
SUNBELT
RECORDS/STAMPING



3.5.2 Sample Collection Procedures

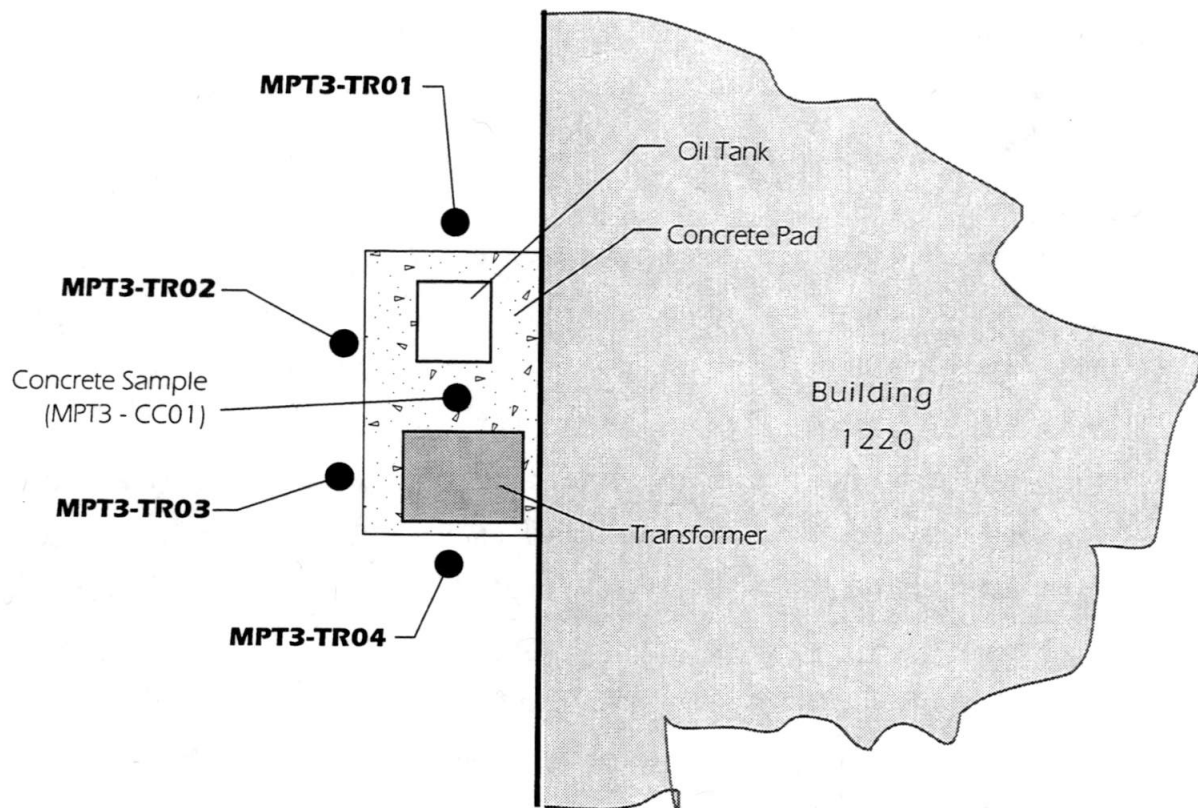
A soil sample was collected for PCB screening underneath each pole-mounted unit. Four discrete soil samples were taken at the sides of the concrete pad at Building 1220 (Figure 3.5-1). The pad at Building 2000 on Charles Wood had been removed prior to sampling, so four surface soil samples were taken along a natural drainage swale north and west of the former pad location (Figure 3.5-2).

Because a leak from a pole-mounted transformer could have occurred at any point on the transformer, a screening process was performed to detect soil contamination. Soil samples for screening were taken at three points immediately below the location of the pole-mounted transformer and were mixed. The samplers were directed to take a sample at any location with stressed vegetation, but no stressed areas were found. This process increases the likelihood of detecting small areas of contamination. Additional sampling will be conducted at locations where PCBs were detected in the soil at levels above or close to the NJDEP soil criteria.

At each soil sampling location a soil sample from 0 to 6 inches was collected with a stainless-steel scoop and placed in a mixing bowl. Stones and vegetation were removed from the soil matrix, and the remaining soil was mixed in a stainless-steel bowl. The sample was placed in a glass bottle with a Teflon-lined cap. A clean pair of disposable sample gloves was worn by the sampler during collection of each separate sample.

A concrete chip sample was taken in the middle of each stain on the concrete of a pad or vault. An electronic chipping hammer was used to chip the concrete to a depth of up to ½ inch and to pulverize the concrete for analysis. Chips were pulverized as fine as possible to facilitate laboratory extraction and analysis. A clean pair of disposable sample gloves was worn by the sampler during collection of each discrete sample.

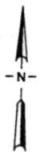
Stainless-steel bowls and trowels were used and decontaminated prior to use in accordance with instructions in the CDAP (WESTON, 1994). Trip and field blanks and duplicate samples were prepared and submitted for analysis.



NOT TO SCALE

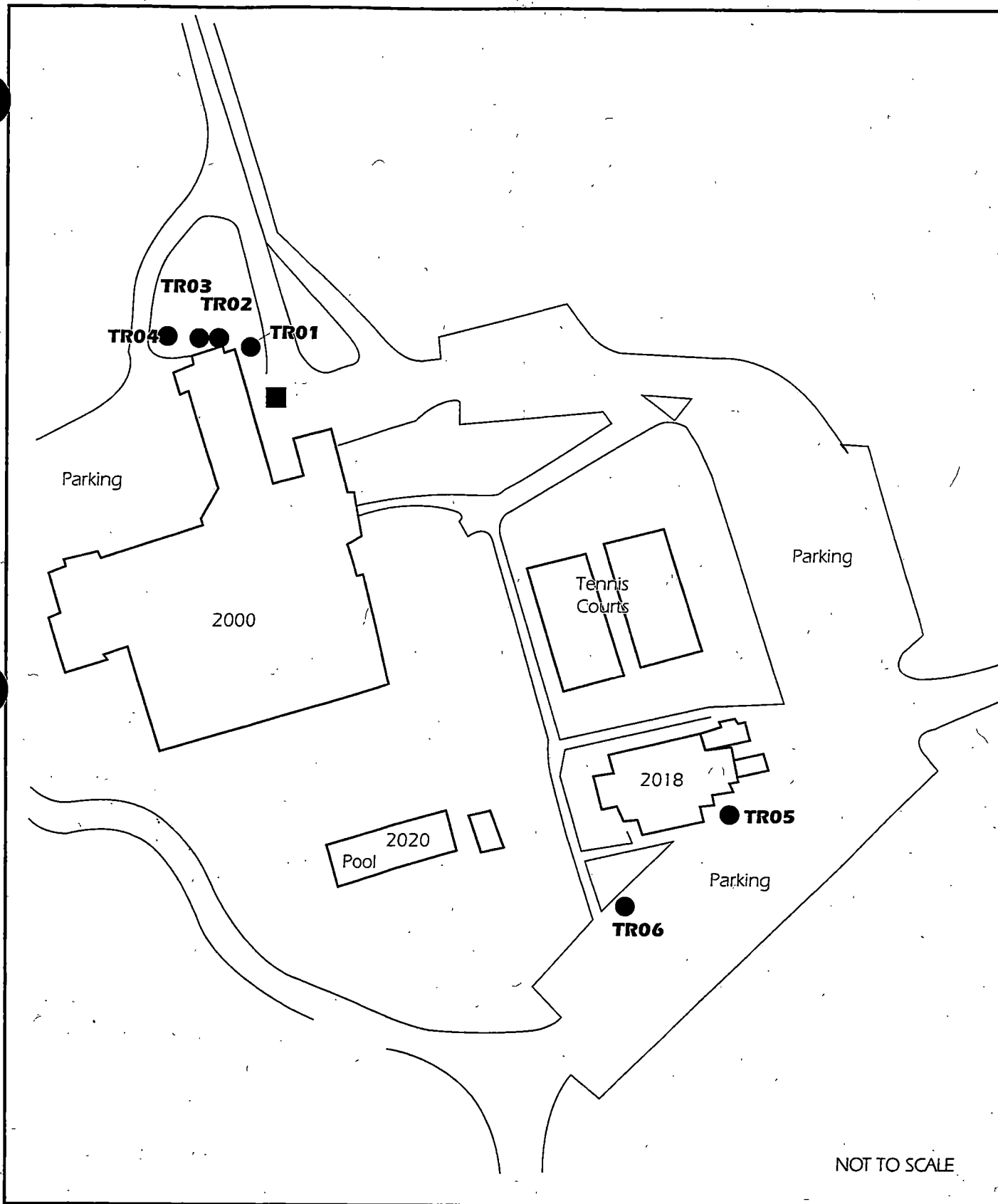
Legend

● Sampling Location



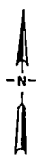
Fort Monmouth, Main Post

FIGURE 3.5-1
TRANSFORMER SITE SAMPLING LOCATIONS
AT BUILDING 1220, MAIN POST



Legend

- Sampling Location
- Former Transformer Pad



Fort Monmouth

FIGURE 3.5-2
TRANSFORMER SITE SAMPLING LOCATIONS
AT BUILDING 2000 AND 2018, CHARLES WOOD

3.6 SOIL BORINGS

Soil borings were drilled at the following Main Post sites: M-16, M-18, and AOC-3; and Charles Wood sites: CW-1, CW-2, CW-4, CW-5, CW-6, CW-9, and AOC-7. The borings were completed to site-specific depths using hollow-stem auger drilling techniques to collect soil samples for laboratory analysis. Site-specific soil samples were analyzed for the parameters listed in Table 3.6-1. Lithologic logs are presented in Appendix A.

The borings were drilled using either 4.25-in. or 8-in. inside diameter (ID) hollow stem augers. Borings that were converted into monitor wells were drilled using the larger auger. Continuous split-spoon samples were collected according to the techniques specified in American Society for Testing and Materials (ASTM) Method 1586. All drilling was conducted by a New Jersey licensed driller.

Soil samples were collected from the soil borings using the following procedures:

1. Soil samples submitted for laboratory analysis were collected from borings using a 2-ft long, 2- or 3-in. diameter split spoon.
2. After retrieval, the split spoon was opened and immediately scanned with an organic vapor detector as a preliminary assessment of the amount of organic compounds present in the soils. Field screening for headspace was conducted according to the protocols outlined in the *NJDEP Field Sampling Procedures Manual*, May 1992.
3. If required by the site-specific sampling protocol, a portion of the soil sample was taken directly from the split spoon and placed in the sample bottle for VOC analysis to minimize volatilization of the sample. VOC samples were collected from discrete 6-in. intervals prior to organic vapor scanning of the soil samples.
4. Samples submitted for laboratory analysis were collected from intervals where high organic vapor monitor (OVM) readings were measured, visible staining was observed, or as specified in Section 4 of the CDAP.
5. The remaining sample was then homogenized in a stainless-steel bowl after a lithologic description of the soil sample and other pertinent drilling information was recorded according to the procedures outlined in the *NJDEP Field Sampling Procedures Manual*, May 1992.

Table 3.6-1
Fort Monmouth - Main Post and Charles Wood
Soil Sampling Analytical Parameters

SITE SAMPLE LOCATION	TCL VOC	TCL SVOC	TCL PEST/ PCB	TAL METALS	TPH	CYANIDE
Main Post						
M-15		X	X	X		
M-16	X	X	X			
M-18	X	X*	X	X	X	
AOC-3	X	X	X	X		
Background	X	X	X	X		X
Charles Wood						
CW-1	X	X	X	X		
CW-2	X	X	X	X		
CW-4	X	X	X	X		
CW-5	X	X	X			
CW-6	X	X	X	X**		
CW-9	X	X	X	X		
AOC-7	X	X	X	X		
Background	X	X	X	X		X

Notes:

* = Only sampled SVOCs at SB-06.

** = Only sampled at SS-01.

SVOC - Semi-Volatile Organic Compound

PEST - Pesticides

PCB - Polychlorinated biphenyls

TAL - Target Analyte List

TCL - Target Compound List

TPH - Total Petroleum Hydrocarbons

VOC - Volatile Organic Compound

See Table 5.1-1 for analytical methods.

6. The soil was then placed in the appropriate sample containers.
7. Field QA/QC samples were collected at a frequency of 1 set per 10 samples as specified in the CDAP.

A total of 16 trip blanks, 3 duplicates, and 3 equipment blanks were collected during the soil sampling program. Extra soil for laboratory MS/MSD analysis was also obtained as part of the QA/QC program. One split sample was collected and sent to the USACE New England Division Environmental Laboratory for analysis. Specific sampling protocols were in accordance with the procedures outlined in the CDAP.

After sampling was completed, the shallow borings were allowed to fill by the natural collapse of surrounding soil, and then further backfilled with a cement/bentonite mixture to ground surface. Split spoons and stainless-steel bowls were decontaminated prior to each use according to the procedures specified in the CDAP. Field blanks consisted of chromatography-grade distilled water rinsed over the inside of a decontaminated split spoon and bowl. Field blanks were collected once every 10 soil samples collected per analysis to verify the effectiveness of the decontamination process. All nonsampling, downhole drilling equipment was decontaminated between boring locations at each site, as described in the CDAP. Filled sample bottles were handled in the same manner as sediment sample bottles (Subsection 3.2).

3.7 GROUNDWATER MONITOR WELL INSTALLATION

A total of 45 shallow groundwater monitor wells were installed at both the Main Post and Charles Wood areas between 13 December 1994 and 23 January 1995 in accordance with the procedures and materials specified in the CDAP (December 1994). A total of 29 monitor wells were installed at the Main Post location and 16 monitor wells were installed at Charles Wood (these numbers include background wells). All monitor wells were drilled using an auger-type drilling rig equipped with 8-in. and 4.25-in. ID hollow-stem augers.

Continuous split-spoon samples were collected using ASTM Method 1586. A complete lithologic profile was recorded for each well by the WESTON site geologist from the split-spoon sample.

Monitor wells were installed within the shallow unconfined hydrogeologic water-bearing zone at depths ranging from 14 to 28 ft bgs. The shallow monitor wells were constructed with 4-in. diameter Schedule 40 polyvinyl chloride (PVC) casing and screen. Well screens were placed approximately 2 feet above the noted saturation depth to monitor seasonal fluctuations. However, where saturation was observed in boreholes immediately below ground surface (1 to 4 ft) screens were placed entirely in the saturation zone in order to get the proper sand pack and seal above the slotted screened interval. Screen lengths varied from 10 to 15 feet (screen slot size is 0.01 in.). The annular space around the well screen was filled with sand pack to approximately 1 to 2 feet above the top of the screen. A minimum 2.5- to 3-ft bentonite slurry was placed above the sand pack and a bentonite/cement grout mixture was used to seal the remaining annular space. All wells were secured with a locking steel protective casing. Summaries of well completion specifications for Main Post and Charles Wood are presented in Tables 3.7-1 and 3.7-2, respectively. Individual lithologic logs and well construction summaries are presented in Appendix A.

Well permit numbers and site identification numbers were stamped on the 6-in. diameter steel outer protective casing. The top of the PVC casing and ground surface was surveyed by a New Jersey-licensed surveyor and was referenced in feet above msl. Appendix B presents the survey data for site monitor and stilling wells. All well permit numbers and survey information are also included with each lithologic log and are summarized in Tables 3.7-1 and 3.7-2.

All drilling equipment was decontaminated in accordance with the decontamination procedures described in the CDAP prior to use at each well location. Drill cuttings were spread on the ground near the well location since no OVM readings above background were recorded. Holes, ruts, or divots developed during drilling were backfilled.

3.7.1 Well Development

Following installation, wells were developed according to the procedures described in the CDAP. The development procedures consisted of manually surging with a PVC surge block for 15 to 30 minutes. After surging, the wells were purged using a PVC bailer to remove any fine particles.

Table 3.7-1
Fort Monmouth - Main Post
Well Completion Summary

Site and Location ID	Well Permit No.	Completion Date	Surveyed GS Elev. (Ft. MSL)	Surveyed PVC Elev. (Ft. MSL)	Total Depth (Ft. BGS)	Total Depth (Ft. TOIC)	Screened Interval (Ft. BGS)	Top of Sand Pack (Ft. BGS)	Top of Seal (Ft. BGS)
SITE M-2									
MW-01	2932584	14-Dec-94	19.44	21.04	22.75	24.35	7.00-22.29	5.75	3.75
MW-02	2932585	13-Dec-94	13.36	15.5	17.46	19.6	7.46-17.00	5.46	3.46
MW-03	2932586	13-Dec-94	10.98	12.63	15.6	17.25	5.60-15.14	4.6	2.6
SITE M-3									
MW-04	2932568	5-Jan-95	17.34	19.02	23.72	25.40	8.72-23.26	6.72	3.72
MW-05	2932569	9-Jan-95	11.28	13.30	16.43	18.45	6.43-15.97	4.43	2.43
MW-06	2932570	11-Jan-95	10.25	12.42	15.33	17.50	5.33-14.87	3.33	1.33
SITE M-4									
MW-07	2932571	14-Dec-94	14.83	16.75	16.01	17.93	6.01-15.55	4.01	1.51
MW-08	2932572	13-Dec-94	9.02	10.68	18.64	20.30	3.64-18.18	1.64	0.20
MW-09	2932573	13-Dec-94	7.77	9.69	22.69	24.61	7.69-22.23	5.69	3.19
SITE M-5									
MW-10	2932574	14-Dec-94	5.13	6.91	15.00	16.78	5.00-14.54	3.00	0.80
MW-11	2932575	15-Dec-94	9.77	11.70	15.00	16.93	5.00-14.54	3.00	0.80
SITE M-8									
MW-12	2932560	20-Dec-94	13.47	15.20	15.00	16.73	5.00-14.54	3.00	0.50
MW-13	2932560	17-Jan-95	6.02	7.80	15.00	16.78	5.00-14.54	3.50	1.00
MW-14	2932562	16-Jan-95	12.88	14.91	15.00	17.03	5.00-14.54	3.00	0.50
MW-15	2932563	17-Jan-95	5.01	7.01	15.00	17.00	5.00-14.54	3.50	1.00
SITE M-12									
MW-16	2932576	4-Jan-95	6.33	8.35	14.50	16.52	4.50-14.01	3.00	0.50
MW-17	2932577	11-Jan-95	5.90	7.87	14.50	16.47	4.50-14.04	3.00	0.50
MW-18	2932578	11-Jan-95	4.78	6.62	14.50	16.34	4.50-14.04	3.00	0.50
SITE M-14									
MW-19	2932579	4-Jan-95	7.98	9.68	15.00	16.70	5.00-14.54	3.50	0.50
MW-20	2932580	4-Jan-95	7.43	9.29	14.50	16.36	4.50-14.04	3.00	1.00
MW-21	2932581	4-Jan-95	7.50	9.57	16.00	18.07	6.00-15.54	4.00	1.00
SITE M-16									
MW-22	2932582	15-Dec-94	5.5	7.25	14.50	16.25	4.50-14.04	3.00	1.00
SITE M-18									
MW-24	2932565	12-Jan-95	6.78	8.16	15.00	16.38	5.00-14.54	3.50	1.00
MW-25	2932566	13-Jan-95	6.35	8.28	15.00	16.93	5.00-14.54	3.00	0.50
BACKGROUND									
MW1B	2932587	9-Jan-95	22.48	24.59	14.00	16.11	4.00-13.54	3.00	0.50
MW2B	2932588	6-Jan-95	19.44	20.23	20.00	20.79	19.54-20.00	8.00	5.00
MW3B	2932589	9-Jan-95	19.2	21.09	26.00	27.89	16.00-25.54	14.00	11.00
MW4B	2932567	9-Jan-95	9.78	12.08	15.00	17.30	5.00-14.54	3.00	1.00
MW5B	2932583	11-Jan-95	13.4	15.4	14.50	16.50	4.50-14.04	3.00	1.00

Notes:

All wells were completed as 4 inch PVC single cased wells with 10-slot screen (0.010 -inches) and have a 6-inch diameter outer steel protective casing.

GS - Ground surface

TOIC - Top of Inner Casing

Elev. - Elevation

MSL - Mean Sea Level

Ft - Feet

BGS - Below Ground Surface

Table 3.7-2
Fort Monmouth - Charles Wood
Well Completion Summary

Site and Location ID	Well Permit No.	Completion Date	Surveyed GS Elev. (Ft. MSL)	Surveyed PVC Elev. (Ft. MSL)	Total Depth (Ft. BGS)	Total Depth (Ft. TOIC)	Screened Interval (Ft. BGS)	Top of Sand Pack (Ft. BGS)	Top of Seal (Ft. BGS)
SITE CW-1									
MW-26	2932591	19-Dec-94	60.54	62.46	15.00	17.01	5.00-14.54	4.00	2.00
MW-27	2932592	19-Dec-94	60.81	62.56	15.00	16.75	5.00-14.54	4.00	2.00
MW-28	2932593	19-Dec-94	60.73	62.89	15.00	17.16	5.00-14.54	5.00	0.50
MW-29	2932590	19-Dec-94	60.41	62.44	15.00	17.03	5.00-14.54	3.00	0.50
SITE CW-2									
MW-30	2932594	16-Dec-94	49.47	51.71	16.00	18.24	6.00-15.54	4.00	2.00
MW-31	2932595	16-Dec-94	49.67	51.58	15.00	16.91	5.00-14.54	3.00	1.00
MW-32	2932596	16-Dec-94	49.47	51.38	15.00	16.91	5.00-14.54	3.00	0.80
MW-33	2932597	15-Dec-94	49.18	51.09	15.00	16.91	5.00-14.54	3.00	0.50
SITE CW-6									
MW-34	2932599	3-Jan-95	31.97	33.76	14.50	16.29	4.50-14.04	3.00	1.00
SITE CW-9									
MW-35	2932600	4-Jan-95	29.27	31.43	14.50	16.66	4.50-14.01	3.00	0.50
MW-36	2932601	4-Jan-95	31.22	33.21	14.00	15.99	4.00-13.54	3.00	1.00
BACKGROUND									
MW-6B	2932602	10-Jan-95	35.19	37.37	14.00	16.18	4.00-13.54	3.00	1.00
MW-7B	2932604	10-Jan-95	64.27	66.31	15.00	17.04	5.00-14.54	3.00	1.00
MW-8B	2932598	10-Jan-95	47.04	48.9	15.00	16.86	5.00-14.54	3.00	0.50
MW-9B	2932603	23-Jan-95	43.13	45.31	15.00	17.18	5.00-14.54	3.00	1.00
MW-10B	2932605	10-Jan-95	51.36	53.14	14.50	16.28	4.50-14.04	3.00	0.50

All wells were completed as 4-inch PVC single cased wells with 10-slot screen (0.010-inches) and have a 6-inch diameter outer steel protective casing.

Notes:

GS - Ground surface

Elev. - Elevation

Ft - Feet

TOIC - Top of Inner Casing

MSL - Mean Sea Level

BGS - Below Ground Surface

that may have accumulated in the well column and were then purged by bailing or pumping with a submersible pump to remove the fine particles from the sand pack. Monitor wells MW-1, MW-24, MW-25, MW-30 through MW-33, MW-03B, MW-05B, and MW-09B were developed by bailing; all other wells had sufficient yield to sustain pumping. Throughout the development process, the temperature, pH, and specific conductance of the purge water were measured and recorded in the field at a minimum of once per well volume of water removed. The well development sheets are included in Appendix C. Well development continued until moderately low turbidity was visually observed or where well turbidity was believed to be a result of natural conditions after a maximum of 2 hours of purging. However, well development continued after 2 hours of purging at several locations where high turbidity was believed to be a result of inadequate well yields. Consequently, low volumes of water were removed. After a sufficient volume of water was removed and ample time was applied toward well development, development ceased (see Appendix C).

All development equipment was decontaminated prior to use in each well in accordance with the procedures described in the CDAP. Since no OVM readings above background were recorded during development, the purge water was discharged to the ground, as directed in the CDAP.

3.7.2 Well Abandonment

All existing monitor wells and piezometers at Landfill 8 were abandoned in accordance with the requirements specified in the CDAP. Several site reconnaissance efforts were conducted in an effort to locate all of the previously installed monitor wells and piezometers, in or around Landfill 8. A total of 11 wells, six 4-in. monitor wells and five 2-in. piezometers, were identified for abandonment (Figure 4.2-12). Access to the locations was made with the use of an all terrain vehicle (ATV) rig. The wells were abandoned by a New Jersey licensed driller in accordance with the NJDEP procedures for wells screened across an aquifer (unconfined). Abandonment procedures consisted of:

1. Recording field observations of well construction details, if available.
2. Pulling the outer protective casing out of the ground.

3. Cutting the inner PVC casing stick-up off to ground surface.
4. Tremie-grouting the well from the bottom of the PVC screen to the ground surface with a cement/bentonite mixture.

3.8. GROUNDWATER SAMPLING

Two groundwater sampling rounds were conducted at the Main Post and Charles Wood areas between 13 through 22 February 1995 and 7 through 15 March 1995. A complete set of depth to water readings at all well locations on the Main Post and Charles Wood areas were collected prior to start of the groundwater sampling round. The full set of depth to water readings and elevations, which are provided in the discussion of site groundwater flow, are presented in Appendix C, Tables C-1 and C-2. The groundwater sampling was conducted in accordance with the *NJDEP Field Sampling Procedures Manual* (May 1992), as indicated in the CDAP, to ensure that water samples were representative of subsurface conditions. Groundwater samples were collected from the 45 newly installed monitor wells after a minimum of 2 to 3 weeks following well development. Site-specific groundwater samples were analyzed for the constituents presented in Table 3.8-1. Two existing monitor wells were also sampled; one at site M-18 on the Main Post, and one at site CW-6 on Charles Wood.

Prior to sampling, all monitor wells were purged with a variable rate stainless-steel submersible pump at rates between 0.5 and 1.0 gpm. Well yield data collected during well development were used to estimate the purge rate for each well. Prior to well purging, pH, temperature, and specific conductance measurements were recorded to compare to subsequent measurements taken during purging as each well volume was evacuated. Purging was continued until parameters stabilized and a minimum of three well volumes were evacuated. Monitor wells that purged dry were allowed to recover and purged again to remove a minimum of 1.5 well volumes before sampling. Groundwater samples from all wells were collected from the monitor wells using dedicated, disposable Teflon bailers. Groundwater was transferred from the bailers directly into the appropriate sample containers. Sample portions designated for soluble metals analyses were field-filtered. Field QA/QC samples were collected at a frequency of 1 set per 10 samples. A total of seven trip blanks, three duplicates, and seven equipment blanks were collected during

Table 3.8-1
Fort Monmouth - Main Post and Charles Wood
Sampling Parameters Table for
February & March 1995 Sampling Rounds

SITE SAMPLE LOCATION	TCL VOC (8240)	TCL SVOC	TCL PEST/ PCB	TAL Metals Total	TAL Metals Dissolved	TPH	Cyanide	Sulfate	Ammonia
Main Post									
M-2	X	X	X	X	X		X		
M-3	X	X	X	X	X		X		
M-4	X	X	X	X	X		X		
M-5	X	X	X	X	X		X	X	
M-8	X	X	X	X	X		X	X	X
M-12	X	X	X	X	X		X		
M-14	X	X	X	X	X		X		
M-16	X	X	X						
M-18	X	X	X	X	X	X			
Background	X	X	X	X	X		X		
Charles Wood									
CW-1	X	X	X	X	X				
CW-2	X	X	X	X	X				
CW-6	X	X	X						
CW-9	X	X	X	X	X				
Background	X	X	X	X	X		X		

Notes:

PCB - Polychlorinated biphenyls

PEST - Pesticides

SVOC - Semi-Volatile Organic Compounds

TAL - Target Analyte List

TCL - Target Compound List

TPH - Total Petroleum Hydrocarbons

VOC - Volatile Organic Compound

See table 5.1-1 for analytical methods.

each sampling round. Extra groundwater for laboratory MS/MSD analysis was also obtained as part of the QA/QC program. One split sample per sampling round was collected and sent to the USACE New England Division Environmental Laboratory for analysis. Specific sampling protocols were in accordance with the procedures outlined in the CDAP. Filled sample bottles were handled in the same manner as sediment sample bottles (Subsection 3.2). Appendix D presents the analytical results of the field sampling activities at both the Main Post and Charles Wood areas.

3.9 TIDAL MONITORING

Two 72-hr tidal monitoring tests were conducted in three areas at the Main Post: Landfill 2, Landfill 8, and Landfills 12 and 14. The tests were conducted the week of 30 January through 3 February 1995, prior to the February 1995 groundwater sampling round, and the week of 20 through 24 March following the March 1995 groundwater sampling round in an effort to evaluate the effect of tidal fluctuations on water levels in the monitor wells. A total of four stilling wells were installed; one at Landfill 2, one at Landfill 8, and two at the Landfill 12 and 14 areas.

The stilling wells at Fort Monmouth are temporarily installed measuring points that are used to monitor water-level fluctuations in surface-water bodies (creeks). The stilling wells were installed using a 2-in. diameter, 5-ft long stainless-steel slotted screen with a conical drive shoe. The drive shoe was used to insert the screen approximately 2 to 3 feet into the surface-water sediments. Once the steel screen was secured, a 2-in. diameter, 5-ft long PVC slotted screen was added to the steel screen to ensure that the top of the stilling well was above creek water levels during high tides. The top of the PVC casing was surveyed by a New Jersey-licensed surveyor. The data collected are presented in Appendix B, along with the stream bed elevations. The data were collected from the stilling wells using pressure transducers with an electronic data logger (In-Situ Model SE-1000C) and were then compared to the subsequent site monitor wells to gauge the influence of the tides on water levels in the monitor wells. Water-level fluctuations in the monitor wells were collected using pressure transducers (In-Situ Model SE 1000C) and well sentinels (Model LTM 3000). Appendix E presents the results (hydrographs) and conductivity

and salinity measurements collected during the individual tidal monitoring tests. The stilling wells were located in accordance with the CDAP.

SECTION 4

RESULTS OF INVESTIGATION

RESULTS OF INVESTIGATION

4.1 COMPARISON WITH NEW JERSEY STANDARDS AND BACKGROUND

The results of the sampling effort were evaluated by comparing them with the results of background samples and with NJDEP regulatory standards. In general, for each compound of each environmental sample, the analytical results were compared against the NJDEP regulatory criteria. If the analytical result exceeded the regulatory criteria, then it was compared against the maximum background concentration. Those compounds that exceeded the regulatory standard and established background at a particular site were classified as a compound of concern.

The concentration of each compound was first compared with NJDEP standards. The New Jersey regulatory standards used for this evaluation are summarized in the following paragraphs:

- Groundwater — NJAC 7:9-6, *Groundwater Quality Standards*, establishes groundwater criteria for different classes of groundwater. Class II-A, which is defined as all groundwater that is not classified as one of the other special classes, is the class for groundwater at Fort Monmouth. Table 1 of this regulation presents the regulatory limit as the higher of the groundwater quality criteria and the practical quantitation levels (PQL). The PQL is the lowest concentration that can be reliably measured in a laboratory analysis. These values are presented in Table 4.1-1.
- Soil — NJDEP currently uses the Soil Cleanup Criteria (SCC) that have been published as an interim regulation and in the NJDEP publication, *Site Remediation News*. Criteria have been developed for future residential and nonresidential uses, and potential impacts to groundwater. The residential direct contact soil criteria were used to evaluate soil analytical results. Although soil criteria exist that are based on potential impacts to groundwater, it is more appropriate to use actual groundwater monitoring results, which exist for most of the sites in this investigation. The criteria for residential direct contact and impact to groundwater are presented in Table 4.1-2. They were published in March 1994, except for lead, which was revised in the winter 1995 *Site Remediation News*.

Table 4.1-1
Ft. Monmouth - Main Post and Charles Wood
NJDEP Groundwater Quality Criteria - Class II - A and Practical Quantitation Levels
February 1993

ANALYSIS	STANDARD		
	GROUND WATER QUALITY CRITERIA (µg/L)	PRACTICAL QUANTITATION LEVELS (PQLs) (µg/L)	HIGHER OF PQL AND GW CRITERIA (µg/L)
1,1,1-Trichloroethane	30	1	30
1,1,2,2-Tetrachloroethane	2	1	2
1,1,2-Trichloroethane	3	2	3
1,1-Dichloroethane	70	NA	70
1,1-Dichloroethene	-	-	-
1,2,4-Trichlorobenzene	9	1	9
1,2-Dichlorobenzene	600	5	600
1,2-Dichloroethane	0.3	2	2
1,2-Dichloroethene (total)	-	-	-
1,2-Dichloropropane	0.5	1	1
1,3-Dichlorobenzene	600	5	600
1,4-Dichlorobenzene	75	5	75
2,2'-oxybis(1-Chloropropane)	-	-	-
2,4,5-Trichlorophenol	700	10	700
2,4,6-Trichlorophenol	-	-	-
2,4-Dichlorophenol	20	10	20
2,4-Dimethylphenol	100	20	100
2,4-Dinitrophenol	10	40	40
2,4-Dinitrotoluene	0.05	10	10
2,6-Dinitrotoluene	NA	10	10
2-Butanone	-	-	-
2-Chloronaphthalene	-	-	-
2-Chlorophenol	40	20	40
2-Hexanone	-	-	-
2-Methylnaphthalene	-	-	-
2-Methylphenol	-	-	-
2-Nitroaniline	-	-	-
2-Nitrophenol	-	-	-
3,3'-Dichlorobenzidine	0.08	60	60
3-Nitroaniline	-	-	-
4,4'-DDD	0.1	0.04	0.1
4,4'-DDE	0.1	0.04	0.1
4,4'-DDT	0.1	0.06	0.1
4,6-Dinitro-2-methylphenol	-	-	-
4-Bromophenyl-phenylether	-	-	-
4-Chloro-3-methylphenol	NA	20	20
4-Chloroaniline	-	-	-
4-Chlorophenyl-phenylether	-	-	-
4-Methyl-2-pentanone	400	NA	400
4-Methylphenol	-	-	-
4-Nitroaniline	-	-	-
4-Nitrophenol	-	-	-
Acenaphthene	400	10	400
Acenaphthylene	NA	10	10
Acetone	700	NA	700
Aldrin	0.002	0.04	0.04
alpha-BHC	0.006	0.02	0.02
alpha-Chlordane	-	-	-

Table 4.1-1
Ft. Monmouth - Main Post and Charles Wood
NJDEP Groundwater Quality Criteria - Class II - A and Practical Quantitation Levels
February 1993

ANALYSIS	STANDARD		
	GROUND WATER QUALITY CRITERIA (µg/L)	PRACTICAL QUANTITATION LEVELS (PQLs) (µg/L)	HIGHER OF PQL AND GW CRITERIA (µg/L)
Aluminum	200	200	200
Anthracene	2000	10	2000
Antimony	2	20	20
Aroclor-1016	0.43	2	2
Aroclor-1221	0.43	2	2
Aroclor-1232	0.43	2	2
Aroclor-1242	0.43	2	2
Aroclor-1248	0.43	2	2
Aroclor-1254	0.43	2	2
Aroclor-1260	0.43	2	2
Arsenic	0.02	8	8
Barium	2000	200	2000
Benzene	0.2	1	1
Benzo(a)anthracene	0.03	10	10
Benzo(a)pyrene	0.003	20	20
Benzo(b)fluoranthene	0.03	2	2
Benzo(g,h,i)perylene	NA	20	20
Benzo(k)fluoranthene	0.03	2	2
Beryllium	0.008	20	20
beta-BHC	0.2	0.04	0.2
bis(2-Chloroethoxy) methane	-	-	-
bis(2-Chloroethyl) ether	0.03	10	10
bis(2-Ethylhexyl)phthalate	3	30	30
Bromodichloromethane	0.3	1	1
Bromoform	4	0.8	4
Bromomethane	-	-	-
Butylbenzylphthalate	100	20	100
Cadmium	4	2	4
Calcium	-	-	-
Carbazole	-	-	-
Carbon Disulfide	-	-	-
Carbon Tetrachloride	0.4	2	2
Chlordane	0.01	0.5	0.5
Chlorobenzene	4	2	4
Chloroethane	-	-	-
Chloroform	6	1	6
Chloromethane	-	-	-
Chromium (total)	100	10	100
Chrysene	0.03	20	20
cis-1,3-Dichloropropene	0.2	NA	0.2
Cobalt	-	-	-
Copper	1000	1000	1000
Cyanide	200	40	200
delta-BHC	-	-	-
Di-n-butylphthalate	900	20	900
Di-n-octyl phthalate	100	NA	100
Dibenzo(a,h)anthracene	0.003	20	20
Dibenzofuran	-	-	-

Table 4.1-1
- Ft. Monmouth - Main Post and Charles Wood
NJDEP Groundwater Quality Criteria - Class II - A and Practical Quantitation Levels
February 1993

ANALYSIS	STANDARD		
	GROUND WATER QUALITY CRITERIA (µg/L)	PRACTICAL QUANTITATION LEVELS (PQLs) (µg/L)	HIGHER OF PQL AND GW CRITERIA (µg/L)
Dibromochloromethane	10	1	10
Dieldrin	0.002	0.03	0.03
Diethylphthalate	5000	10	5000
Dimethylphthalate	7000	10	7000
Endosulfan I	0.4	0.02	0.4
Endosulfan II	0.4	0.04	0.4
Endosulfan sulfate	0.4	0.08	0.4
Endrin	2	0.04	2
Endrin aldehyde	-	-	-
Endrin ketone	-	-	-
Ethylbenzene	700	5	700
Fluoranthene	300	10	300
Fluorene	300	10	300
gamma-BHC (Lindane)	0.2	0.2	0.2
gamma-Chlordane	0.01	0.5	0.5
Heptachlor	0.008	0.4	0.4
Heptachlor epoxide	0.004	0.2	0.2
Hexachlorobenzene	0.02	10	10
Hexachlorobutadiene	1	1	1
Hexachlorocyclopentadiene	50	10	50
Hexachloroethane	0.7	10	10
Indeno(1,2,3-cd)pyrene	0.03	20	20
Iron	300	100	300
Isophorone	100	10	100
Lead (total)	5	10	10
Magnesium	-	-	-
Manganese	50	6	50
Mercury	2	0.5	2
Methoxychlor	40	10	40
Methylene Chloride	2	2	2
N-Nitrosodi-n-propylamine	0.005	20	20
N-Nitrosodiphenylamine (1)	7	20	20
Naphthalene	-	-	-
Nickel (soluble salts)	100	10	100
Nitrobenzene	3	10	10
Pentachlorophenol	0.3	1	1
Phenanthrene	NA	10	10
Phenol	4000	10	4000
Potassium	-	-	-
Pyrene	200	20	200
Selenium (total)	50	10	50
Silver	20	2	20
Sodium	50000	400	50000
Styrene	100	5	100
Tetrachloroethene	0.4	1	1
Thallium	0.5	10	10
Toluene	1000	5	1000
Toxaphene	0.03	3	3

Table 4.1-1
Ft. Monmouth - Main Post and Charles Wood
NJDEP Groundwater Quality Criteria - Class II - A and Practical Quantitation Levels
February 1993

ANALYSIS	STANDARD		
	GROUND WATER QUALITY CRITERIA (µg/L)	PRACTICAL QUANTITATION LEVELS (PQLs) (µg/L)	HIGHER OF PQL AND GW CRITERIA (µg/L)
trans-1,3-Dichloropropene	0.2	NA	0.2
Trichloroethene	1	1	1
Vanadium	-	-	-
Vinyl Chloride	0.08	5	5
Xylene (total)	40	2	40
Zinc	5000	30	5000

- = No level established

Table 4.1-2

Forth Monmouth - Main Post and Charles Wood
NJDEP Soil Cleanup Criteria
February 1994

ANALYSIS	STANDARD	
	RESIDENTIAL DIRECT CONTACT	IMPACT TO GROUND WATER
	SOIL CLEANUP CRITERIA (mg/kg)	SOIL CLEANUP CRITERIA (mg/kg)
1,1,1-Trichloroethane	210	50
1,1,2,2-Tetrachloroethane	34	1
1,1,2-Trichloroethane	22	1
1,1-Dichloroethane	570	10(i)
1,1-Dichloroethene	8	10
1,2,4-Trichlorobenzene	68	100
1,2-Dichlorobenzene	5100	50
1,2-Dichloroethane	6	1
1,2-Dichloroethene (trans)	1000(d)	50
1,2-Dichloroethene (cis)	79	1(i)
1,2-Dichloropropane	10	(r)
1,3-Dichlorobenzene	5100	100
1,4-Dichlorobenzene	570	100
2,2'-oxybis(1-Chloropropane)	-	-
2,4,5-Trichlorophenol	5600	50
2,4,6-Trichlorophenol	62	10(i)
2,4-Dichlorophenol	170	10
2,4-Dimethylphenol	1100	10
2,4-Dinitrophenol	110	10
2,4-Dinitrotoluene	1(l)	10(l)
2,6-Dinitrotoluene	1(l)	10(l)
2-Butanone (MEK)	1000 (d)	50
2-Chloronaphthalene	-	-
2-Chlorophenol	280	10 (j)
2-Hexanone	-	-
2-Methylnaphthalene	-	-
2-Methylphenol	2800	(r)
2-Nitroaniline	-	-
2-Nitrophenol	-	-
3,3'-Dichlorobenzidine	2	100
3-Nitroaniline	-	-
4,4'-DDD	3	50(i)
4,4'-DDE	2	50(i)
4,4'-DDT	2	500(i)
4,6-Dinitro-2-methylphenol	-	-
4-Bromophenyl-phenylether	-	-
4-Chloro-3-methylphenol	10000(c)	100
4-Chloroaniline	230	(r)
4-Chlorophenyl-phenylether	-	-
4-Methyl-2-pentanone	1000(d)	50
4-Methylphenol	2800	(r)
4-Nitroaniline	-	-
4-Nitrophenol	-	-
Acenaphthene	3400	100
Acenaphthylene	-	-
Acetone	1000(d)	100(i)

Table 4.1-2 (continued)

Forth Monmouth - Main Post and Charles Wood
NJDEP Soil Cleanup Criteria
February 1994

ANALYSIS	STANDARD	
	RESIDENTIAL DIRECT CONTACT SOIL CLEANUP CRITERIA (mg/kg)	IMPACT TO GROUND WATER SOIL CLEANUP CRITERIA (mg/kg)
Aldrin	0.040	50
alpha-BHC	-	-
alpha-Chlordane	-	-
Aluminum	-	-
Anthracene	10000(c)	100(i)
Antimony	14	(h)
Aroclor-1016	0.49	50(i)
Aroclor-1221	0.49	50(i)
Aroclor-1232	0.49	50(i)
Aroclor-1242	0.49	50(i)
Aroclor-1248	0.49	50(i)
Aroclor-1254	0.49	50(i)
Aroclor-1260	0.49	50(i)
Arsenic	20(e)	(h)
Barium	700	(h)
Benzene	3	1
Benzo(a)anthracene	0.9	500
Benzo(a)pyrene	0.66(f)	100
Benzo(b)fluoranthene	0.9	50(i)
Benzo(g,h,i)perylene	-	-
Benzo(k)fluoranthene	0.9	500
Beryllium	1(f)	(h)
beta-BHC	-	-
bis(2-Chloroethoxy) methane	-	-
bis(2-Chloroethyl) ether	0.66(f)	10(j)
bis(2-Ethylhexyl)phthalate	49	100
Bromodichloromethane	11(g)	1
Bromoform	86	1
Bromomethane	79	1
Butylbenzylphthalate	1100	100
Cadmium	1	(h)
Calcium	-	-
Carbazole	-	-
Carbon Disulfide	-	-
Carbon Tetrachloride	2(k)	1
Chlorobenzene	37	1
Chloroethane	-	-
Chloroform	19(k)	1
Chloromethane	520	10
Chromium	-	-
Chrysene	9	500
cis-1,3-Dichloropropene	4	1
Cobalt	-	-
Copper	600(m)	(h)
Cyanide	1100	(h)
delta-BHC	-	-

Table 4.1-2 (continued)

Forth Monmouth - Main Post and Charles Wood
NJDEP Soil Cleanup Criteria
February 1994

ANALYSIS	STANDARD	
	RESIDENTIAL DIRECT CONTACT	IMPACT TO GROUND WATER
	SOIL CLEANUP CRITERIA (mg/kg)	SOIL CLEANUP CRITERIA (mg/kg)
Di-n-butylphthalate	5700	100
Di-n-octyl phthalate	1100	100
Dibenzo(a,h)anthracene	0.66(f)	100(j)
Dibenzofuran	-	-
Dibromochloromethane	110	1
Dieldrin	0.042	50
Diethylphthalate	10000(c)	50
Dimethylphthalate	10000(c)	50
Endosulfan	340(g)	50
Endosulfan sulfate	-	-
Endrin	17	50
Endrin aldehyde	-	-
Endrin ketone	-	-
Ethylbenzene	1000(d)	100
Fluoranthene	2300	100(i)
Fluorene	2300	100
gamma-BHC (Lindane)	0.52	50(j)
gamma-Chlordane	-	-
Heptachlor	0.15	50(j)
Heptachlor epoxide	-	-
Hexachlorobenzene	0.66(f)	100(i)
Hexachlorobutadiene	1(g)	100(g)
Hexachlorocyclopentadiene	400	100
Hexachloroethane	6	100
Indeno(1,2,3-cd)pyrene	0.9	500
Iron	-	-
Isophorone	1100	50(j)
Lead	400 ¹	(h)
Magnesium	-	-
Manganese	-	-
Mercury	14	(h)
Methoxychlor	280	50(j)
Methylene Chloride	49	1(j)
N-Nitroso-di-n-propylamine	0.66(f)	10(j)
N-Nitrosodiphenylamine (1)	140	100
Naphthalene	230	100
Nickel	250	(h)
Nitrobenzene	28	10(i)
Pentachlorophenol	6	100
Phenanthrene	-	-
Phenol	10000(c)	50
Potassium	-	-
Pyrene	1700	100(j)
Selenium	63	(h)
Silver	110	(h)
Sodium	-	-

Table 4.1-2 (continued)

**Forth Monmouth - Main Post and Charles Wood
NJDEP Soil Cleanup Criteria
February 1994**

ANALYSIS	STANDARD	
	RESIDENTIAL DIRECT CONTACT SOIL CLEANUP CRITERIA (mg/kg)	IMPACT TO GROUND WATER SOIL CLEANUP CRITERIA (mg/kg)
Trichloroethene	23	1
Vanadium	370	(h)
Vinyl Chloride	2	10(i)
Xylene (total)	410	10
Zinc	1500(m)	(h)

(c) Health based criterion exceeds the 10000 mg/kg maximum for total organic contaminants.

(d) Health based criterion exceeds the 1000 mg/kg maximum for total volatile organic contaminants.

(e) Cleanup standard proposal was based on natural background.

(f) Health based criterion is lower than analytical limits; cleanup criterion based on practical quantitation level.

(g) Criterion has been recalculated based on new toxicological data.

(h) The impact to ground water values for inorganics will be developed based upon site specific chemical and physical parameters.

(i) Original criterion was incorrectly calculated and has been recalculated.

(j) Typographical error.

(k) Criterion based on inhalation exposure pathway which yielded a more stringent criterion than the incidental ingestion exposure pathway.

(l) New criterion derived using methodology in the basis and background document.

(m) Criterion based on ecological (phytotoxicity) effects.

(p) criterion based on the goal that children should be exposed to the minimal amount of lead that is practicable and is reflective of natural background as altered by diffuse anthropogenic pollution. Criterion corresponds to both a median value for urban land which has not been impacted by any local point source of lead and a 90th percentile value for similar suburban land.

- = No level established.

¹ = NJDEP criteria as referenced in Site Remediation News, Winter 1995.

NJDEP criteria for Total Volatile Organics and Total Organics is 1,000 mg/kg and 10,000 mg/kg, respectively.

- Surface water — NJAC 7:9-1, *Surface Water Quality Standards*, contains surface-water quality criteria for chemicals detected at the Main Post and Charles Wood. Surface water is classified based on the designated uses of the surface water, the biota present, and the type of aquatic system (e.g., freshwater or saltwater). Generally, separate criteria were established for freshwater and saltwater. Although the classifications of some surface waters are defined in the regulation, the surface water at Fort Monmouth has not been classified. Based on observations by field personnel during this investigation, the on-site surface water has been designated as either freshwater or saltwater. The sample-specific designation is discussed in Subsections 4.2 and 4.3. Surface-water criteria are presented in Table 4.1-3.
- Sediment — The NJDEP *Guidance for Sediment Quality Evaluations* (1991), which references National Oceanic and Atmospheric Administration (NOAA) biological effects screening criteria, and ERL guideline values from Long et al. (1995), were used to evaluate sediment concentrations at the Main Post and Charles Wood. The use of these criteria is discussed in Subsection 4.1.2. The sediment quality criteria are presented in Table 4.1-4.
- PCB transformers — The proposed NJDEP rule NJAC 7:26D, *Cleanup Standards for Contaminated Sites*, was used for PCB cleanup criteria in soil and interior surfaces. These criteria are presented in Table 4.1-5.

Two groundwater sampling rounds were conducted at the Main Post and Charles Wood areas. As specified in the NJDEP regulation *Technical Requirements for Site Remediation* (NJAC 7:26E), the results of the two groundwater sampling rounds were averaged since the samples were collected within a 30-day period. The averaged concentrations were compared with the NJDEP criteria and then with the maximum background concentrations. If the concentration in only one of the samples was above the detection limit, then that result was averaged with half of the quantitation limit.

Analytical results that were reported as a "J," i.e., below the quantitation limit but above the method detection limit, were still compared against NJDEP criteria to determine if the criteria were exceeded. The laboratory quantitation limit is the lowest concentration of an analyte determined by a given method in a given matrix that the laboratory feels can be reported with acceptable quantitative error. The method detection limit is the lowest concentration that can be seen for a given analytical method and sample matrix with 99% confidence that the analyte is present. Laboratory quantitation limits are typically about three times the value of the method

Table 4.1-3
Fort Monmouth - Main Post and Charles Wood
Surface Water Quality Standards for Fresh and Saline Waters

ANALYSIS	STANDARD	
	FRESH WATER (µg/L)	SALT WATER (µg/L)
1,1,1-Trichloroethane	127(h)	-
1,1,2,2-Tetrachloroethane	1.72(hcc)	-
1,1,2-Trichloroethane	13.5(h)	-
1,1-Dichloroethane	-	-
1,1-Dichloroethene	4.81(h)	-
1,2,4-Trichlorobenzene	30.6(h)	113(h)
1,2-Dichlorobenzene	2,520(h)	16,500(h)
1,2-Dichloroethane	0.291(hc)	99(hc)
1,2-Dichloroethene (total)	-	-
1,2-Dichloropropane	-	-
1,3-Dichlorobenzene	2,620(h)	22,200(h)
1,4-Dichlorobenzene	343(h)	3,159(h)
2,2'-oxybis(1-Chloropropane)	-	-
2,4,5-Trichlorophenol	2,580(h)	9,790(h)
2,4,6-Trichlorophenol	2.14(hc)	6.53(hc)
2,4-Dichlorophenol	92.7(h)	794(h)
2,4-Dimethylphenol	-	-
2,4-Dinitrophenol	69.7(h)	14,000(h)
2,4-Dinitrotoluene	0.11(hc)	9.1(hc)
2,6-Dinitrotoluene	-	-
2-Butanone	-	-
2-Chloronaphthalene	-	-
2-Chlorophenol	122(h)	402(h)
2-Hexanone	-	-
2-Methylnaphthalene	-	-
2-Methylphenol	-	-
2-Nitroaniline	-	-
2-Nitrophenol	-	-
3,3'-Dichlorobenzidine	0.0386(hc)	0.0767(hc)
3-Nitroaniline	-	-
4,4'-DDD	0.000832(hc)	0.000837(hc)
4,4'-DDE	0.000588(hc)	0.000591(hc)
4,4'-DDT	1.1(a); 0.0010(c); 0.000588(hc)	0.13(a); 0.0010(c); 0.000591(hc)
4,6-Dinitro-2-methylphenol	-	-
4-Bromophenyl-phenylether	-	-
4-Chloro-3-methylphenol	-	-
4-Chloroaniline	-	-
4-Chlorophenyl-phenylether	-	-
4-Methyl-2-pentanone	-	-
4-Methylphenol	-	-
4-Nitroaniline	-	-
4-Nitrophenol	-	-
Acenaphthene	-	-
Acenaphthylene	-	*Reserved*

Table 4.1-3 (continued)
Fort Monmouth - Main Post and Charles Wood
Surface Water Quality Standards for Fresh and Saline Waters

ANALYSIS	STANDARD	
	FRESH WATER (µg/L)	SALT WATER (µg/L)
Acetone	-	-
Aldrin	3.0(a); 0.000135(hc)	1.3(a) 0.000144(hc)
alpha-BHC	0.00391(hc)	0.0131(hc)
alpha-Chlordane	2.4(a); 0.0043(c); 0.000277(hc)	0.09(a); 0.0040(c); 0.000283(hc)
Aluminum	-	*Reserved*
Anthracene	9,570(h)	108,000(h)
Antimony	12.2(h)	4,300(h)
Aroclor-1016	.014(c); .000244(hc)	.30(c); .000247(hc)
Aroclor-1221	.014(c); .000244(hc)	.30(c); .000247(hc)
Aroclor-1232	.014(c); .000244(hc)	.30(c); .000247(hc)
Aroclor-1242	.014(c); .000244(hc)	.30(c); .000247(hc)
Aroclor-1248	.014(c); .000244(hc)	.30(c); .000247(hc)
Aroclor-1254	.014(c); .000244(hc)	.30(c); .000247(hc)
Aroclor-1260	.014(c); .000244(hc)	.30(c); .000247(hc)
Arsenic	0.0170(hc)	0.136(hc)
Barium	2,000(h)	-
Benzene	0.150(hc)	71(hc)
Benzo(a)anthracene	0.0028(hc)	0.031(hc)
Benzo(a)pyrene	0.0028(hc)	0.031(hc)
Benzo(b)fluoranthene	0.0028(hc)	0.031(hc)
Benzo(g,h,i)perylene	-	*Reserved*
Benzo(k)fluoranthene	0.0028(hc)	0.031(hc)
Beryllium	-	*Reserved*
beta-BHC	0.137(hcc)	0.460(hcc)
bis(2-Chloroethoxy) methane	-	-
bis(2-Chloroethyl) ether	.0311(hc)	1.4(hc)
bis(2-Ethylhexyl)phthalate	1.76(hc)	5.92(hc)
Bromodichloromethane	.266(hc)	22(hc)
Bromoform	4.38(hc)	360(hc)
Bromomethane	48.4(h)	4,000(h)
Butylbenzylphthalate	239(h)	416(h)
Cadmium	10(h)	-
Calcium	-	-
Carbazole	-	-
Carbon Disulfide	-	-
Carbon Tetrachloride	0.363(hc)	6.31(hc)
Chlorobenzene	22.0(h)	21,000(h)
Chloroethane	-	-
Chloroform	5.67(hc)	470(hc)
Chloromethane	5.7(hc); 470(hc)	*Reserved*
Chromium	160(h)	3,230(h)
Chrysene	0.0028(hc)	0.031(hc)
cis-1,3-Dichloropropene	-	-
Cobalt	-	-

Table 4.1-3 (continued)
Fort Monmouth - Main Post and Charles Wood
Surface Water Quality Standards for Fresh and Saline Waters

ANALYSIS	STANDARD	
	FRESH WATER (µg/L)	SALT WATER (µg/L)
Copper	-	*Reserved*
Cyanide	22(a); 5.2(c) 768(h)	1.0(a); 1.0(c); 220,000(h)
delta-BHC	-	-
Di-n-butylphthalate	3,530(h)	15,700(h)
Di-n-octyl phthalate	-	-
Dibenzo(a,h)anthracene	0.0028(hc)	0.031(hc)
Dibenzofuran	-	-
Dibromochloromethane	72.6(h)	-
Dieldrin	2.5(a) 0.0019(c); 0.000135(hc)	0.71(a); 0.0019(c); 0.000144(hc)
Diethylphthalate	21,200(h)	111,000(h)
Dimethylphthalate	313,000(h)	2,900,000(h)
Endosulfan I	-	-
Endosulfan II	-	-
Endosulfan sulfate	0.93(h)	2.0(h)
Endrin	0.18(a); 0.0023(c); 0.629(h)	0.037(a); 0.0023(c) 0.678(h)
Endrin aldehyde	0.76(h)	0.081(h)
Endrin ketone	-	-
Ethylbenzene	3,030(h)	27,900(h)
Fluoranthene	310(h)	393(h)
Fluorene	1,340(h)	-
gamma-BHC (Lindane)	2.0(a); 0.080(c)	0.16(a)
gamma-Chlordane	-	-
Heptachlor	0.52(a); 0.0038(c); 0.000208(hc)	0.053(a); 0.0036(c); 0.000214(hc)
Heptachlor epoxide	0.52(a); 0.0038(c); 0.000103(hc)	0.053(a); 0.0036(c); 0.000106(hc)
Hexachlorobenzene	0.000748(hc)	0.000775(hc)
Hexachlorobutadiene	6.94(h)	-
Hexachlorocyclopentadiene	245(h)	17,000(h)
Hexachloroethane	2.73(h)	12.4(h)
Indeno(1,2,3-cd)pyrene	0.0028(hc)	0.031(hc)
Iron	-	*Reserved*
Isophorone	552(h)	-
Lead	5(h)	-
Magnesium	-	-
Manganese	100(h)	-
Mercury	0.144(h)	0.146(h)
Methoxychlor	0.03(c); 40(h)	0.03(c)
Methylene Chloride	2.49(hc)	1,600(hc)
N-Nitroso-di-n-propylamine	-	-
N-Nitrosodiphenylamine (1)	-	-
Naphthalene	-	-
Nickel	516(h)	3,900(h)

Table 4.1-3 (continued)
Fort Monmouth - Main Post and Charles Wood
Surface Water Quality Standards for Fresh and Saline Waters

ANALYSIS	STANDARD	
	FRESH WATER (µg/L)	SALT WATER (µg/L)
Nitrobenzene	16.0(h)	1,900(h)
Pentachlorophenol	e(1.005(pH)-4.830)(a); e(1.005(pH)-5.290)(c); 0.282(c)	13(a); 7.9(c); 8.2(hc)
Phenanthrene	-	*Reserved*
Phenol	20,900(h)	4,600,000(h)
Potassium	-	-
Pyrene	797(h)	8,970(h)
Selenium	10(h)	300(a); 71(c); 6,800(h)
Silver	164(h)	-
Sodium	-	-
Styrene	-	-
Tetrachloroethene	0.388(hc)	4.29(hc)
Thallium	1.70(h)	6.22(h)
Toluene	7,440(h)	200,000(h)
Toxaphene	0.73(a); 0.0002(c); 0.000730(hc)	0.21(a); 0.0002(c); 0.000747(hc)
trans-1,3-Dichloropropene	.193(hc)	1,700(h)
Trichloroethene	1.09(hc)	81(hc)
Vanadium	-	-
Vinyl Chloride	0.0830(hc)	525(hc)
Xylene (total)	-	-
Zinc	-	*Reserved*

NOTE: Except as noted, aquatic life criteria followed by an (a) represent acute aquatic life protection criteria as a one-hour average and aquatic life criteria followed by (C) represent chronic aquatic life protection criteria as a four-day average.

No exceedance of aquatic life criteria shall be permitted at or above the design flows specified in section N.J.A.C.

7:9B-1.5(c) 2. Criteria followed by an (h) are noncarcinogenic effect-based human health criteria as a 30-day average with no frequency of exceedance at or above the design flows specified in section N.J.A.C. 7:9B-1.5(c)2. Criteria followed by an (hc) are carcinogenic effect-based human health criteria as a 70-year average with no frequency of exceedance at or above the design flows specified in section N.J.A.C. 7:9B-1.5(c)2 and are based on a risk level of one-in-one-million.

Criteria followed by an (hcc) are for toxic substances considered to be possible human carcinogens as a 70-year average with no frequency of exceedance at or above the design flows specified in section N.J.A.C.

7:9B-1.5(c)2 and are based on a risk level of one-in-one hundred thousand Criteria followed by and (OL) are organoleptic effect-based criteria and are maximum concentrations.

- = No level established

Table 4.1-4
Fort Monmouth - Main Post and Charles Wood
Sediment Guidance Values for Detected Contaminants

COMPOUND	NJDEP SEDIMENT GUIDANCE ^a (mg/kg)	MARINE/ESTUARINE BIOLOGICAL EFFECTS LEVEL (ERL) ^b (mg/kg)
VOC's (mg/kg)		
Acetone	NLE	NLE
2-Butanone	NLE	NLE
1,2-Dichloroethene (total)	NLE	NLE
Vinyl Chloride	NLE	NLE
SVOCs (mg/kg)		
bis-(2-Ethylhexyl)phthalate	NLE	NLE
Dimethylphthalate	NLE	NLE
Di-n-butylphthalate	NLE	NLE
Di-n-octyl phthalate	NLE	NLE
2,2'-oxybis(1-Chloropropane)	NLE	NLE
PAHs (mg/kg)		
Benzo (a)anthracene	0.23	0.261
Benzo(a)pyrene	0.4	0.43
Benzo (b)fluoranthene	NLE	NLE
Chrysene	0.4	0.984
Fluoranthene	0.6	0.6
Phenanthrene *	0.225, 0.326	0.74
Pyrene	0.35	0.665
PESTICIDES/PCBs (mg/kg)		
4,4'-DDD	0.002	NLE
4,4'-DDE	0.002	0.0022
4,4'-DDT *	0.003, 0.00183	0.00158
Heptachlor epoxide	NLE	NLE
METALS TOTAL (mg/kg)		
Aluminum	NLE	NLE
Arsenic	33	8.2
Barium	NLE	NLE
Beryllium	NLE	NLE
Cadmium	5	1.2
Calcium	NLE	NLE
Chromium	80	81
Cobalt	NLE	NLE
Copper	70	34
Iron	NLE	NLE
Lead	35	46.7
Magnesium	NLE	NLE
Manganese	NLE	NLE
Mercury	0.15	0.15
Nickel	30	20.9
Potassium	NLE	NLE
Selenium	NLE	NLE
Silver	1	1
Sodium	NLE	NLE
Vanadium	NLE	NLE
Zinc	120	150

^a NJDEP Sediment Guidance (1991), based on NOAA (1990) ER-L guidance. Values provided are for freshwater sediments.

Criteria for DDE and DDD are not presented in NJDEP Sediment Quality Evaluations (1991).

^b Long et. al (1995).

* - Standards developed using equilibrium partitioning approach in accordance with NJDEP Guidance for Sediment Quality Evaluation (1991). Total organic carbon concentrations of 1% assumed based on organic carbon content detected in adjacent sample.

NLE - No Level Established

Table 4.1-5

Potentially Applicable PCB Cleanup Levels

New Jersey (Proposed 7:26D)

- **Building interior:**
 - Porous surface (from floor to 6 feet):
chip sample < 0.055 µg/g
 - Porous surface (higher than 6 feet):
chip sample < 0.11 mg/g
 - Nonporous surface (from floor to 6 feet):
wipe sample < 0.27 mg/m² (2.7 mg/100 cm²)
 - Nonporous surface (higher than 6 feet):
wipe sample < 0.54 mg/m² (5.4 µg/100 cm²)
- **Soil:**
 - Surface soil*: Soil sample < 0.49 mg/kg (ppm)
 - Subsurface soil: Soil sample < 100 mg/kg (ppm)

*Surface soil is top 2 feet of soil.



detection limit to ensure the confidence of the value reported. When a concentration is detected below the laboratory quantitation limit but above the method detection limit, the letter "J" is assigned to that concentration. The J indicates that the concentration is estimated due to detection at or below the laboratory quantitation limit (but above the method detection limit). The method detection limits are reported in the summary tables in Section 4 and Appendix D, but the quantitation limits are reported only in Appendix D.

Many of the inorganic compounds in soil and groundwater that were analyzed for occur in nature or commonly exist because of human activities. For example, naturally occurring inorganic compounds are always present in groundwater and soil samples. Lead is generally found at elevated levels near heavily traveled roads because it was formerly used in gasoline. Pesticides and herbicides are commonly found in suburban settings because of past applications of these substances.

The background concentration, therefore, is the concentration of a compound in the environment that occurs naturally or as the result of unrelated base activities. The estimate of background is based on analytical results of sampling at background locations and a review of published material.

There is no generally accepted method for determining the background concentration. For this investigation, a total of 10 groundwater and soil background samples and 2 sediment and surface-water background samples were taken on both Charles Wood and Main Post. Background sampling locations were selected as specified in the document *Investigations of Suspected Hazardous Waste Sites at Fort Monmouth, New Jersey* (WESTON, 1993), which was approved by NJDEP. The U.S. Environmental Protection Agency (EPA) has provided some guidance in its document *Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities*. It provides a number of scenarios for comparing groundwater analytical data against background well data. In discussing the tolerance interval method, the document suggests that the groundwater data be compared with the 95% confidence limit for the 95th percentile of the background data; however, the method specified can be strictly applied only when the data have a normal distribution or a log normal distribution. Neither of these is true for the background

data collected at Fort Monmouth. Nonparametric methods that are similar to the tolerance interval method involve simply selecting the data value that is at the 95th percentile of the data set. Since there are 10 data points, the equivalent method for the background samples at Fort Monmouth is to use the maximum background value. Each environmental sample concentration was compared against the maximum value that was measured in the background samples. If a compound was not detected in the background samples, then any measurement above the detection limit for that compound in an environmental sample was considered to be above background. This practice was followed at other New Jersey sites.

An outlier screening was conducted to identify background concentrations that were not consistent with other background concentrations. Based on the screening, outliers were rejected for beryllium, chromium, cobalt, lead, vanadium, and zinc in groundwater on the Main Post, and manganese in soil on Charles Wood.

The Monmouth County and site-specific background concentrations for total metals at Fort Monmouth were determined using literature values and on-site background data. The values in Tables 4.1-6 and 4.1-7 are based on the maximum concentrations of inorganic analytes in background wells and soil borings at Main Post and Charles Wood. These data are compared with the maximum Monmouth County background values, based on published data. The Monmouth County values for soil are from Fields et al., 1992, and the Monmouth County background values for groundwater are from Harriman and Sargent, 1985.

The Monmouth County background concentrations for soils are based on the analyses of samples from the vicinity of Fort Monmouth (see Table 9 and the locations of samples 35 and 36 in Figure 1 in Fields et al., 1992). Sample 36 (Fields et al., 1992) was collected near Charles Wood and sample 35 (Fields et al., 1992) was collected northeast of the Main Post. The site-specific background concentrations are based on samples from the two areas collected during this investigation. Most of the soil samples were from landscaping fill and natural deposits in Fort Monmouth. The screened intervals in the background monitor wells are also in landscaping fill

Table 4.1-6
Fort Monmouth - Main Post
Summary of Site-Specific and Monmouth County
Soil and Groundwater Maximum Background Concentrations

COMPOUNDS	SOILS		GROUNDWATER	
	Site Specific (maximum)	Monmouth County ¹ (maximum)	Site Specific (maximum)	Monmouth County ² (maximum)
SVOC'S	(mg/kg)	(mg/kg)	(µg/L)	(µg/L)
Phenol	0.420 J	-	ND	-
Acenaphthylene	0.041 J	-	ND	-
Acenaphthene	0.100 J	-	ND	-
Dibenzofuran	0.060 J	-	ND	-
Diethylphthalate	ND	-	ND	-
Fluorene	0.074 J	-	ND	-
Phenanthrene	0.39	-	ND	-
Anthracene	0.100 J	-	ND	-
Di-n-butylphthalate	2.2 B	-	ND	-
Fluoranthene	0.46	-	ND	-
Pyrene	1.5	-	ND	-
Benzo(a)anthracene	0.65	-	ND	-
Chrysene	0.65	-	3 J	-
bis(2-Ethylhexyl)phthalate	.19 J	-	5 J	-
Benzo(b)fluoranthene	0.9	-	ND	-
Benzo(k)fluoranthene	0.43	-	ND	-
Benzo(a)pyrene	0.6	-	ND	-
Indeno(1,2,3-cd)pyrene	0.46	-	ND	-
Dibenzo(a,h)anthracene	0.079 JB	-	ND	-
Benzo(g,h,i)perylene	0.64 B	-	ND	-
PESTICIDE / PCB	(mg/kg)	(mg/kg)	(µg/L)	(µg/L)
Heptachlor epoxide	ND	-	0.041 J	-
4,4-DDD	0.0096 P	-	ND	-
4,4'-DDE	0.0096 P	-	ND	-
4,4'-DDT	0.11	-	ND	-
METALS TOTAL	(mg/kg)	(mg/kg)	(µg/L)	(µg/L)
Aluminum	15200	NLE	121000	NLE
Antimony	ND	NLE	20.7	NLE
Arsenic	22.9	4.56	89.3	NLE
Barium	32.3	NLE	699	400
Beryllium	2	0.09	2.1	7
Calcium	921	NLE	45400	7300
Cadmium	ND	0.116	9.5	6
Cobalt	2.5	NLE	18.3	NLE
Chromium	269	0.104	191	< 50
Copper	8	6.05	65.6	730
Cyanide	ND	NLE	ND	NLE
Iron	55800	11	431000	27000
Lead	19.5	25.9	22.7	< 100
Magnesium	7230	NLE	62700	25000
Mercury	ND	NLE	0.26	NLE
Manganese	90.7	59	331	480
Nickel	8.4	3.2	187	NLE
Potassium	15400	NLE	137000	10000
Silver	1.1	0.21	ND	< 10
Sodium	51.6	NLE	21500	197000
Selenium	1.9	0.11	29.6	NLE
Thallium	ND	NLE	5.5	NLE
Vanadium	94.1	1.3	108	NLE
Zinc	81.4	44.6	233	60

ND - Not detected at the quantification limits

NLE - No level established

¹ - Sample 35 in Fields et al., 1992

² - From Table 9 in Harriman and Sargent, 1985

- Literature search was not completed for SVOC and Pest/PCB compounds.

Table 4.1-7
Fort Monmouth - Charles Wood
Summary of Site Specific and Monmouth County
Soil and Groundwater Maximum Background Concentrations

COMPOUNDS	SOILS		GROUNDWATER	
	Site Specific (maximum)	Monmouth County ¹ (maximum)	Site Specific (maximum)	Monmouth County ² (maximum)
SVOC'S	(mg/kg)	(mg/kg)	(µg/L)	(µg/L)
Phenol	ND	-	ND	-
Acenaphthylene	ND	-	ND	-
Acenaphthene	ND	-	ND	-
Dibenzofuran	ND	-	ND	-
Diethylphthalate	ND	-	1 J	-
Fluorene	ND	-	ND	-
Phenanthrene	ND	-	ND	-
Anthracene	ND	-	ND	-
Di-n-butylphthalate	2 B	-	ND	-
Fluoranthene	0.042 J	-	ND	-
Pyrene	0.048 J	-	ND	-
Benzo(a)anthracene	0.046 J	-	ND	-
Chrysene	0.083 J	-	ND	-
bis(2-Ethylhexyl)phthalate	0.170 J	-	600	-
Benzo(b)fluoranthene	0.078 J	-	ND	-
Benzo(k)fluoranthene	0.041 J	-	ND	-
Benzo(a)pyrene	0.047 J	-	ND	-
Indeno(1,2,3-cd)pyrene	ND	-	ND	-
Dibenzo(a,h)anthracene	ND	-	ND	-
Benzo(g,h,i)perylene	0.042 J	-	ND	-
PESTICIDE / PCB	(mg/kg)	(mg/kg)	(µg/L)	(µg/L)
Heptachlor epoxide	ND	-	ND	-
4,4-DDD	ND	-	ND	-
4,4'-DDE	0.071	-	ND	-
4,4'-DDT	0.053	-	ND	-
METALS TOTAL	(mg/kg)	(mg/kg)	(µg/L)	(µg/L)
Aluminum	15700	NLE	8210	NLE
Antimony	ND	NLE	ND	NLE
Arsenic	31.6	10.7	25.1	NLE
Barium	26	NLE	192	400
Beryllium	1.7	0.88	2.8	7
Calcium	653	NLE	8700	7300
Cadmium	ND	0.135	3.7	6
Cobalt	4.5	NLE	30.6	NLE
Chromium	128	0.14	49.6	< 50
Copper	6.6	7.27	9.8	730
Cyanide	0.41	NLE	ND	NLE
Iron	45500	23.7	19600	27000
Lead	11.1	15.1	7.3	< 100
Magnesium	3960	NLE	7160	25000
Mercury	ND	NLE	ND	NLE
Manganese	48.7	120	232	480
Nickel	8.3	8.3	48.3	NLE
Potassium	10600	NLE	4630	10000
Silver	ND	0.26	ND	< 10
Sodium	56.8	NLE	36400	197000
Selenium	0.85	0.17	3.8	NLE
Thallium	ND	NLE	ND	NLE
Vanadium	59.6	14	28.9	NLE
Zinc	55.6	28.1	133	60

ND - Not detected at the quantification limits

NLE - No level established

¹ - Sample 36 in Fields et al., 1992

² - From Table 9 in Harriman and Sargent, 1985

- Literature search was not completed for SVOC and Pest/PCB compounds.

and natural deposits. The Monmouth County and site-specific background concentrations are provided in Tables 4.1-6 and 4.1-7.

Table 4.1-6 summarizes the Monmouth County and site-specific background concentrations for the Main Post area. The background concentrations of metals in soils at the Main Post site are generally below regional concentrations, except for arsenic, chromium, beryllium, selenium, iron, manganese, nickel, zinc, silver, and vanadium.

Nine analytes exceeded maximum Monmouth County values for groundwater in the Main Post area: barium, beryllium, calcium, cadmium, chromium, iron, magnesium, potassium, and zinc (Table 4.1-6).

Table 4.1-7 summarizes the Monmouth County and site-specific background concentrations for the Charles Wood area. The background concentrations in soils at Charles Wood are generally below Monmouth County concentrations, except for arsenic, beryllium, chromium, iron, selenium, vanadium, and zinc.

For the background groundwater concentration established for this investigation, two analytes exceeded the maximum values established for Monmouth County: calcium and zinc (Table 4.1-7). Calcium concentrations in groundwater at Charles Wood are 12% higher than the Monmouth County concentrations. Zinc concentrations are twice as high as the Monmouth County concentrations.

Several factors, both natural and anthropogenic, contribute to the wide range in the concentrations of metals in the soils at the Main Post and Charles Wood areas. The primary natural influence on the chemical characteristics of the overburden at Fort Monmouth is parent material. The parent material is glauconitic quartzose sands of the Tinton and Red Bank sands and their fluvially- and tidally-reworked equivalents. The mineral glauconite is a potassium-, sodium-, calcium-, iron-, aluminum-, magnesium-rich hydrosilicate (Klein et al., 1985). Soils derived from the glauconitic sands contain abundant iron, aluminum, calcium, magnesium, manganese, and potassium (Tedrow, 1986). The tidal sediments probably contained iron and manganese concretions. As

noted by Fields et al. (1992, p. 19), manganese is a highly variable soil constituent. Groundwater flowing through glauconitic formations contains calcium and magnesium (Meisler et al., 1988, p. 215).

An additional natural influence on background groundwater chemistry is saltwater intrusion. As noted in Section 2, the Main Post and Charles Wood areas are underlain by dissected unconsolidated Coastal Plain sediments. The Coastal Plain aquifers are susceptible to saltwater encroachment, particularly near the coast and along tidal rivers and streams (Gill, 1962; Harriman et al., 1989; Harriman and Sargent, 1985).

Saltwater encroaches several miles inland on tidal streams, particularly during periods of low flow (Gill, 1962). Saltwater encroachment will lead to saltwater intrusion into the adjacent aquifers. Husky Brook and Lafetra Creek are tributary estuaries to the estuaries of Oceanport and Parkers Creeks. Saltwater will encroach several miles up these estuaries.

The area of Monmouth County where Fort Monmouth is located is underlain by groundwater with relatively high manganese and iron concentrations. The manganese and iron concentrations reported for eastern Monmouth County in Harriman et al. (1989) range from 110 to 200 $\mu\text{g/L}$ for manganese and 7,900 to 14,000 $\mu\text{g/L}$ for iron. These concentrations are reported for the Upper Potomac Raritan-Magothy aquifer, but the concentrations are expected to be comparable in the shallower, lithologically similar Tinton and Red Bank sands.

Anthropogenic influences on the background metals include deposition of airborne dust, and fertilizers, pesticides, and herbicides (Fields et al., 1992). The Fort Monmouth area is located downwind from farms (Jablonski, 1989). Vanadium can be a result of oil burning (Fields et al., 1992, p. 20). Arsenic was a common constituent of herbicides and pesticides in the past.

Concentrations detected in surface-water samples collected at Fort Monmouth (Main Post and Charles Wood) in December 1994 were compared to fresh and saltwater NJDEP Surface Water Standards (NJDEP, 1993). Based on observations by field personnel, sample locations were designated as saltwater if the area was tidally influenced. All surface-water and sediment

sampling locations at the Main Post were determined to be saltwater, with the exception of site M-2 (M2SW-1 and M2SW-2) and background locations (SS-B1 and SS-B2). However, all sampling locations at Charles Wood were designated as freshwater. Detected concentrations were also compared to maximum background concentrations for surface water collected at each site. Because many contaminants are readily sorbed to sediment and particles suspended in the water column, and may significantly augment concentrations of contaminants detected in surface water, total (unfiltered) as well as soluble (filtered) surface-water concentrations were compared to criteria and background. Note, however, that the criteria are developed based on the total concentration in surface-water. Surface-water locations sampled at the Main Post were M-2, M-3, and M-14; background surface-water samples were collected at two areas (SS-B1 and SS-B2). Only background surface-water samples were collected at Charles Wood (CW-2 and CW-5). Surface-water criteria are presented in Table 4.1-4. Maximum background concentrations are presented in Table 4.1-8 for the Main Post and in Table 4.1-9 for Charles Wood.

Concentrations of chemicals detected in freshwater and saltwater sediment samples collected at Fort Monmouth, NJ (Main Post and Charles Wood) in December 1994 were compared to NJDEP freshwater sediment guidance values (NJDEP, 1991), or marine/estuarine biological effects screening levels for saltwater (Long et al., 1995), as well as maximum detected background concentrations detected from each site. Concentrations from two sediment sample locations at the Main Post, AOC-3 and the pre-1941 STP, and one location at Charles Wood, CW-5, were compared to the appropriate sediment criteria and background. Sediment criteria are presented in Table 4.1-4. No background sediment samples were collected at saltwater locations on the Main Post. Maximum background concentrations are presented in Tables 4.1-8 and 4.1-9.

NJDEP sediment guidance values incorporate National Oceanic and Atmospheric Administration (NOAA) sediment guidance values (NOAA, 1990) and NJDEP's equilibrium partitioning (EqP) approach for evaluating toxicity and bioavailability of sediment-bound, nonionic organic chemicals. For this screening evaluation, concentrations in sediment were compared to sediment NOAA Effects Range-Low (ER-L) levels (i.e., the lower 10th percentile of the chemical concentration associated with toxicity) and EqP-based criteria, which are adjusted to reflect site-specific total organic carbon (TOC) content (Table 4.1-4).



Background sediment samples were collected from two areas at the Main Post (SS-B1 and SS-B2), and two areas at Charles Wood (CW-2 and CW-5).



Table 4.1-8
Fort Monmouth - Main Post
Surface Water and Sediment Maximum Background Concentrations

COMPOUND	SEDIMENTS (mg/kg)	SURFACE WATER	
		Total	Soluable
VOCs			
Acetone	0.47 B	ND	ND
2-Butanone	0.1	ND	ND
SVOCs			
Phenanthrene	0.39 J	ND	ND
Anthracene	0.061 J	ND	ND
Carbazole	0.051 J	ND	ND
Di-n-butylphthalate	0.26 JB	ND	ND
Fluoranthene	1.5	ND	ND
Pyrene	2	ND	ND
Benzo(a)anthracene	1.3	ND	ND
Chrysene	0.37 J	ND	ND
bis(2-Ethylhexyl)phthalate	0.43 J	ND	ND
Benzo(b)fluoranthene	1.8	ND	ND
Benzo(k)fluoranthene	0.58	ND	ND
Benzo(a)pyrene	1.2	ND	ND
Indeno(1,2,3-cd)pyrene	0.7	ND	ND
Dibenzo(a,h)anthracene	0.12 J	ND	ND
Benzo(g,h,i)perylene	0.67	ND	ND
Total Organic Carbon	5.7	ND	ND
PESTICIDES/PCBs			
Heptachlor epoxide	0.014 P	ND	ND
Endosulfan I	0.0024 J	ND	ND
4,4'-DDE	0.0092 J	ND	ND
4,4'-DDD	0.013	ND	ND
4,4'-DDT	0.0057 JP	ND	ND
alpha-Chlordane	0.011 P	ND	ND
gamma-Chlordane	0.0092 P	ND	ND
METALS			
Aluminum	9060	748	ND
Arsenic	14.5	2.6	ND
Barium	87.6	44.7	39.4
Beryllium	3.2	ND	ND
Calcium	3180	31600	30900
Cobalt	119	8.1	4.1
Chromium	88.1	7.5	ND
Copper	48.4	3.2	4
Iron	61900	6210	405
Mercury	1.7	ND	ND
Potassium	10200	5060	4280
Magnesium	3280	5440	5120
Manganese	70.2	113	98.6
Sodium	189	26700	26200
Nickel	131	22.9	16.1
Lead	64.1	10	ND
Selenium	1.7	ND	ND
Vanadium	49.1	5.8	ND
Zinc	162	35.1	23.8
Cyanide	3.1	ND	ND

Table 4.1-9
Fort Monmouth - Charles Wood
Surface Water and Sediment Maximum Background Concentrations

COMPOUND	SEDIMENT	SURFACE WATER	
		(Total)	(Soluble)
SVOCs (mg/kg)			
bis-(2-Ethylhexy)phthalate	0.23 J	1 J	ND
Di-n-butylphthalate	0.12 J	ND	ND
PAHs (mg/kg)			
Benzo (a)anthracene	0.09 J	ND	ND
Benzo (a)pyrene	0.1 J	ND	ND
Benzo (b)fluoranthene	0.16 J	ND	ND
Benzo (g,h,i)perylene	0.21 J	ND	ND
Chrysene	0.14 J	ND	ND
Fluoranthene	0.12 J	ND	ND
Indeno (1,2,3-cd)perylene	0.19 J	ND	ND
Phenanthrene	0.079 J	ND	ND
Pyrene	0.41 J	ND	ND
PESTICIDES/PCBs (mg/kg)			
4,4'-DDD	0.015 PD	ND	ND
4,4'-DDE	0.096	ND	ND
4,4'-DDT	0.11	ND	ND
METALS TOTAL (mg/kg)			
Aluminum	6660	265	160
Antimony	ND	26.8	ND
Arsenic	5.8	ND	ND
Barium	45.7	77.1	78.2
Calcium	2960	22900	24000
Chromium	36.9	ND	ND
Cobalt	4.2	2.8	ND
Copper	24.5	8	10.2
Iron	19600	715	435
Lead	142	5.3	65.9
Magnesium	2560	7050	7390
Manganese	65.1	97.4	100
Nickel	11.3	ND	ND
Potassium	1700	3590	4040
Selenium	0.68	ND	ND
Sodium	271	156000	164000
Vanadium	39.5	ND	ND
Zinc	126	204	215

J - Estimated Concentrations

D - Diluted Analysis

P - Percent difference between two columns, the smaller of two is reported

ND - Compound was not detected at or above the quantification limit.

Main Post Background Samples

4.2 MAIN POST

Subsection 4.2 presents a description of each Main Post site, the sampling rationale, and the results of sampling activities. The sites and the sampling effort are summarized in Table 4.2-1. Additional historical information on each site may be obtained from the *Investigation of Suspected Waste Sites at Fort Monmouth, New Jersey, 1993*.

This subsection also summarizes the results of the sediment, surface-water, soil, and groundwater sampling program that was implemented to characterize site conditions on the Main Post, as identified in the WESTON report titled *Site Investigation, Chemical Data Acquisition Plan* (CDAP). A total of 4 sediment and 8 surface-water samples were taken on the Main Post. In addition, a total of 15 soil borings and 29 monitor wells were installed on Main Post sites. Soil and groundwater samples were collected from the borings and monitor wells and were analyzed for compounds determined to be characteristic of the wastes associated with each area, i.e., TCL and TAL analytes (Tables 3.6-1 and 3.8-1).

The field effort was conducted in accordance with the scope and procedures outlined in the CDAP. However, there were slight differences, which are summarized in Table 4.2-2. Appendix D presents the analytical results of the Main Post sampling activities. Detailed information regarding the specific sampling protocols for each site is provided in the subsections that follow. In addition to the results of groundwater and soil analyses, the lithologic descriptions and water-level information are used to provide a hydrogeologic interpretation of the site, where appropriate.

Figure 4.2-1 shows the location of the 13 Main Post sites discussed in this subsection.

4.2.1 Background Samples

The background sample locations were selected prior to the initiation of field activities in areas believed to be unaffected by base activities. These locations were as specified in the

Table 4.2-1

Site Investigation Summary — Main Post

Site Number	Site Type	Description	Potential Waste/Contaminants	Previous Sampling Activities*	Investigation Activities
M-2	Landfill	Operated 1964-1968. Currently used for leaf composting and to store wood chips. Debris protrudes from bank of Mill Creek. Was unfenced — covered with soil and gravel from Earle.	Domestic and industrial waste, oil in cans, filters, soot, and building rubble.	NJPDES sampling upstream (SW-1) and downstream (SW-2) on Mill Creek. Detected VOCs, metals, and inorganics.	Installed and sampled 3 monitor wells. Sampled surface water at the NJPDES locations (M2SW-1 and M2SW-2) and a new upstream surface-water location (SS-B1). Analyzed for TCL +30/TAL/CN. Tidal water-level monitoring.
M-3	Landfill	Operated 1959-1964. Was fenced; had skeet shooting range. Burned wood debris. Had tear gas training in tent. Currently grass-covered; no visible debris.	Domestic and industrial waste. Wood and coal ash from stoves, boiler.	NJPDES sampling locations SS-3, SS-4. Detected VOCs, metals, and inorganics.	Sampled surface water at the NJPDES locations (M10SW-1 and M6SW-1) and upstream surface-water sampling location (SS-B2). Used GPR and magnetics to define extent of landfill. Installed and sampled 3 monitor wells. Analyzed for TCL +30/TAL/CN.
M-4	Landfill	Operated 1956 only. Currently grass-covered; no visible debris.	Building rubble.	None.	Installed and sampled 3 monitor wells. Analyzed for TCL +30/TAL/CN.
M-5	Landfill	Operated 1952-1959. Currently grass-covered; no visible debris.	Domestic and industrial waste.	NJPDES sampling locations SS-5, SS-6. Detected VOCs, metals, and inorganics.	Installed and sampled 2 monitor wells. Analyzed for TCL +30/TAL/CN/sulfate.
M-6	Burning area	Located on Landfill M-3. Operated until 1970s. Burned general trash. Currently no visible contamination.	General trash.	None.	See M-3.
M-8	Landfill	Operated 1962-1981. Currently has leaf-composting operation. Was fenced and controlled during operation.	Domestic and industrial waste including pesticide/herbicide cans, batteries, asbestos, sludge from STP, and miscellaneous chemicals.	Four monitor wells, NJPDES sampling location SS-7.	Abandoned existing wells and piezometers; installed 4 new monitor wells. Analyzed for TCL +30/TAL/CN/NH ₃ /sulfate. Tidal water-level monitoring.
M-12	Landfill	Date of operation unknown. Located across Husky Brook from M-14.	Domestic and industrial waste, automobiles, oil, and building rubble.	NJPDES sampling locations SS-8, SS-9, and SS-10.	Used GPR and magnetics to locate landfill and define boundaries. Installed 3 monitor wells. Analyzed for TCL +30/TAL/CN. Tidal monitoring with M-14.
M-14	Landfill	Operated from 1965-1966. Has NJPDES permit.	Building rubble and dredgings from Husky Brook Lake.	NJPDES sampling upstream and downstream on Husky Brook Creek, SS-8, SS-9, and SS-10.	Used GPR and magnetics in western area. Installed and sampled 3 monitor wells for TCL +30/TAL/CN. Tidal monitoring with M-12. Sampled M14SW-8 and M14SW-9 surface-water locations.

WESTON

Table 4.2-1

**Site Investigation Summary — Main Post
(Continued)**

Site Number	Site Type	Description	Potential Waste/Contaminants	Previous Sampling Activities ^a	Investigation Activities
M-15	Water tank	Used for fire-fighting water. Built in 1940s. Paint chips on ground surrounding tank. Stressed vegetation around base of tank.	Lead.	None.	Collected 2 surface soil samples. Analyzed for TCL SVOCs, TAL, and pesticides.
M-16	Former Pesticide Storage Bldg. 498	Misidentified as Bldg. 167 in 1980 report. Building 498 used for pesticide control shop in the 1940s and 1950s; disposal to sink, which discharged to sanitary sewer. No apparent outside disposal.	Pesticides and herbicides.	None.	Collected 4 soil samples from 0 to 6 inches bgs. Installed soil boring and 1 monitor well. Analyzed for TCL +30. Analyzed for TAL in SB-01.
M-18	Former training area	Army Signal School. Diesel and gasoline generators.	Diesel and oil spilled on ground. PAHs, VOCs, TPHs, lead.	None.	Conducted geophysical surveys, completed 9 soil borings, sampled 6 to 12 inches or 12 to 18 inches, stained areas, and/or just above water table. Installed 2 monitor wells in soil borings. Sampled soil for VOCs and TPHs. In addition, sampled for SVOCs and TAL at SB-06 only. Sampled groundwater for TCL +30/TAL/TPHs.
AOC-3	Former sewage treatment plant	Operated 1941-1975. Sludge drying bed located on concrete base. Sludge transported to golf course and landfills. 1935 map shows pistol range on this location.	Heavy metals, cyanide, and pesticides.	Monitor wells installed west of site. Sludge sampled in 1981; no heavy metals detected.	Sampled outfall sediments and 2 soil borings in sludge bed area for TCL + 30/TAL/CN.
New Site, Not Noted in IA Report	Former treatment plant	Operated until 1941. Located approximately where Bldg. 250 is today. Labeled on 1935 map.	Heavy metals.	None.	Sampled outfall sediment for metals.
PCB Transformers	Buildings (see Table 4.2-22)	Several transformers in this area were tested for PCBs in 1990. Those with PCBs >500 ppm were removed or remediated.	PCBs	Transformers sampled — several > 500 ppm. See Table 4.2-22.	Sampled PCB transformer locations.

^aResults of previous investigation were presented on the report titled *Investigation of Suspected Waste Sites at Fort Monmouth, New Jersey* (1993).

^bTCL +30 = Target Compound List; includes volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), pesticides, and polychlorinated biphenyls (PCBs).



Table 4.2-2**Differences Between the Proposed and Actual Work at Main Post**

Site	Differences
M-15	Soil samples from SS-01 and SS-02 were collected and analyzed for TCL SVOCs; however, TCL SVOC analyses were not proposed in the CDAP.
M-16	Soil samples from SB-01 were collected and analyzed for TAL metals; however, TAL metals analyses were not proposed in the CDAP.
M-18	Installed 9 soil borings instead of 12, and 2 monitor wells instead of 3 because marshy conditions made some of the planned sampling locations inaccessible. Sampled one existing monitor well in addition to the 2 newly installed wells. In eight of nine soil borings, no soil staining was observed so no SVOC analysis was performed as per the CDAP.



Investigation of Suspected Waste Sites at Fort Monmouth, New Jersey, 1993, which was approved by NJDEP. Background characterization data were collected to evaluate soil, groundwater, surface water, and sediment in areas of the base considered to be representative of natural materials or upgradient conditions.

Sediment and surface-water samples were taken upgradient of the Main Post on Lafetra Creek and Mill Creek. Five background soil borings, which were converted into monitor wells, were installed and two discrete soil intervals were sampled from each boring. Two rounds of groundwater samples were collected from each location. Soil and groundwater samples were analyzed for the parameters listed in Section 3, Tables 3.6-1 and 3.8-1. Background monitor wells were labeled as "B" wells, i.e., MW-01B. Main Post background locations are shown in Figure 4.2-2 and labeled B-1, B-2, etc. Monitor well MW-01B was installed at background location B-1 and a similar practice was followed at the other background locations.

4.2.1.1 Hydrogeologic Interpretation

The five monitor wells installed at the Main Post were installed to depths ranging from 14 ft below ground surface (bgs) to 26 ft bgs. Total depths were determined during drilling and were based on the depth at which water was encountered. The lithology and depth to water varied between background locations, as presented on the lithologic logs in Appendix A. Monitor wells were screened across the water table.

4.2.1.2 Soil Sampling Results

As outlined in the CDAP, soil samples were collected from two discrete intervals: 0 to 2 ft bgs and between 2 and 10 ft bgs or to groundwater. Soil-boring depths varied among the background locations, depending on the depth to groundwater. The compounds detected in background soil samples at the specific sampling intervals, with the corresponding sample identifications, are presented in Appendix D. Table 4.1-6 summarizes the maximum concentrations detected in background soil at the Main Post and presents published maximum concentrations for Monmouth County.

VOCs

VOCs were analyzed for but were not detected in Main Post background soil samples.

SVOCs

A total of 19 SVOCs were detected in Main Post background soil samples (Table 4.1-6).

Pesticides/PCBs

Three pesticides (4,4'-DDE, 4,4-DDD, and 4,4'-DDT) were detected above the laboratory quantitation limit in Main Post background soils.

Metals

A total of 19 metals were detected above laboratory quantitation limits in Main Post background soils.

Cyanide

Cyanide was not detected in any of the Main Post background soil samples.

4.2.1.3 Groundwater Sampling Results

Two rounds of groundwater samples were collected at the Main Post. The compounds detected in groundwater samples from the individual sampling rounds, with the corresponding sample identifications, are listed in Appendix D. Table 4.1-6 summarizes the maximum background concentrations detected in groundwater at the Main Post.

VOCs

VOCs were not detected in any of the background samples from the Main Post.

SVOCs

Two SVOCs [bis(2-ethylhexyl) phthalate and chrysene] were detected in concentrations above or below the laboratory quantitation limits. However, bis(2-ethylhexyl) phthalate is a common laboratory contaminant.

Pesticides/PCBs

One pesticide (heptachlor epoxide) was detected in the background groundwater samples in a concentration below the laboratory quantitation limit. PCBs were not detected at the background locations.

Metals

As indicated in Table 4.1-6, 22 metals (total) were detected in concentrations above laboratory quantitation limits in background groundwater at the Main Post.

Cyanide

Cyanide was not detected in the background groundwater at the Main Post.

4.2.1.4 Surface-Water Sampling Results

Two surface-water samples collected at locations upgradient from on-site drainage (SS-B1 and SS-B2) were selected as background samples (Figure 4.2-2). The analytes detected in background surface water and corresponding sample identifications are presented in Appendix D.

Table 4.1-8 summarizes the maximum detected concentrations in total and soluble background surface water at the Main Post.

VOCs

VOCs were analyzed for but not detected in background surface water (total) at the Main Post. VOC analysis was not performed for the soluble background surface-water samples.

SVOCs

SVOCs were analyzed for but not detected in background surface water (total) at the Main Post. SVOC analysis was not performed for the soluble background surface-water samples.

Metals

A total of 13 metals were detected above laboratory quantitation limits at the Main Post. Similarly, 11 metals were detected above laboratory quantitation limits in the filtered (soluble) background surface-water samples (Table 4.1-8).

4.2.1.5 Sediment Sampling Results

Two sediment sampling locations at the Main Post, SS-B1 and SS-B2, were selected as background because they are located upgradient of on-site drainage (Figure 4.2-2). Analytes detected in background sediment and corresponding sample identifications are presented in Appendix D. Table 4.1-8 summarizes the maximum detected concentrations in background sediment at the Main Post.

VOCs

Four VOCs (acetone, 2-butanone, 1,2-dichloroethene, and vinyl chloride) were detected above the laboratory quantitation limits in Main Post background sediments. However, acetone and 2-butanone are common laboratory contaminants.

SVOCs

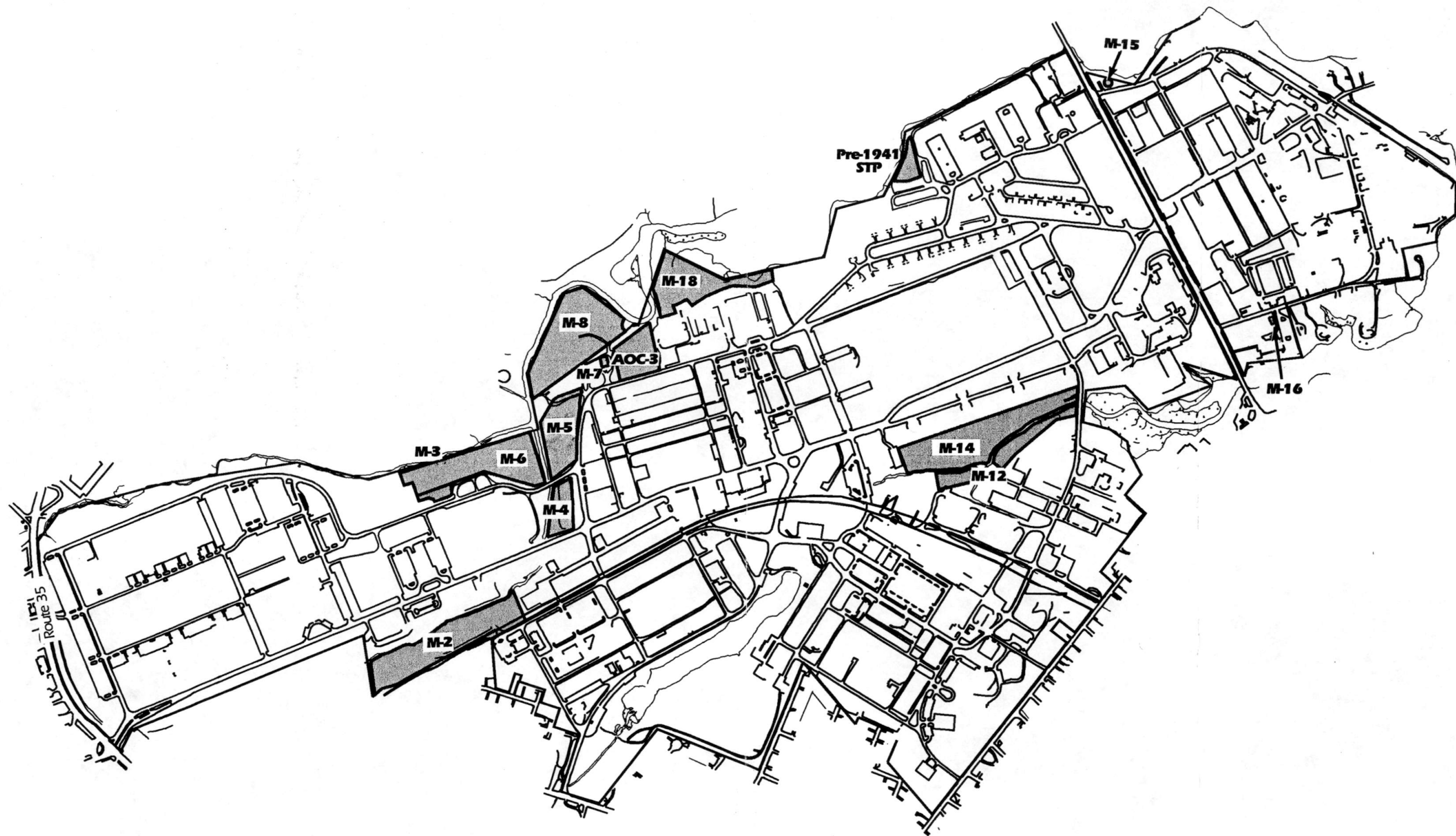
One SVOC, di-n-butyl phthalate, was detected in concentrations above the laboratory quantitation limits in Main Post background sediment. Benzo(a)pyrene was the only polyaromatic hydrocarbon (PAH) compound detected in concentrations above the laboratory quantitation limits in Main Post background sediment.

Pesticides

Pesticides were analyzed for but not detected in background sediments at the Main Post.

Metals

A total of 19 metals in background sediment at the Main Post were detected above laboratory quantitation limits (see Table 4.1-8).



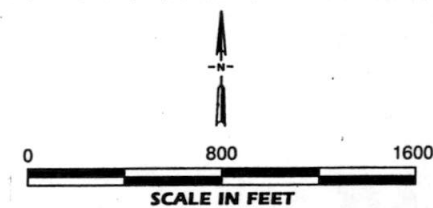
LEGEND

- Road (paved)
- Building
- Site

- Lake
- Marshy Area

/usr3/fort/main/newmain.dgn Sep. 26, 1995 10:07:01

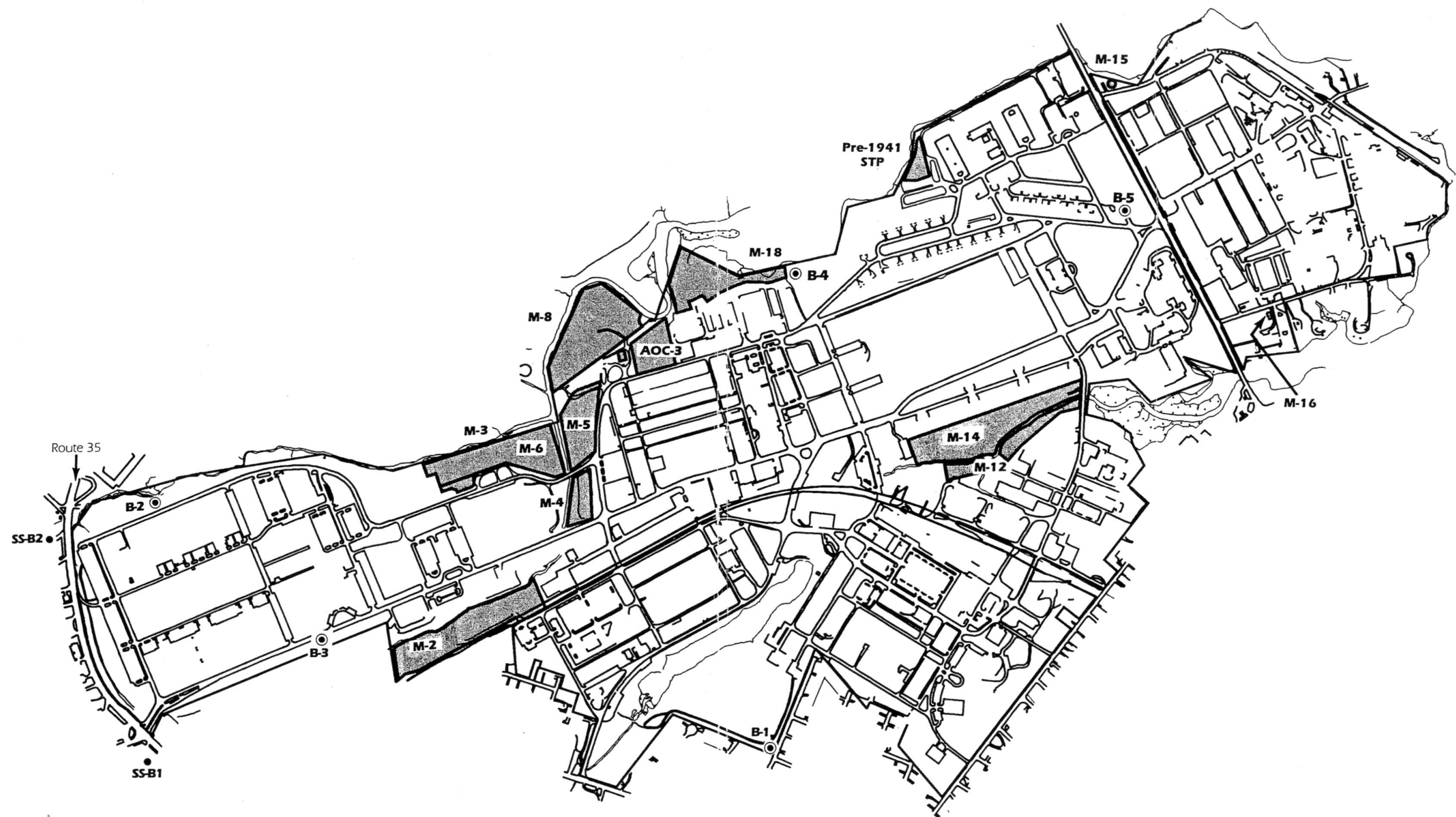
95P-3194



9/28/95

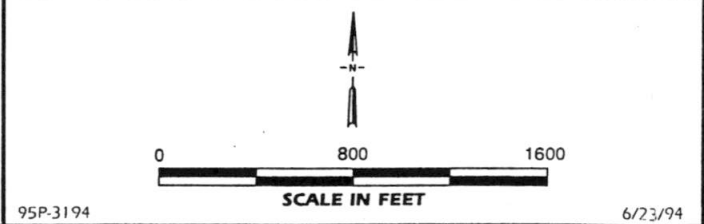
Fort Monmouth, Main Post

**FIGURE 4.2-1
MAIN POST SITE LOCATION MAP**



LEGEND

- | | | |
|--------------|-------------|---------------------------------------|
| Road (paved) | Lake | Background Soil Boring/Monitor Well |
| Building | Marshy Area | Upgradient Surface Water and Sediment |
| Site | | |



Fort Monmouth, Main Post

FIGURE 4.2-2
MAIN POST BACKGROUND SAMPLE LOCATIONS

Site M-2

4.2.2 Landfill 2 (M-2)

4.2.2.1 Site Location

Landfill 2 (M-2) is located in the southwestern corner of the Main Post, on the south bank of Mill Creek (Figures 4.2-1 and 4.2-3). The approximate area of Landfill 2 is 280,400 ft² (6.5 acres).

4.2.2.2 Site History

According to the Installation Assessment (IA) (USATHAMA, 1980), Landfill 2 was in use between 1964 and 1968. A review of aerial photographs suggests that the landfill was still in use in 1969. The 1969 aerial photograph shows that the western three-quarters of the site is mostly bare ground with abundant wheel tracks; a 50- by 300-ft area in the center of this western area is covered with small piles of debris; vegetation is visible between some of the piles, suggesting that the piles had been there for some time. The eastern quarter of the site is vegetated; a small square building and a steel storage igloo were located near the entrance to the landfill. At present, the Landfill 2 area is used for storage of wood chips.

Materials generally found in Main Post landfills include unwashed pesticide/herbicide cans, batteries, fluorescent tubes, electronic components, garbage, asbestos wrappings from pipes, soot and boiler scale, sludge from sanitary treatment plants (STPs), small quantities of outdated drugs, outdated photographic chemicals in glass bottles, building rubble [including asbestos-containing materials (ACM)], incinerator ash, sand from oil spill cleanups; and other debris (IA). According to the IA, specific wastes known to have been put in Landfill 2 include oil in cans, oil burner filters (with approximately 0.5 liter of oil in each), and soot. The banks along Mill Creek near the west end of Landfill 2 were reportedly covered with building rubble (concrete, cinder blocks, etc.) to stabilize the bank. Metal and concrete protrude from the banks of Mill Creek.

As part of a New Jersey Pollutant Discharge Elimination System (NJPDES) permit (permit No. 0057274), surface-water samples have been taken at two locations in Mill Creek since February 1986. The results are summarized in the recent report (WESTON, 1993). Two VOCs

(tetrachloroethene and trichloroethene) were detected in concentrations above the NJDEP surface-water criteria.

4.2.2.3 Sampling Effort

To identify the source of the halogenated hydrocarbons (HHCs) detected in surface-water samples collected from a previous investigation (WESTON, 1993), two new surface-water samples (M2SW-1 and M2SW-2) were collected (Figures 4.2-2 and 4.2-3). In addition, three shallow monitor wells (MW-1, MW-2, and MW-3) were installed. Monitor well locations (MW-1 through MW-3) and surface-water locations are presented in Figure 4.2-3. Tidal water-level monitoring was conducted for a minimum of 72 hours in the three monitor wells and at stilling well-1 and stilling well-2 prior to the collection of analytical samples. Two rounds of groundwater samples and one round of surface-water samples were analyzed for TCL +30 parameters (which include VOCs, SVOCs, pesticides, and PCBs), TAL metals, and cyanide.

4.2.2.4 Hydrogeologic Interpretation

Lithologic logs from MW-2 and MW-3 indicate that the lithology consists of a thin soil cover (0.2 ft) underlain by fill material. The components of the filled materials observed in both borings consist of coal and wood fragments, roof shingles, paper, and miscellaneous debris. Natural quartz sand, silt, and clays were intermixed with the manmade materials. Monitor well MW-1, located upgradient of the landfill boundary, indicates a lithology consisting primarily of silty medium-fine-grained sand that overlies a fine-medium-grained sandy silt.

Groundwater saturation was observed at approximately 8 ft bgs at all of the well locations. The three monitor wells were screened across the water table, with total depths of 23, 18, and 16 feet bgs in MW-1, MW-2, and MW-3, respectively. Water-level elevation data, measured on 6 March 1995, indicate that local groundwater flow is north toward Mill Creek (Figure 4.2-4). Based on groundwater elevation measurements, monitor wells MW-2 and MW-3 are downgradient of the M-2 area.

4.2.2.5 Groundwater Sampling Results

Monitor wells at site M-2 were sampled for the analytical parameters listed in Table 3.8-1. The analytical results in groundwater samples from the individual sampling rounds are listed in Appendix D. Table 4.2-3 compares the average concentrations of the detected compounds from the February and March sampling rounds with the NJDEP Groundwater Quality Criteria (GWQC), and then compares the results to the subsequent site-specific maximum background and/or Monmouth County background concentrations, where appropriate. Figure 4.2-5 presents the locations and averaged concentrations of compounds detected above both the NJDEP GWQC and the background concentrations established for the Main Post.

VOCs

Chlorobenzene was the only VOC detected in site M-2 groundwater (Figure 4.2-5). However, chlorobenzene was detected in concentrations exceeding the NJDEP GWQC from both sampling rounds in MW-2 and MW-3. Chlorobenzene was not detected in the February sampling round in MW-1, but was detected in the March sampling round in exceedance of the NJDEP GWQC.

SVOCs

SVOCs were not detected in site monitor wells above laboratory quantitation limits from either sampling round.

Pesticides/PCBs

Pesticides/PCBs were not detected in site monitor wells from either sampling round.

Metals

As indicated in Table 4.2-3, of the 20 metals detected in site groundwater, only 5 (aluminum, arsenic, iron, manganese, and lead) were found in concentrations exceeding the NJDEP GWQC.

Table 4.2-3
Fort Monmouth - Main Post
Summary of Average Concentrations of Detected
Compounds in Groundwater - Site M-2

COMPOUND	METHOD DETECTION LIMIT (µg/L)	NJDEP GROUNDWATER QUALITY CRITERIA (µg/L)	MAXIMUM BACKGROUND CONCENTRATIONS (µg/L)	ANALYTICAL RESULTS (µg/L)		
				SAMPLING DATE		
				MW1 2/15/95, 3/8/95 (avg.)	MW2 2/15/95, 3/8/95 (avg.)	MW3 2/15/95, 3/8/95 (avg.)
VOC's (µg/L)						
Chlorobenzene	2.7	4	ND	17.5	29	10
SVOCs (µg/L)						
1,4-Dichlorobenzene	4.8	75	ND	ND	3J	ND
4-Methylphenol	12.9	NLE	ND	ND	4J	ND
Naphthalene	8.4	NLE	ND	ND	3J	ND
2-Methylnaphthalene	8.7	NLE	ND	ND	2J	ND
METALS TOTAL (µg/L)						
Aluminum	24	200	121000	5355 R	2061.5	1616.5
Arsenic	1.9	8*	89.3	8.95	4.325	3.4
Barium	1.7	2000	699	135	440.5	105.55
Beryllium	0.9	20*	7 ¹	0.775	ND	ND
Calcium	10.4	NLE	45400	14150	89350	64550
Cadmium	2.8	4	9.5	ND	2.7	ND
Cobalt	2.3	NLE	18.3	6.75	3.85	2.5
Chromium	2.9	100	191	66 R	22.5	15.25
Copper	1.9	1000	730 ¹	5.3	6.575	5.85
Iron	6.4	300	431000	15900 R	61250	20450
Mercury	0.2	2	0.26	ND	0.25	0.195
Potassium	685	NLE	137000	7195	12000	11150
Magnesium	18.3	NLE	62700	8315	11400	5570
Manganese	1.8	50	480 ¹	78.55	286.5	483.5
Sodium	30.5	50000	197000 ¹	13100	10390	9170
Nickel	10.8	100	187	19.8	ND	ND
Lead	1.1	10*	22.7	4.4	11.55	14.8
Selenium	1.5	50	29.6	1.9	ND	ND
Vanadium	2.3	NLE	108	21.25	13.65	9.7
Zinc	3.8	5000	233	472	47.35	79.3

Compounds exceeding NJDEP groundwater quality criteria are noted by bold numbers.

NJDEP groundwater quality criteria consist of the higher number between the PQL or STANDARD

*PQL - Practical Quantitation Limit was used as the NJDEP groundwater quality criteria

NLE - No Level Established

ND - Indicates that the compound was not detected at the noted quantification limit

J - Indicates that the concentration value was estimated due to detection at or near the quantification limits

¹ - Monmouth County maximum background concentration.

R - Data rejected, URS the Data Validator

However, all five metals, with the exception of iron in MW-2 and manganese in MW-3, were found in concentrations below those determined for both site-specific and Monmouth County background at the Main Post. Although iron was found in samples collected from MW-2 in concentrations greater than the range established in the Monmouth County study, the concentrations were well below the site-specific maximum background concentration established at Main Post. Manganese was found in MW-3 in a concentration only slightly greater than the site-specific and Monmouth County background concentrations. As discussed in Subsection 4.1, groundwater flowing through glauconitic formations contains abundant manganese. In addition, manganese is a common metal found in tidally influenced environments. Therefore, manganese is not identified as a compound of concern.

Cyanide

Cyanide was not detected in site monitor wells from either sampling round.

4.2.2.6 Surface-Water Sampling Results

Figure 4.2-6 presents the Main Post surface-water and sediment sampling locations. Surface-water samples were collected from two locations at M-2: M2SW-1 and M2SW-2 (Figures 4.2-3 and 4.2-6). M2SW-1 is upgradient of M2SW-2. Both samples were determined to be freshwater, based on conductivity data, salinity data, and field observations. Total (unfiltered) and soluble (filtered) concentrations were compared to NJDEP freshwater criteria and background and are presented in Table 4.2-4.

VOCs

Two VOCs (tetrachloroethene and trichloroethene) were found in concentrations in the unfiltered samples greater than the NJDEP freshwater criteria and background at locations SW-1 and SW-2. Figure 4.2-5 presents the locations of the compounds detected above the established criteria and maximum background.

Table 4.2-4
Fort Monmouth - Main Post
Summary of Detected Compounds in Site Surface Water
Total and Soluble - Site M-2

COMPOUND	METHOD DETECTION LIMIT	NJDEP SURFACE WATER CRITERIA* FRESH WATER	MAXIMUM BACKGROUND CONCENTRATION (TOTAL)	MAXIMUM BACKGROUND CONCENTRATION (SOLUBLE)	ANALYTICAL RESULTS (µg/L)			
					SAMPLING DATE - 12/1/1994			
					M2 (Total)		M2 (Soluble)	
					SW-1	SW-2	SW-1	SW-2
VOC's (µg/L)								
1,2-Dichloroethene (total)	4.4	592 (h)	ND	ND	3 J	2 J	NA	NA
Tetrachloroethene (PCE)	4.0	0.388 (hc)	ND	ND	5 J	5 J	NA	NA
Trichloroethene ¹	2.0	1.09 (hc)	ND	ND	2 J	2 J	NA	NA
SVOC's (µg/L)								
bis-(2-Ethylhexyl)phthalate	9.7	1.76 (hc)	ND	ND	ND	4 J	NA	NA
METALS TOTAL (µg/L)								
Aluminum	26.7	NLE	748	ND	258	263	ND	ND
Barium	2.1	2000 (h)	44.7	39.4	42.7	47	38.2	41.8
Calcium	12	NLE	31600	30900	18000	19400	17700	19000
Cobalt	2.4	NLE	8.1	4.1	4.5	4.8	4.1	ND
Copper	2.4	NLE	3.2	4	3.1	2.9	4.2	4.9
Iron	4.7	NLE	6210	405	2760	3020	493	681
Lead	1.6	5 (h)	10	ND	3.1	2.3	7.6	ND
Magnesium	38.2	NLE	5440	5120	2930	2860	2860	3070
Manganese	2.0	NLE	113	98.6	89.9	97.6	86.1	92.8
Nickel	12.8	516 (h)	22.9	16.1	ND	ND	14.7	ND
Potassium	821	NLE	5060	4280	2840	2860	2860	3180
Sodium	15.4	NLE	26700	26200	25400	27500	25200	26900
Zinc	2.8	NLE	35.1	23.8	29.1	19.4	19.4	21.1

¹ - Same compound as listed by NJDEP tetrachloroethylene.

* - NJDEP Surface Water Quality Standards (1993).

h - Non carcinogen effect-based human health criteria as a 30 day average.

hc - Carcinogen effect-based human health criteria as 70 year average.

ND - Indicates that the compound was not detected at the noted quantification limit.

J - Indicates that the concentration value was estimated due to detection at or near the quantification limit.

NLE - No Level Established.

NA - Not Analyzed.

Compounds detected above NJDEP Surface Water Criteria are noted by bold numbers.

SVOCs

Bis(2-ethylhexyl) phthalate was the only SVOC detected in site M-2 surface water. In addition, the compound was found in a concentration greater than the NJDEP freshwater criteria and background at location SW-2. Bis(2-ethylhexyl) phthalate is a common laboratory contaminant and can be attributed to sampling or laboratory contamination.

Pesticides/PCBs

Pesticides/PCBs were analyzed for but were not detected in site surface water.

Metals

Of the 13 metals detected in site surface water, only one (lead) was found in a concentration greater than the NJDEP freshwater criteria and maximum background. The compound exceeded the criteria in the filtered sample, but was not detected above criteria in the unfiltered sample (Figure 4.2-5).

4.2.2.7 Tidal Monitoring

Appendix E presents hydrographs of the comparisons between the monitor wells (MW-1 through MW-3) and the stilling wells (1 and 2) during the tidal monitoring tests.

Tidal fluctuations in Mill Creek and in site monitor wells were monitored at upstream tidal monitoring station (stilling well-2), downstream tidal monitoring station (stilling well-1), and site monitor wells (MW-1 through MW-3) (Figure 4.2-3). (Hydrographs are presented in Appendix E.) The tidal monitoring stations are approximately 2,400 ft apart. Changes in creek levels at the upstream location were compared to changes in water levels measured at well MW-2, and changes in creek levels at the downstream location were compared to changes in water levels measured at well MW-3. Wells MW-2 and MW-3 are approximately 150 feet from the creek.

Tidal fluctuations in the creek were also compared to water levels measured at well MW-1, approximately 1,100 feet from the creek. Monitor wells were screened below sea level.

The tidal monitoring data collected at Landfill 2 (M-2) suggest that the stream is influenced by incoming tides. Peaks representing the high tides at stilling well-1 and stilling well-2 are observed, but low tide peaks are not apparent because the elevation of the stream bed at Landfill 2 (M-2) is higher than the elevation of sea level at low tide. The streambed elevation is 1.37 feet above mean sea level (ft. msl) at stilling well-1 and 1.28 ft msl at stilling well-2. The maximum change in creek stage at Landfill 2 (M-2) was 1.2 feet, and the maximum change in water level in the monitor wells was 0.2 foot.

Data collected from well MW-1 were useful as baseline data during the tidal monitoring study at Landfill 2 (M-2). The data suggest that there is no apparent tidal effect on the water levels at well MW-1 and creek levels measured at stilling well-1 or -2. Well MW-1 is approximately 1,100 feet from the creek and is too distant to be influenced by changing creek stage. Water levels in the water-bearing unit and creek levels declined by about 0.1 foot over the course of the monitoring study in March 1995.

The water levels recorded at MW-2 and MW-3 appear to be tidally influenced (see Appendix E). Water levels measured at both wells respond almost instantaneously to rising creek levels. The peak in water levels measured at both wells occurs approximately 20 to 40 minutes after the peak in creek stage. At both monitoring locations (stilling well-1, MW-2 and stilling well-2, MW-3) water-level peaks at each well are approximately 15% to 20% of the tidal peak in creek levels.

4.2.2.7.1 Conductivity and Salinity Results

Conductivity and salinity were measured in surface-water and groundwater samples at Landfill 2 (M-2) in January and March 1995, and are presented in tables in Appendix E. Measurements were collected at low tide and high tide each month to evaluate the extent of saltwater intrusion at each site. High conductivity and salinity readings indicate salty or brackish water, whereas low readings indicate freshwater.

The data indicate the presence of freshwater in the creek at Landfill 2 (M-2). Specific conductance measured in the creek at Landfill 2 (M-2) is consistently less than 240 μ mhos. In addition, salinity measured in the creek at Landfill 2 (M-2) is consistently less than 0.2 parts per thousand (ppth). The results are consistent with the higher streambed elevation at Landfill 2 (M-2) when compared to Landfill 8 (M-8) and Landfills 12 and 14 (M-12, M-14).

Groundwater sampled from monitor wells MW-1 and MW-3 generally exhibits low conductivity and zero salinity, except well MW-2 at Landfill 2 (M-2). The moderate to high specific conductance at well MW-2 at Landfill 2 (M-2) is unexplained, but is likely caused by saltwater intrusion from Parkers Creek.

4.2.2.8 Recommendations

The surface-water sampling results indicate that two VOCs were detected at the two surface-water locations at concentrations greater than NJDEP surface-water criteria, and above maximum background concentrations. In addition, soluble lead was detected at a concentration greater than NJDEP criteria and the maximum background concentrations. Because the site formerly had an NJPDES permit (permit No. 0057274), surface water has been sampled since 1986. The results from the current round of surface-water sampling for VOCs are less than the maximum results from previous rounds.

Chlorobenzene was detected in the groundwater at concentrations exceeding the NJDEP GWQC and background in both downgradient monitor wells from both sampling rounds and in the upgradient well during one sampling round.

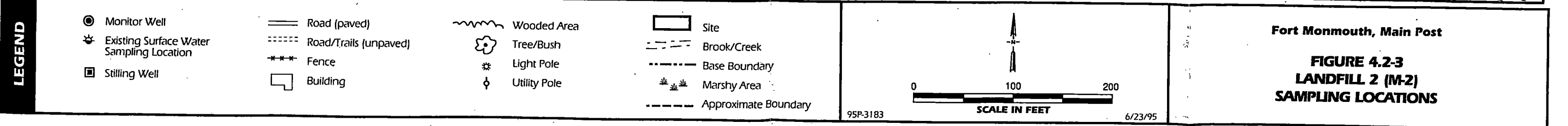
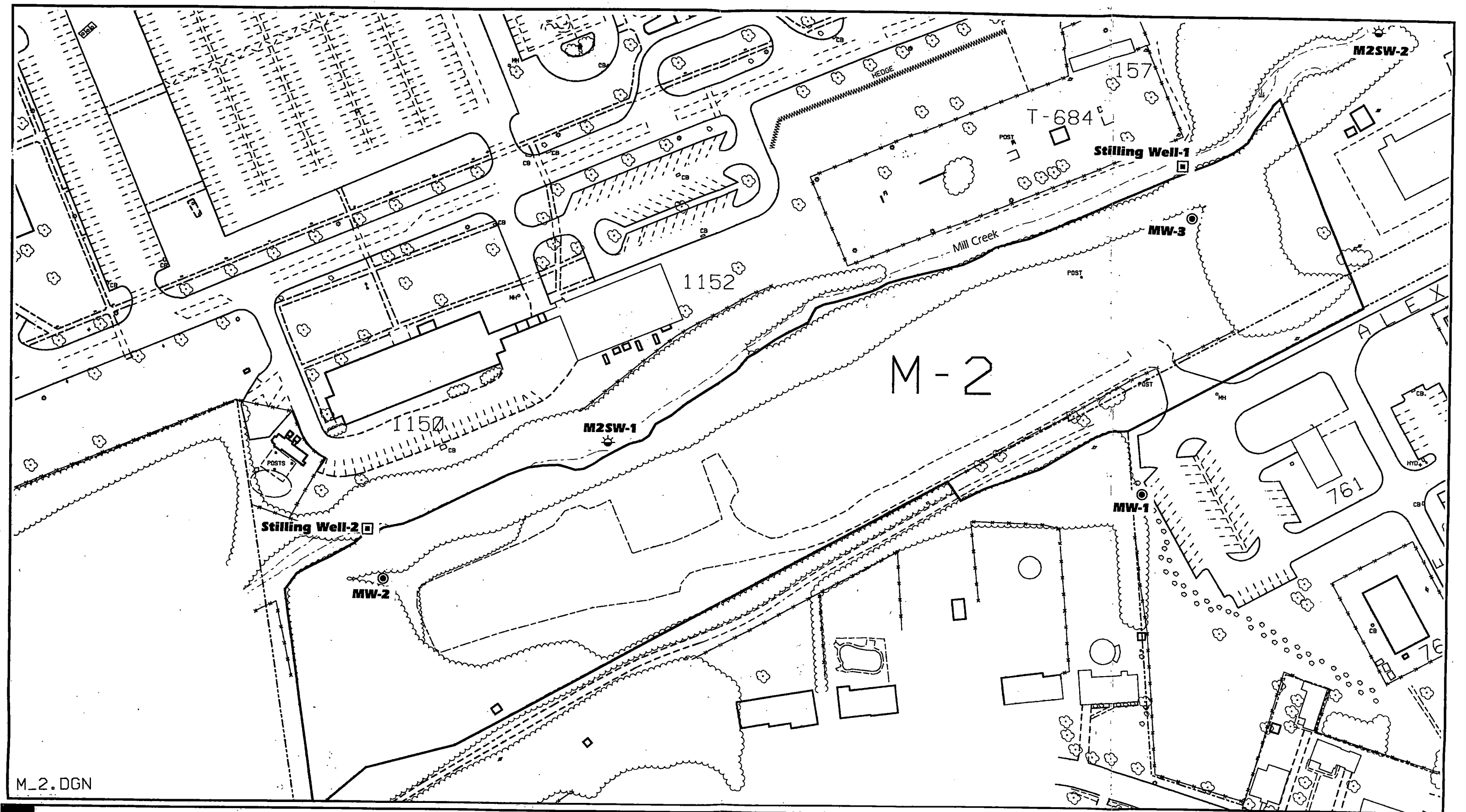
The results of the tidal monitoring indicate that there is no apparent relationship between the changing creek levels and the water levels in upgradient monitor well MW-1; however, a direct relationship was observed between changing creek levels and the water levels in downgradient monitor wells MW-2 and MW-3. Conductivity and salinity results indicate the presence of freshwater in the creek at site M-2. Freshwater was indicated at monitor wells MW-1 and

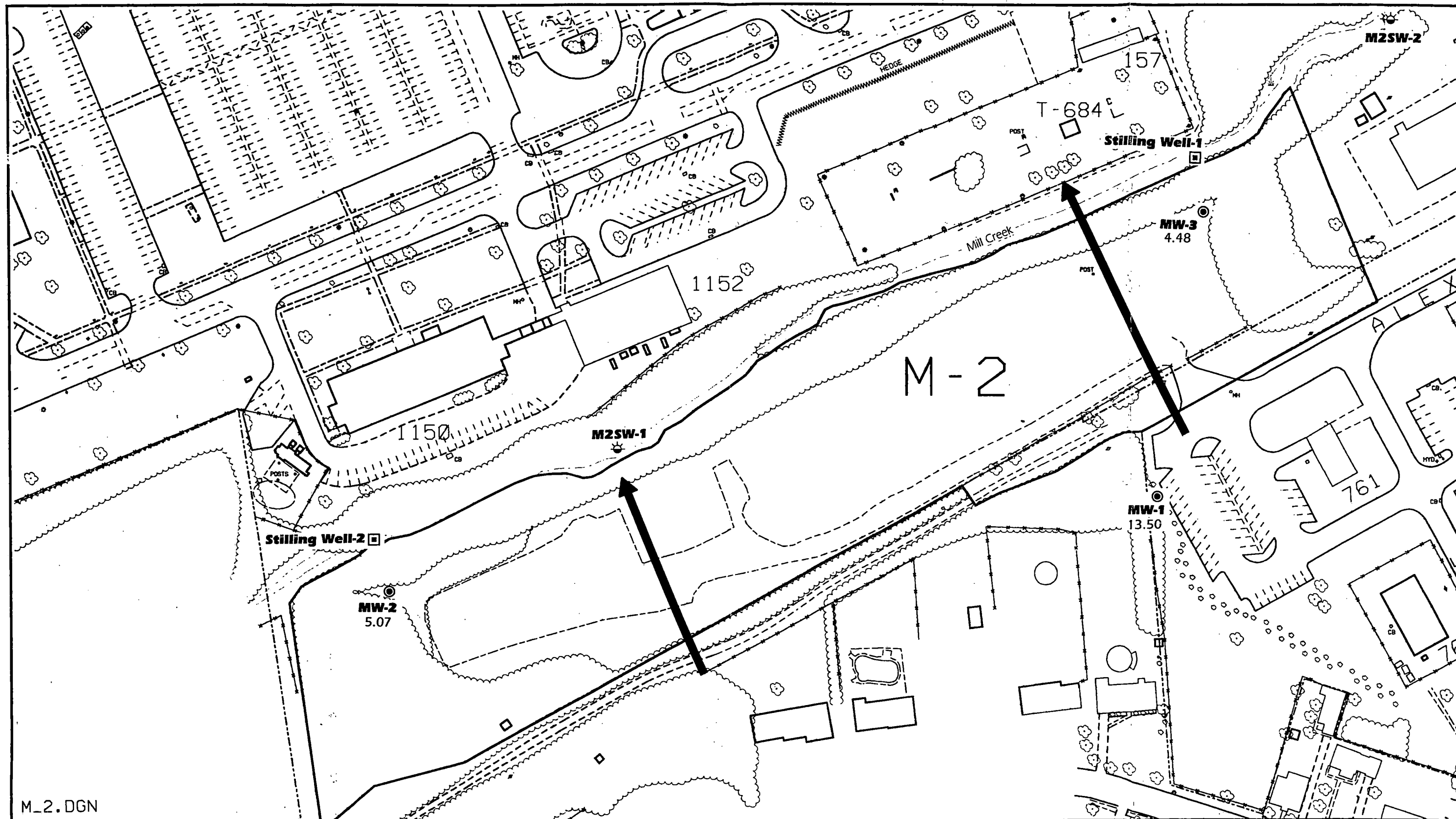
MW-3. A moderate to high specific conductance was measured at monitor well MW-2, which is unexplained.

Although groundwater sample results at site M-2 exceeded NJDEP criteria for one VOC, and surface-water results were slightly exceeded by two VOCs, immediate remedial action is not required for several reasons. Immediate remedial action is usually based on an immediate threat to human health. At this site, shallow groundwater flows toward and discharges to Mill Creek, as indicated by water-level measurements in site monitor wells. Also, there are no known uses of groundwater at or downgradient of the site. Although there is slight VOC contamination in Mill Creek, there is no use of this water for human consumption. In fact, Mill Creek becomes saline immediately downgradient of site M-2. Therefore, the groundwater and surface waters are not used for drinking water.

In addition, surface-water sampling has been performed at this site since 1986, and since the landfill has not been used for decades, the concentrations of VOCs seem, at worst, to be stable and possibly decreasing. Presumably, since no material is being added to the source (the landfill), natural degradation will decrease groundwater and surface-water contamination levels in the future. Although downgradient surface-water samples were not taken during this round, previous sampling at site M-8 indicated that NJDEP surface-water criteria were not exceeded for VOCs. Therefore, the only portion of Mill Creek for which NJDEP surface-water criteria are exceeded is the portion between sites M-2 and M-8. All of this portion is on Fort Monmouth property and, therefore, access to it is restricted.

Since the existing monitor wells and surface-water sampling locations are adequately placed to monitor downgradient groundwater and surface water, the Fort Monmouth Directorate of Public Works (DPW) proposes that a long-term surface-water and groundwater monitoring program be developed and implemented for the site. Aqueous samples would be collected and analyzed on a quarterly basis to further evaluate water quality conditions at the site. Groundwater samples would be collected from existing monitor wells, and surface-water samples would be collected from points yet to be determined. Compounds of concern identified in the first two rounds of sampling would be targeted for the monitoring program.





M_2.DGN

LEGEND	MW-07 5.07	● Monitor Well	□ Stilling Well	~~~~~ Wooded Area	□ Site
	← Groundwater Elevation (FT/MSL)	→	==== Road (paved)	⊕ Tree/Bush	--- Brook/Creek
	⊕ Existing Surface Water Sampling Location	→	----- Road/Trails (Unpaved)	⊙ Light Pole	--- Base Boundary
	→ Groundwater Flow Direction	→	*** Fence	⊕ Utility Pole	⊕ Marshy Area
			□ Building		--- Approximate Boundary

95P-3183

SCALE IN FEET

0 100 200

15/95

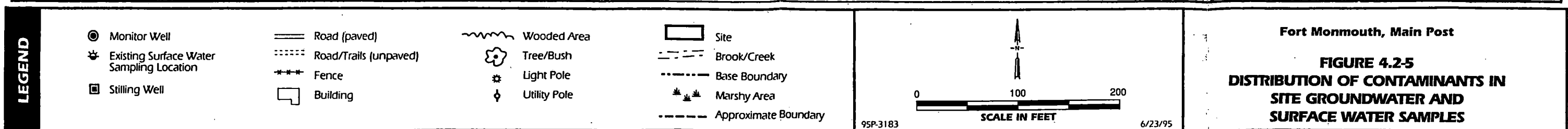
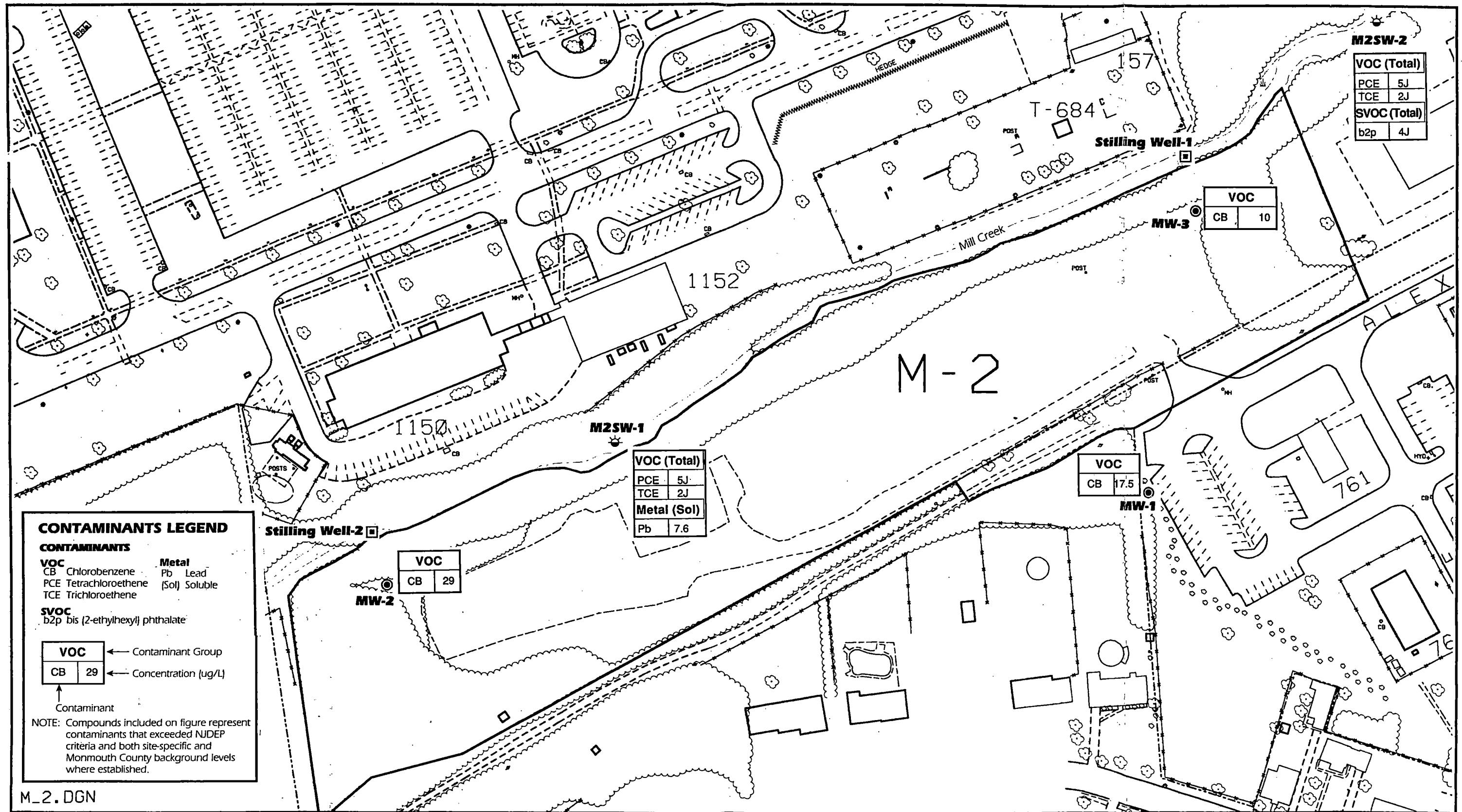
Fort Monmouth, Main Post

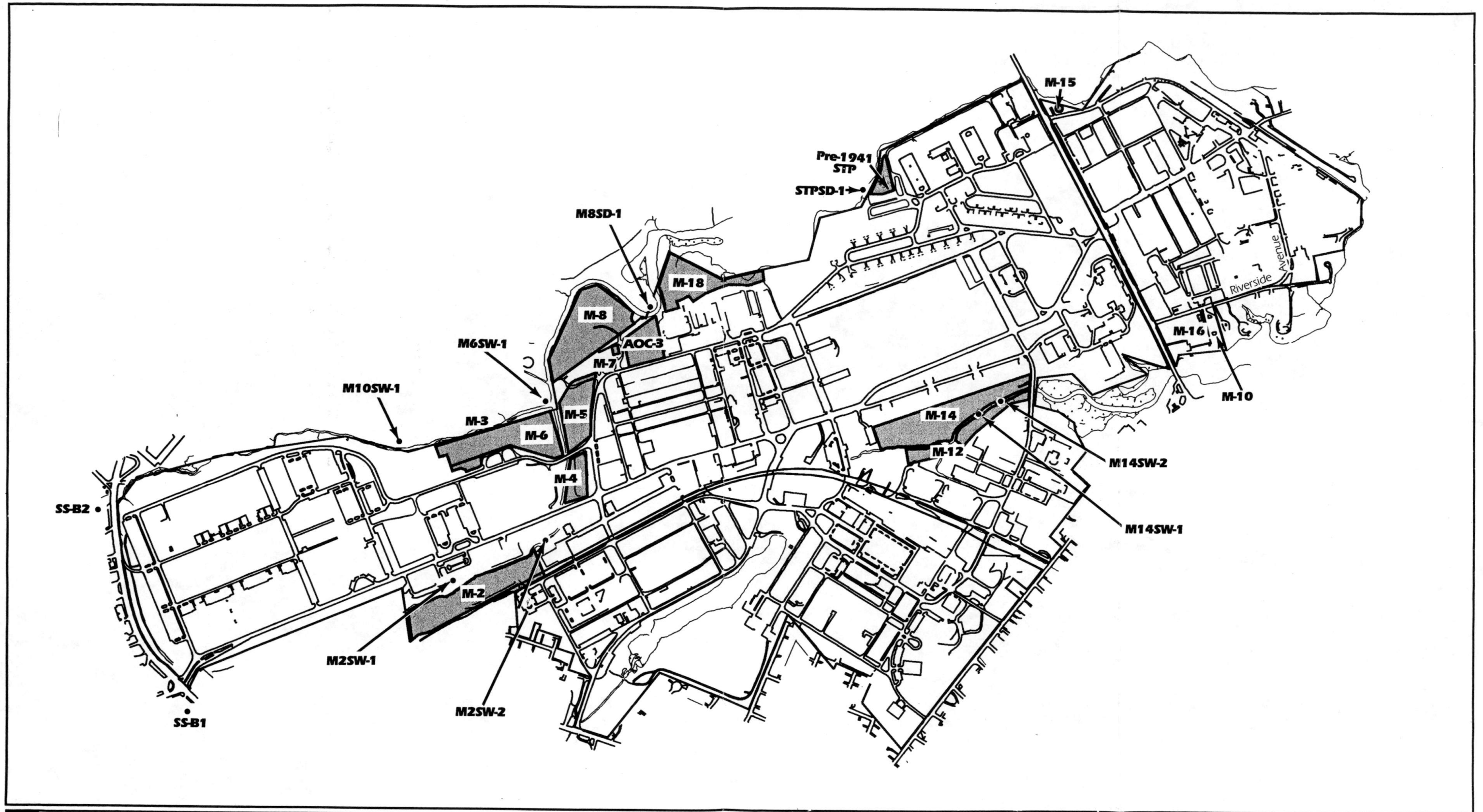
FIGURE 4.24

LANDFILL 2 (M-2)

APPROXIMATE GROUNDWATER FLOW DIRECTIONS

(Groundwater Elevations Recorded from March 1995 Sampling Round)





LEGEND Road (paved) Building Site Lake Marshy Area	● Surface Water and/or Sediment Location SW = Surface Water SD = Sediment	0 800 1600 SCALE IN FEET	Fort Monmouth, Main Post FIGURE 4.2-6 MAIN POST SURFACE WATER AND SEDIMENT SAMPLING LOCATIONS
	Note: SS-B1 and SS-B2 are background locations. Samples for both surface water and sediment were collected.		

95P-3194

9/28/95

Site M-3

4.2.3 Landfill 3 (M-3)

4.2.3.1 Site Location

Landfill 3 (M-3) is located between North Drive and Lafetra Creek in the west-central part of the Main Post. The actual boundaries of the landfill are not clear, but have been approximated in Figure 4.2-7. The approximate area of site M-3 is 257,890 ft² (5.9 acres). Burning Area M-6, which is discussed later, is located within Landfill 3.

4.2.3.2 Site History

According to the IA, Landfill 3 was in use between 1959 and 1964, and was used for general purpose disposal of domestic and industrial wastes. The 1969 aerial photograph shows that, with the exception of a few areas with vehicle tracks, this area was covered with vegetation. At present, the surface is hummocky and covered with grass.

Landfill 3 (M-3) most likely contained materials similar to those generally found in other Main Post landfills. According to long-term Fort Monmouth employees, this landfill also contains wood and coal ash from furnaces and boilers.

As part of an NJPDES permit (permit No. 0057274), surface-water samples have been taken at two locations in Lafetra Creek since February 1986. The results are summarized in the recent report (WESTON, 1993). One VOC (tetrachloroethene) was detected in concentrations above the NJDEP surface-water criteria.

4.2.3.3 Sampling Effort

Surface geophysics surveys were conducted to confirm the location and investigate the extent of the former landfill. First, a magnetometer survey, including both vertical magnetic gradient and total magnetic field, was conducted. After completion of the magnetometer survey, GPR was used in accessible areas to provide additional definition of landfill boundaries.

The source of the HHCs detected in surface-water samples from a previous investigation could not be determined (WESTON, 1993). Therefore, surface-water locations M6SW-1 and M10SW-1 on Lafetra Creek were sampled (Figure 4.2-6). In addition, three monitor well locations (MW-4 through MW-6), as shown in Figure 4.2-7, were installed. The location of monitor well M-6 was slightly adjusted based on the geophysical interpretations. The well was repositioned to monitor groundwater quality downgradient of the exposed drum area. The monitor wells were sampled twice and surface-water locations were sampled once for TCL +30 parameters, TAL metals, and cyanide.

4.2.3.4 Geophysical Results

The magnetometer survey performed at M-3 indicated buried ferrous material, as depicted in Figures 4.2-8 and 4.2-9, within the suspected boundary of the landfill. The total magnetic field contour plot (Figure 4.2-8) shows background readings of approximately 54,000 nT and is represented by the green contour interval. High and low excursions from this value, represented by the violet and blue contour intervals, respectively, reveal anomalous magnetic signatures indicative of buried ferrous objects. The boundary between the background and anomalous magnetic readings is interpreted as the landfill boundary. Cultural features along the north side of the site include buried and overhead power lines and a chainlink fence. These features limited the magnetic data acquisition and anomalous magnetic influences that could be seen on the magnetic gradient plot (shown in Figure 4.2-9). The northern edge of the plot shows these cultural anomalies as a "low" reading from background, and is represented by the blue contour interval.

The GPR survey performed at M-3 confirmed the potential landfill boundary and expanded the geophysical survey underneath the overhead power lines and up to the northern fenceline. The GPR system is not heavily influenced by these types of cultural features like magnetometer methods. A typical radar profile, such as along the 600E traverse, reveals "normal" horizontal reflectors, indicative of nonfill areas, from 100S to approximately 100N (Figure 4.2-9A). Continuing from 65N to 160N the radar waveform becomes very chaotic in nature. This chaotic waveform is typical of buried waste material.

Hyperbolic radar signatures, typical of buried drums, were observed in the vicinity of grid coordinate 160N/800E. This was confirmed visually by observing a partially exposed drum at the surface at approximately 160N/800E. As shown on the radar profile in Figure 4.2-9B, the hyperbolic waveforms are found within chaotic radar reflectors. With the exception of these hyperbolic radar signatures, the geophysical surveys indicate that the waste material is within the suspected landfill boundary. Monitor wells have been installed in appropriate locations to monitor groundwater quality upgradient and downgradient of the site.

4.2.3.5 Hydrogeologic Interpretation

Lithologic logs from MW-5 and MW-6 indicate that the lithology consists of a thin soil cover (0.3 ft) underlain by fill material. The components of the filled materials observed in both borings consisted of a black slag material with camera film, rebar, and paper debris. Natural quartz sand, gravel, silt, and clay were intermixed with the manmade materials. MW-4 is located upgradient of the fill locations and consists of tight olive-green silty fine-grained sand with a clay matrix.

Groundwater saturation was observed in the borehole during drilling activities between 8 and 10 ft bgs. Monitor wells were screened across the water table, and total depths varied from approximately 23, 16, and 15 ft bgs in MW-4, MW-5, and MW-6, respectively. Water-level elevation data measured on 6 March 1995, indicate that local groundwater flow is to the north in the direction of Lafetra Creek (Figure 4.2-10). Based on groundwater elevation measurements, monitor wells MW-5 and MW-6 are downgradient of the site M-3 area.

4.2.3.6 Groundwater Sampling Results

Monitor wells at site M-3 were sampled for the analytical parameters listed in Table 3.8-1. The analytical results for groundwater samples from the individual sampling rounds are listed in Appendix D. Table 4.2-5 compares the average concentrations of the detected compounds from the February and March sampling rounds with the NJDEP GWQC, and then compares the results to subsequent site-specific maximum background and/or Monmouth County background

Table 4.2-5
Fort Monmouth - Main Post
Summary of Average Concentrations of Detected
Compounds in Groundwater - Site M-3

COMPOUND	METHOD DETECTION LIMIT (µg/L)	NJDEP GROUNDWATER QUALITY CRITERIA (µg/L)	MAXIMUM BACKGROUND CONCENTRATION (µg/L)	ANALYTICAL RESULTS (µg/L)		
				SAMPLING DATE		
				MW4 2/16/95, 3/8/95 (avg.)	MW5 2/16/95, 3/9/95 (avg.)	MW6 2/16/95, 3/9/95 (avg.)
VOC's (µg/L)						
Chlorobenzene	2.7	4	ND	ND	5 J	ND
Toluene	2.7	1000	ND	ND	4.5 J	4 J
SVOCs (µg/L)						
4-Methylphenol	12.9	NLE	ND	ND	4 J	ND
Naphthalene	8.4	NLE	ND	ND	3 J	ND
2-Methylnaphthalene	8.7	NLE	ND	ND	1.5 J	ND
Acenaphthene	6.0	400	ND	ND	2 J	ND
Fluorene	6.3	300	ND	ND	1.5 J	ND
Phenanthrene	5.0	NLE	ND	ND	3 J	ND
Anthracene	4.6	2000	ND	ND	3 J	ND
Pyrene	5.4	200	ND	ND	3 J	ND
bis-(2-Ethylhexyl)phthalate	9.7	30*	100B	ND	ND	4 J
Carbazol	4.4	NLE	ND	ND	3 J	ND
METALS TOTAL (µg/L)						
Aluminum	24.0	200	121000	705	2494	474
Arsenic	1.9	8*	89.3	1.425	2.625	ND
Barium	1.7	2000	699	47.4	584	124
Calcium	10.4	NLE	45400	33750	95600	122500
Cadmium	2.8	4	9.5	ND	2.825	ND
Cobalt	3.0	NLE	18.3	ND	2.075	ND
Chromium	2.9	100	191	9.05	20.1	7.75
Copper	1.9	1000	730 ¹	2	22.7	ND
Iron	6.4	300	431000	2965	89850	20500
Mercury	0.2	2	0.26	ND	0.365	ND
Potassium	685	NLE	137000	7825	13300	10300
Magnesium	18.3	NLE	62700	4590	17950	28800
Manganese	1.8	50	480 ¹	34.3	1115	686
Sodium	30.5	50000	197000 ¹	13150	15800	34300
Nickel	10.8	100	187	4	ND	ND
Lead	1.6	10*	22.7	ND	78.3	21.2
Vanadium	2.3	NLE	108	3.3	12	3.625
Zinc	3.8	5000	233	17.85	234.05	62.05

Compounds exceeding NJDEP groundwater quality criteria are noted by bold numbers
NJDEP groundwater quality criteria consist of the higher number between the PQL or STANDARD
*PQL - Practical Quantitation Limit was used as the NJDEP groundwater quality criteria.
NLE - No Level Established
ND - Indicates that the compound was not detected at the noted quantification limit
J - Indicates that the concentration value was estimated due to detection at or near the quantification limits
¹ - Monmouth County maximum background concentration.

concentrations, where appropriate. Figure 4.2-11 presents the locations and average concentrations of compounds detected above the NJDEP GWQC, and above both site-specific and Monmouth County background concentrations established at the Main Post.

VOCs

Although chlorobenzene was detected below the laboratory quantitation limit but above the method detection limit in a sample collected at MW-5 from the March sampling round, the value slightly exceeds the NJDEP GWQC. As discussed in Subsection 4.1, the analytical results that are reported with a "J" are estimated values that are below the quantitation limit but above the method detection limit.

SVOCs

SVOCs were not detected above laboratory quantitation limits in the site monitor wells from either sampling round. The levels of compounds that could be estimated (below the laboratory quantitation limit) were well below the NJDEP GWQC, where established.

Pesticides/PCBs

Pesticides/PCBs were not detected in the site monitor wells from either sampling round.

Metals

As indicated in Table 4.2-5, of the 18 metals detected in site groundwater, 4 metals (aluminum, iron, manganese, and lead) were found in concentrations exceeding the NJDEP GWQC. However, aluminum and iron were found in concentrations below those determined for site-specific and/or Monmouth County background. Manganese was detected (at MW-5 and MW-6) in concentrations greater than the site-specific and Monmouth County background levels. In addition, lead was found in concentrations greater than those determined for maximum background in MW-5 (Figure 4.2-11), but below background in MW-6. However, lead was not

detected in the filtered sample above NJDEP GWQC. As discussed in Subsection 4.1, groundwater flowing through glauconitic formations contains abundant manganese. In addition, manganese is a common metal found in tidally influenced environments. Therefore, manganese is not identified as a compound of concern. The relatively high sodium concentrations in groundwater samples from site M-3 are from saltwater intrusion from the Parkers Creek estuary via Lafetra Creek.

Cyanide

Cyanide was analyzed for but not detected in the site monitor wells from either sampling round.

4.2.3.7 Surface-Water Sampling Results

Two surface-water samples were collected at M-3: M10SW-1 and M6SW-1 (Figures 4.2-6 and 4.2-7). M10SW-1 is upgradient of M-3 and M6SW-1 is downgradient. Both samples were determined to be saltwater, based on conductivity results and field observations. Total (unfiltered) and soluble (filtered) concentrations were compared to NJDEP saltwater criteria and background and are presented in Table 4.2-6.

VOCs

VOCs were analyzed for but were not detected in site surface-water samples.

SVOCs

SVOCs were analyzed for but were not detected in site surface-water samples.

Pesticides/PCBs

Pesticides/PCBs were analyzed for but were not detected in site surface-water samples.

Table 4.2-6
Summary of Detected Compounds in Site Surface Water
Total and Soluble - Site M-3

COMPOUND	METHOD DETECTION LIMIT	NJDEP SURFACE WATER CRITERIA* SALINE WATER	MAXIMUM BACKGROUND CONCENTRATION (TOTAL)	MAXIMUM BACKGROUND CONCENTRATION (SOLUBLE)	ANALYTICAL RESULTS (µg/L) 12/1/94			
					MP6SW-1 (Total)	MP6SW-1 (Soluble)	M10SW-1 (Total)	M10SW-1 (Soluble)
METALS TOTAL (µg/L)								
Aluminum	26.7	NLE	748	ND	179	ND	69	ND
Barium	2.1	NLE	44.7	39.4	33.3	27.7	34.6	29.1
Calcium	12	NLE	31600	30900	32100	30400	30000	29400
Copper	2.4	NLE	32	4	ND	4.3	ND	3.9
Iron	4.7	NLE	6210	405	2940	465	2180	355
Lead	1.6	NLE	10	ND	4.8	ND	1.6	ND
Magnesium	38.2	NLE	5440	5120	9790	9030	5340	5160
Manganese	2.0	100 (h)	113	98.6	102	94.3	98.7	96.2
Potassium	821	NLE	5060	4280	6260	5840	4320	4280
Selenium	0.9	NLE	ND	ND	1.1	ND	ND	ND
Sodium	15.4	NLE	26700	26200	56500	52300	18200	17700
Zinc	2.8	NLE	35.1	23.8	12.2	7.8	16	7.9

* - NJDEP Surface Water Quality Standards (1993).

h - Non carcinogen effect-based human health criteria as a 30 day average.

ND - Indicates that the compound was not detected at the noted quantification limit.

NLE - No Level Established

Compounds detected above NJDEP Surface Water Criteria are bolded.

Metals

As indicated in Table 4.2-6, of the 12 metals detected in site surface water, only one (manganese, unfiltered) was found in a concentration slightly exceeding the NJDEP surface-water criteria (saline) in sample MP6SW1. However, the concentration of manganese was detected below the maximum background levels established at the Main Post for total metals. In addition, manganese was found in a concentration below the established criteria and background in the filtered sample.

As presented in Table 4.2-6 (soluble), no soluble concentrations of contaminants detected in M6SW-1 surface-water were greater than NJDEP surface-water criteria.

None of the total or soluble concentrations of chemicals detected in M10SW-1 surface water exceeded NJDEP surface-water guidance (Table 4.2-6 total and soluble).

4.2.3.8 Recommendations

The geophysical surveys indicate that the extent of the identified waste material is within the suspected boundaries of the landfill and the monitor wells have been installed in appropriate locations to monitor shallow groundwater quality upgradient and downgradient of the site. In an isolated area of the site the GPR results indicated hyperbolic radar signatures typical of a buried drum or drums. A partially exposed drum was also observed at this location.

Groundwater quality results indicate that chlorobenzene was detected in one downgradient well below laboratory quantitation limits, but just above NJDEP GWQC and background from one sampling round. Lead was also detected at levels above NJDEP GWQC and background.

The surface-water quality results indicate that no organic or inorganic concentrations exceeded both NJDEP surface-water criteria and the maximum background concentration. Because the site formerly had an NJPDES permit, surface water has been sampled since 1986. The results from

the current round of surface-water sampling for VOCs are less than the maximum results from previous rounds.

Although NJDEP groundwater criteria were exceeded for one VOC, immediate remedial action is not required for several reasons. First, the measured value for the VOC was below the quantitation limit and just slightly above the GWQC. In addition, the groundwater flows toward Lafetra Creek, and since the water table is higher than the creek bed and groundwater flow tends to follow surface topography, the shallow groundwater probably flows into Lafetra Creek. There are no uses of groundwater between the source and Lafetra Creek. Surface-water samples did not exceed NJDEP surface-water criteria. Therefore, there is no immediate threat to human health.

In addition, because surface-water sampling has been performed at this site since 1986, and the landfill has not been used for decades, the concentrations of VOCs seem, at worst, to be stable and possibly decreasing. Presumably, since no material is being added to the source (the landfill), natural degradation will decrease groundwater and surface-water contamination levels in the future.

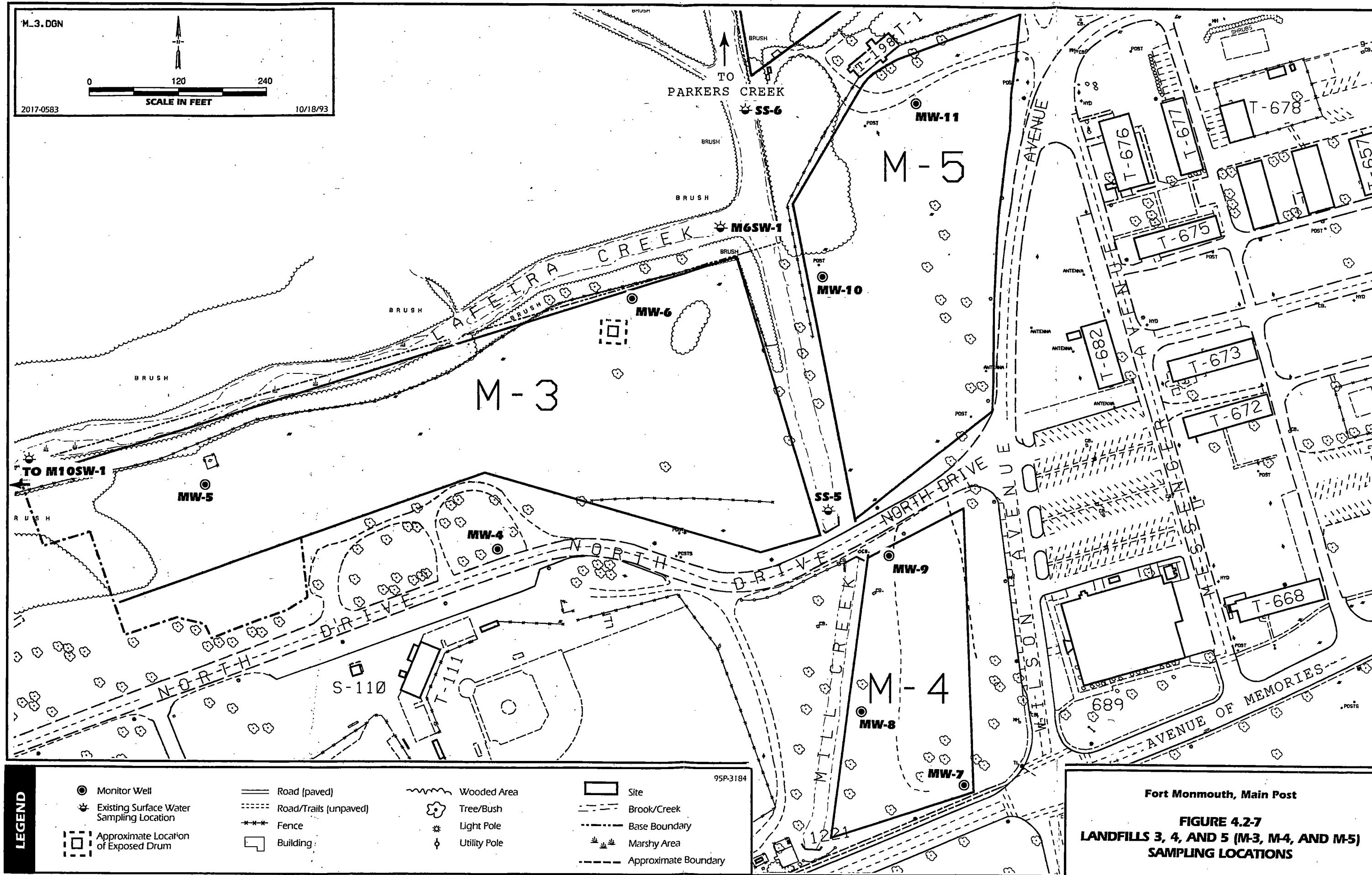
Since the existing monitor wells and surface-water sampling locations are adequately placed to monitor downgradient groundwater and surface water, DPW proposes that a long-term surface-water and groundwater monitoring program be developed and implemented for the site. Aqueous samples would be collected and analyzed on a quarterly basis to further evaluate water quality conditions at the site. Groundwater samples would be collected from existing monitor wells, and surface-water samples would be collected from points yet to be determined. Compounds of concern identified in the first two rounds of sampling would be the targeted for the monitoring program.

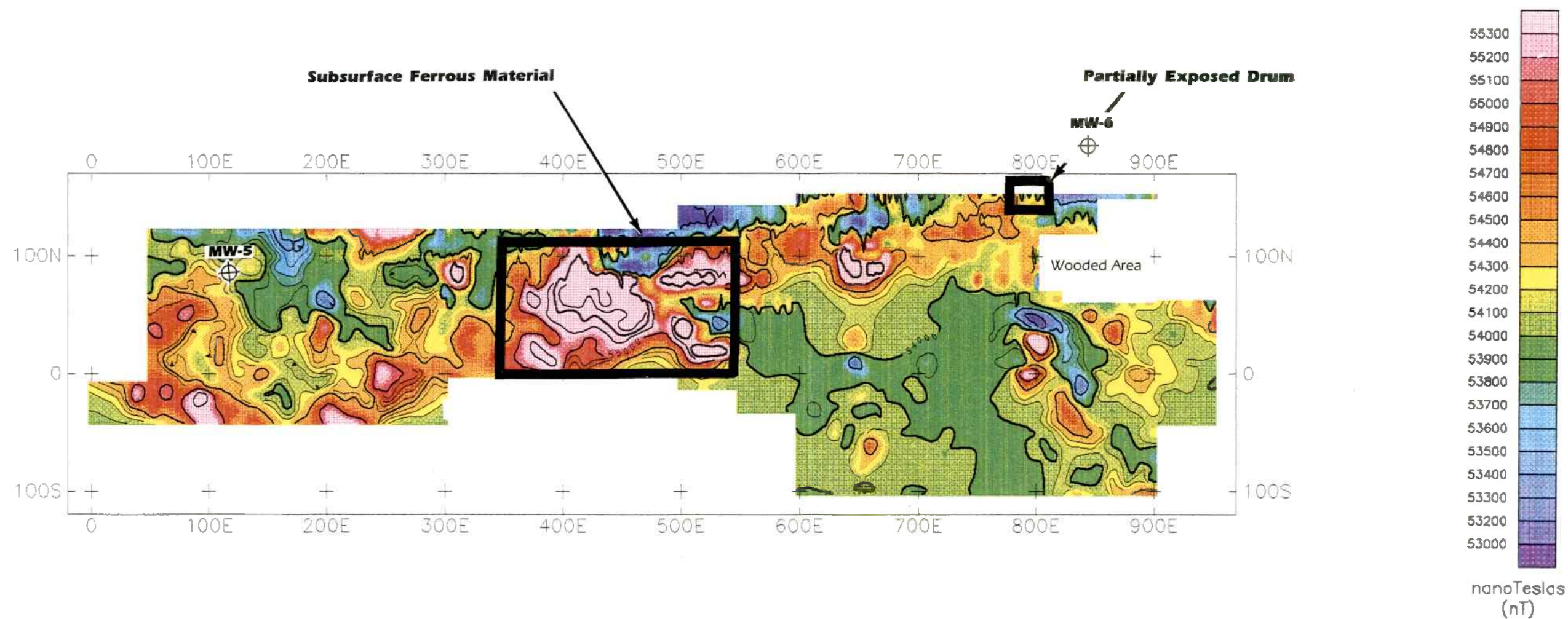
The partially exposed drum will be excavated. The area immediately around and under the drum will be investigated for additional drums. Any excavated drums will be examined to determine if hazardous materials were present or still exist. The drum and the excavation will be monitored with a photoionization detector (PID). NJDEP will be requested to send a representative to



monitor the excavation. If there is no indication that the drum contained, or still contains, hazardous materials and if elevated readings are not observed on the PID, the excavation will be backfilled and no further action will be taken. If contamination is identified, additional sampling will be conducted in accordance with the *Technical Requirements for Site Remediation* (NJDEP, 1993).







LEGEND

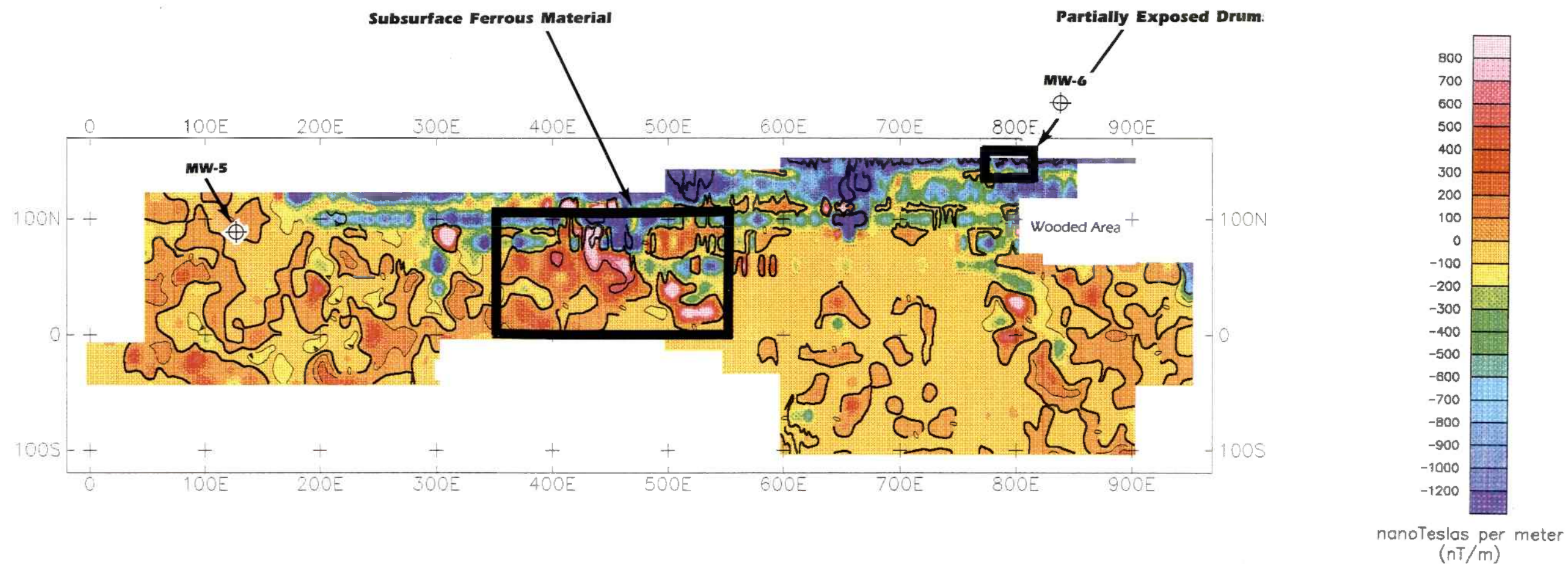


Monitor Well



Fort Monmouth, Main Post Site M-3

FIGURE 4.2-8
MAGNETOMETER SURVEY
TOTAL MAGNETIC FIELD - SITE M-3



LEGEND



Monitor Well

0 50 100 150 200

SCALE IN FEET



Fort Monmouth, Main Post Site M-3

FIGURE 4.2-9
MAGNETOMETER SURVEY
MAGNETIC GRADIENT - SITE M-3

File 43 FILE43 Created December 14, 1994 15:06:14

512 samples/scan 25.004 scans/sec
Position: -3 NS range: 100 NS 8 Bits
Dielectric Constant: 0 Antenna: 3102

Range Gain -4 12 36 44 47

Vert. IIR low Pass N=2 F=48
Vert. IIR high Pass N=2 F=8
Horiz. IIR stacking TC=4

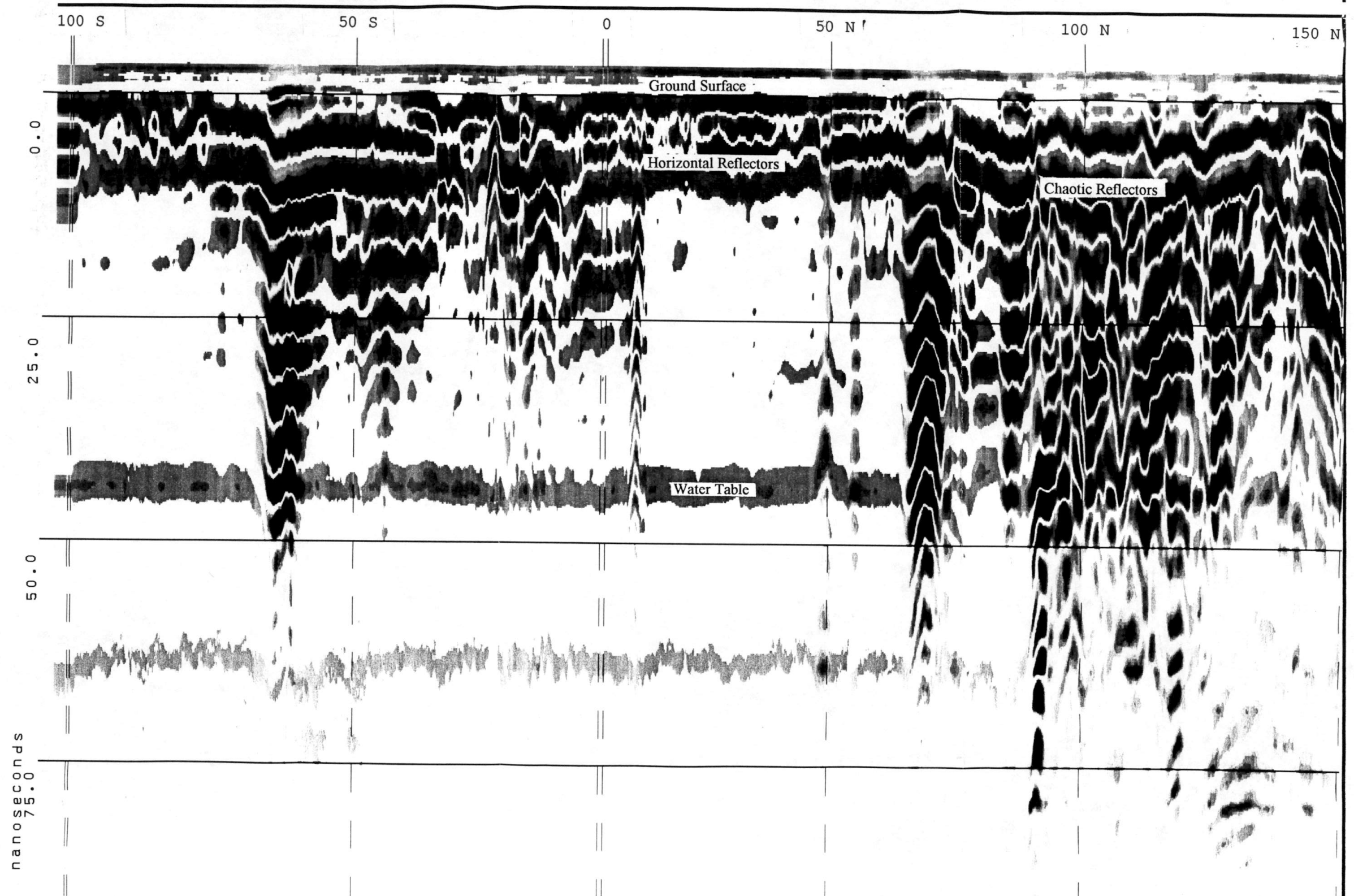
Ft. Monmouth NJ

Main Post Site M3

Line 600 E, Marks at 50' intervals

Start: 100 S End: 160 N

Gray Scale Table #4 Gray Scale Transform #1 Contrast 7: 0%



**FIGURE 4.2-9A REPRESENTATIVE RADAR PROFILE
DEPICTING LANDFILL BOUNDARY AT SITE M-3**

File 12 FILE12 Created December 13, 1994 17:27:44
 512 samples/scan 25.004 scans/sec
 Position: 0 NS range: 100 NS 8 Bits
 Dielectric Constant: 0 Antenna: 3102
 Range Gain -4 12 36 44 47
 Vert: IIR low pass N=2 F=48
 Vert: IIR high pass N=2 F=8
 Horiz: IIR stacking TC=4
 Ft. Monmouth NJ
 Main Post Site M3
 Line 160 N, Marks at 50' intervals
 Start: 750 E End: 850 E REPEAT
 Gray Scale Table #4 Gray Scale Transform #1 Contrast 7: 0%

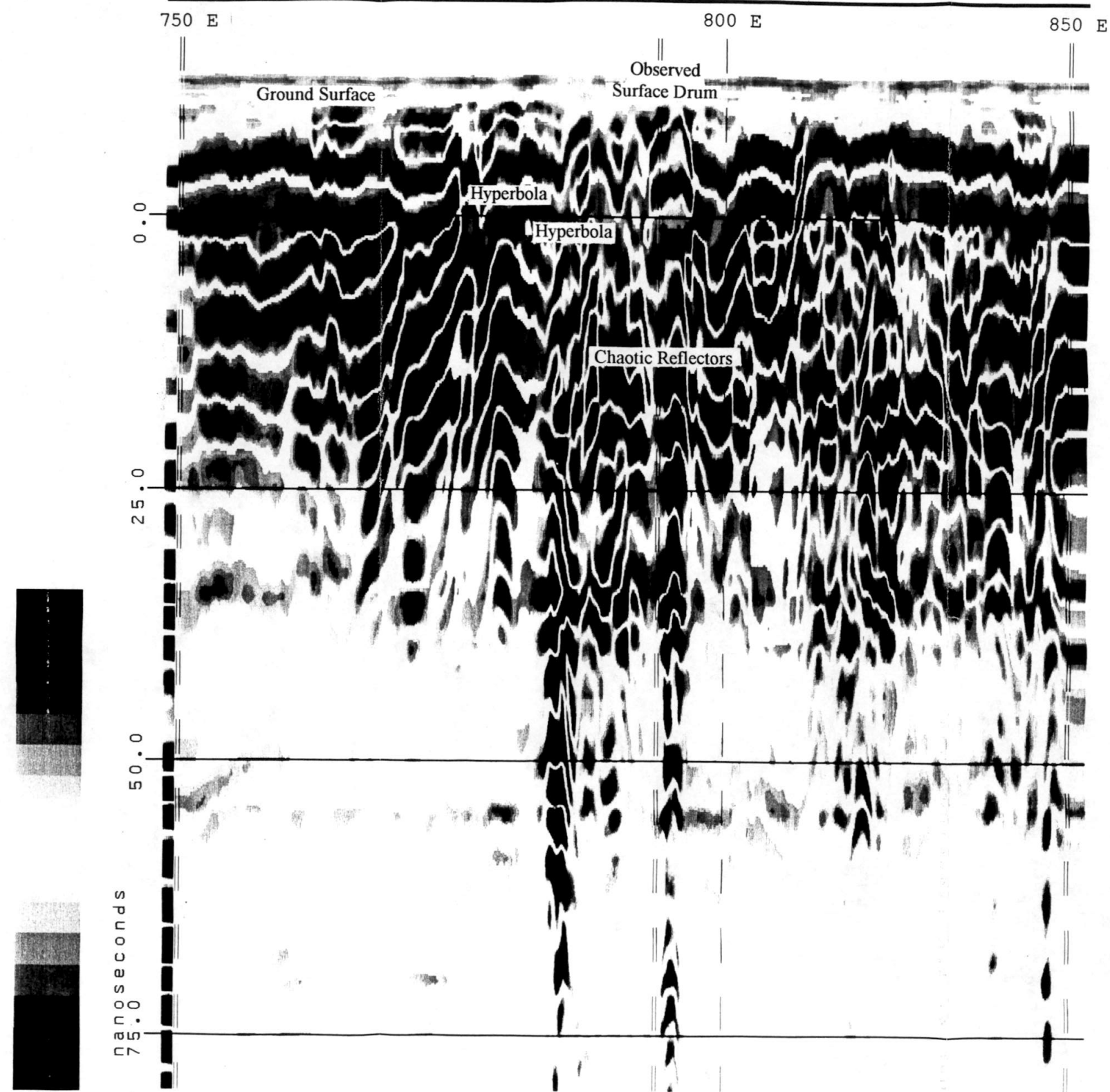
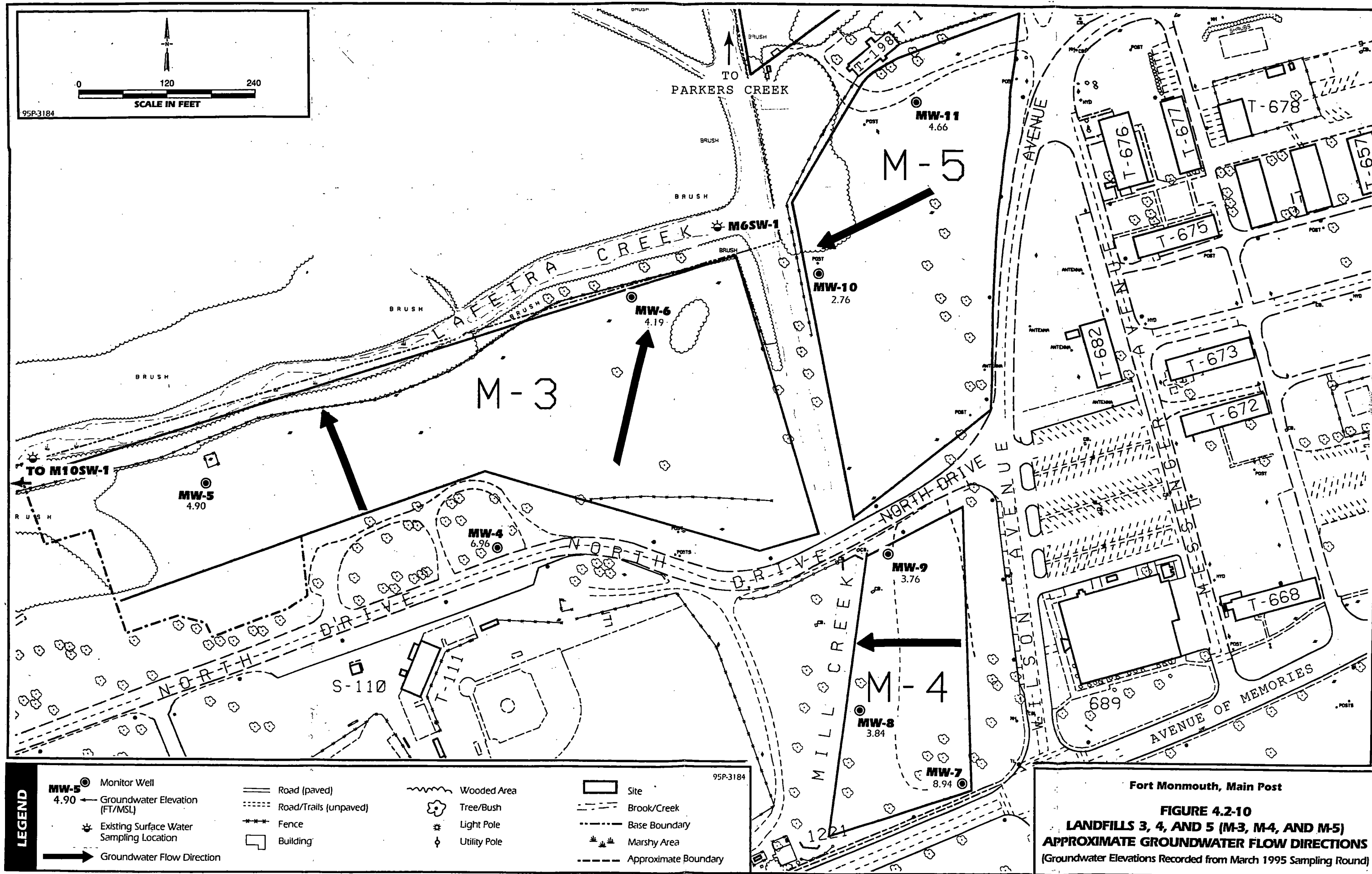
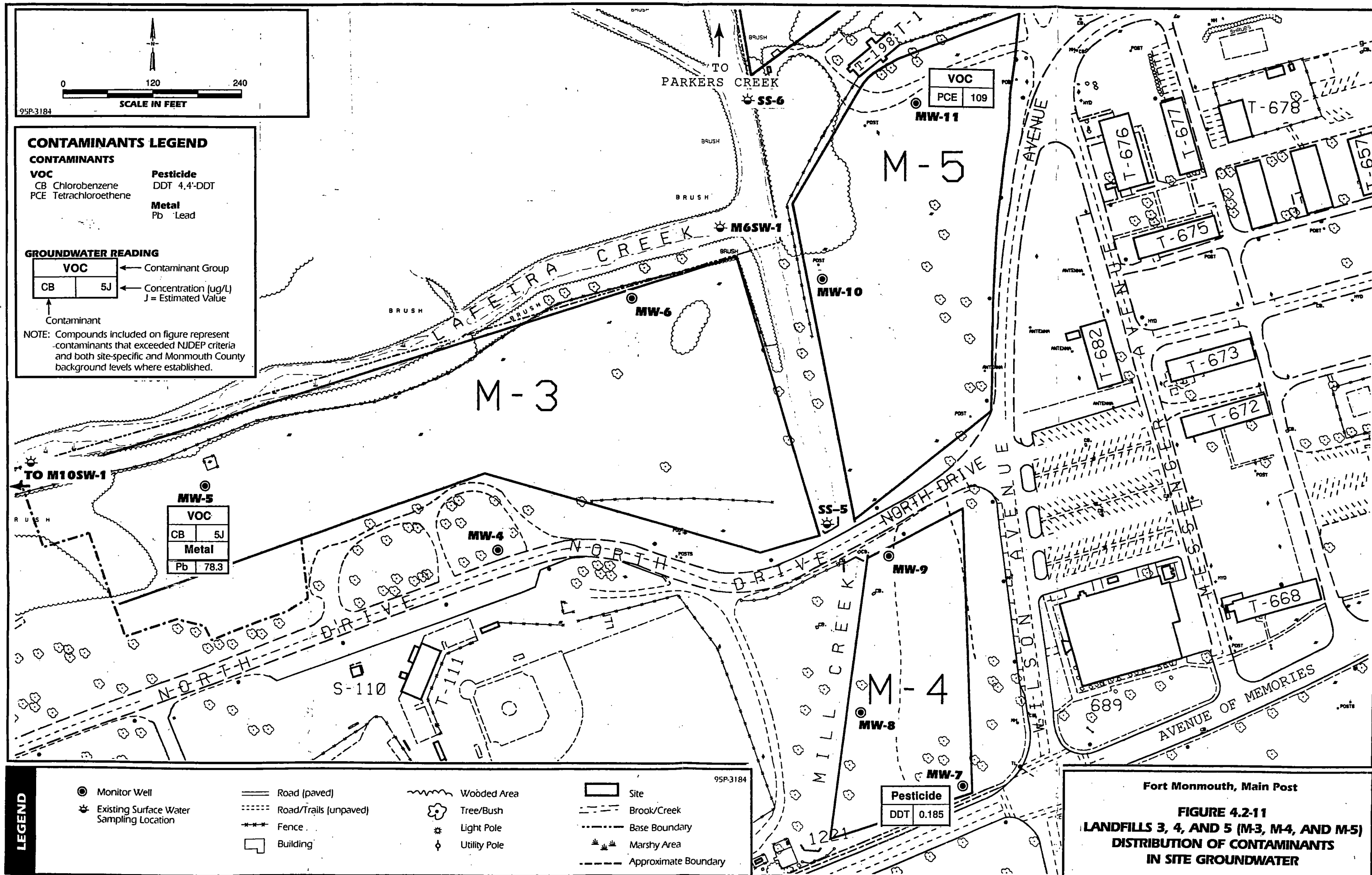


FIGURE 4.2-9B RADAR PROFILE SHOWING SURFACE DRUM AND
 HYPERBOLIC RADAR SIGNATURES AT SITE M-3





Site M-4

4.2.4 Landfill 4 (M-4)

4.2.4.1 Site Location

Landfill 4 (M-4) is located in the area bounded by the Avenue of Memories to the south, North Drive to the north, Mill Creek to the west, and Wilson Avenue to the east (Figure 4.2-7). The approximate area of site M-4 is 61,800 ft² (1.4 acres).

4.2.4.2 Site History

Landfill 4 was used in 1956 for the disposal of building demolition debris. The 1940 aerial photograph shows a swamp at this location. In the latter part of 1955 and during 1956, 72 World War II buildings were demolished on Main Post (*Concise History; History and Place Names*). Potential contaminants associated with demolition debris include lead from paints and piping and asbestos. At present, the surface is flat and grass covered. There are trees in the southeast corner.

As part of an NJPDES permit, surface-water samples have been taken upstream and downstream of this site on Mill Creek. The results are discussed in Subsection 4.2.2 (site M-2) and 4.2.5 (site M-5).

4.2.4.3 Sampling Effort

Three shallow monitor wells (MW-7 through MW-9) were installed around the landfill, and two rounds of groundwater sampling were conducted to evaluate groundwater quality. Monitor well MW-7 is an upgradient well and monitor wells MW-8 and MW-9 are downgradient wells. The monitor wells were sampled twice for TCL +30 parameters, TAL metals, and cyanide.

4.2.4.4 Hydrogeologic Interpretation

Lithologic logs from MW-8 and MW-9 indicate that the lithology consists of a thin soil cover (0.4 ft) underlain by alternating layers of reworked sand, silt, and broken concrete gravel pieces,

with interbeds of plant-root fragments. Borehole logs from MW-7 indicate a lithology consisting of an orange-olive-brown fine-coarse sand with little silt.

Groundwater saturation was observed at approximately 7 ft bgs at each well location. The three monitor wells were screened across the unconfined water table, at total depths of 16, 18, and 22 ft bgs in MW-7, MW-8, and MW-9, respectively. Water elevation data, measured on 6 March 1995, indicate that local groundwater flow is west toward Mill Creek (Figure 4.2-10). Based on groundwater elevation measurements, monitor wells MW-8 and MW-9 are downgradient of the M-4 area.

4.2.4.5 Groundwater Sampling Results

Monitor wells at site M-4 were sampled for the analytical parameters listed in Table 3.8-1. The analytical results for groundwater samples from the individual sampling rounds are listed in Appendix D. Table 4.2-7 compares the average concentrations of the detected compounds from the February and March sampling rounds with the NJDEP GWQC, and then compares the results to the subsequent site-specific background and/or Monmouth County background concentrations, where appropriate. Figure 4.2-11 presents the locations and average concentrations of compounds detected above the NJDEP GWQC and the established maximum background concentrations at the Main Post.

VOCs

VOCs were not detected in the site monitor wells from either sampling round.

SVOCs

SVOCs were not detected above laboratory quantitation limits in the site monitor wells from either sampling round. The levels of compounds that could be estimated (below the laboratory quantitation limit) were well below the NJDEP GWQC.

Table 4.2-7
Fort Monmouth - Main Post
Summary of Average Concentrations of Detected
Compounds in Groundwater - Site M-4

COMPOUND	METHOD DETECTION LIMIT (µg/L)	NJDEP GROUNDWATER QUALITY CRITERIA (µg/L)	MAXIMUM BACKGROUND CONCENTRATION (µg/L)	ANALYTICAL RESULTS (µg/L)		
				SAMPLING DATE		
				MW7 2/16/95, 3/9/95 (avg.)	MW8 2/16/95, 3/8/95 (avg.)	MW9 2/16/95, 3/9/95 (avg.)
SVOC's (µg/L)						
bis-(2-Ethylhexyl)phthalate	9.7	30*	5 J	ND	4J	ND
Pesticides/PCBs (µg/L)						
4,4'-DDT	0.1**	0.1	ND	0.185	ND	ND
METALS TOTAL (µg/L)						
Aluminum	24.0	200	121000	6550	1605	129.1
Arsenic	1.9	8*	89.3	5.1	1.525	ND
Barium	1.7	2000	699	80.95	39.9	57.9
Beryllium	0.9	20*	7 ¹	0.84	ND	ND
Calcium	10.4	NLE	45400	18800	33100	46500
Cobalt	3.0	NLE	18.3	4.7	3.3	ND
Chromium	2.9	100	191	62.55	17.25	4.175
Copper	1.9	1000	730 ¹	5.75	2.5	ND
Iron	6.4	300	431000	18435	17900	21700
Potassium	685	NLE	137000	5020	7585	8925
Magnesium	18.3	NLE	62700	8400	6145	6245
Manganese	1.8	50	480 ¹	61.9	110.5	85
Sodium	30.5	50000	197000 ¹	50950	9500	10280
Nickel	10.8	100	187	7.9	ND	ND
Lead	1.6	10*	22.7	9	7.05	ND
Vanadium	2.3	NLE	108	34.95	6.95	ND
Zinc	3.8	5000	233	49.65	31.75	2.43

Compounds exceeding NJDEP groundwater quality criteria are noted by bold numbers.

NJDEP groundwater quality criteria consist of the higher number between the PQL or STANDARD

*PQL -Practical Quantitation Limit was used as the NJDEP groundwater quality criteria

NLE - No Level Established

ND - Indicates that the compound was not detected at the noted quantification limit

J - Indicates that the concentration value was estimated due to detection at or near the quantification limits

** - Method detection limit equals or exceeds NJDEP groundwater quality criteria.

¹ - Monmouth County maximum background concentration.

Pesticides/PCBs

One pesticide (4-4'-DDT) was detected in a concentration slightly exceeding the NJDEP GWQC in the upgradient well MW-7 from the February sampling round only (Table 4.2-7). This concentration was confirmed in a duplicate sample collected in MW-7 during the same sampling round. However, pesticides were not detected in a downstream surface-water location (SS-5) collected from a previous investigation (Figures 4.2-7 and 4.2-11). The results of that investigation are presented in WESTON, 1993. PCBs were not detected in the site monitor wells from either sampling round.

Metals

As indicated in Table 4.2-7, of the 17 metals detected in site groundwater, 4 metals (aluminum, iron, manganese, and sodium) were found in concentrations exceeding the NJDEP GWQC. However, aluminum, iron, and manganese were found in concentrations below those determined for site-specific and Monmouth County maximum background levels. Although sodium in MW-7 was detected in a concentration greater than the level established as site-specific background, the concentration was well below the Monmouth County maximum background level.

Cyanide

Cyanide was not detected in the site monitor wells from either sampling round.

4.2.4.6 Recommendations

One pesticide compound was detected at a concentration just above the NJDEP GWQC and background in the upgradient well in both the routine and duplicate samples. The pesticide was not detected in downgradient monitor wells, and also was not detected during previous sampling at downgradient location SS-5 (WESTON, 1993).

Although NJDEP groundwater criteria were exceeded for one pesticide, no immediate remedial action is required. The measured value of the pesticide was just slightly above the GWQC. Shallow groundwater flows toward and discharges into Mill Creek, as indicated by water-level measurements in site monitor wells. Also, there are no known uses of groundwater at or downgradient of the site. No surface-water sampling was performed at this site during this project. The surface water was previously sampled downstream but was not analyzed for pesticides. Since Mill Creek flows on Fort Monmouth property between sites M-4 and M-8, access to this stream is restricted. Presumably, since no material is being added to the source (the landfill), natural degradation will decrease groundwater and surface-water contamination levels in the future.

- Since the existing monitor well locations are adequately placed to monitor downgradient groundwater, DPW proposes that a long-term groundwater monitoring program be developed and implemented for the site. Aqueous samples would be collected and analyzed on a quarterly basis to further evaluate water quality conditions at the site. Groundwater samples would be collected from existing monitor wells. Compounds of concern (including pesticides) identified in the first two rounds of sampling would be targeted for the groundwater and surface-water monitoring program.

Site M-5

4.2.5 Landfill 5 (M-5)

4.2.5.1 Site Location

Landfill 5 (M-5) is located just north of Landfill 4 in the area bounded by North Drive to the south, an unpaved road south of Building T-198 to the north, Wilson Avenue to the east, and Mill and Parkers Creeks to the west (Figure 4.2-7). The approximate area of site M-5 is 138,200 ft² (3.2 acres).

4.2.5.2 Site History

According to the IA, Landfill 5 was in use between 1952 and 1959, and was reportedly used for the disposal of automobiles as well as for domestic and industrial wastes similar to those mentioned in Subsection 4.2.2.2. Like Landfill 4, this landfill was also constructed in a former swamp and is presently flat and grass covered.

As part of an NJPDES permit, surface-water samples have been taken at two locations (one upstream on Mill Creek and one downstream on Lafetra Creek) since February 1986. The results are summarized in the recent report (WESTON, 1993). One VOC (tetrachloroethene) was detected in concentrations above the NJDEP surface-water criteria.

4.2.5.3 Sampling Effort

Two shallow monitor wells (MW-10 and MW-11) were installed (Figure 4.2-7), and two rounds of groundwater sampling were conducted in an effort to further evaluate the presence of VOCs, metals, and inorganics detected from samples collected during a previous investigation. Monitor wells MW-10 and MW-11 were sampled twice for TCL +30 parameters, TAL metals, sulfate, and cyanide.

4.2.5.4 Hydrogeologic Interpretation

Borehole logs from MW-10 and MW-11 indicate that the lithology consists of a thin soil cover (0.5 ft) partially underlain by fill and interbedded sand with silt and clay laminae. The components of the fill materials observed in both borings consist of coal, glass, and plastic fragments found interspersed within a silty sand and clay matrix and overlie a dark-green-brown silty/clayey medium-coarse-grained sand with silt and clay laminae.

Groundwater saturation was encountered at approximately 4 ft bgs at both well locations. The two monitor wells were screened across the water table, with total depths of 15 ft bgs. Water-level elevation data, measured on 6 March 1995, indicate that approximate local groundwater flow is west toward Mill Creek (Figure 4.2-10). Based on groundwater elevation measurements, monitor well MW-10 is downgradient of the area under investigation.

4.2.5.5 Groundwater Sampling Results

Monitor wells at site M-5 were sampled for the analytical parameters listed in Table 3.8-1. The compounds detected in groundwater samples from the individual sampling rounds, with the corresponding sample identifications, are listed in Appendix D. Table 4.2-8 compares the average concentrations of the detected compounds from the February and March sampling rounds with the NJDEP GWQC, and then compares the results to the site-specific and Monmouth County maximum background concentrations, where appropriate. Figure 4.2-11 presents the locations and average concentrations of compounds detected above the NJDEP GWQC and the established maximum background concentrations.

VOCs

Tetrachloroethene (PCE) was the only VOC detected in site groundwater. However, the PCE concentrations exceeded the NJDEP GWQC and background from both sampling rounds in MW-11, the upgradient well (Figure 4.2-11). In addition, tetrachloroethene was detected in

Table 4.2-8
Fort Monmouth - Main Post
Summary of Average Concentration of Detected
Compounds in Groundwater - Site M-5

COMPOUND	METHOD DETECTION LIMIT (µg/L)	NJDEP GROUNDWATER QUALITY CRITERIA (µg/L)	MAXIMUM BACKGROUND CONCENTRATION (µg/L)	ANALYTICAL RESULTS (µg/L)	
				MW10 2/17/95, 3/9/95 (avg.)	MW11 2/17/95, 3/9/95 (avg.)
VOC's (µg/L)					
Tetrachloroethene (PCE) ¹	4.0**	1*	ND	ND	109
SVOC's (µg/L)					
bis-(2-Ethylhexyl)phthalate	9.7	30*	ND	ND	3.5J
METALS TOTAL (µg/L)					
Aluminum	24	200	121000	155.8	1052.5
Barium	1.7	2000	699	116	16.05
Calcium	10.4	NLE	45400	16500	11100
Chromium	2.9	100	191	3.925	12.9
Copper	1.9	1000	730 ²	7.05	2.9
Iron	6.4	300	431000	9205	4685
Potassium	685	NLE	137000	8850	3305
Magnesium	18.3	NLE	62700	13550	4220
Manganese	1.8	50	480 ²	146.5	14.5
Sodium	30.5	50000	197000 ²	82800	17950
Lead	1.6	10*	22.7	5.65	2.2
Vanadium	2.1	NLE	108	1.825	5.85
Zinc	3.8	5000	233	7.75	173
OTHER INORGANICS (µg/L)					
Sulfate	5.0	250000	NA	14.8	43.75

¹ - same compound as listed by NJDEP tetrachloroethylene

Compounds exceeding NJDEP groundwater quality criteria are noted by bold numbers.

NJDEP groundwater quality criteria consist of the higher number between the PQL or STANDARD

*PQL - Practical Quantitation Limit -was used as the NJDEP groundwater quality criteria

NLE - No Level Established

ND - Indicates that the compound was not detected above quantification limits

J - Indicates that the concentration value was estimated due to detection at or near the quantification limits

NA - Not Analyzed

** - Method detection limit exceeds NJDEP groundwater quality criteria

² - Monmouth County maximum background concentration.



exceedance of the established surface-water criteria in a surface-water sample (SS-6) collected downgradient of site M-5 from a previous investigation.

SVOCs

SVOCs were not detected above laboratory quantitation limits in the site monitor wells from either sampling round. The level of bis(2-ethylhexyl) phthalate that could be estimated below the laboratory quantitation limit was well below the NJDEP GWQC.

Pesticides/PCBs

Pesticides/PCBs were not detected in the site monitor wells from either sampling round.

Metals

As indicated in Table 4.2-8, of the 13 metals detected in site groundwater, 4 metals (aluminum, iron, manganese, and sodium) were found in concentrations exceeding the NJDEP GWQC. However, aluminum, iron, and manganese were found in concentrations below those determined for site-specific and Monmouth County maximum background levels. Although sodium was detected in a concentration in MW-10 greater than the level established as site-specific background, the concentration was well below the Monmouth County maximum background level.

Cyanide and Sulfate

Cyanide and sulfate were analyzed in site groundwater samples. Cyanide was not detected in the site monitor wells from either sampling round. Sulfate was detected at low levels in MW-10 and MW-11 from both sampling rounds, well below the NJDEP GWQC.



4.2.5.6 Recommendations

PCE was detected in the upgradient well in concentrations exceeding NJDEP GWQC and background from both sampling rounds. Because the site formerly had an NJPDES permit, surface water has been sampled since 1986. During previous investigations, PCE was also detected at downgradient surface-water sampling location SS-6 (WESTON, 1993). Surface water was not sampled at site M-5 during this investigation because the maximum VOC concentrations at this site during previous rounds of sampling were less than the maximum concentrations at site M-2, which is upgradient. For site M-2, the results of the current round of surface-water sampling for VOCs are less than the maximum results from previous rounds.

Although groundwater sample results exceeded NJDEP criteria for one VOC, immediate remedial action is not required. Groundwater flows toward and discharges into Mill Creek and Lafetra Creek, as indicated by water-level measurements in site monitor wells. Also, there are no known uses of groundwater between the source and the streams. No surface-water sampling was performed at this site during this project. Previous sampling rounds have indicated that some VOC concentrations exceed NJDEP surface-water criteria in Mill Creek adjacent to site M-5. However, previous rounds of sampling have indicated that VOC concentrations do not exceed surface-water criteria at site M-8, which is downgradient of site M-5. Therefore, there is little immediate threat to human health.

In addition, since the landfill has not been used for decades, the concentrations of VOCs seem, at worst, to be stable and possibly decreasing. Presumably, since no material is being added to the source (the landfill), natural degradation will decrease groundwater and surface-water contamination levels in the future.

Since the existing monitor wells and surface-water sampling locations are adequately placed to monitor downgradient groundwater and surface water, DPW proposes that a long-term surface-water and groundwater monitoring program be developed and implemented for the site. Aqueous samples would be collected and analyzed on a quarterly basis to further evaluate water quality conditions at the site. Groundwater samples would be collected from existing monitor wells and

surface-water samples would be collected from points yet to be determined. Compounds of concern identified in the first two rounds of sampling would be targeted for the monitoring program.

Site M-6

4.2.6 Burning Area (M-6)

4.2.6.1 Site Location

According to interviews with Fort Monmouth personnel, Burning Area M-6 consisted of open-air wood burning in small pits located on Landfill 3. Specific pit locations could not be discerned from aerial photograph review and site reconnaissance.

4.2.6.2 Site History

It is likely that the burning areas on Landfill 3 were used throughout the period when the landfill was in operation, 1959 through 1964. Specific burn areas have not been identified. At present, the surface in the eastern part of Landfill 3 is hummocky and grass covered.

4.2.6.3 Sampling Effort

This site was included in the Landfill 3 (M-3) investigation (see Subsection 4.3.3).

Site M-8

4.2.7 Landfill 8 (M-8)

4.2.7.1 Site Location

Landfill 8 (M-8) is located north of Buildings T-692 and S-697 in a bend of Parkers Creek (Figure 4.2-12). According to the *Phase I Engineering Study and Compliance Plan, Fort Monmouth Solid Waste Landfill* (Cosulich, 1981), a masonry dike was constructed around the landfill perimeter adjacent to Parkers Creek. The area within the dike is 9.5 acres, of which approximately 7.2 acres contain waste material. The approximate area of site M-8 is 315,000 ft² (7.2 acres).

4.2.7.2 Site History

Landfill 8 was operated from 1962 through 1981. In preparation for landfill operations, as mentioned previously, a masonry dike was constructed around the perimeter. According to Cosulich (1981), in the southern part of the landfill area, an approximately 0.9-acre area was excavated to 12 feet below grade prior to filling with solid waste. Waste material was deposited directly on the existing surface over the rest of the site. Cosulich found the bottom of fill to be 3 feet below sea level. The 1969 aerial photographs show an uneven surface with both pit-type disposal and piled-up debris. A number of drums stacked near the entrance just west of the STP are visible in the 1969 photos. The area just west of the stacked drums appears to have randomly strewn drums. In the western half of the site, there were two separate piles of telephone poles. One area in the south-central part of the landfill was used for the disposal of trees and brush.

The photos also show that soil was used to cover the trash. In 1969 part of the area was covered with vegetation.

At present, the landfill is covered with heavy brush and small trees. There is no visible evidence of the drums observed in the 1969 aerial photographs. Four monitor wells and several piezometers of unknown construction were found during the site walkover in 1993.

According to the IA in 1979, materials observed in Landfill 8 and determined from interviews, included unwashed pesticide/herbicide cans, batteries, fluorescent tubes, electronic components, garbage, asbestos wrappings from pipes, soot and boiler scale, sludge from STPs, small quantities of outdated drugs, outdated photographic chemicals in glass bottles, building rubble (including ACM), incinerator ash, sand from oil spill cleanups, and other debris. Cosulich reported that incinerator ash from the classified document incinerator (site M-7) ranging in thickness from 2.5 to 6.5 feet was found along the southern boundary of the landfill. Cosulich also reports that leaves and brush were placed in this landfill. From 1992 through the present, an adjacent area to the southeast of Landfill M-8 has been used for a leaf-composting operation. This operation has an NJDEP permit.

As part of an NJPDES permit, surface-water samples have been taken at two locations in Lafetra Creek since February 1986. The results are summarized in the recent report (WESTON, 1993). No compounds were detected in concentrations above the NJDEP surface-water criteria.

4.2.7.3 Sampling Effort

Because of the poor recovery of the original Landfill 8 monitor wells and the highly turbid conditions in the wells, all existing wells and piezometers were abandoned. Four new monitor wells (MW-12 through MW-15), shown in Figure 4.2-12, were installed and sampled twice for TCL +30 parameters, TAL metals, sulfate, ammonia, and cyanide in an effort to evaluate the impacts of previous site activities on groundwater quality. The new wells were surveyed and tidal water-elevation monitoring was conducted in the four new monitor wells and at stilling well-7 (Figure 4.2-12).

4.2.7.4 Hydrogeologic Interpretation

Lithologic logs from downgradient wells MW-13, MW-14, and MW-15 indicate that the lithology consists of a thin soil cover (0.4 ft) underlain by fill material. The components of the filled materials observed in the borings consisted of large wood chip fragments, amber glass chips, and traces of wires. Natural sandy silt with trace amounts of clay were intermixed with the manmade

materials. Monitor well MW-12, located upgradient of the landfill boundary, indicates a lithology consisting of an orange-brown medium-fine-grained sand with trace amounts of silt and clay.

Groundwater saturation observed during drilling operations ranged from 2 to 8 ft bgs, depending on the proximity to Parkers Creek. Monitor wells were screened across the water table and were drilled to 15 ft bgs at all well locations. Water-level elevation data, measured on 6 March 1995, indicate that local groundwater flow is generally north toward Parkers Creek (Figure 4.2-13). Based on groundwater elevation measurements, monitor wells MW-13, MW-14, and MW-15 are downgradient and MW-12 is upgradient of the area under investigation.

4.2.7.5 Groundwater Sampling Results

Monitor wells at site M-8 were sampled for the analytical parameters listed in Table 3.8-1. The analytical results for groundwater samples from the individual sampling rounds are listed in Appendix D. Table 4.2-9 compares the average concentrations of the detected compounds from the February and March sampling rounds with the NJDEP GWQC, and then compares the results with the subsequent site-specific and Monmouth County maximum background concentrations, where appropriate. Figure 4.2-14 presents the locations and average concentrations of compounds detected above the NJDEP GWQC and established maximum background at the Main Post.

VOCs

Three VOCs (tetrachloroethene, benzene, and chlorobenzene) were detected in site groundwater in one or both sampling rounds in concentrations exceeding the NJDEP GWQC. Tetrachloroethene was detected in MW-12, the upgradient well, from both sampling rounds. Benzene was detected below the laboratory quantitation limit in MW-15 from both sampling rounds; however, the level is estimated to be above the NJDEP GWQC of 1 µg/L. Chlorobenzene was detected in MW-15 from both sampling rounds and in MW-14 below laboratory quantitation limits, from the March sampling round only. VOC compounds were not detected in MW-13.

Table 4.2-9
Fort Monmouth - Main Post
Summary of Average Concentrations of Detected
Compounds in Groundwater - Site M-8

COMPOUND	METHOD DETECTION LIMIT (µg/L)	NJDEP GROUNDWATER QUALITY CRITERIA (µg/L)	MAXIMUM BACKGROUND CONCENTRATION (µg/L)	ANALYTICAL RESULTS (µg/L)			
				SAMPLING DATE			
				MW12 2/17/95, 3/15/95 (avg.)	MW13 2/22/95, 3/15/95 (avg.)	MW14 2/16/95, 3/15/95 (avg.)	MW15 2/22/95, 3/15/95 (avg.)
VOC's (µg/L)							
Tetrachloroethene (PCE) ¹	4.0**	1*	ND	47	ND	ND	ND
Benzene	3.3**	1*	ND	ND	ND	ND	4.5J
Chlorobenzene	2.7	4	ND	ND	ND	6.5J	37.5
Toluene	2.7	1000	ND	ND	ND	4.5J	ND
SVOCs (µg/L)							
1,4-Dichlorobenzene	4.8	75	ND	ND	ND	3J	4.5J
1,3-Dichlorobenzene	5.3	600	ND	ND	ND	ND	3.5J
1,2-Dichlorobenzene	5.7	600	ND	ND	ND	ND	3J
Naphthalene	8.4	NLE	ND	ND	ND	3J	3J
2-Methylnaphthalene	8.7	NLE	ND	ND	ND	1J	1.5J
Acenaphthene	6.7	400	ND	ND	ND	2J	15.5
Dibenzofuran	6.5	NLE	ND	ND	ND	ND	6J
Fluorene	6.3	300	ND	ND	ND	ND	8J
Carbazol	4.4	NLE	ND	ND	ND	ND	3J
METALS TOTAL (µg/L)							
Aluminum	24.0	200	121000	738	512	2350	568
Arsenic	1.9	8*	89.3	ND	ND	3.75	ND
Barium	1.7	2000	699	8.8	232	410	269
Beryllium	0.9	20*	7 ¹	ND	ND	0.7	ND
Calcium	10.4	NLE	45400	8980	157500	159500	336000
Cadmium	2.8	4	9.5	ND	ND	2.95	ND
Cobalt	3.0	NLE	18.3	ND	ND	4.3	ND
Chromium	2.9	100	191	8.425	4.2	24	4.25
Copper	1.9	1000	730 ²	2.6	6.5	5.2	ND
Iron	6.4	300	431000	2979.5	40000	57350	25800
Mercury	0.2	2	0.26	ND	0.36	ND	ND
Potassium	685	NLE	137000	2815	19950	65150	35450
Magnesium	18.3	NLE	62700	2485	63950	77050	74000
Manganese	1.8	50	480 ²	10.25	655	276	381
Sodium	30.5	50000	197000 ²	21550	156050	383500	229000
Nickel	10.8	100	187	ND	ND	3.5	ND
Lead	1.6	10*	22.7	0.9	3.25	9.75	2.1
Vanadium	2.3	NLE	108	6.225	4.7	14.15	7.7
Zinc	3.8	5000	233	6.55	19.6	53.4	21.1
OTHER INORGANICS (µg/L)							
Ammonia as Nitrogen	0.2	500	NA	ND	2.75	36.3	30.25
Sulfate	5.0	250000	NA	40.9	24.15	11.4	81.35

¹ - same compound as listed by NJDEP tetrachloroethylene

Compounds exceeding NJDEP groundwater quality criteria are noted by bold numbers.

NJDEP groundwater quality criteria consist of the higher number between the PQL or STANDARD

*PQL - Practical Quantitation Limit - was used as the NJDEP groundwater quality criteria

NLE - No Level Established

ND - Indicates that the compound was not detected at the noted quantification limit

J - Indicates that the concentration value was estimated due to detection at or near the quantification limits

** - Method detection limit exceeds NJDEP groundwater quality criteria.

NA - Not Analyzed

² - Monmouth County maximum background concentrations.

SVOCs

One SVOC (acenaphthene) was detected above the laboratory quantitation limit in monitor well MW-15. Acenaphthene was detected in a concentration well below the NJDEP GWQC.

Pesticides/PCBs

Pesticides/PCBs were not detected in the site monitor wells from either sampling round.

Metals

As indicated in Table 4.2-9, of the 19 metals detected in site groundwater, 4 metals (aluminum, iron, manganese, and sodium) were found in concentrations exceeding the NJDEP GWQC. However, aluminum was found in concentrations below those determined for site-specific and Monmouth County maximum background levels. Although iron was found in concentrations well below site-specific maximum background levels, iron was detected in concentrations in MW-13 and MW-14 above Monmouth County maximum background levels. The presence of iron in exceedance of the criteria may be attributable to the high concentrations found in site background soils and is not a compound of concern. Manganese in MW-13 and sodium in MW-14 and MW-15 were detected in concentrations greater than both established background levels (Figure 4.2-14). Elevated sodium concentrations may be the result of saline water intrusion into the groundwater. These wells are near the Parkers Creek estuary. Saltwater has invaded the estuary (see Subsection 4.2.7.6.1) and intruded the aquifer monitored by these wells. Sodium is not a compound of concern. As discussed in Subsection 4.1, groundwater flowing through glauconitic formations contains abundant manganese. In addition, manganese is a common metal found in tidally influenced environments. Therefore, manganese is not identified as a compound of concern.

Cyanide, Sulfate, and Ammonia

Cyanide, sulfate, and ammonia as nitrogen were analyzed for in site M-8 groundwater. Cyanide was not detected in the site monitor wells from either sampling round. Sulfate was detected above the laboratory quantitation limit in both sampling rounds in MW-12, MW-13, MW-14, and MW-15. Ammonia as nitrogen was detected above the laboratory quantitation limit in both sampling rounds in MW-13 and MW-15. Ammonia, not detected from the February sampling round in MW-14, was detected in the March sampling round. Sulfate and ammonia were detected well below the NJDEP GWQC.

4.2.7.6 Tidal Monitoring

Tidal fluctuations in Parkers Creek were monitored at one station (stilling well-7) at Landfill 8 (M-8) (Figure 4.2-12). (Hydrographs are presented in Appendix E.) Changes in creek stage were compared to changes in water levels measured at the following monitor wells: MW-12, MW-13, MW-14, and MW-15. Wells MW-13, MW-14, and MW-15 are located within 100 feet of Parkers Creek, and well MW-12 is approximately 1,300 feet from Parkers Creek. The tidal monitoring station at Landfill 8 (M-8) records incoming and outgoing tides, but the lowest tidal effects are subdued. Peaks in creek levels corresponding to high tides are sharp, but peaks in creek levels corresponding to low tides are rounded because the elevation of the stream bed is higher than the elevation of sea level at low tide. The elevation of the stream bed is -1.02 ft msl at stilling well-7. The maximum change in creek levels at Landfill 8 (M-8) was 3.3 feet, and the maximum change in water level in the monitor well was 1.4 feet during the time of study. All site monitor wells were screened below sea level.

Data collected from well MW-12 are useful as baseline data during the tidal monitoring study conducted at Landfill 8 (M-8). There is no apparent relationship between water levels measured at well MW-12 and creek levels measured at stilling well-7. Well MW-12 is approximately 1,300 feet from the creek and is too distant to be influenced by changing creek levels. Water levels in the water-bearing unit and creek levels were slowly declining by about 0.1 foot during the tidal monitoring study in March 1995.

The response of water levels measured at well MW-14 is dampened, indicating a poor to moderate hydraulic connection between the water-bearing unit at MW-14 and the creek levels. The peak in water levels measured at well MW-14 occurs from 60 to 200 minutes after the peak in creek level at stilling well-7, and the water-level peaks at MW-14 are only about 10% of the tidal peak in creek levels.

There is an apparent hydraulic influence between the water-bearing unit at MW-13 and creek levels. Water levels measured at MW-13 respond quickly to high tides recorded in the creek. The response of water levels at MW-13 to low tides in the creek is subdued probably because low tides have less effect on Parkers Creek in the area of MW-13. This is expected because MW-13 is approximately 2,400 feet upstream from stilling well-7, and tidal changes in the creek diminish in the upstream direction, as documented at Landfill 2 (M-2). The ratio of change in water level in the water-bearing unit to change in creek levels was not calculated for this location because of the distance between the well and the tidal monitoring station.

There is an apparent hydraulic connection between the water-bearing unit at MW-15 and creek levels. Water levels measured at well MW-15 respond quickly to rising and falling creek levels. The peak in water levels measured at well MW-15 occurs at approximately the same time as the peak in creek levels at stilling well-7. The response of water levels at MW-15 to low tides in the creek is slightly subdued. At this location (stilling well-7, MW-15) water-level peaks at MW-15 are approximately 30 to 40% of the tidal peak in creek levels.

4.2.7.6.1 Conductivity and Salinity Results

Conductivity and salinity were measured at Parkers Creek and monitor wells (MW-12 through MW-15) at Landfill 8 (M-8) in January and March 1995. Measurements were collected at low tide and high tide each month to evaluate the extent of saltwater intrusion at each site (see Tables E-1 through E-3 in Appendix E).

The results indicate the presence of brackish to salty water in Parkers Creek at Landfill 8 (M-8). Specific conductance measured in Parkers Creek at Landfill 8 (M-8) is consistently greater than

2,000 μ mhos. In addition, salinity measured in Parkers Creek at Landfill 8 (M-8) is consistently greater than 1.5 ppt.

Groundwater sampled from monitor well MW-12 exhibited low conductivity and zero salinity. Monitor wells MW-13, MW-14, and MW-15 indicate possible brackish to saltwater intrusion in an area of the water-bearing unit close to Parkers Creek.

4.2.7.7 Recommendations

Due to highly turbid conditions and poor water-level recovery of the original monitor wells, all original monitor wells and piezometers were abandoned.

Groundwater sampling results indicate low concentrations of benzene and chlorobenzene were detected in two downgradient monitor wells, and PCE concentrations were detected in the upgradient well (MW-12) exceeding NJDEP GWQC. Additionally, PCE and other VOCs were previously detected in surface-water samples at location SS-7, downstream of site M-8.

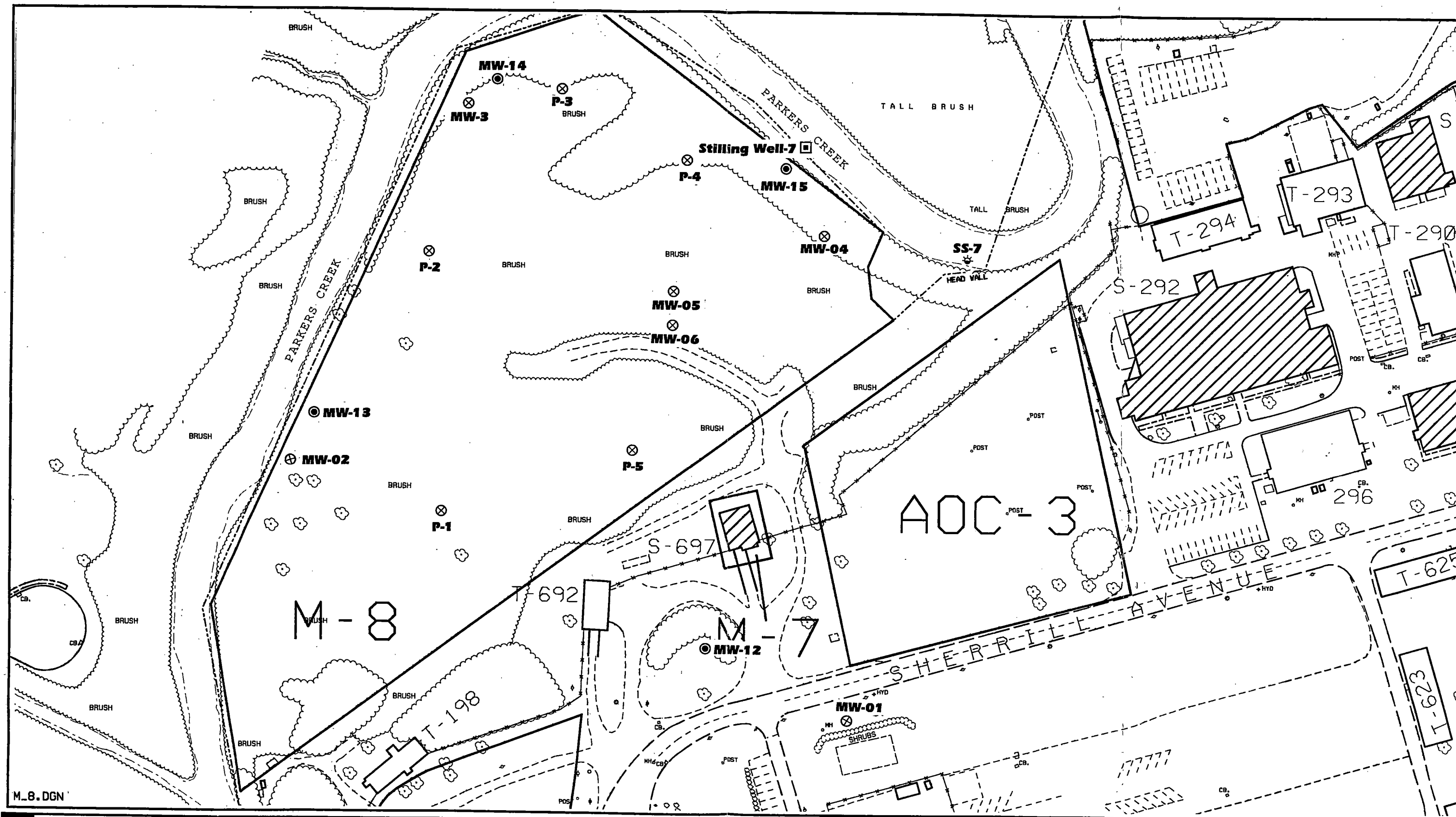
Because the site formerly had an NJPDES permit, surface water has been sampled since 1986. However, surface water was not sampled at site M-8 during this investigation because the maximum VOC concentrations at this site during previous rounds of sampling were less than the maximum concentrations at sites M-2 and M-3, which are upstream. The concentrations of VOCs at site M-8 for previous rounds were less than the NJDEP surface-water criteria.

The results of the tidal monitoring indicate that there is no apparent relationship between creek levels and water levels in MW-12 because of its distance from the creek. A poor to moderate relationship was measured between MW-14 and creek levels. A direct relationship was observed between creek levels and MW-13 and MW-15. The conductivity and salinity measurements in Parkers Creek indicate the presence of brackish to salty water at site M-8. Groundwater sampled from MW-12 indicates freshwater. Monitor wells MW-13, MW-14, and MW-15 indicate brackish to salty water in an area of the water-bearing unit close to Parkers Creek.

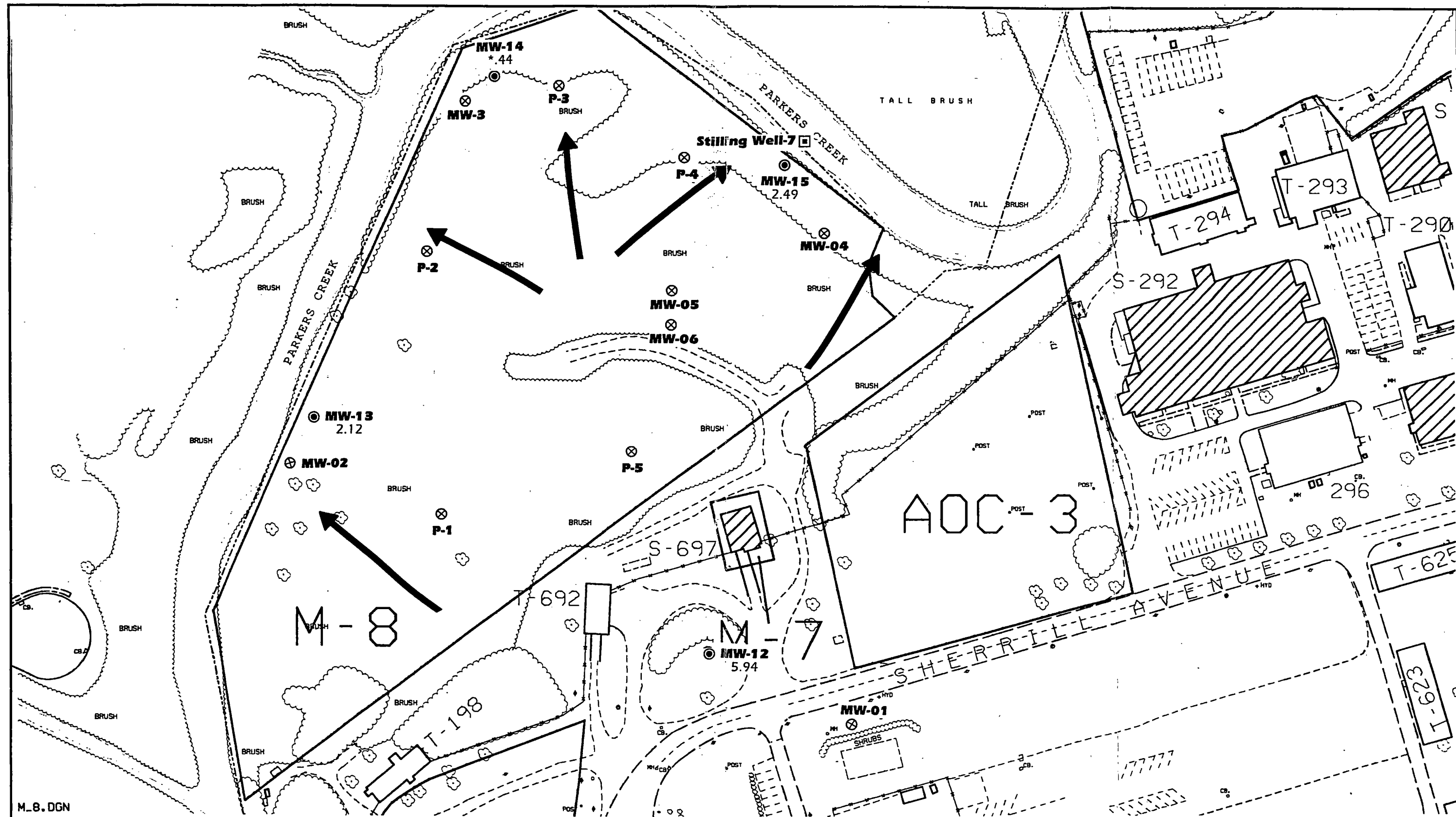
Although groundwater sample results exceeded NJDEP criteria for three VOCs, immediate remedial action is not required. Shallow groundwater flows toward and discharges to Lafetra Creek, as indicated by water-level measurements in site monitor wells. There are no known uses of groundwater at or downgradient of the site. In fact, groundwater at three of the four monitor wells is brackish and unsuitable for drinking. No surface-water sampling was performed at this site during this project. Previous sampling rounds have indicated that VOC concentrations did not exceed NJDEP surface-water criteria in the stream. Therefore, there is little immediate threat to human health.

In addition, since the landfill has not been used for decades, the concentrations of VOCs seem, at worst, to be stable and possibly decreasing. Presumably, since no material is being added to the source (the landfill), natural degradation will decrease groundwater and surface-water contamination levels in the future.

Since the existing monitor wells and surface-water sampling locations are adequately placed to monitor downgradient groundwater and surface water, DPW proposes that a long-term surface-water and groundwater monitoring program be developed and implemented for the site. Aqueous samples would be collected and analyzed on a quarterly basis to further evaluate water quality conditions at the site. Groundwater samples would be collected from existing monitor wells and surface-water samples would be collected from points yet to be determined. Compounds of concern identified in the first two rounds of sampling would be targeted for the monitoring program.



LEGEND	● Monitor Well ⊗ Existing Surface Water Sampling Location ⊗ Abandoned Monitor Well/Piezometer □ Stilling Well	— Road (paved) - - - Road/Trails (unpaved) - - - - Fence □ Building	- Wooded Area - Tree/Bush - Light Pole - Utility Pole	□ Site - - - Brook/Creek - - - - Base Boundary - Marshy Area - - - - Approximate Boundary	SCALE IN FEET	Fort Monmouth, Main Post FIGURE 4.2-12 INCINERATOR (M-7) AND LANDFILL 8 (M-8) SAMPLING LOCATIONS
	95P-3185 6/23/95					



LEGEND

MW-13 ● Monitor Well
2.12

← Groundwater Elevation (FT/MSL)

☼ Existing Surface Water Sampling Location

⊗ Abandoned Monitor Well/ Piezometer

— Road (paved)

--- Road/Trails (unpaved)

--- Fence

□ Building

→ Groundwater Flow Direction

■ Stilling Well

~~~~~ Wooded Area

☼ Tree/Bush

⊕ Light Pole

⊕ Utility Pole

\* PVC Survey Elevation will need to be Adjusted

□ Site

--- Brook/Creek

--- Base Boundary

--- Marshy Area

--- Approximate Boundary

0 100 200

SCALE IN FEET

95P-3185

**Fort Monmouth, Main Post**

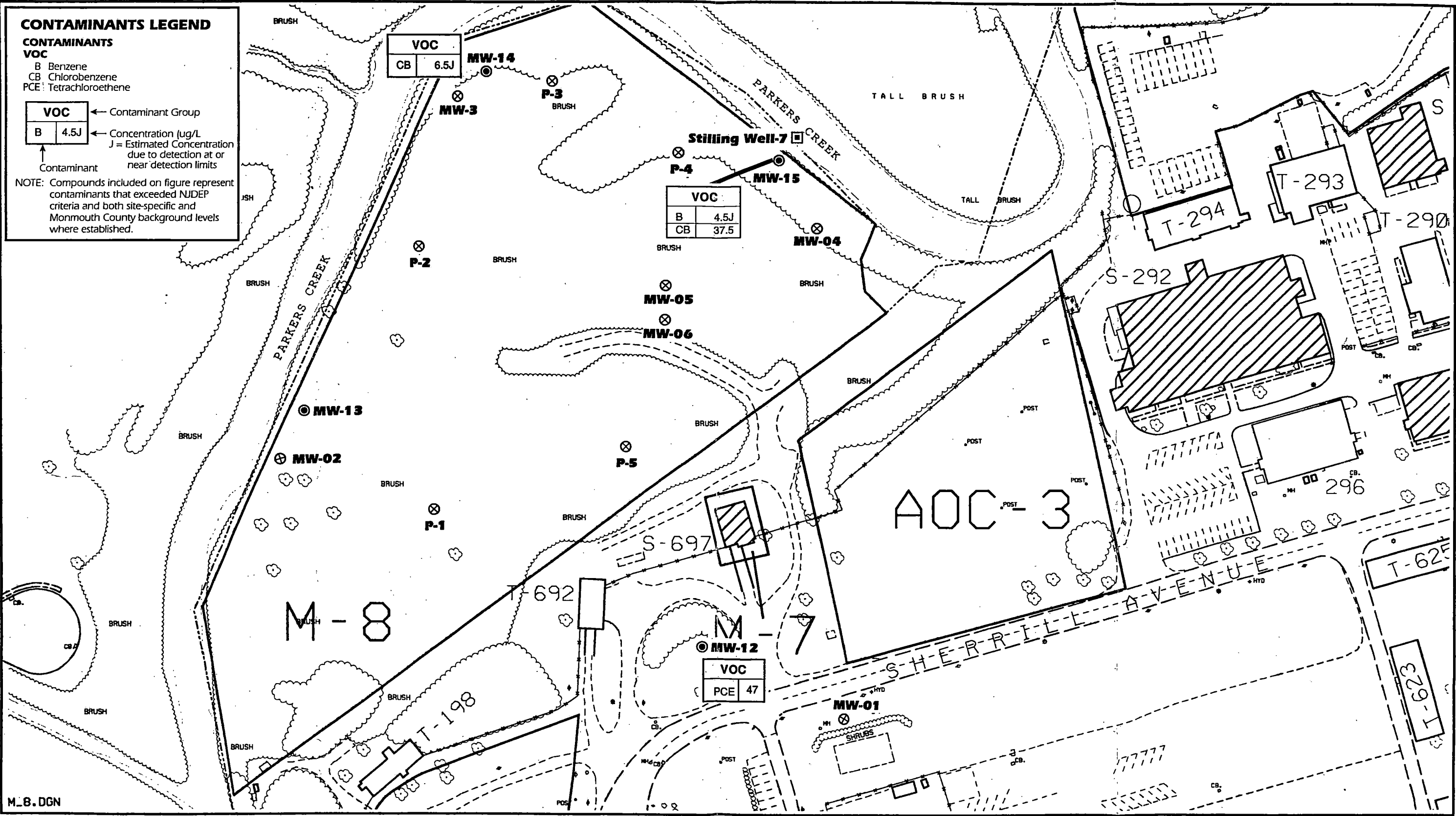
**FIGURE 4.2-13**

**INCINERATOR (M-7) AND LANDFILL 8 (M-8)**

**APPROXIMATE GROUNDWATER FLOW DIRECTIONS**

(Groundwater Elevations Recorded from March 1995 Sampling Round)

6/23/95



**LEGEND**

- Monitor Well
- ⊛ Existing Surface Water Sampling Location
- ⊗ Abandoned Monitor Well/ Piezometer
- ▣ Stilling Well
- Road (paved)
- - - Road/Trails (unpaved)
- - - - Fence
- ▭ Building
- ~~~~~ Wooded Area
- ⊕ Tree/Bush
- ⊙ Light Pole
- ⊙ Utility Pole
- ▭ Site
- - - Brook/Creek
- - - - Base Boundary
- ⊕ Marshy Area
- - - - Approximate Boundary

Fort Monmouth, Main Post

**FIGURE 4.2-14**

**INCINERATOR (M-7) AND LANDFILL 8 (M-8)**

**DISTRIBUTION OF CONTAMINANTS IN SITE GROUNDWATER**

0

100

200

0

SCALE IN FEET

95P-3185 6/23/95

Site M-12



#### **4.2.8 Landfill 12 (M-12)**

##### **4.2.8.1 Site Location**

Landfill 12 (M-12) is located on the south side of Husky Brook, west of Murphy Drive (Figure 4.2-15). The approximate northwest area of site M-12 is 60,100 ft<sup>2</sup> (1.4 acres) and the approximate southwest area is 29,200 ft<sup>2</sup> (0.7 acre).

##### **4.2.8.2 Site History**

The period of operation of Landfill 12 is unknown. Landfill 12 most likely contains domestic and industrial wastes similar to that found in other Main Post landfills. This landfill may also have been used for automobile disposal. At present, the southern bank of Husky Brook is flat and grass covered.

##### **4.2.8.3 Sampling Effort**

GPR and magnetometer surveys were conducted to locate the landfill boundaries. Three monitor wells, MW-16, MW-17, and MW-18, were installed at the locations shown in Figure 4.2-15. The original locations of monitor wells MW-16 and MW-18 were repositioned during the field investigation activities. Monitor well MW-16 was moved because of possible accessibility problems (the proposed location of the well was inside the locked boat yard parking lot). Monitor well MW-18 was moved based on geophysical interpretations.

These wells were sampled twice for TCL +30 parameters, TAL metals, and cyanide. Tidal monitoring was conducted at the same time as tidal monitoring for Landfill 14.

##### **4.2.8.4 Geophysical Results**

The magnetometer survey conducted at the northeast portion of site M-12, i.e., M-12NE, revealed elevated total magnetic field readings located at relative grid coordinates 40N to 70N/335E to 400E and 70N to 80N/175E to 225E. As shown in Figure 4.2-16, the high magnetometer

readings are represented by the violet contour interval and are indicative of buried ferrous material. Another anomalous area indicating ferrous material was revealed at the southwest corner of site M12NE and is located at approximate grid coordinates 0N to 60S/50W to 100E. Cultural features affecting the magnetometer survey are the tower and guy wires centered about coordinate 60N/100E and the chainlink fence to the south of the survey area. As shown in Figure 4.2-17, the magnetic gradient anomalies coincide with the total magnetic field results, also suggesting the presence of buried ferrous material within the suspected landfill boundary.

The GPR survey at M-12NE revealed chaotic radar reflectors throughout the area. These radar waveforms may be indicative of coarse-grained fill material or naturally occurring sands and gravel. However, the radar data collected collaborates the existing magnetometer anomalies at grid coordinates 30N to 70N/335E to 350E and 30N to 70N/390E to 400E, suggesting buried ferrous material within the suspected landfill boundary.

Hyperbolic radar signatures appear traversing the site from approximately 280E to 300E at a depth of 3 ft bgs. These hyperbolic waveforms are interpreted to be an 18-in. diameter drainage pipe that was observed discharging to the stream.

Site M-12SW contained many cultural features scattered throughout the site, including overhead power lines and metallic surface debris, prohibiting total site coverage and producing anomalous magnetic signatures. The magnetometer survey revealed anomalous total magnetic field and gradient anomalies at the northwest portion of the survey area. Located within grid coordinates 0N to 50N and 50E to 120E, the anomalies are probably due to metallic debris observed on the surface. As shown in Figure 4.2-18, total magnetic field anomalies exist at grid coordinates 0N to 20N/140E to 180E and centered about coordinate 10S/200E. The magnetic gradient contour plot (Figure 4.2-19) confirms these anomalous magnetic signatures and reveals smaller discrete high and low gradient readings indicative of buried ferrous material from 10N to 10S and 120E to 240E.

The GPR survey revealed hyperbolic diffraction patterns at 10N/160E and 10S/200E, confirming the presence of the magnetometer anomalies at a depth of approximately 2 ft bgs. These

hyperbolic radar signatures are typical of buried manmade metallic cylindrical objects such as pipe, utilities, and other metallic objects, as well as naturally occurring cobbles and large gravel. Chaotic radar reflectors were also found at the northeast quadrant of the site within grid coordinates 10N to 50N/250E to 300E. These chaotic waveforms are indicative of coarse-grained materials such as sand and gravel or disturbed subsurface conditions.

The results of the geophysical survey at M-12NE and M-12SW indicate that fill and buried ferrous material are present within the suspected boundaries of the landfill. Monitor wells and surface-water sample locations are positioned to adequately monitor groundwater downgradient of these areas.

#### **4.2.8.5 Hydrogeologic Interpretation**

Lithologic logs from the wells installed at M-12 indicate that the lithology consists of a thin soil cover (0.3 ft) underlain by fill material. The components of the filled materials observed in the borings consisted of organic debris and coal fragments intermixed with a moderate to poorly sorted olive-green-brown silty medium-fine-grained sand with little clay.

Saturation was observed at approximately 2 ft bgs across the site. The three monitor wells were screened across the water table and set at 14.5 ft bgs. Water-level elevation data, measured on 6 March 1995, prior to the March sampling round, indicate that local groundwater flows north toward Husky Brook (Figure 4.2-20). Based on groundwater elevation measurements, monitor wells MW-17 and MW-18 are located downgradient of the M-12 area.

#### **4.2.8.6 Groundwater Sampling Results**

Monitor wells at site M-12 were sampled for the analytical parameters listed in Table 3.8-1. The analytical results for groundwater samples from the individual sampling rounds are listed in Appendix D. Table 4.2-10 compares the average concentrations of the detected compounds from the February and March sampling rounds with the NJDEP GWQC, and then compares the results

**Table 4.2-10**  
**Fort Monmouth - Main Post**  
**Summary of Average Concentrations of Detected**  
**Compounds in Groundwater - Site M-12**

| COMPOUND                    | METHOD DETECTION<br>LIMIT<br><br>(µg/L) | NJDEP<br>GROUNDWATER<br>QUALITY<br>CRITERIA<br><br>(µg/L) | MAXIMUM<br>BACKGROUND<br>CONCENTRATION<br><br>(µg/L) | ANALYTICAL RESULTS (µg/L)          |                                    |                                    |
|-----------------------------|-----------------------------------------|-----------------------------------------------------------|------------------------------------------------------|------------------------------------|------------------------------------|------------------------------------|
|                             |                                         |                                                           |                                                      | SAMPLING DATE                      |                                    |                                    |
|                             |                                         |                                                           |                                                      | MW16<br>2/20/95, 3/10/95<br>(avg.) | MW17<br>2/20/95, 3/10/95<br>(avg.) | MW18<br>2/20/95, 3/10/95<br>(avg.) |
| <b>SVOCs (µg/L)</b>         |                                         |                                                           |                                                      |                                    |                                    |                                    |
| bis-(2-Ethylhexyl)phthalate | 9.7                                     | 30*                                                       | ND                                                   | 3 J                                | 2J                                 | 4 J                                |
| <b>METALS TOTAL (µg/L)</b>  |                                         |                                                           |                                                      |                                    |                                    |                                    |
| Aluminum                    | 24.0                                    | 200                                                       | 121000                                               | <b>961</b>                         | 173.5                              | <b>733</b>                         |
| Arsenic                     | 1.9                                     | 8*                                                        | 89.3                                                 | 4.05                               | ND                                 | 1.475                              |
| Barium                      | 1.7                                     | 2000                                                      | 699                                                  | 47.1                               | 184                                | 133.5                              |
| Calcium                     | 10.4                                    | NLE                                                       | 45400                                                | 7860                               | 50200                              | 6235                               |
| Cadmium                     | 2.8                                     | 4                                                         | 9.5                                                  | 2.475                              | ND                                 | 3.4                                |
| Cobalt                      | 3.0                                     | NLE                                                       | 18.3                                                 | 2.025                              | ND                                 | 2.675                              |
| Chromium                    | 2.9                                     | 100                                                       | 191                                                  | 12.025                             | 4.425                              | 7.675                              |
| Copper                      | 1.9                                     | 1000                                                      | 730 <sup>1</sup>                                     | ND                                 | 14.1                               | 5.1                                |
| Iron                        | 6.4                                     | 300                                                       | 431000                                               | <b>19650</b>                       | <b>31250</b>                       | <b>1795</b>                        |
| Mercury                     | 0.2                                     | 2                                                         | 0.26                                                 | 0.205                              | ND                                 | ND                                 |
| Potassium                   | 685                                     | NLE                                                       | 137000                                               | 3040                               | 4380                               | 5115                               |
| Magnesium                   | 18.3                                    | NLE                                                       | 62700                                                | 6120                               | 4405                               | 3935                               |
| Manganese                   | 1.8                                     | 50                                                        | 480 <sup>1</sup>                                     | 46.05                              | <b>256</b>                         | 16.8                               |
| Sodium                      | 30.5                                    | 50000                                                     | 197000 <sup>1</sup>                                  | 17150                              | 10285                              | 21050                              |
| Nickel                      | 10.8                                    | 100                                                       | 187                                                  | 3.75                               | ND                                 | 7.8                                |
| Lead                        | 1.6                                     | 10*                                                       | 22.7                                                 | 1.1                                | 1.3                                | 3.1                                |
| Vanadium                    | 2.3                                     | NLE                                                       | 108                                                  | 6.35                               | ND                                 | 2.775                              |
| Zinc                        | 3.8                                     | 5000                                                      | 233                                                  | 20.75                              | 9.6                                | 45.3                               |

Compounds exceeding NJDEP groundwater quality criteria are noted by bold numbers.

NJDEP groundwater quality criteria consist of the higher number between the PQL or STANDARD

\*PQL - Practical Quantitation Limit -was used as the NJDEP groundwater criteria

NLE - No Level Established

ND - Indicates that the compound was not detected at noted quantification limit

J - Indicates that the concentration value was estimated due to detection at or near the quantification limits

<sup>1</sup> - Monmouth County maximum background concentration.

with the subsequent site-specific and Monmouth County maximum background concentrations, where appropriate.

### **VOCs**

VOCs were not detected in the site monitor wells from either sampling round.

### **SVOCs**

SVOCs were not detected in the site monitor wells above laboratory quantitation limits from either sampling round. The estimated value for bis(2-ethylhexyl) phthalate is below NJDEP GWQC.

### **Pesticides/PCBs**

Pesticides/PCBs were not detected in the site monitor wells from either sampling round.

### **Metals**

As indicated in Table 4.2-10, of the 18 metals detected in site groundwater, 3 (aluminum, iron, and manganese) were found in concentrations exceeding the NJDEP GWQC. However, all metals were found in concentrations below those determined for site-specific or Monmouth County maximum background levels. Although the concentration of aluminum exceeded the Monmouth County background level in MW-17, the concentration was well below the site-specific background level established at the Main Post.

### **Cyanide**

Cyanide was not detected in the site monitor wells from either sampling round.

#### 4.2.8.7 Tidal Monitoring — Landfill 12 and Landfill 14 (M-12 and M-14)

Tidal fluctuations in Husky Brook were monitored at an upstream tidal monitoring station (stilling well-8) and at a downstream tidal monitoring station (stilling well-9) at Landfills 12 and 14 (Figure 4.2-15). The tidal monitoring stations are approximately 400 feet apart and tidal changes at both stations are similar. Changes in creek levels measured at station stilling well-8 were compared to changes in water levels measured at monitor wells MW-16 through MW-21 (see Appendix E).

Monitor wells MW-17, MW-18, MW-19, and MW-21 are located within 150 feet of the creek, and wells MW-16 and MW-20 are located 150 feet or more from the creek. The tidal monitoring station at Landfills 12 and 14 records high and low tides, but the lowest tidal peaks are slightly subdued. The stream bed elevation at Landfills 12 and 14 is the lowest of the three areas studied and is more affected by low tides. Stream bed elevation is -1.71 ft msl at stilling well-8 and -1.63 ft msl at stilling well-9. The maximum change in creek levels during the study was 3.3 feet. The maximum change in water level in the monitor well was approximately 1.6 feet during the time of study.

Data collected from wells MW-19 and MW-20 are useful as baseline data during the tidal monitoring study conducted at Landfills 12 and 14. There is no apparent relationship between water levels measured at wells MW-19 and MW-20 and creek levels measured at stilling well-8. Well MW-19 is approximately 150 feet from the creek, but is about 1,600 feet upgradient from stilling well-8. Well MW-20 is approximately 700 feet from the creek and is too distant to be influenced by changing creek levels. Water levels in the water-bearing unit and creek levels were fluctuating by less than 0.1 foot during the tidal monitoring study in March 1995.

The response of water levels measured at wells MW-16, MW-17, and MW-18 indicates a poor to moderate degree of hydraulic connection between the water-bearing unit in the area around these wells and the creek levels. There is a small lag time between tidal peaks in the creek and water-level peaks in each of the three wells. The magnitude of water-level changes in these three wells is small, between 5% and 15% of the magnitude of tidal changes in the creek.

There is an apparent hydraulic influence between the water-bearing unit at MW-21 and creek levels. Water-level data from monitor well MW-21 were compared with creek level data from station stilling well-8. The peak in water levels measured at well MW-1 occurs approximately 70 to 120 minutes after the peak in creek levels at stilling well-8, but the ratio of change in water level in the water-bearing unit to change in creek levels at this location (stilling well-8, MW-21) is approximately 40% to 50%. This high ratio indicates a high degree of hydraulic influence.

#### **4.2.8.7.1 Conductivity and Salinity Results**

Conductivity and salinity were measured in Husky Brook and in the monitor wells at Landfill 12 (M-12) and Landfill 14 (M-14) in January and March 1995 and are presented in Appendix E. Measurements were collected at low tide and high tide each month to evaluate the extent of saltwater intrusion at each site.

The results indicate the presence of brackish to salty water in Husky Brook at Landfills 12 and 14 (M-12, M-14).

Specific conductance measured in Husky Brook at Landfills 12 and 14 (M-12, M-14) is consistently greater than 2,000  $\mu$ mhos. In addition, salinity measured in Husky Brook at Landfills 12 and 14 (M-12, M-14) is consistently greater than 1.5 ppt. The results are consistent with the higher streambed elevation at Landfill 2 (M-2) compared to Landfill 8 (M-8) and Landfills 12 and 14 (M-12, M-14).

Groundwater sampled from monitor wells at each location generally exhibit low conductivity and zero salinity.

#### **4.2.8.8 Recommendations**

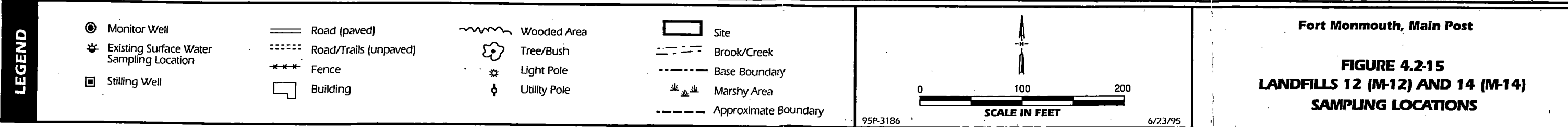
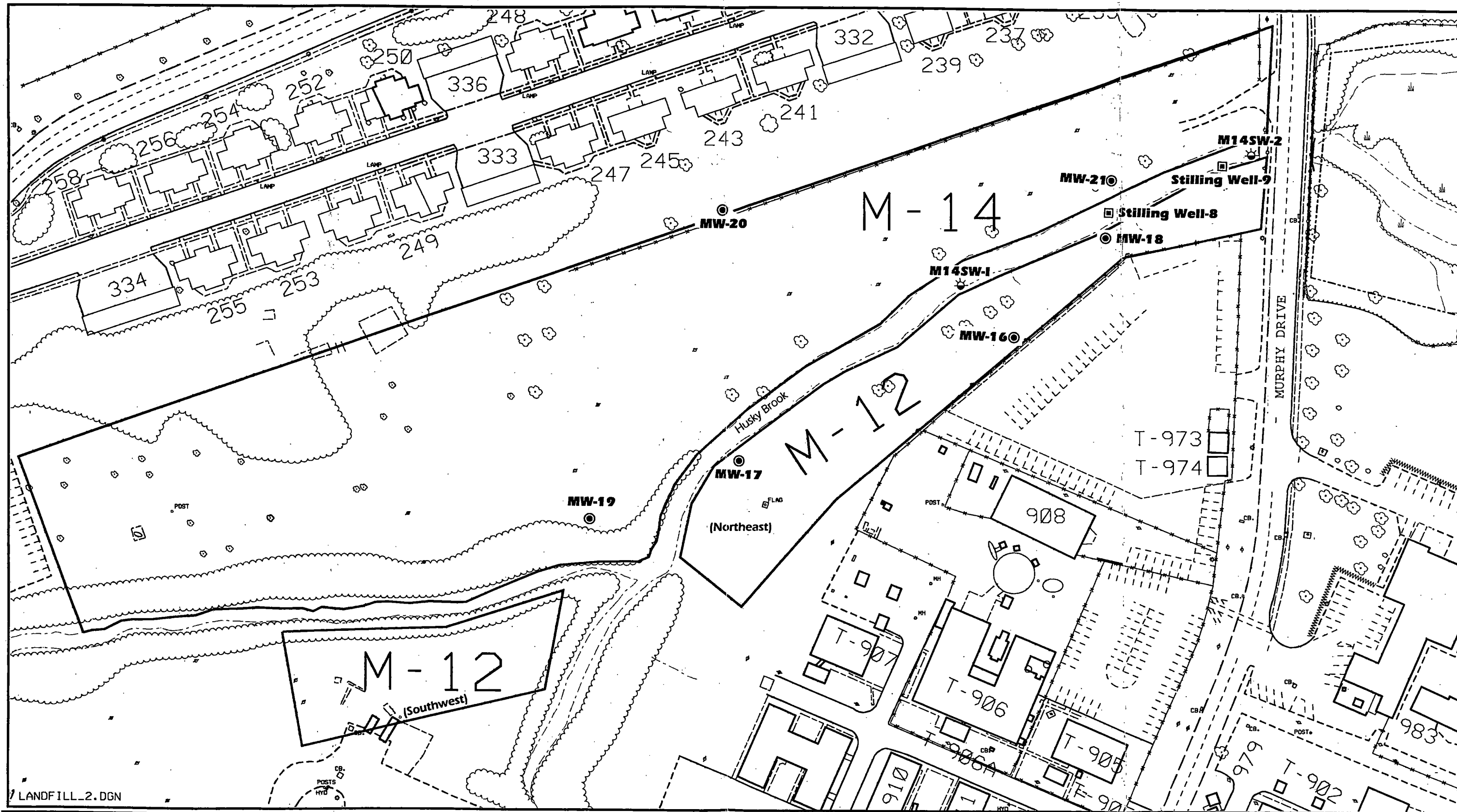
The results of the geophysical surveys indicate that the identified fill and buried ferrous material are present within the suspected boundaries of the landfill. Monitor wells are positioned to adequately monitor groundwater downgradient of these areas.

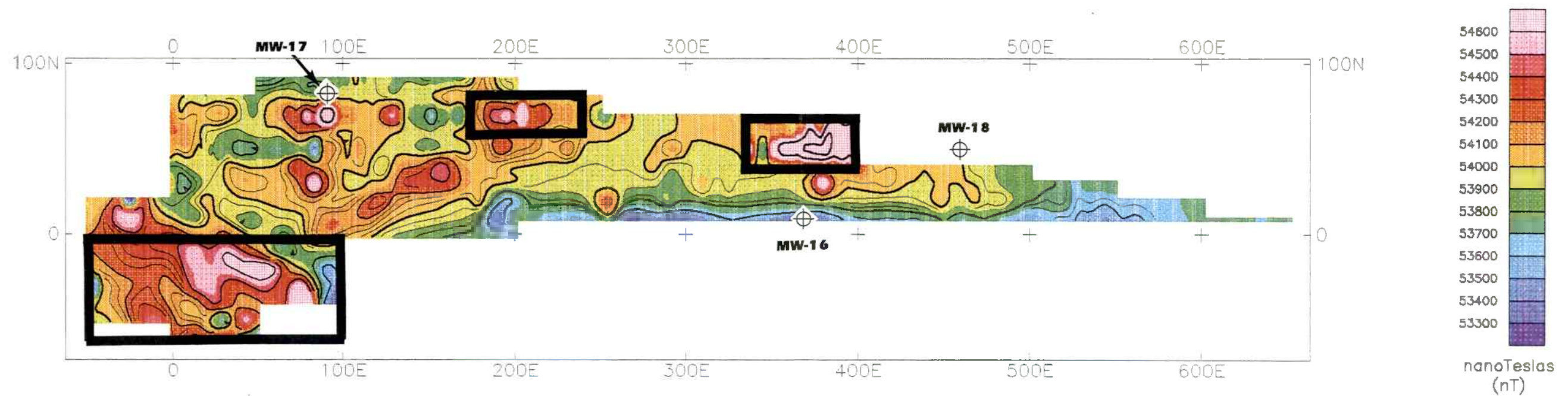
Groundwater sampling results indicate that no compounds of concern exceeded NJDEP GWQC from upgradient and downgradient wells.

The results of the tidal monitoring relate to both sites M-12 and M-14. The data indicate that there is no apparent relationship between creek levels and water levels in MW-19 and MW-20. A poor to moderate relationship was measured between MW-16, MW-17, and MW-18 and creek levels. A direct relationship was observed between creek levels and MW-21. The conductivity and salinity measurements in Husky Brook indicate the presence of brackish to salty water at sites M-12 and M-14. Groundwater sampled from monitor wells at each location indicates freshwater.

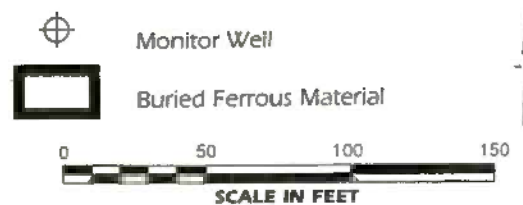
Although no compounds of concern were identified at site M-12, because of the site's history of being used as a landfill, DPW proposes that a long-term groundwater monitoring program be developed and implemented for the site. Aqueous samples would be collected and analyzed on a quarterly basis to further evaluate water quality conditions at the site. Groundwater samples would be collected from existing monitor wells. Contaminants identified in the first two rounds of sampling would be targeted for the monitoring program.



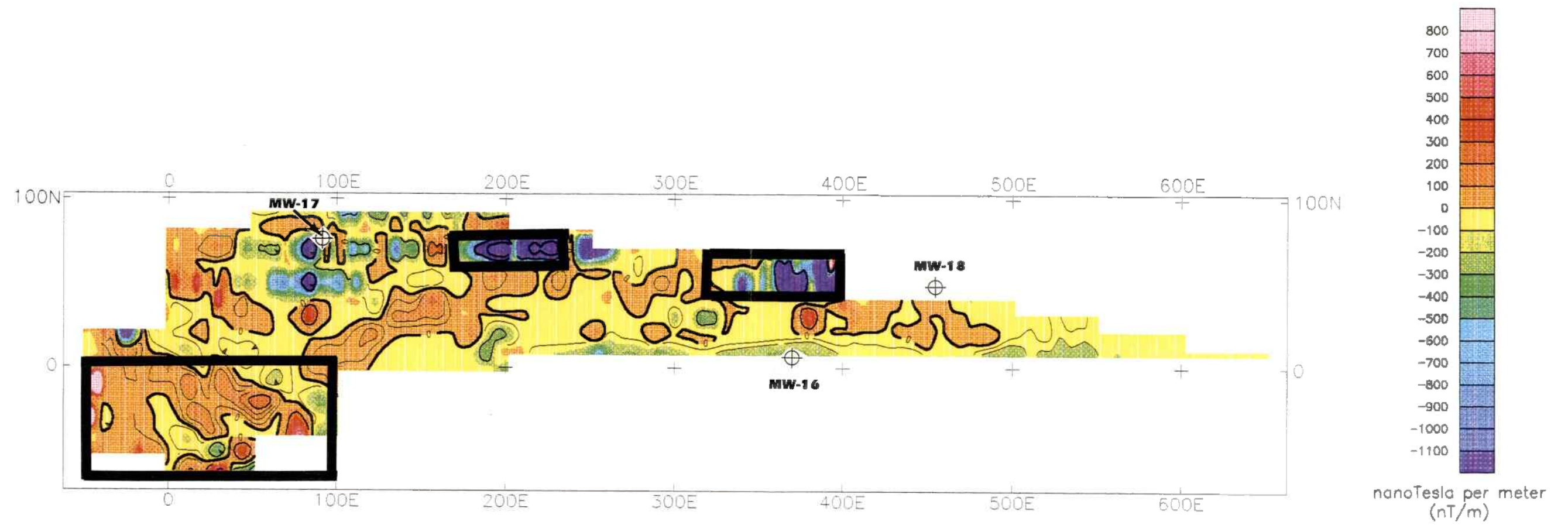




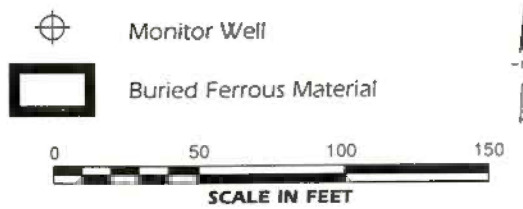
**LEGEND**



Fort Monmouth, Main Post Site M-12 NE  
**FIGURE 4.2-16**  
**MAGNETOMETER SURVEY**  
**TOTAL MAGNETIC FIELD - SITE M-12 NE**



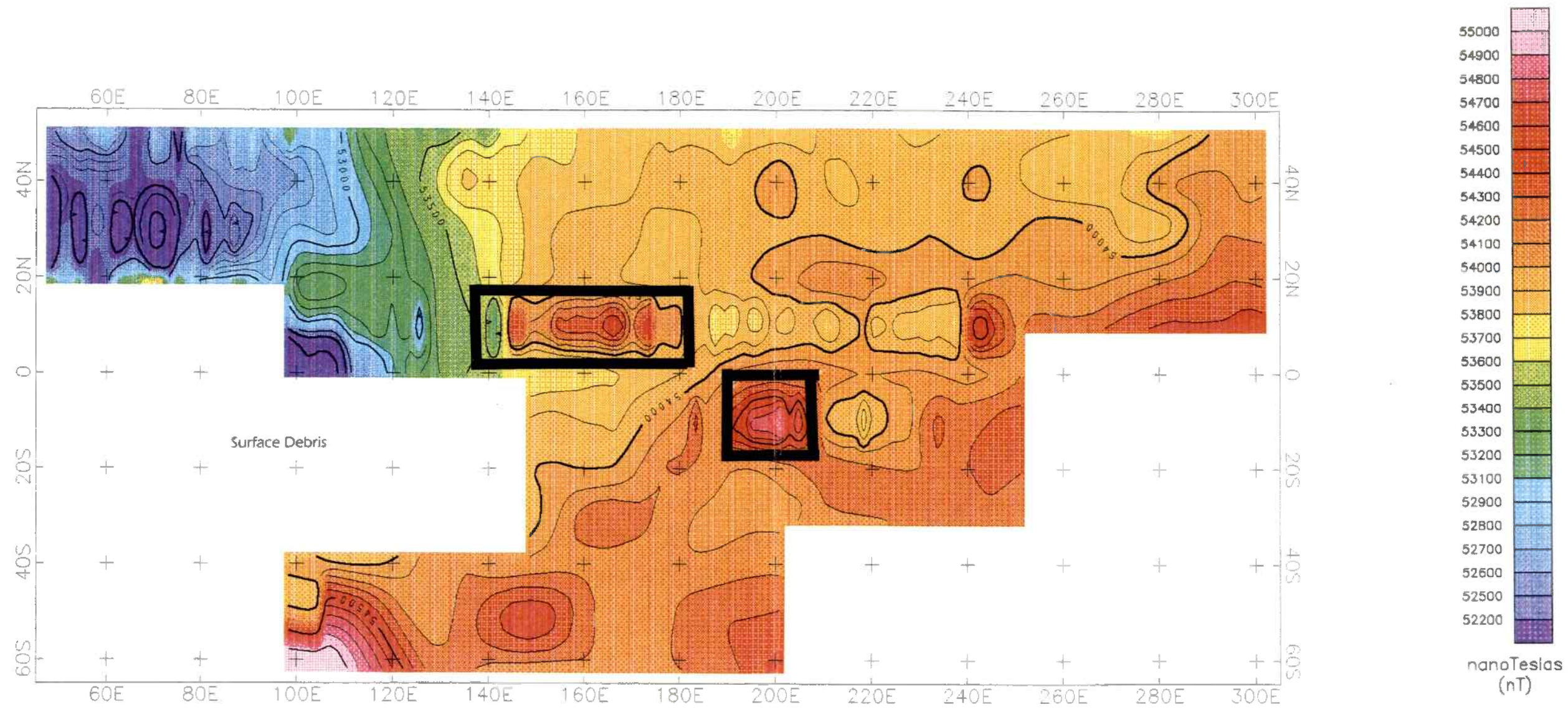
**LEGEND**



Fort Monmouth, Main Post Site M-12 NE

**FIGURE 4.2-17**  
**MAGNETOMETER SURVEY**  
**MAGNETIC GRADIENT - SITE M-12 NE**





LEGEND



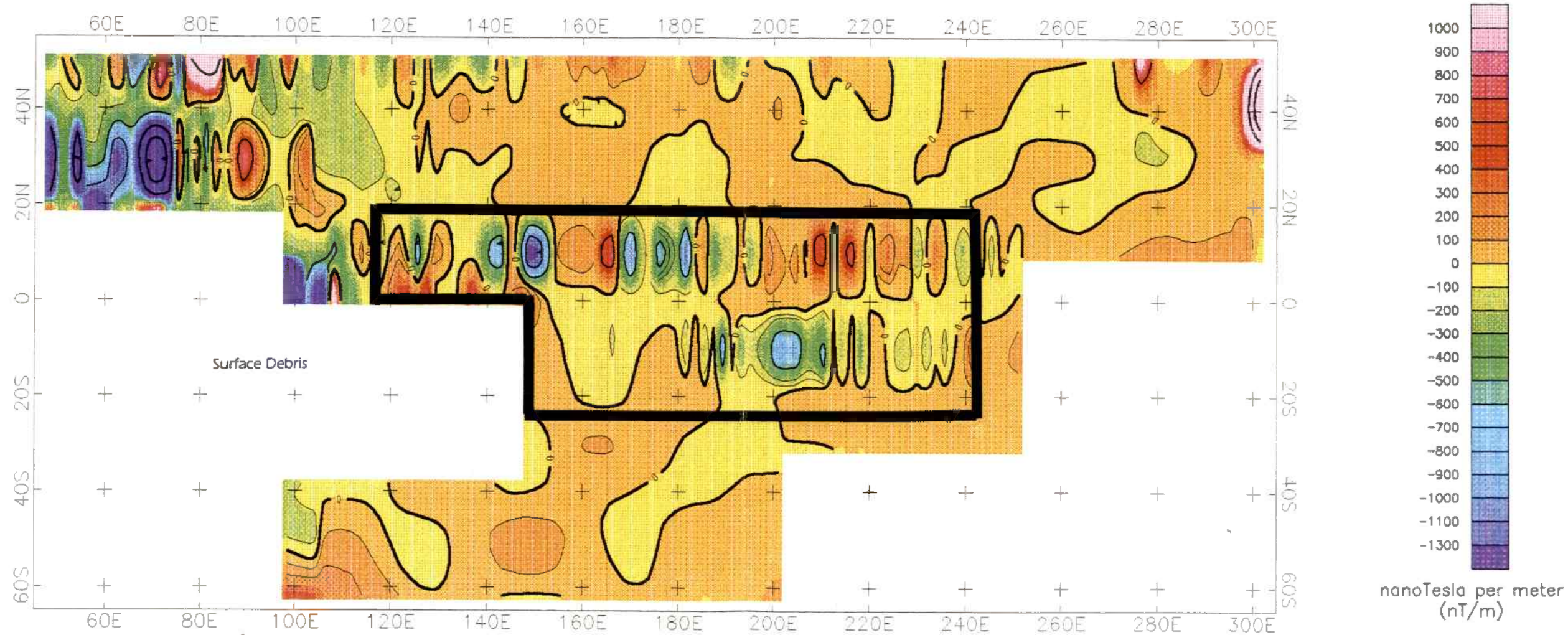
Possible Fill Area Boundary



Fort Monmouth, Main Post Site M-12 SW

**FIGURE 4.2-18**  
**MAGNETOMETER SURVEY**  
**TOTAL MAGNETIC FIELD - SITE M-12 SW**





LEGEND

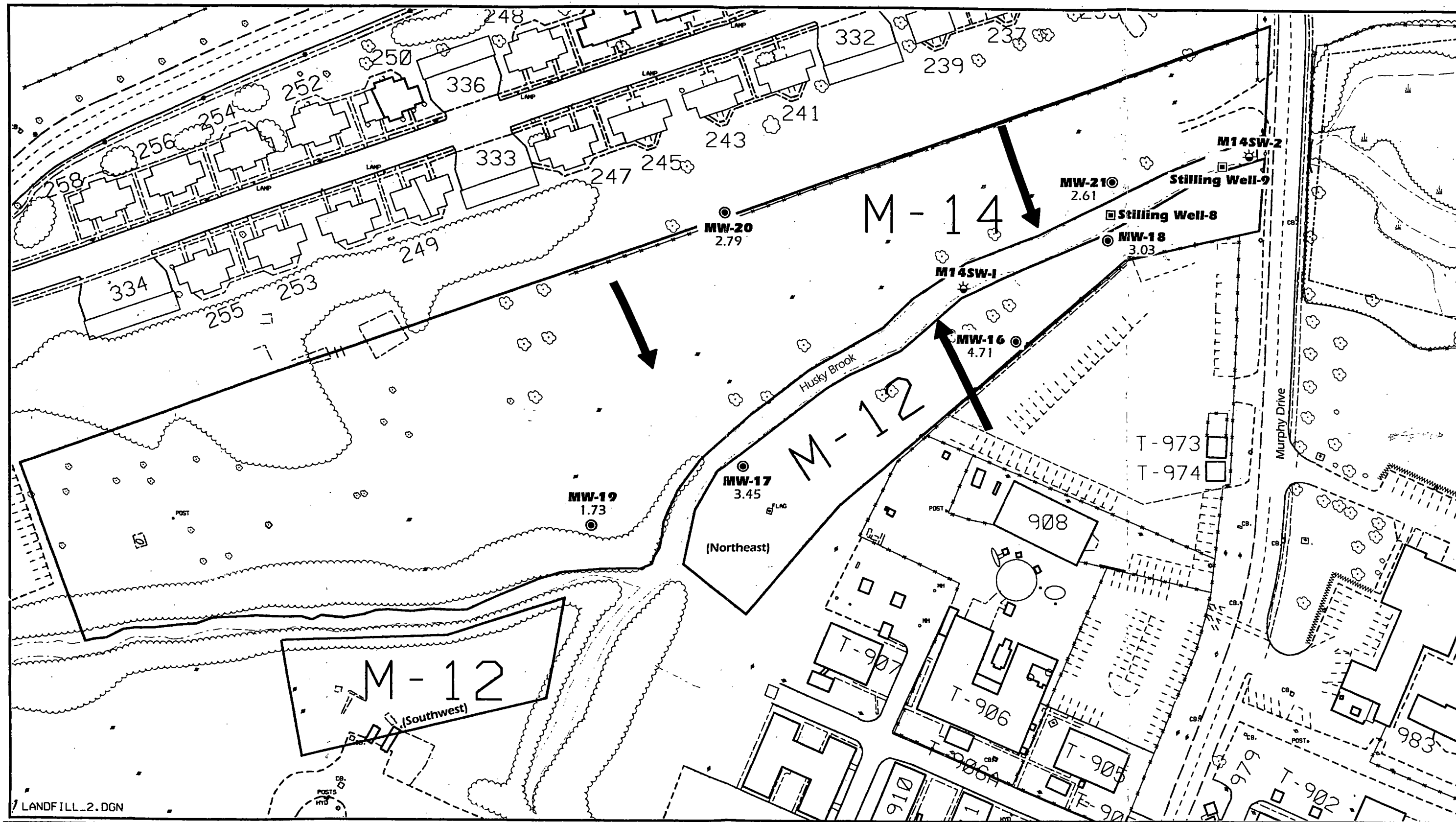


Possible Fill Area Boundary

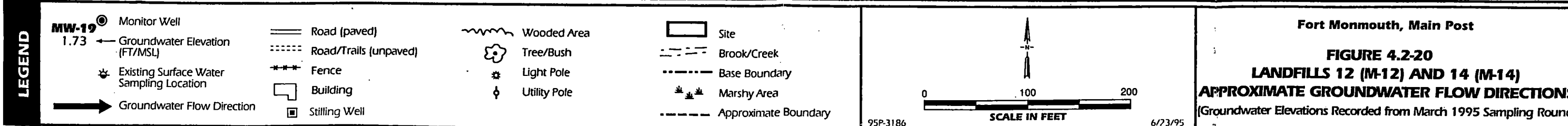


Fort Monmouth, Main Post Site M-12 SW

**FIGURE 4.2-19**  
**MAGNETOMETER SURVEY**  
**MAGNETIC GRADIENT - SITE M-12 SW**



LANDFILL\_2.DGN



## Site M-14

## **4.2.9 Landfill 14 (M-14)**

### **4.2.9.1 Site Location**

Landfill 14 (M-14) is located on the north bank of Husky Brook in the area west of Murphy Drive (Figure 4.2-15). This area is north of the suspected location of Landfill 12. The approximate area of site M-14 is 300,000 ft<sup>2</sup> (6.9 acres).

### **4.2.9.2 Site History**

Both a 1935 Fort Monmouth map and the 1940s aerial photograph show a marshy area in this location. According to the IA, Landfill 14 was used in 1965 and 1966 for the disposal of building rubble that was covered by dredgings from Husky Brook Lake. A figure in Cosulich shows a 1940s-era landfill in the western part of the area. This 1940s landfill may have contained general domestic and industrial wastes similar to that found in other Main Post landfills.

As part of an NJPDES permit, surface-water samples have been taken at two locations in Husky Brook since February 1986. The results are summarized in the recent report (WESTON, 1993). No compounds were detected in concentrations above the NJDEP surface-water criteria.

### **4.2.9.3 Sampling Effort**

GPR and magnetometer surveys were conducted in the western half of this site to ascertain whether the landfill extends into this area. Three monitor wells (MW-19 through MW-21), shown in Figure 4.2-15, were installed and sampled twice for TCL +30 parameters, TAL metals, and cyanide. Tidal monitoring was conducted at the same time as the tidal monitoring at Landfill 12. Surface-water samples were taken at M14SW-1 and M14SW-2.



#### 4.2.9.4 Geophysical Results

The magnetometer survey at site M-14 shows the majority of the site to have background total magnetic field readings of approximately 54,000 nT, as shown on the total magnetic field contour plot in Figure 4.2-21. However, anomalous readings exist at grid coordinates along the 100N traverse from 0E to 700E, 20N/100E, 40N/760E, 40N/810E, and 0 to 90S/300E to 700E. These anomalies, mostly represented by the blue contour interval or approximately 48,000 nT, can be attributed to cultural features such as a buried gas main, a fence, playground apparatus, and overhead power lines, respectively. The magnetic gradient component confirms the total field anomalies as shown in Figure 4.2-22. A smaller discrete anomaly exists at grid coordinate 40N from 420E to 470E, which is indicative of buried ferrous material.

The overhead power lines could be masking the magnetic response that any potential buried ferrous material may have, however, the GPR survey was conducted to identify any subsurface "disturbances" such as metallic fill material. Chaotic radar reflectors, indicative of fill material, coarse-grained soils, or disturbed soils, were found mainly along the treeline at grid coordinates 0 to 60S/150E to 250E, and 75S to 120S/400E to 475E. Chaotic radar reflectors, corresponding to a magnetic gradient anomaly, exist at 0 to 20N/450E to 575E, and are indicative of ferrous material. Hyperbolic radar signatures, identified as the gas main, were revealed along the 100N traverse at a depth of approximately 3 ft bgs.

While magnetometer and GPR anomalies exist throughout the site, a discrete landfill boundary was not identified at site M-14. This may be due in part to the composition of the fill material, as described in the lithologic logs, and the lack of metallic material.

#### 4.2.9.5 Hydrogeologic Interpretation

Lithologic logs from site monitor wells indicate that the lithology consists of a thin soil cover (0.4 ft) underlain by fill material. The components of the filled materials observed in the borings consisted of concrete rubble, charcoal, wood, and glass fragments intermixed with a gray-green silty fine-coarse-grained sand with little clay and gravel.

Groundwater saturation was observed in the boreholes during activities between 4 and 6 ft bgs. The three monitor wells were screened across the water table, with total depths of 14, 15, and 16 ft bgs in MW-19, MW-20, and MW-21, respectively. Water-level elevation data, measured on 6 March 1995, indicate that local groundwater flow is south toward Husky Brook (Figure 4.2-20). Based on groundwater elevation measurements, monitor wells MW-19 and MW-21 are downgradient of the M-14 area.

#### **4.2.9.6 Groundwater Sampling Results**

Monitor wells at site M-14 were sampled for the analytical parameters listed in Table 3.8-1. The compounds detected in groundwater samples from the individual sampling rounds, with the corresponding sample identifications, are listed in Appendix D. Table 4.2-11 compares the average concentrations of the detected compounds from the February and March sampling rounds with the NJDEP GWQC, and then compares the results to the subsequent site-specific and Monmouth County maximum background concentration, where appropriate.

##### **VOCs**

VOCs were not detected in the site monitor wells from either sampling round.

##### **SVOCs**

SVOCs were not detected in the site monitor wells from either sampling round.

##### **Pesticides/PCBs**

Pesticides/PCBs were not detected in the site monitor wells in either sampling round.

**Table 4.2-11**  
**Fort Monmouth - Main Post**  
**Summary of Average Concentrations of Detected**  
**Compounds in Groundwater - Site M-14**

| COMPOUND                   | METHOD DETECTION<br>LIMIT<br>(µg/L) | NJDEP<br>GROUNDWATER<br>QUALITY<br>CRITERIA<br>(µg/L) | MAXIMUM<br>BACKGROUND<br>CONCENTRATION<br>(µg/L) | ANALYTICAL RESULTS (µg/L)          |                                    |                                   |
|----------------------------|-------------------------------------|-------------------------------------------------------|--------------------------------------------------|------------------------------------|------------------------------------|-----------------------------------|
|                            |                                     |                                                       |                                                  | SAMPLING DATE                      |                                    |                                   |
|                            |                                     |                                                       |                                                  | MW19<br>2/20/95, 3/10/95<br>(avg.) | MW20<br>2/22/95, 3/13/95<br>(avg.) | MW21<br>2/22/95, 3/9/95<br>(avg.) |
| <b>METALS TOTAL (µg/L)</b> |                                     |                                                       |                                                  |                                    |                                    |                                   |
| Aluminum                   | 24.0                                | 200                                                   | 121000                                           | <b>393</b>                         | <b>903.5</b>                       | <b>1380</b>                       |
| Arsenic                    | 1.9                                 | 8*                                                    | 89.3                                             | ND                                 | 6.3                                | 2.33                              |
| Barium                     | 1.7                                 | 2000                                                  | 699                                              | 214.5                              | 48.7                               | 35.2                              |
| Beryllium                  | 0.9                                 | 20*                                                   | 7 <sup>1</sup>                                   | ND                                 | 0.245                              | ND                                |
| Calcium                    | 10.4                                | NLE                                                   | 45400                                            | 38700                              | 31850                              | 32800                             |
| Cobalt                     | 3.0                                 | NLE                                                   | 18.3                                             | 2.03                               | ND                                 | ND                                |
| Chromium                   | 2.9                                 | 100                                                   | 191                                              | 4.925                              | 9.625                              | 12.65                             |
| Copper                     | 1.9                                 | 1000                                                  | 730 <sup>1</sup>                                 | 8.15                               | 8.3                                | 2.35                              |
| Iron                       | 6.4                                 | 300                                                   | 431000                                           | <b>41400</b>                       | <b>7960</b>                        | <b>5685</b>                       |
| Potassium                  | 685                                 | NLE                                                   | 137000                                           | 4660                               | 5316                               | 7490                              |
| Magnesium                  | 18.3                                | NLE                                                   | 62700                                            | 5185                               | 4270                               | 4060                              |
| Manganese                  | 1.8                                 | 50                                                    | 480 <sup>1</sup>                                 | <b>550.5</b>                       | <b>199.5</b>                       | <b>64.45</b>                      |
| Sodium                     | 30.5                                | 50000                                                 | 197000 <sup>1</sup>                              | 8815                               | 22600                              | 6700                              |
| Nickel                     | 10.8                                | 100                                                   | 187                                              | 3.35                               | 5.65                               | ND                                |
| Lead                       | 1.6                                 | 10*                                                   | 22.7                                             | <b>18.75</b>                       | 4.65                               | 3.45                              |
| Vanadium                   | 2.3                                 | NLE                                                   | 108                                              | ND                                 | 6.25                               | 8.75                              |
| Zinc                       | 3.8                                 | 5000                                                  | 233                                              | 89.5                               | 14.5                               | 13.5                              |

Compounds exceeding NJDEP groundwater quality criteria are noted by bold numbers.

NJDEP groundwater quality criteria consist of the higher number between the PQL or STANDARD

\*PQL - Practical Quantitation Limit -was used as the NJDEP groundwater quality criteria

ND - Indicates that the compound was not detected at the noted quantification limits

NLE - No Level Established

<sup>1</sup> - Monmouth County maximum background concentration.

## Metals

As indicated in Table 4.2-11, of the 17 metals detected in site groundwater, 4 (aluminum, iron, manganese, and lead) were found in concentrations exceeding the NJDEP GWQC. In addition, manganese was found in a concentration greater than both the site-specific and the Monmouth County maximum background level in MW-19 only. As discussed in Subsection 4.1, groundwater flowing through glauconitic formations contains abundant manganese. In addition, manganese is a common metal found in tidally influenced environments. Therefore, manganese is not identified as a compound of concern. Aluminum and lead were found in concentrations below those determined for site-specific and Monmouth County maximum background levels.

Although the concentration of iron exceeded the Monmouth County background level in MW-19, the concentration was well below the site-specific background level established at the Main Post.

The lower reaches of Husky Brook are tidal. The sodium content of surface water is saline (Subsection 4.2.9.7), suggesting that saltwater has encroached upon this section of Husky Brook. The relatively high sodium content of the monitor wells in the vicinity of Husky Brook is caused by the saltwater encroachment.

## Cyanide

Cyanide was not detected in the site monitor wells from either sampling round.

### **4.2.9.7 Surface-Water Sampling Results**

Two surface-water samples, M14SW-1 and M14SW-2 were collected at M-14 (Figure 4.2-15). Both samples were determined to be saltwater based on conductivity and salinity results, and total (unfiltered) and soluble (filtered) concentrations were compared to NJDEP saltwater criteria and background (Table 4.2-12).

**Table 4.2-12**  
**Fort Monmouth - Main Post**  
**Summary of Detected Compounds in Surface Water**  
**Total and Soluble - Site M-14**

| COMPOUND                    | METHOD<br>DETECTION<br>LIMIT | NJDEP<br>SURFACE WATER<br>CRITERIA*<br>SALINE WATER | MAXIMUM<br>BACKGROUND<br>CONCENTRATION<br>(TOTAL) | MAXIMUM<br>BACKGROUND<br>CONCENTRATION<br>(SOLUBLE) | ANALYTICAL RESULTS<br>SAMPLING DATE - 12/1/1994 |        |               |        |
|-----------------------------|------------------------------|-----------------------------------------------------|---------------------------------------------------|-----------------------------------------------------|-------------------------------------------------|--------|---------------|--------|
|                             |                              |                                                     |                                                   |                                                     | M14 (Total)                                     |        | M14 (Soluble) |        |
|                             |                              |                                                     |                                                   |                                                     | SW-1                                            | SW-2   | SW-1          | SW-2   |
| VOC's (µg/L)                |                              |                                                     |                                                   |                                                     |                                                 |        |               |        |
| 1,2-Dichloroethene (total)  | 4.4                          | NLE                                                 | ND                                                | ND                                                  | 4 J                                             | 5 J    | NA            | NA     |
| SVOC's (µg/L)               |                              |                                                     |                                                   |                                                     |                                                 |        |               |        |
| bis-(2-Ethylhexyl)phthalate | 9.7                          | 5.92 (hc)                                           | ND                                                | ND                                                  | ND                                              | 2 J    | NA            | NA     |
| METALS TOTAL (µg/L)         |                              |                                                     |                                                   |                                                     |                                                 |        |               |        |
| Aluminum                    | 26.7                         | NLE                                                 | 748                                               | ND                                                  | 188                                             | 205    | ND            | 26.7   |
| Barium                      | 2.1                          | NLE                                                 | 44.7                                              | 39.4                                                | 30                                              | 33.1   | 27.2          | 31.2   |
| Calcium                     | 12                           | NLE                                                 | 31600                                             | 30900                                               | 16200                                           | 20400  | 16300         | 20300  |
| Cobalt                      | 2.4                          | NLE                                                 | 8.1                                               | 4.1                                                 | ND                                              | ND     | ND            | ND     |
| Copper                      | 2.4                          | NLE                                                 | 3.2                                               | 4                                                   | 2.9                                             | 5.3    | 5.6           | 4.9    |
| Iron                        | 4.7                          | NLE                                                 | 6210                                              | 405                                                 | 1920                                            | 2070   | 839           | 999    |
| Lead                        | 1.6                          | NLE                                                 | 10                                                | ND                                                  | 3.4                                             | 2.8    | 3.1           | 3.2    |
| Magnesium                   | 38.2                         | NLE                                                 | 5440                                              | 5120                                                | 9770                                            | 21400  | 9540          | 21600  |
| Manganese                   | 2.0                          | 100 (h)                                             | 113                                               | 98.6                                                | 65.6                                            | 68.4   | 63.6          | 66.1   |
| Nickel                      | 12.8                         | NLE                                                 | 22.9                                              | 16.1                                                | 14.2                                            | ND     | ND            | ND     |
| Potassium                   | 821                          | NLE                                                 | 5060                                              | 4280                                                | 4840                                            | 8320   | 4240          | 8220   |
| Sodium                      | 15.4                         | NLE                                                 | 26700                                             | 26200                                               | 70100                                           | 168000 | 69100         | 171000 |
| Zinc                        | 2.8                          | NLE                                                 | 35.1                                              | 23.8                                                | 23.7                                            | 23.4   | 14.4          | 13.2   |

\* - NJDEP Surface Water Quality Standards (1993).

h - Non carcinogen effect-based human health criteria as a 30 day average.

hc - Carcinogen effect-based human health criteria as 70 year average.

ND - Indicates that the compound was not detected at the noted quantification limit.

J - Indicates that the concentration value was estimated due to detection at or near the quantification limit.

NLE - No Level Established

NA - Not Analyzed.

Compounds detected above NJDEP Surface Water Criteria are noted by bold numbers.

### VOCs

VOCs were analyzed for but were not detected above the laboratory quantitation limit in site surface-water samples.

### SVOCs

SVOCs were analyzed for but were not detected above the laboratory quantitation limit in site surface-water samples.

### Pesticides/PCBs

Pesticides/PCBs were analyzed for but were not detected in site surface-water samples.

### Metals

As indicated in Table 4.2-12, no metals were found in concentrations exceeding the NJDEP surface-water criteria (saline).

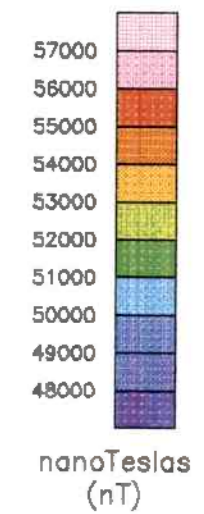
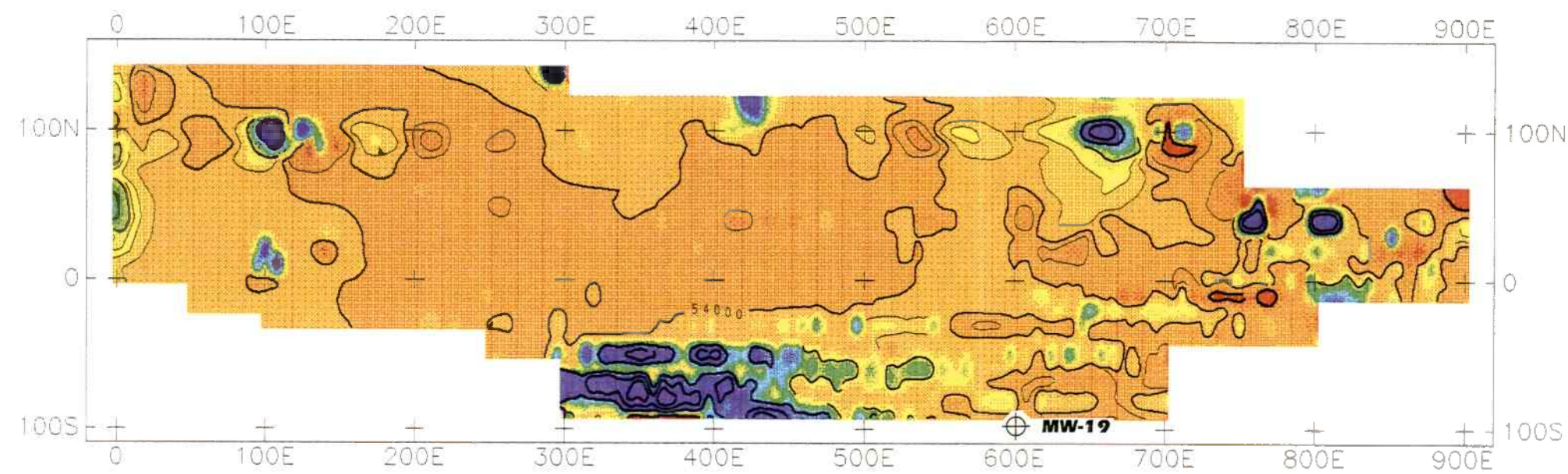
#### **4.2.9.8 Recommendations**

The results of the geophysical surveys indicate that fill and some metallic debris exist throughout the site; however, a discrete landfill boundary was not identified at site M-14. This may be due in part to the composition of the fill material and the small amount of subsurface metallic material present at the site.

The groundwater and surface-water sampling results indicate that no compounds of concern were detected above NJDEP GWQC and surface-water criteria.

Tidal monitoring was conducted at site M-12 and site M-14 simultaneously. The results of the tidal monitoring are discussed in Subsection 6.1.6.

Although no compounds of concern were identified at site M-14, because of the site's history of being used as a landfill, DPW proposes that a long-term surface-water and groundwater monitoring program be developed and implemented for the site. Aqueous samples would be collected and analyzed on a quarterly basis to further evaluate water quality conditions at the site. Groundwater samples would be collected from existing monitor wells and surface-water samples would be collected from points yet to be determined. Contaminants identified in the first two rounds of sampling would be targeted for the monitoring program.



LEGEND



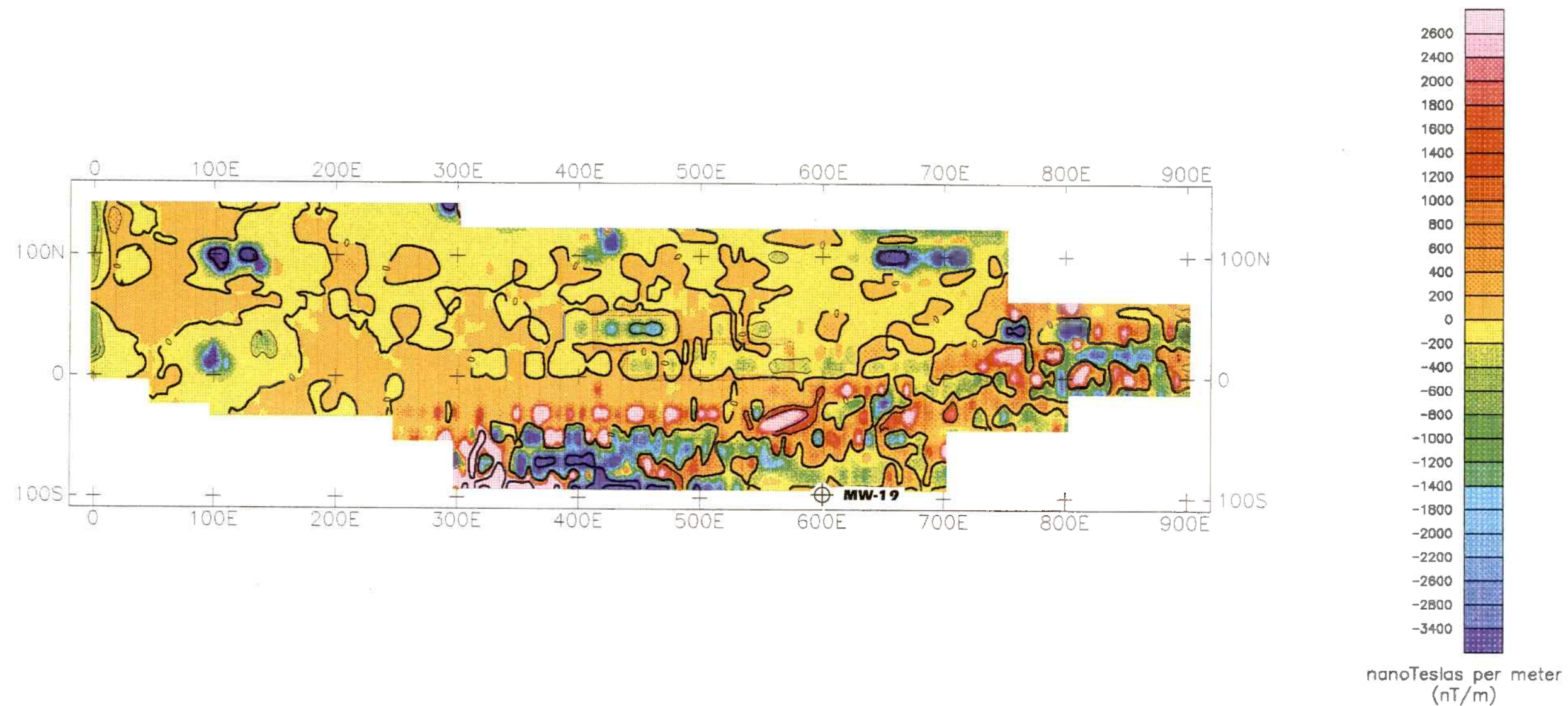
Monitor Well



Fort Monmouth, Main Post Site M-14

**FIGURE 4.2-21**  
MAGNETOMETER SURVEY  
TOTAL MAGNETIC FIELD - SITE M-14





## Site M-15

#### **4.2.10 Water Tank (M-15)**

##### **4.2.10.1 Site Location**

The water tank is located on the eastern portion of the Main Post (Figure 4.2-23). The tank is a vertical aboveground tank mounted on a concrete pad. The approximate area of site M-15 is 3,000 ft<sup>2</sup> (0.07 acre). There are soil patches without vegetation along the eastern circumference of the tank and visible paint chips.

##### **4.2.10.2 Site History**

Interviews with site personnel indicate that the tank was constructed in the 1940s and was always used as a water tank. The IA described the site as the "Water Tank," but did not discuss why the tank was identified as a hazardous waste site.

##### **4.2.10.3 Sampling Effort**

There is no evidence that the water tank or its contents are potential sources of contamination; however, the stressed vegetation may have been caused by the use of herbicides and the paint chips may contain lead. Therefore, two surface soil samples (0 to 6 inches) were collected, one at the bottom of the grade and one halfway up the grade, and were analyzed for TCL SVOCs, TAL metals, and pesticides (Figure 4.2-23). The SVOCs were analyzed for even though this was not proposed in the original scope of work (CDAP).

##### **4.2.10.4 Soil Sampling Results**

Two surface soil samples were collected (0 to 0.5 ft bgs), one at the bottom of the grade and one halfway up the grade, and were analyzed for the parameters listed in Table 3.6-1. The analytical results are listed in Appendix D. Table 4.2-13 compares the detected compounds in site soil with the NJDEP Residential Direct Contact Soil Cleanup Criteria (SCC), and then compares the results to the subsequent site-specific and Monmouth County background levels, where appropriate. In

**Table 4.2-13**  
**Fort Monmouth - Main Post**  
**Summary of Detected Compounds**  
**In Soils at Site M-15**

| COMPOUND                                                   | METHOD<br>DETECTION<br>LIMIT<br>(mg/kg) | RESIDENTIAL DIRECT<br>CONTACT SOIL<br>CLEANUP CRITERIA<br>(mg/kg) | MAXIMUM<br>BACKGROUND<br>CONCENTRATION<br>(mg/kg) | ANALYTICAL RESULTS<br>SAMPLE DATE |                      |
|------------------------------------------------------------|-----------------------------------------|-------------------------------------------------------------------|---------------------------------------------------|-----------------------------------|----------------------|
|                                                            |                                         |                                                                   |                                                   | SS01-A01<br>11/29/94              | SS02-A01<br>11/29/94 |
| SVOCs (mg/kg) - Sample Interval (6" to 12" bgs)            |                                         |                                                                   |                                                   |                                   |                      |
| Anthracene                                                 | 0.152                                   | 10,000                                                            | 0.1 J                                             | 0.041 J                           | ND                   |
| Phenathrene                                                | 0.165                                   | NLE                                                               | 0.39                                              | 0.37 J                            | 0.17 J               |
| Fluoranthene                                               | 0.198                                   | 2300                                                              | 0.46                                              | 0.53                              | 0.36 J               |
| Pyrene                                                     | 0.178                                   | 1700                                                              | 1.5                                               | 0.72                              | 0.43                 |
| Benzo(a)anthracene                                         | 0.162                                   | 0.9                                                               | 0.65                                              | 0.31 J                            | 0.18 J               |
| Chrysene                                                   | 0.145                                   | 0.9                                                               | 0.65                                              | 0.33 J                            | 0.23 J               |
| bis(2-Ethylhexyl)phthalate                                 | 0.32                                    | 49                                                                | 0.19 J                                            | .069 J                            | .077 J               |
| Benzo(b)fluoranthene                                       | 0.188                                   | 0.9                                                               | 0.9                                               | 0.45                              | 0.35 J               |
| Benzo(k)fluoranthene                                       | 0.205                                   | 0.9                                                               | 0.43                                              | 0.13 J                            | 0.110 J              |
| Benzo(a)pyrene                                             | 0.162                                   | 0.66                                                              | 0.6                                               | 0.27 J                            | 0.200 J              |
| Indeno(1,2,3-cd)pyrene                                     | 0.234                                   | 0.9                                                               | 0.46                                              | 0.16 J                            | 0.120 J              |
| Dibenzo(a,h)anthracene                                     | 0.198                                   | 0.66                                                              | 0.079 J B                                         | .041 J                            | ND                   |
| Benzo(g,h,i)perylene                                       | 0.224                                   | NLE                                                               | 0.64 B                                            | 0.16 J                            | 0.11 J               |
| PESTICIDES AND PCBs (mg/kg) Sample Interval (0" to 6" bgs) |                                         |                                                                   |                                                   |                                   |                      |
| 4,4'-DDE                                                   | 0.0038                                  | 2                                                                 | 0.096 P                                           | 6.6 CD                            | 1.0 CD               |
| 4,4'-DDT                                                   | 0.0037                                  | 2                                                                 | .110 D                                            | 7.9 CD                            | 1.0 CD               |
| METALS TOTAL (mg/kg) Sample Interval (0" to 6" bgs)        |                                         |                                                                   |                                                   |                                   |                      |
| Aluminum                                                   | 3.9                                     | NLE                                                               | 15200                                             | 5300                              | 5030                 |
| Arsenic                                                    | 0.35                                    | 20                                                                | 22.9                                              | 8.3                               | 8.9                  |
| Barium                                                     | 0.17                                    | 700                                                               | 32.3                                              | 68.4                              | 101                  |
| Beryllium                                                  | 0.1                                     | 1                                                                 | 2                                                 | 0.6                               | 0.69                 |
| Calcium                                                    | 2.2                                     | NLE                                                               | 921                                               | 815                               | 1860                 |
| Cadmium                                                    | 0.86                                    | 1                                                                 | 0.116 <sup>1</sup>                                | 2.9                               | 4.5                  |
| Cobalt                                                     | 0.71                                    | NLE                                                               | 2.5                                               | 6.1                               | 7.8                  |
| Chromium                                                   | 1.6                                     | 500                                                               | 269                                               | 109                               | 95.5                 |
| Copper                                                     | 2.2                                     | 600                                                               | 8                                                 | 34                                | 66.5                 |
| Iron                                                       | 0.58                                    | NLE                                                               | 55800                                             | 33400                             | 37700                |
| Lead                                                       | 0.49                                    | 400 <sup>2</sup>                                                  | 25.9 <sup>1</sup>                                 | 5340                              | 6130                 |
| Magnesium                                                  | 9.6                                     | NLE                                                               | 7230                                              | 1560                              | 1600                 |
| Manganese                                                  | 0.18                                    | NLE                                                               | 90.7                                              | 159                               | 187                  |
| Nickel                                                     | 1.4                                     | 250                                                               | 8.4                                               | 8.3                               | 6.9                  |
| Potassium                                                  | (12.3-25.8)                             | NLE                                                               | 15400                                             | 2990                              | 2770                 |
| Sodium                                                     | 3.8                                     | NLE                                                               | 51.6                                              | 23.4                              | 33.1                 |
| Silver                                                     | 0.54                                    | 110                                                               | 1.1                                               | 1.4                               | 1.5                  |
| Selenium                                                   | 0.36                                    | 63                                                                | 1.9                                               | 0.45                              | 2.1                  |
| Vanadium                                                   | 0.53                                    | 370                                                               | 94.1                                              | 27.5                              | 25.9                 |
| Zinc                                                       | 0.41                                    | 1500                                                              | 81.4                                              | 7750                              | 12800                |

Compounds exceeding NJDEP soil cleanup criteria are noted by bold numbers.

bgs - Below Ground Surface

J - Indicates that the concentration value was estimated due to detection at or near the detection limits

C - Pesticide identification was confirmed by GC/MS

P - The percent difference between the results from two GC columns is greater than 25%, the lower of the two values is reported

B - Compound was observed in the sample and associated laboratory blank

D - surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis

ND - Indicates that the compound was not detected at or below the quantification limits

NLE - No Level Established

Note: MDL's for metal analysis is actually the highest detection limit with potassium given as a range due to high variability

<sup>1</sup> Monmouth County maximum background concentration.

<sup>2</sup> NJDEP criteria are referenced in the Site Remediation News, Winter 1995.

addition, compounds that exceed the SCC are subsequently compared to the impact to groundwater SCC because there were no monitor wells installed at the site.

### **SVOCs**

Three SVOCs were detected above laboratory quantitation limits in site soils, but were well below NJDEP SCC. In addition, all other detected compounds with established SCC were found in concentrations below their respective criteria. The detected compounds did not exceed the impact to groundwater SCC.

### **Pesticides/PCBs**

Two pesticides (4,4'-DDE and 4,4'-DDT) were detected in concentrations above NJDEP SCC and background in SS-01. The concentrations of 4,4'-DDE and 4,4'-DDT were well below the respective impact to groundwater criteria (Figure 4.2-24). Pesticides were not detected above criteria in SS-02. PCBs were not detected in site surface soil samples.

### **Metals**

As indicated in Table 4.2-13, of the 20 metals detected in site soil, 3 (cadmium, lead, and zinc) were found in concentrations exceeding the NJDEP SCC. In addition, these metals were found in concentrations greater than those determined for site-specific and Monmouth County maximum background at the Main Post. Figure 4.2-24 presents the locations of compounds detected above the SCC and the established maximum background concentrations at the Main Post.

#### **4.2.10.5 Recommendations**

Two pesticide compounds and three metals, cadmium, zinc, and lead, were detected in surface soil at levels that exceeded NJDEP SCC and maximum background.

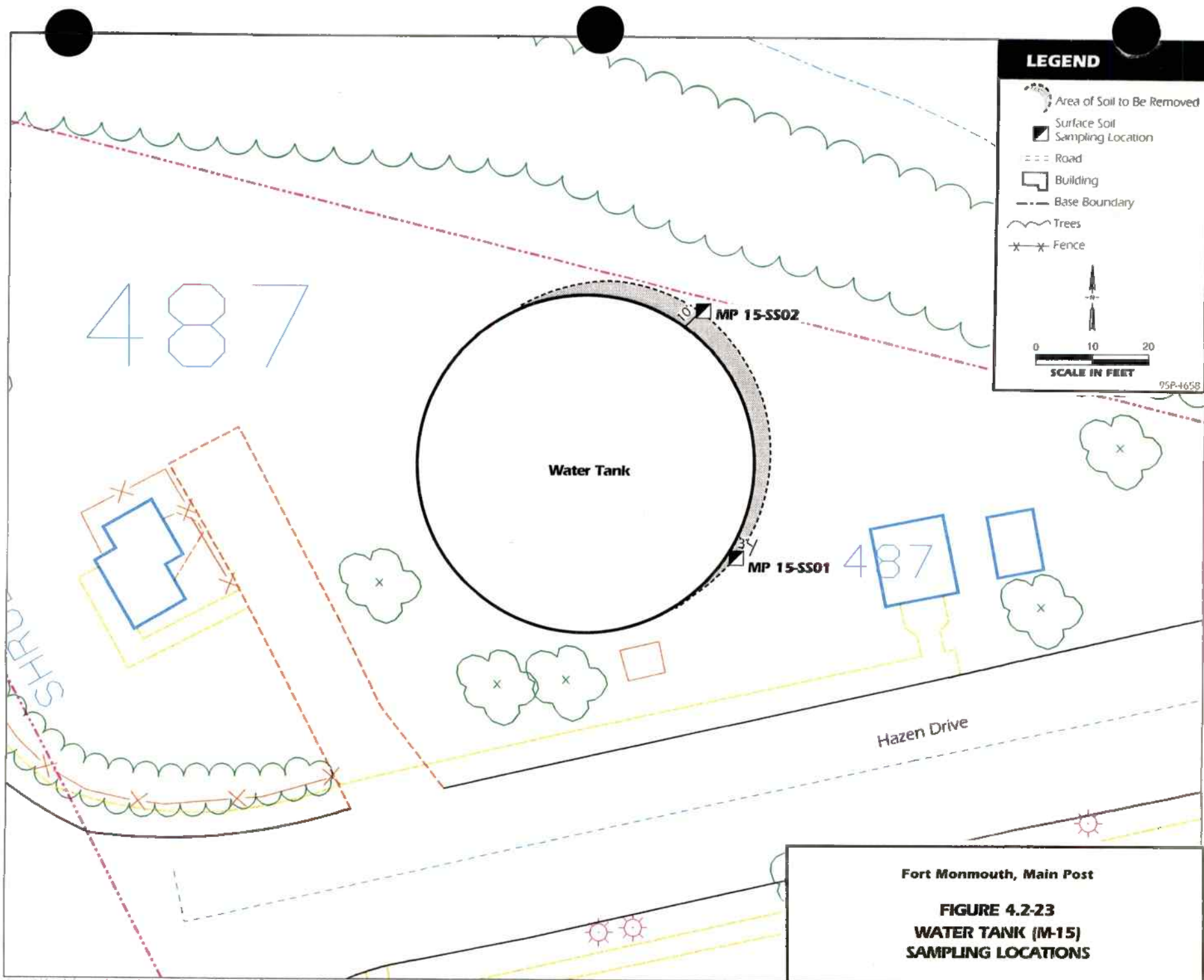


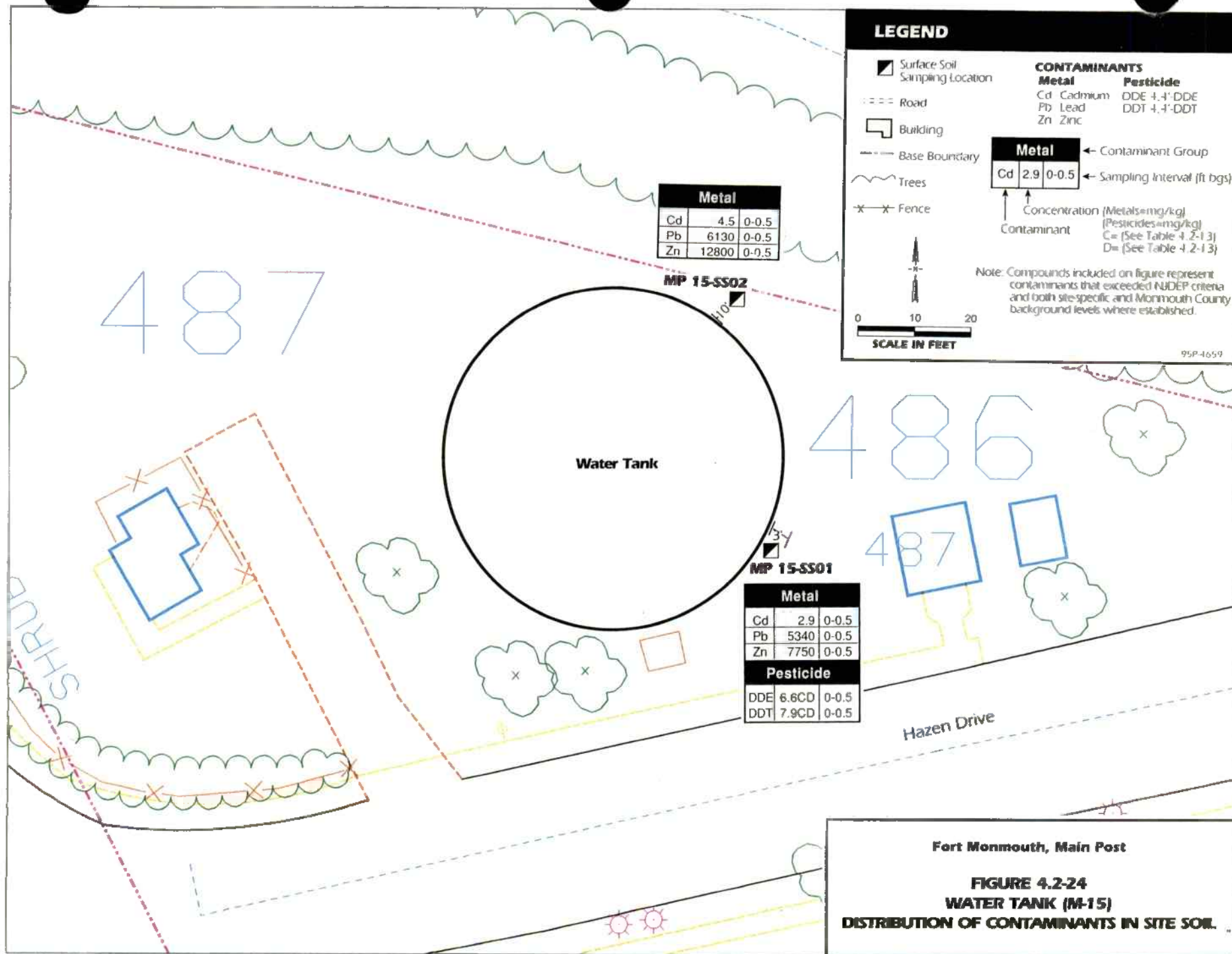
DPW has submitted the necessary documentation to Headquarters, Army Materiel Command/Army Environmental Center (HQAMC/AEC) to obtain the proper funding to remediate the site in FY 1996. Depending on funding availability, the affected soil will be excavated and disposed of in accordance with the applicable regulations. The area of contamination encompasses the perimeter of the tank, about 10 feet at the widest point. The depth of contamination is assumed to be 6 inches. Excavation will be performed in conjunction with confirmatory soil sampling to ensure that NJDEP SCC are achieved. It is estimated that 13 yd<sup>3</sup> of soil will be excavated, assuming that soil is excavated to a depth of 6 inches. NJDEP will be requested to send a representative to observe the excavation.





4.2-123







## Site M-16

#### **4.2.11 Former Pesticide Storage Building (M-16)**

##### **4.2.11.1 Site Location**

The former Pesticide Storage Building (M-16) was misidentified as Building 167 in the IA. The building actually used for pesticide storage was Building S-498, which is located on the south-side of Riverside Avenue, north of the marina (Figure 4.2-25). The approximate area of site M-16 is 1,400 ft<sup>2</sup> (0.03 acre).

##### **4.2.11.2 Site History**

Building S-498 was built in 1939. According to long-term Fort Monmouth employees, this building was used as a pesticide control shop in the 1940s and 1950s, before this function was moved to Building T-65. Building S-498 is currently used for miscellaneous storage. During the 1993 site visit, workers were bricking in the windows. The front of the building has a tile floor and was most likely used for office space. The back wing of the building has a cement floor with a centrally located floor drain. The southeast corner of the floor has sunk 2 to 3 inches, breaking away from the foundation and creating a crack in the area of the door. The cracks and floor drain could have allowed the release of spilled pesticides. Pesticide mixing reportedly took place inside the building with rinse water dumped in a sink that went to the sanitary sewer.

##### **4.2.11.3 Sampling Effort**

Four soil samples were collected from 6 to 12 inches bgs from areas that are not paved south of the building and analyzed for TCL +30 parameters (Figure 4.2-25). Soil samples were collected from two discrete intervals in the monitor well boring and analyzed for TCL +30 parameters and TAL metals. TAL metal analysis was not proposed in the CDAP but samples were collected at SB-01. One monitor well (MW-22) was south of Building S-498. Two rounds of groundwater samples from the monitor well were analyzed for TCL +30 parameters. In addition, an attempt was made to determine whether the floor drain discharges to the sanitary sewer at Building S-498. However, because the original floor in the building was reconstructed as a result of past

flooding problems, the original drainage line was no longer accessible and, consequently, could not be traced from Building S-498 to the sanitary sewer.

#### **4.2.11.4 Hydrogeologic Interpretation**

The lithologic log from MW-22 indicates that the lithology consists of a thin (0.4 ft) soil cover with crushed asphalt (to 2 ft bgs) underlain by interbedded green-brown fine-coarse sandy clay and fine-coarse sand with little clay.

Saturation was observed at 1 ft bgs. Monitor well MW-22 was screened in the saturated zone and was completed to a depth of 14.5 ft bgs. The site-specific groundwater flow direction is estimated to be south toward Oceanport Creek (Figure 4.2-26).

#### **4.2.11.5 Soil Sampling Results**

One shallow soil boring (SB-01) was installed in the MW-22 borehole to a depth of 6 ft bgs. Soil samples were collected in the borehole from two discrete intervals, i.e., 0 to 2 ft bgs and 2 to 4 ft bgs. In addition, four surface soil samples were collected from the 0 to 0.5 ft bgs interval. Soil samples were sampled for the analytical parameters listed in Table 3.6-1. The analytical results for site soils are listed in Appendix D. Table 4.2-14 compares detected compounds with the NJDEP SCC, and then compares the results to the subsequent site-specific and Monmouth County maximum background levels, where appropriate.

#### **VOCs**

VOCs were not detected in site soils.

#### **SVOCs**

Three SVOCs were detected slightly above laboratory quantitation limits in site soils. The compounds were detected well below their respective NJDEP SCC. In addition, SVOCs

**Table 4.2-14 (1 of 2)**  
**Fort Monmouth - Main Post**  
**Summary of Detected Compounds**  
**In Soil at Site M-16**

| COMPOUND                    | METHOD<br>DETECTION<br>LIMIT<br><br>(mg/kg) | RESIDENTIAL<br>DIRECT CONTACT<br>SOIL CLEANUP<br>CRITERIA<br><br>(mg/kg) | MAXIMUM<br>BACKGROUND<br>CONCENTRATION<br><br>(mg/kg) | ANALYTICAL RESULTS                   |                                      |                             |                             |                             |                             |
|-----------------------------|---------------------------------------------|--------------------------------------------------------------------------|-------------------------------------------------------|--------------------------------------|--------------------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
|                             |                                             |                                                                          |                                                       | SB01-A01<br>12/15/94<br>(0-2 ft bgs) | SB01-A02<br>12/15/94<br>(2-4 ft bgs) | SS01-A01<br>11/29/94<br>(1) | SS02-A01<br>11/29/94<br>(1) | SS03-A01<br>11/29/94<br>(1) | SS04-A01<br>11/29/94<br>(1) |
| SVOCs (mg/kg)               |                                             |                                                                          |                                                       |                                      |                                      |                             |                             |                             |                             |
| bis(2-ethylhexyl)phthalate  | 0.32                                        | 49                                                                       | 0.19J                                                 | ND                                   | 0.23J                                | 0.084 J                     | 1.1 J                       | 0.26 J                      | 0.64                        |
| Phenathrene                 | 0.165                                       | NLE                                                                      | 0.39                                                  | 0.140 J                              | ND                                   | ND                          | ND                          | 0.045 J                     | ND                          |
| Di-n-octylphthalate         | 0.185                                       | 1100                                                                     | ND                                                    | ND                                   | ND                                   | 0.845                       | 1.1 J                       | 0.26 J                      | 0.64                        |
| Fluoranthene                | 0.198                                       | 2300                                                                     | 0.46                                                  | 0.330 J                              | ND                                   | 0.046 J                     | ND                          | 0.1 J                       | 0.073 J                     |
| Pyrene                      | 0.178                                       | 1700                                                                     | 1.5                                                   | 0.220 J                              | ND                                   | 0.060 J                     | ND                          | 0.14 J                      | 0.096 J                     |
| Benzo(a)anthracene          | 0.162                                       | 0.9                                                                      | 0.65                                                  | 0.092 J                              | ND                                   | ND                          | ND                          | 0.069 J                     | 0.039 J                     |
| Chrysene                    | 0.145                                       | 9                                                                        | 0.65                                                  | 0.150 J                              | ND                                   | ND                          | ND                          | 0.063 J                     | 0.043 J                     |
| Benzo(b)fluoranthene        | 0.188                                       | 0.9                                                                      | 0.9                                                   | 0.150 J                              | ND                                   | ND                          | ND                          | 0.12 J                      | 0.065 J                     |
| Benzo(k)fluoranthene        | 0.205                                       | 0.9                                                                      | 0.43                                                  | 0.069 J                              | ND                                   | ND                          | ND                          | ND                          | ND                          |
| Benzo(a)pyrene              | 0.162                                       | 0.66                                                                     | 0.6                                                   | 0.084 J                              | 0.43                                 | ND                          | ND                          | 0.575                       | 0.046 J                     |
| Indeno(1,2,3-cd)pyrene      | 0.234                                       | 0.9                                                                      | 0.46                                                  | 0.067 J                              | ND                                   | ND                          | ND                          | 0.049 J                     | 0.04 J                      |
| Benzo(g,h,i)perylene        | 0.224                                       | NLE                                                                      | 0.64 B                                                | 0.063 J                              | ND                                   | ND                          | ND                          | ND                          | ND                          |
| PESTICIDES AND PCBs (mg/kg) |                                             |                                                                          |                                                       |                                      |                                      |                             |                             |                             |                             |
| Aldrin                      | 0.0021                                      | 0.04                                                                     | ND                                                    | ND                                   | ND                                   | ND                          | 0.17 C                      | ND                          | ND                          |
| gamma-BHC (Lindane)         | 0.0021                                      | 0.52                                                                     | ND                                                    | ND                                   | ND                                   | 0.0034                      | 0.17                        | 0.0059                      | ND                          |
| Heptachlor                  | 0.0021                                      | 0.15                                                                     | ND                                                    | ND                                   | ND                                   | ND                          | 2.5 CD                      | 0.0099                      | ND                          |
| Dieldrin                    | 0.0042                                      | 0.042                                                                    | ND                                                    | 0.12                                 | ND                                   | 0.017                       | 2.0 CD                      | 0.21 D                      | 0.37 C                      |
| 4,4'-DDE                    | 0.0037                                      | 2                                                                        | 0.091 D                                               | 1 C                                  | 0.1                                  | 0.35 CD                     | 3.5 CD                      | 0.48 CD                     | 0.57 CD                     |
| 4,4'-DDD                    | 0.0037                                      | 3                                                                        | 0.0096 P                                              | 1.5 C                                | 0.2                                  | 0.13 D                      | ND                          | 0.22 D                      | 1.7 CD                      |
| 4,4'-DDT                    | 0.00037                                     | 2                                                                        | 0.11 D                                                | 0.71 C                               | 0.072                                | 1.1 CD                      | 23 CD                       | 2.0 C D                     | 1.6 CD                      |
| Endrin Ketone               | 0.0037                                      | NLE                                                                      | ND                                                    | ND                                   | ND                                   | ND                          | 0.092                       | ND                          | ND                          |
| alpha-Chlordane             | 0.0018                                      | NLE                                                                      | ND                                                    | 0.042                                | 0.0096                               | 0.05                        | 11 CD                       | 0.2 D                       | 0.86 CD                     |
| gamma-Chlordane             | 0.0018                                      | NLE                                                                      | ND                                                    | 0.033 P                              | 0.0088 P                             | 0.05                        | 13 CD                       | 0.2 D                       | 0.92 CD                     |

Note: See page (2 of 2) for Table 4.2-14 Text, etc.

4.2-127

**Table 4.2-14 (2 of 2)**  
**Fort Monmouth - Main Post**  
**Summary of Detected Compounds**  
**In Soil at Site M-16**

| COMPOUND             | METHOD<br>DETECTION<br>LIMIT<br><br>(mg/kg) | RESIDENTIAL<br>DIRECT CONTACT<br>SOIL CLEANUP<br>CRITERIA<br><br>(mg/kg) | MAXIMUM<br>BACKGROUND<br>CONCENTRATION<br><br>(mg/kg) | ANALYTICAL RESULTS                   |                                      |                             |                             |                             |                             |
|----------------------|---------------------------------------------|--------------------------------------------------------------------------|-------------------------------------------------------|--------------------------------------|--------------------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
|                      |                                             |                                                                          |                                                       | SB01-A01<br>12/15/94<br>(0-2 ft bgs) | SB01-A02<br>12/15/94<br>(2-4 ft bgs) | SS01-A01<br>11/29/94<br>(1) | SS02-A01<br>11/29/94<br>(1) | SS03-A01<br>11/29/94<br>(1) | SS04-A01<br>11/29/94<br>(1) |
| METALS TOTAL (mg/kg) |                                             |                                                                          |                                                       |                                      |                                      |                             |                             |                             |                             |
| Aluminum             | 3.9                                         | NLE                                                                      | 15200                                                 | 6840                                 | 11900                                | NA                          | NA                          | NA                          | NA                          |
| Arsenic              | 0.35                                        | 20                                                                       | 22.9                                                  | 8.8                                  | 16                                   | NA                          | NA                          | NA                          | NA                          |
| Barium               | 0.17                                        | 700                                                                      | 32.3                                                  | 36.3                                 | 29.7                                 | NA                          | NA                          | NA                          | NA                          |
| Beryllium            | 0.1                                         | 1                                                                        | 2                                                     | 0.84                                 | 0.8                                  | NA                          | NA                          | NA                          | NA                          |
| Calcium              | 2.2                                         | NLE                                                                      | 921                                                   | 1500                                 | 1200                                 | NA                          | NA                          | NA                          | NA                          |
| Cobalt               | 0.7                                         | NLE                                                                      | 2.5                                                   | 5.0                                  | 2.8                                  | NA                          | NA                          | NA                          | NA                          |
| Chromium             | 1.6                                         | 500                                                                      | 269                                                   | 54.6                                 | 59.5                                 | NA                          | NA                          | NA                          | NA                          |
| Copper               | 2.2                                         | 600                                                                      | 8                                                     | 24.2                                 | 11.7                                 | NA                          | NA                          | NA                          | NA                          |
| Iron                 | 0.58                                        | NLE                                                                      | 55800                                                 | 21300                                | 36200                                | NA                          | NA                          | NA                          | NA                          |
| Lead                 | 0.4                                         | 400 <sup>3</sup>                                                         | 25.9 <sup>2</sup>                                     | 35.3                                 | 16.3                                 | NA                          | NA                          | NA                          | NA                          |
| Magnesium            | 9.6                                         | NLE                                                                      | 7230                                                  | 1670                                 | 2340                                 | NA                          | NA                          | NA                          | NA                          |
| Manganese            | 0.18                                        | NLE                                                                      | 90.7                                                  | 74.5                                 | 37.7                                 | NA                          | NA                          | NA                          | NA                          |
| Nickel               | 1.4                                         | 250                                                                      | 8.4                                                   | 8.0                                  | 5.4                                  | NA                          | NA                          | NA                          | NA                          |
| Potassium            | (12.3-25.8)                                 | NLE                                                                      | 15400                                                 | 2990                                 | 3660                                 | NA                          | NA                          | NA                          | NA                          |
| Sodium               | 3.8                                         | NLE                                                                      | 51.6                                                  | 283                                  | 232                                  | NA                          | NA                          | NA                          | NA                          |
| Selenium             | 0.3                                         | 63                                                                       | 1.9                                                   | 0.67                                 | 0.96                                 | NA                          | NA                          | NA                          | NA                          |
| Vanadium             | 0.53                                        | 370                                                                      | 94.1                                                  | 37.6                                 | 43.5                                 | NA                          | NA                          | NA                          | NA                          |
| Zinc                 | 0.41                                        | 1500                                                                     | 81.4                                                  | 93                                   | 42.1                                 | NA                          | NA                          | NA                          | NA                          |

Compounds exceeding NJDEP cleanup criteria are noted by bold numbers.

J - Indicates that the concentration value was estimated due to detection at or near the detection limits

C - Pesticide identification was confirmed by GC/MS

D - Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis.

P - The percent difference between the results from two GC columns is greater than 25%, the lower of the two values is reported

B - Compound was observed in the sample and associated laboratory blank

NA - Not Analyzed - Not Proposed ; NLE - No Levels Established

ND - Indicates that the compound was not detected at or below the quantification limits

ft bgs. - feet below ground surface.

<sup>1</sup> - VOC's/SVOC's were collected from sample interval 6" to 12" bgs; Pesticide/PCB's were collected from sample interval 0.0" to 6" bgs.

Note: Metal analysis was not proposed or analyzed at surface soil locations. Metals analysis was not proposed at SB-01, but was analyzed.

Note: MDL's for metal analysis are actually the highest detection limit with potassium given as a range due to high variability.

<sup>2</sup> Monmouth County maximum background concentration.

<sup>3</sup> NJDEP criteria are referenced in the Site Remediation News, Winter 1995.

detected below laboratory quantitation limits were found in levels well below their respective criteria where established.

### **Pesticides/PCBs**

A total of 10 pesticide compounds were detected above laboratory quantitation limits in site soil. Five pesticides (dieldrin, heptachlor, aldrin, 4,4'-DDE, and 4,4'-DDT) were found in concentrations exceeding the NJDEP SCC. Dieldrin was detected in soil boring SB-01 (0 to 2 ft bgs) and in surface soil samples SS-01 through SS-04. Heptachlor, aldrin, 4,4'-DDE, and 4,4'-DDT were detected at or above criteria in SS-01, SS-02, SS-03, and SS-04. None of the pesticides were detected above their respective impact to groundwater criteria. PCBs were not detected in site soil (Figure 4.2-27).

### **Metals**

As indicated in Table 4.2-14, no metals were detected in concentrations above either the NJDEP SCC or established maximum background concentrations at the Main Post.

#### **4.2.11.6 Groundwater Sampling Results**

Monitor well MW-22 was sampled for the analytical parameters listed in Table 3.8-1. The compounds detected in groundwater samples from the individual sampling rounds, with the corresponding sample identifications, are listed in Appendix D. Table 4.2-15 compares the average concentrations of the detected compounds from the February and March sampling rounds with the NJDEP GWQC, and then compares the results to the subsequent site-specific and Monmouth County maximum background concentrations, where appropriate.

### **VOCs**

VOCs were not detected in MW-22 from either sampling round.

**Table 4.2-15**  
**Fort Monmouth -Main Post**  
**Summary of Average Concentrations of Detected Compounds in Groundwater**  
**Site M-16**

| COMPOUND                    | METHOD DETECTION<br>LIMIT | NJDEP<br>GW<br>QUALITY<br>CRITERIA<br>(µg/L) | MAXIMUM<br>BACKGROUND<br>CONCENTRATION<br>(µg/L) | ANALYTICAL RESULTS (µg/L) |                   |                  |
|-----------------------------|---------------------------|----------------------------------------------|--------------------------------------------------|---------------------------|-------------------|------------------|
|                             |                           |                                              |                                                  | SAMPLING DATE             |                   |                  |
|                             |                           |                                              |                                                  | MW22A01<br>2/17/95        | MW22A02<br>3/9/95 | MW22A02<br>(avg) |
| <b>SVOCs (µg/L)</b>         |                           |                                              |                                                  |                           |                   |                  |
| bis-(2-Ethylhexyl)phthalate | 9.7                       | 30*                                          | 5 J                                              | ND                        | 1J                | 0.5 J            |

Compounds detected above NJDEP standards are noted by bold numbers.

GW - Ground water

NJDEP groundwater quality criteria consist of the higher number between the PQL or the STANDARD.

\*PQL - Practical Quantitation Limit was used as the NJDEP groundwater quality criteria

J - Indicates that the concentration value was estimated due to detection at or near the quantification limits

ND - Indicates that the compound was not detected at or below the quantification limits

### SVOCs

SVOCs were not detected above laboratory quantitation limits in MW-22 from either sampling round. The SVOC bis(2-ethylhexyl) phthalate was detected below the laboratory quantitation limit and well below the NJDEP GWQC.

### Pesticides/PCBs

Pesticides/PCBs were not detected in MW-22 from either sampling round.

#### **4.2.11.7 Recommendations**

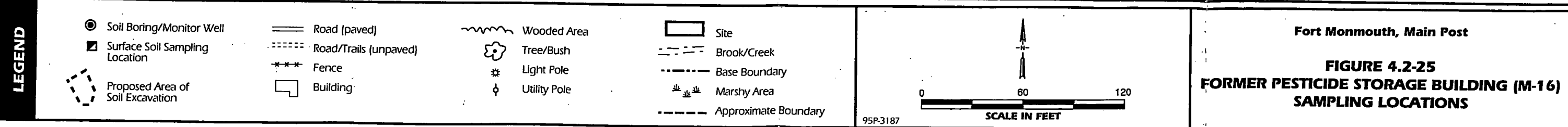
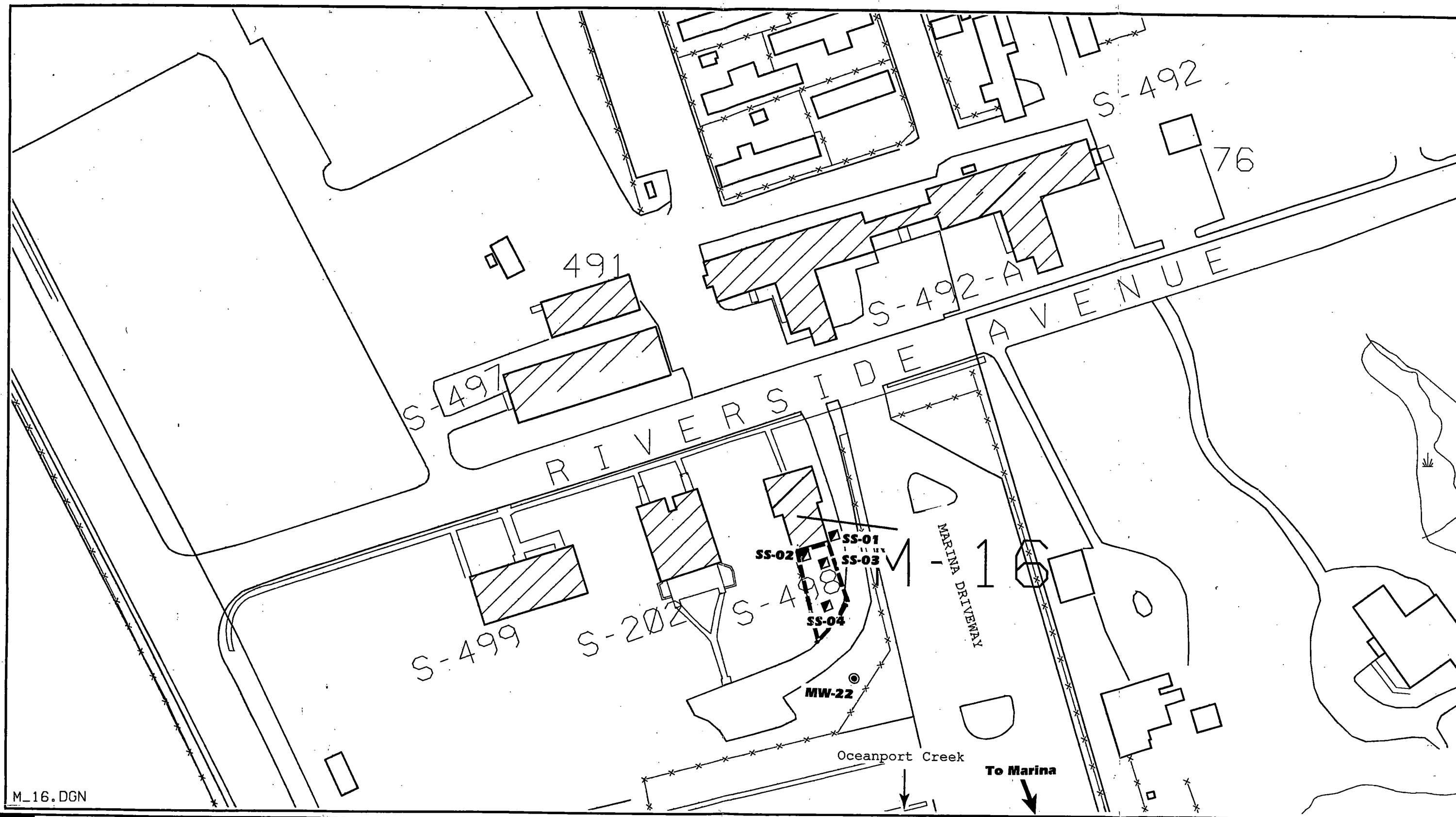
Pesticide compounds were detected at four surface soil sampling locations and in one soil boring sample (0 to 2-foot interval) in concentrations above NJDEP criteria and background.

No compounds of concern were detected in the groundwater above NJDEP criteria.

DPW has submitted the necessary documentation to HQAMC/AEC to obtain the proper funding to remediate the site in FY 1996. Depending on funding availability, the affected soil will be excavated and disposed of in accordance with the applicable regulations. The area of contamination is approximately 50 feet by 20 feet. The depth of contamination is assumed to be 12 inches. Excavation will be conducted in conjunction with confirmatory soil sampling to ensure that NJDEP SCC are achieved. It is estimated that 56 yd<sup>3</sup> of soil will be excavated, assuming that soil will be excavated to a depth of 12 inches. NJDEP will be requested to send a representative to observe the excavation.

The site monitor well will be properly abandoned due to the nondetection of compounds of concern in groundwater. The remedial activities proposed will remediate potential source areas of pesticides detected in soil.







M\_16.DGN

|               |                                                                                                                                                                                                                       |                                                                                                |                                                                                       |                                                                                                                              |                                                              |                                                                                                                                                                                                                                                         |
|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>LEGEND</b> | <p>● Soil Boring/Monitor Well</p> <p><b>MW-22</b> ● Monitor Well</p> <p>4.50 ← Groundwater Elevation (FT/MSL)</p> <p>▣ Surface Soil Sampling Location</p> <p>→ Groundwater Flow Direction (Dashed where Inferred)</p> | <p>==== Road (paved)</p> <p>----- Road/Trails (unpaved)</p> <p>*** Fence</p> <p>□ Building</p> | <p>~~~~~ Wooded Area</p> <p>✿ Tree/Bush</p> <p>* Light Pole</p> <p>◇ Utility Pole</p> | <p>□ Site</p> <p>- - - Brook/Creek</p> <p>----- Base Boundary</p> <p>* * * Marshy Area</p> <p>----- Approximate Boundary</p> | <p>0 60 120</p> <p>SCALE IN FEET</p> <p>95P-3187 6/73/95</p> | <p><b>Fort Monmouth, Main Post</b></p> <p><b>FIGURE 4.2-26</b></p> <p><b>FORMER PESTICIDE STORAGE BUILDING (M-16)</b></p> <p><b>APPROXIMATE GROUNDWATER FLOW DIRECTIONS</b></p> <p>(Groundwater Elevations Recorded from March 1995 Sampling Round)</p> |
|               |                                                                                                                                                                                                                       |                                                                                                |                                                                                       |                                                                                                                              |                                                              |                                                                                                                                                                                                                                                         |
|               |                                                                                                                                                                                                                       |                                                                                                |                                                                                       |                                                                                                                              |                                                              |                                                                                                                                                                                                                                                         |
|               |                                                                                                                                                                                                                       |                                                                                                |                                                                                       |                                                                                                                              |                                                              |                                                                                                                                                                                                                                                         |

**CONTAMINANTS LEGEND**

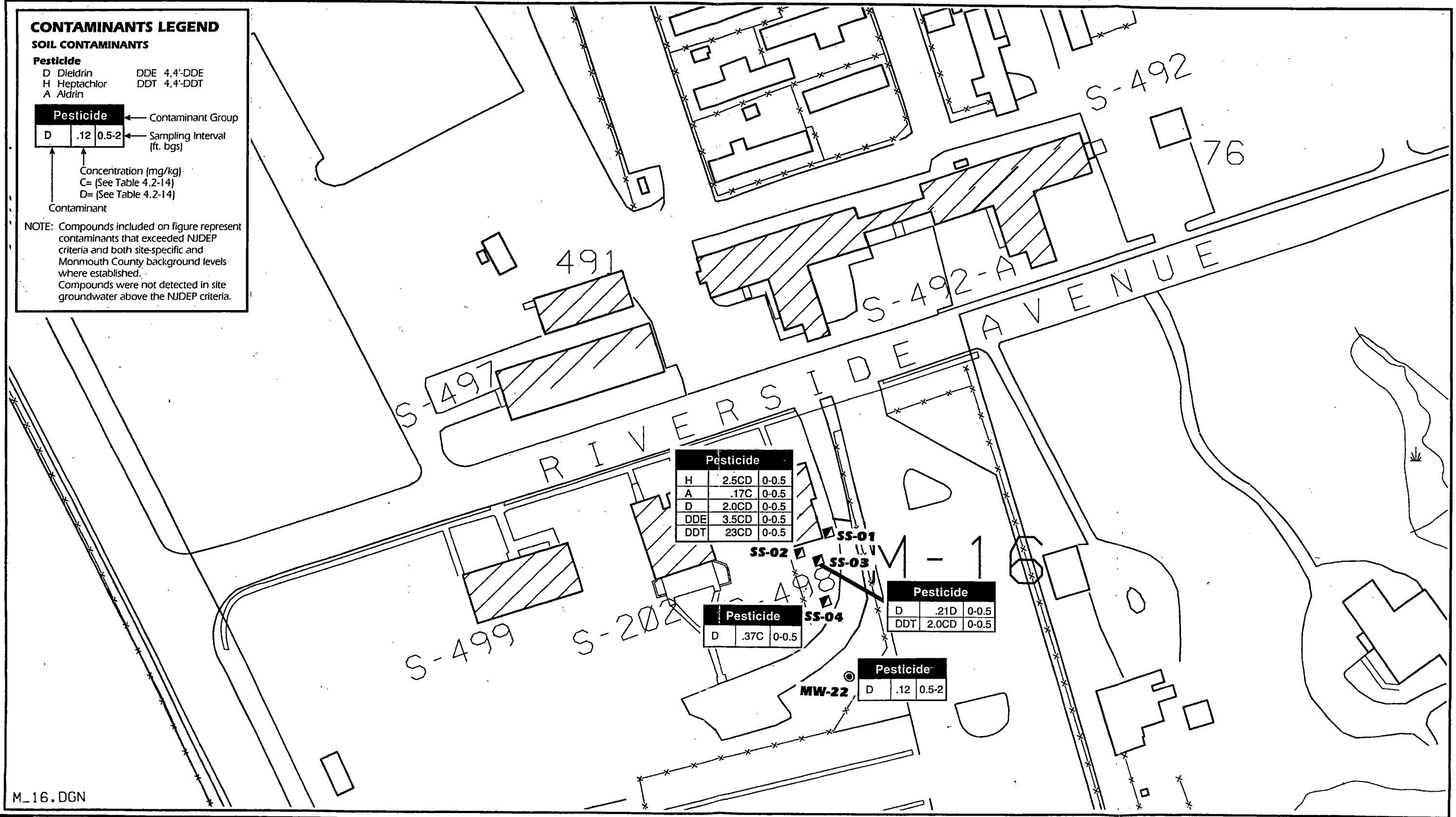
**SOIL CONTAMINANTS**

**Pesticide**

D Dieldrin      DDE 4,4'-DDE  
H Heptachlor    DDT 4,4'-DDT  
A Aldrin

| Pesticide |     |       | Contaminant Group              |
|-----------|-----|-------|--------------------------------|
| D         | .12 | 0.5-2 | Sampling Interval<br>(ft. bgs) |
|           |     |       |                                |
|           |     |       |                                |
|           |     |       | Concentration (mg/kg)          |
|           |     |       | C= [See Table 4.2-14]          |
|           |     |       | D= [See Table 4.2-14]          |
|           |     |       | Contaminant                    |

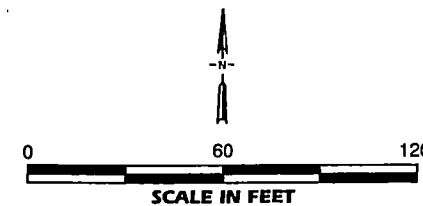
NOTE: Compounds included on figure represent contaminants that exceeded NJDEP criteria and both site-specific and Monmouth County background levels where established.  
Compounds were not detected in site groundwater above the NJDEP criteria.



M\_16.DGN

**LEGEND**

- Soil Boring/Monitor Well
- Surface Soil Sampling Location
- Road (paved)
- Road/Trails (unpaved)
- Fence
- Building
- Wooded Area
- Tree/Bush
- Light Pole
- Utility Pole
- Site
- Brook/Creek
- Base Boundary
- Marshy Area
- Approximate Boundary



Fort Monmouth, Main Post

**FIGURE 4.2-27**  
**FORMER PESTICIDE STORAGE BUILDING (M-16)**  
**DISTRIBUTION OF CONTAMINANTS IN SITE SOIL**

## Site M-18

#### **4.2.12 Former Training Area (M-18)**

##### **4.2.12.1 Site Location**

The Army Signal School Training Area (M-18) is located in the northern part of the Main Post, between Parkers Creek to the north and Buildings 283, T-294, T-293, S-289, and S-145 to the south (Figure 4.2-28). The approximate area of site M-18 is 177,300 ft<sup>2</sup> (4.1 acres).

##### **4.2.12.2 Site History**

The Army Signal School Training Area has been used for military training exercises since 1919. Diesel and gasoline generators used to support these field exercises were reported in the IA to have been used 150 meters from Lafetra Creek, although the location shown in Figure 7 of the IA is closer to Parkers Creek. The IA reports that numerous fuel spills occurred in the generator area. A riot control agent was also used in this area for troop protective mask training for a limited period of time. During the 1993 site inspection, military training area exercises were being conducted in the M-18 area. Part of the area is paved. Based on the presence of concrete at the surface, there is a suspected debris disposal area used for the disposal of building rubble in the area north of Building 289.

##### **4.2.12.3 Sampling Effort**

GPR and electromagnetic (EM) surveys were conducted to investigate the extent of debris disposal north of Building 289. Nine soil borings in a grid pattern were drilled in this area (Figure 4.2-28). The original scope of work included the installation of 12 soil borings. However, because of difficult drilling locations in marshy areas, the borings were repositioned and fewer borings were installed. Soil samples were analyzed for VOCs and TPHs and were collected from either 6 to 12 inches or 12 to 18 inches below the bottom of the asphalt (to avoid bias from the asphalt that covers about half of this area) and either from intervals with visible staining or from just above the water table. If staining was observed, samples were collected for SVOC analysis. If staining or high HNu, organic vapor analyzer (OVA), or organic vapor monitor (OVM) readings were recorded, a sample was collected for TCL +30 parameters and

TAL metals. Due to soil staining and elevated PID readings at SB-06, TCL +30 parameters and TAL metals were sampled. No evidence of contamination was present at the other soil sampling locations. Monitor wells were installed in two of the borings (MW-24 and MW-25), and two rounds of groundwater samples were collected for TCL +30 parameters, TAL metals, and TPHs. In addition, two rounds of groundwater samples were collected from previously installed monitor well MW-3.

#### **4.2.12.4 Geophysical Results**

The EM survey conducted at site M-18 reveals apparent background conductivities in the range of 25 to 40 mS/m, which are represented by the green to yellow color contour intervals as shown in Figure 4.2-29. These conductivities are indicative of silty soils. High conductivity readings exist toward the north and perimeter of the site (70 + mS/m). This is probably due to marsh deposits and partially to cultural features such as the chainlink fence surrounding the site.

Anomalous conductivity signatures located at 0N to 60S/65E to 95E contain both high conductivity and low conductivity (positive and negative) readings. This may be indicative of buried metallic objects or abrupt changes in subsurface materials.

The in-phase component reveals a strong discrete anomaly located at approximately 0N to 10S/80E to 100E (represented by the blue color contours). This anomaly is adjacent to the quadrature anomalies. Also, discrete in-phase anomalies located within grid coordinates 0N to 60N/170E to 250E are indicative of buried metallic objects (Figure 4.2-30). The strongest of these point source anomalies is located at 15N to 25N/180E to 195E. Other discrete anomalies indicative of buried metallic objects are located at 50N/350E, 30N/360E, and on the east side of the fence at 60N/415E.

The GPR survey at site M-18 revealed anomalous radar signatures (including a hyperbolic diffraction pattern) located at 0N to 10S/100E. Figure 4.2-30A shows this anomaly, which coincides with the EM anomaly in Figure 4.2-30 and may be indicative of an underground storage tank (UST) or UST component (i.e., foundation) at a depth of approximately 5 or 6 ft

bgs. The 100E line traverse on Figure 4.2-30A indicates that the suspected UST is approximately 4 feet in length. Figure 4.2-30A reveals that the three areas contain chaotic reflectors, which are indicative of coarse-grained or disturbed subsoil. The areas, centrally located at grid coordinates 50N/250E, 10N/250E, and 50N/350E, coincide with EM anomalies and may contain buried metallic objects. The radar profiles also reveal low amplitude chaotic reflectors, indicative of coarse-grained soils in the area that encompasses low apparent conductivity at the western portion of the site (green contour interval), as shown in Figure 4.2-29.

Although the geophysical survey results indicated areas that may contain buried ferrous material and fill, these areas are within the suspected boundary of the landfill. Monitor wells and soil borings were appropriately located to evaluate subsurface conditions downgradient and within the landfill boundaries.

#### **4.2.12.5 Hydrogeologic Interpretation**

Lithologic logs from SB-01 through SB-07 and MW-24 and MW-25 indicate that the lithology consists of fill intermixed with a poorly sorted gray-olive-brown silty fine-coarse-grained sand with trace amounts of clay. The manmade components of the filled materials observed in the borings consisted of asphalt, wood fragments, and roof shingles.

Saturation was observed in monitor wells MW-24 and MW-25 at approximately 6 ft bgs. Both monitor wells were screened across the water table and were completed to 15 ft bgs. Local groundwater flows toward and discharges into Parkers Creek (Figure 4.2-31), as indicated by water-level measurements from site monitor wells and land surface topography. Monitor wells MW-24 and MW-25 are positioned downgradient of the M-18 area.

#### **4.2.12.6 Soil Sampling Results**

A total of nine shallow soil borings (Figure 4.2-32) were completed at selected locations at site M-18 to depths ranging from 2 to 10 ft bgs. Two soil borings (SB-24 and SB-25) were completed at the new monitor wells (MW-24 and MW-25) locations. Locations were selected

for seven of the borings based on the results of the geophysical surveys. Soil samples were collected from two discrete intervals (1 to 1.5 ft bgs and 2 to 10 ft bgs, depending on the depth to water), and based on field observations, were sampled for the analytical parameters listed in Table 3.6-1. The analytical results for soils at specific sampling intervals are listed in Appendix D. Tables 4.2-16 and 4.2-17 compare the detected compounds with the NJDEP SCC, and then compare the results with the subsequent site-specific and Monmouth County maximum background levels, where appropriate. Stained soil was observed below ground surface, but in the 0 to 2-ft bgs sampling interval at boring SB-06. In accordance with the work plan, samples were also taken for BNAs (SVOCs), pesticides/PCBs, and metals analysis at this location.

### VOCs

VOCs were not detected above the laboratory quantitation limit in site soils. VOCs detected below quantitation limits were well below their respective criteria (Table 4.2-16).

### SVOCs

A total of 13 SVOCs were detected above laboratory quantitation limits in SB-06. Four of the compounds [benzo(a)anthracene, chrysene, benzo(k)fluoranthene, and ideno(1,2,3-cd)pyrene] were detected in concentrations above laboratory quantitation limits and above the NJDEP SCC at SB-06 in the 2- to 5-ft bgs sampling interval. In addition, two compounds [benzo(b)fluoranthene and benzo(a)pyrene], detected below laboratory quantitation limits in SB-06, were also found in concentrations exceeding the NJDEP SCC from the 2- to 5-ft bgs sampling interval. All other detected SVOCs were found in concentrations below the established criteria. All six of the compounds that exceeded the NJDEP criteria also exceeded the site and Monmouth County background. Although the SVOCs were found in concentrations above NJDEP SCC and maximum background in SB-06, the concentrations were well below the impact to groundwater SCC. Monitor wells downgradient of this location did not detect these particular SVOCs. Figure 4.2-32 presents the locations of the compounds detected above the NJDEP SCC and the established maximum background levels at the Main Post.



**Table 4.2-16**  
**Fort Monmouth - Main Post**  
**Summary of Detected Compounds**  
**in Soils from Site M-18**  
**(VOC's and TPH only)**

| COMPOUND      | METHOD<br>DETECTION<br>LIMIT | RESIDENTIAL DIRECT<br>CONTACT SOIL<br>CLEANUP CRITERIA | MAXIMUM<br>BACKGROUND<br>CONCENTRATION | ANALYTICAL RESULTS |          |              |            |              |              |             |            |
|---------------|------------------------------|--------------------------------------------------------|----------------------------------------|--------------------|----------|--------------|------------|--------------|--------------|-------------|------------|
|               |                              |                                                        |                                        | SB01-A01           | SB01-A02 | SB02-A01     | SB02-A02   | SB03-A01     | SB03-A02     | SB04-A01    | SB04-A02   |
|               |                              |                                                        |                                        | 1/12/95            | 1/12/95  | 1/12/95      | 1/12/95    | 1/12/95      | 1/12/95      | 1/11/95     | 1/11/95    |
|               | (mg/kg)                      | (mg/kg)                                                | (mg/kg)                                | 1-1.5 ft bgs       | 2 ft bgs | 1-1.5 ft bgs | 4-6 ft bgs | 1-1.5 ft bgs | 4-7.5 ft bgs | 1-1.5 ft bg | 4-6 ft bgs |
| VOC's (mg/kg) |                              |                                                        |                                        |                    |          |              |            |              |              |             |            |
| Ethylbenzene  | 0.0031                       | 1000                                                   | ND                                     | ND                 | ND       | ND           | ND         | ND           | ND           | ND          | ND         |
| Toluene       | 0.0027                       | 1000                                                   | ND                                     | ND                 | ND       | ND           | ND         | ND           | ND           | ND          | ND         |
| Xylene        | 0.0038                       | 410                                                    | ND                                     | ND                 | ND       | ND           | ND         | ND           | ND           | ND          | ND         |
| TPH (mg/kg)   | 26.8                         | NLE                                                    | NA                                     | 367                | 84.9     | 188          | 612        | 6330*        | 1100*        | ND          | ND         |

| COMPOUND      | METHOD<br>DETECTION<br>LIMIT | RESIDENTIAL<br>DIRECT CONTACT<br>SOIL CLEANUP<br>CRITERIA | MAXIMUM<br>BACKGROUND<br>CONCENTRATION | ANALYTICAL RESULTS |            |              |            |              |              |            |              |            |
|---------------|------------------------------|-----------------------------------------------------------|----------------------------------------|--------------------|------------|--------------|------------|--------------|--------------|------------|--------------|------------|
|               |                              |                                                           |                                        | SB05-A01           | SB05-A02   | SB06-A01     | SB06-A02   | SB07-A01     | SB24-A01     | SB24-A02   | SB25-A01     | SB25-A02   |
|               |                              |                                                           |                                        | 1/11/95            | 1/11/95    | 1/11/95      | 1/11/95    | 1/12/95      | 1/12/95      | 1/12/95    | 1/13/95      | 1/13/95    |
|               | (mg/kg)                      | (mg/kg)                                                   | (mg/kg)                                | 1-1.5 ft bgs       | 2-5 ft bgs | 1-1.5 ft bgs | 2-5 ft bgs | 1-1.5 ft bgs | 1-1.5 ft bgs | 2-4 ft bgs | 1-1.5 ft bgs | 2-4 ft bgs |
| VOC's (mg/kg) |                              |                                                           |                                        |                    |            |              |            |              |              |            |              |            |
| Ethylbenzene  | 0.0031                       | 1000                                                      | ND                                     | ND                 | ND         | ND           | 0.002 J    | ND           | ND           | ND         | ND           | ND         |
| Toluene       | 0.0027                       | 1000                                                      | ND                                     | ND                 | ND         | ND           | ND         | ND           | ND           | ND         | ND           | 0.002 J    |
| Xylene        | 0.0038                       | 410                                                       | ND                                     | ND                 | ND         | ND           | 0.013 J    | ND           | ND           | ND         | ND           | 0.006 J    |
| TPH (mg/kg)   | 26.8                         | NLE                                                       | NA                                     | 117                | ND         | 221          | 2300*      | 29.9         | 695          | 993        | 311          | 2500*      |

Compounds exceeding NJDEP soil cleanup criteria are noted by bold numbers.  
 ND - Indicates that the compound was not detected at or below the quantification limits  
 J - Indicates that the concentration value was estimated due to detection at or near the detection limits  
 NA - Not Analyzed  
 \*Quantification limit was increased during analysis for the associated sample  
 ft bgs. - feet below ground surface.

4.2-143

**Table 4.2-17**  
**Fort Monmouth - Main Post**  
**Summary of Detected Compounds in**  
**Soils from Site M-18 Sample SB06-A02**

| COMPOUND                           | METHOD<br>DETECTION<br>LIMIT<br>(mg/kg) | RESIDENTIAL DIRECT<br>CONTACT SOIL<br>CLEANUP<br>CRITERIA<br>(mg/kg) | MAXIMUM<br>BACKGROUND<br>CONCENTRATION<br>(mg/kg) | ANALYTICAL<br>RESULTS<br>SB06-A02<br>1/11/95<br>2-5 ft bgs |
|------------------------------------|-----------------------------------------|----------------------------------------------------------------------|---------------------------------------------------|------------------------------------------------------------|
| <b>SVOCs (mg/kg)</b>               |                                         |                                                                      |                                                   |                                                            |
| Naphthalene                        | 0.277                                   | 230                                                                  | ND                                                | 1.2                                                        |
| 2-Methylnaphthalene                | 0.287                                   | NLE                                                                  | ND                                                | 0.18 J                                                     |
| Acenaphthene                       | 0.221                                   | 3400                                                                 | 0.1 J                                             | 52                                                         |
| Dibenzofuran                       | 0.215                                   | NLE                                                                  | 0.06 J                                            | 31                                                         |
| Fluorene                           | 0.208                                   | 2300                                                                 | 0.074 J                                           | 40                                                         |
| Phenanthrene                       | 0.165                                   | NLE                                                                  | 0.39                                              | 140                                                        |
| Anthracene                         | 0.152                                   | 10000                                                                | 0.10 J                                            | 16                                                         |
| Carbazole                          | 0.145                                   | NLE                                                                  | ND                                                | 4.8 J                                                      |
| Fluoranthene                       | 0.198                                   | 2300                                                                 | 0.46                                              | 46                                                         |
| Pyrene                             | 0.178                                   | 1700                                                                 | 1.5                                               | 48                                                         |
| Butylbenzylphthalate               | 0.175                                   | 1100                                                                 | ND                                                | 0.45 J                                                     |
| Benzo(a)anthracene                 | 0.162                                   | 0.9                                                                  | 0.65                                              | 11                                                         |
| Chrysene                           | 0.145                                   | 9                                                                    | 0.65                                              | 10                                                         |
| bis(2-Ethylhexyl)phthalate         | 0.32                                    | 49                                                                   | 0.19 J                                            | 0.17 J                                                     |
| Benzo(b)fluoranthene               | 0.188                                   | 0.9                                                                  | 0.9                                               | 7.6 J                                                      |
| Benzo(k)fluoranthene               | 0.205                                   | 0.9                                                                  | 0.43                                              | 2.3                                                        |
| Benzo(a)pyrene                     | 0.162                                   | 0.66                                                                 | 0.6                                               | 3.8 J                                                      |
| Indeno(1,2,3-cd)pyrene             | 0.234                                   | 0.9                                                                  | 0.46                                              | 2.1                                                        |
| Dibenzo(a,h)anthracene             | 0.198                                   | 0.66                                                                 | 0.079 J B                                         | 0.45 J                                                     |
| Benzo(g,h,i)perylene               | 0.224                                   | NLE                                                                  | 0.079 J B                                         | 1.5                                                        |
| <b>TPH (mg/kg)</b>                 | 26.8                                    | NLE                                                                  | NA                                                | 2300                                                       |
| <b>PESTICIDES AND PCBs (mg/kg)</b> |                                         |                                                                      |                                                   |                                                            |
| Heptachlor epoxide                 | 0.0021                                  | NLE                                                                  | ND                                                | 0.030 P                                                    |
| 4,4'-DDE                           | 0.0037                                  | 2                                                                    | 0.096 P                                           | 0.11                                                       |
| 4,4'-DDD                           | 0.0037                                  | 3                                                                    | 0.096 P                                           | 0.46 UX                                                    |
| 4,4'-DDT                           | 0.0037                                  | 2                                                                    | 0.11 D                                            | 0.032                                                      |
| alpha-Chlordane                    | 0.0021                                  | NLE                                                                  | ND                                                | 0.0078                                                     |
| gamma-Chlordane                    | 0.0021                                  | NLE                                                                  | ND                                                | 0.02 P                                                     |
| <b>MINERALS TOTAL (mg/kg)</b>      |                                         |                                                                      |                                                   |                                                            |
| Aluminum                           | 3.9                                     | NLE                                                                  | 15200                                             | 6130                                                       |
| Arsenic                            | 0.35                                    | 20                                                                   | 22.9                                              | 5.8                                                        |
| Barium                             | 0.17                                    | 700                                                                  | 32.3                                              | 31                                                         |
| Calcium                            | 2.2                                     | NLE                                                                  | 921                                               | 11100                                                      |
| Cobalt                             | 0.71                                    | NLE                                                                  | 2.5                                               | 6.3                                                        |
| Chromium                           | 1.60                                    | 500                                                                  | 269                                               | 35.3                                                       |
| Copper                             | 2.2                                     | 600                                                                  | 8                                                 | 218                                                        |
| Iron                               | 0.58                                    | NLE                                                                  | 55800                                             | 17700                                                      |
| Lead                               | 0.4                                     | 400 <sup>2</sup>                                                     | 25.9 <sup>1</sup>                                 | 127                                                        |
| Magnesium                          | 9.6                                     | NLE                                                                  | 7230                                              | 3380                                                       |
| Manganese                          | 0.18                                    | NLE                                                                  | 90.7                                              | 168                                                        |
| Mercury                            | 0.49                                    | 14                                                                   | ND                                                | 0.61                                                       |
| Nickel                             | 1.4                                     | 250                                                                  | 8.4                                               | 12.6                                                       |
| Potassium                          | (12.3-25.8)                             | NLE                                                                  | 15400                                             | 2190                                                       |
| Sodium                             | 3.8                                     | NLE                                                                  | 51.6                                              | 181                                                        |
| Selenium                           | 0.3                                     | 63                                                                   | 1.9                                               | 0.78                                                       |
| Vanadium                           | 0.53                                    | 370                                                                  | 94.1                                              | 27.3                                                       |
| Zinc                               | 0.41                                    | 1500                                                                 | 81.4                                              | 72.6                                                       |

Compounds exceeding NJDEP cleanup criteria are noted by bold numbers.

ft bgs - Feet below ground surface

NLE - No Level Established

ND - Indicates that the compound was not detected at or below the quantification limits

J - Indicates that the concentration value was estimated due to detection at or near the detection limits

B - Compound was observed in the samples and associated laboratory blank

NA - Not Analyzed

C - Pesticide identification was confirmed by GC/MS

P - The percent difference between the results from two GC columns is greater than 25%, the lower of the two values is reported

U - Compound was not detected at or above the reporting limit.

X - Other specific flags may be required to properly qualify the result.

<sup>1</sup> Monmouth County maximum background concentration.

<sup>2</sup> NJDEP criteria are referenced in the Site Remediation News, Winter 1995.

### **Pesticides/PCBs**

Five pesticides were detected in concentrations above laboratory quantitation limits in SB-06 from the 2- to 5-ft bgs sampling interval. However, all pesticide compounds were detected below the NJDEP SCC. PCBs were analyzed for but were not detected in any of the boring locations.

### **Metals**

As indicated in Table 4.2-17, metals detected in SB-06 were found in concentrations below the NJDEP SCC.

### **Total Petroleum Hydrocarbons (TPHs)**

TPH concentrations were detected above laboratory quantitation limits in one or both sampling intervals in all but soil boring SB-04 in concentrations ranging from 29.9 milligrams per kilogram (mg/kg) to 6,330 mg/kg.

#### **4.2.12.7 Groundwater Sampling Results**

Monitor wells at site M-18 were sampled for the analytical parameters listed in Table 3.8-1. The compounds detected in groundwater samples from the individual sampling rounds, with the corresponding sample identifications, are listed in Appendix D. The existing monitor well, MW-3, was sampled in May 1995. Table 4.2-18 compares the average concentrations from the February and March sampling rounds with the NJDEP GWQC, and then compares the results to the subsequent site-specific and Monmouth County maximum background, where appropriate.

### **VOCs**

Acetone was the only VOC detected in site groundwater samples. Acetone was detected in concentrations below the NJDEP GWQC in groundwater samples collected from MW-24 and

**Table 4.2-18**  
**Fort Monmouth - Main Post**  
**Summary of Average Concentrations of Detected**  
**Compounds in Groundwater - Site M-18**

| COMPOUND                             | METHOD DETECTION<br>LIMIT<br>(µg/L) | NJDEP<br>GROUNDWATER<br>QUALITY<br>CRITERIA<br>(µg/L) | MAXIMUM<br>BACKGROUND<br>CONCENTRATION<br>(µg/L) | ANALYTICAL RESULTS (µg/L)          |                                    |                                    |
|--------------------------------------|-------------------------------------|-------------------------------------------------------|--------------------------------------------------|------------------------------------|------------------------------------|------------------------------------|
|                                      |                                     |                                                       |                                                  | SAMPLING DATE                      |                                    |                                    |
|                                      |                                     |                                                       |                                                  | MW24<br>2/17/95, 3/10/95<br>(avg.) | MW25<br>2/17/95, 3/10/95<br>(avg.) | MW03<br>5/10/95, 5/27/95<br>(avg.) |
| <b>VOC's (µg/L)</b>                  |                                     |                                                       |                                                  |                                    |                                    |                                    |
| Acetone                              | 6.9                                 | 700                                                   | ND                                               | 10 J                               | 12.5                               | ND                                 |
| <b>SVOCs (µg/L)</b>                  |                                     |                                                       |                                                  |                                    |                                    |                                    |
| 4-Methylphenol                       | 12.9                                | NLE                                                   | ND                                               | 3.5J                               | ND                                 | ND                                 |
| <b>PETROLEUM HYDROCARBONS (µg/L)</b> |                                     |                                                       |                                                  |                                    |                                    |                                    |
| Petroleum Hydrocarbons               | 0.26                                | NLE                                                   | NA                                               | 1.12                               | 0.43                               | ND                                 |
| <b>PESTICIDES/PCBs (µg/L)</b>        |                                     |                                                       |                                                  |                                    |                                    |                                    |
| 4,4'-DDD                             | 0.97                                | 0.1                                                   | 0.050 JP                                         | <b>0.145P</b>                      | ND                                 | ND                                 |
| <b>METALS TOTAL (µg/L)</b>           |                                     |                                                       |                                                  |                                    |                                    |                                    |
| Aluminum                             | 24.0                                | 200                                                   | 121000                                           | <b>5615</b>                        | <b>4103</b>                        | <b>8310</b>                        |
| Arsenic                              | 1.9                                 | 8*                                                    | 89.3                                             | <b>16.8</b>                        | <b>11.4</b>                        | 4.8                                |
| Barium                               | 1.7                                 | 2000                                                  | 699                                              | 267                                | 92.9                               | 13.7                               |
| Beryllium                            | 0.9                                 | 20*                                                   | 7 <sup>1</sup>                                   | 1.65                               | 0.53                               | 0.6                                |
| Calcium                              | 10.4                                | NLE                                                   | 45400                                            | 747000                             | 169000                             | 5470                               |
| Cadmium                              | 2.8                                 | 4                                                     | 9.5                                              | 2.775                              | 3.625                              | ND                                 |
| Cobalt                               | 2.3                                 | NLE                                                   | 18.3                                             | 1.975                              | 1.825                              | 4.1                                |
| Chromium                             | 2.9                                 | 100                                                   | 191                                              | 48.15                              | 23.2                               | 54.2                               |
| Copper                               | 1.9                                 | 1000                                                  | 730 <sup>1</sup>                                 | 8.45                               | 2.6                                | 2.9                                |
| Iron                                 | 6.4                                 | 300                                                   | 431000                                           | <b>40000</b>                       | <b>28620</b>                       | <b>39950</b>                       |
| Potassium                            | 685                                 | NLE                                                   | 137000                                           | 19200                              | 29900                              | 10735                              |
| Magnesium                            | 18.3                                | NLE                                                   | 62700                                            | 49750                              | 69050                              | 6145                               |
| Manganese                            | 1.8                                 | 50                                                    | 480 <sup>1</sup>                                 | <b>712</b>                         | <b>940</b>                         | 38.3                               |
| Sodium                               | 30.5                                | 50000                                                 | 197000 <sup>1</sup>                              | 42000                              | <b>363500</b>                      | <b>55950</b>                       |
| Nickel                               | 10.8                                | 100                                                   | 187                                              | 6.75                               | 8.35                               | 7.3                                |
| Lead                                 | 1.1                                 | 10*                                                   | 22.7                                             | <b>34.7</b>                        | <b>11.2</b>                        | 8.2                                |
| Selenium                             | 1.5                                 | 50                                                    | 29.6                                             | 1.575                              | ND                                 | ND                                 |
| Vanadium                             | 2.3                                 | NLE                                                   | 108                                              | 29.15                              | 24.85                              | 44.8                               |
| Zinc                                 | 3.8                                 | 5000                                                  | 233                                              | 90.75                              | 33.55                              | 88.9                               |

Compounds exceeding NJDEP groundwater quality criteria are noted by bold numbers.

NJDEP groundwater quality criteria consist of the higher number between the PQL or STANDARD

\*PQL - Practical Quantitation Limit - was used as the NJDEP groundwater quality criteria

NLE - No Level Established

ND - Indicates that the compound was not detected at noted quantification limit

NA - Not analyzed

J - Indicates that the concentration value was estimated due to detection at or near the quantification limits

P - The percent difference between the results from two GC columns is greater than 25%, the lower of the two values is reported.

<sup>1</sup> - Monmouth County maximum background concentration.

MW-25. The source of the acetone is not known, however, acetone is a common laboratory contaminant.

### SVOCs

One SVOC (4-methylphenol) was detected in MW-24 below the laboratory quantitation limit. SVOCs were not detected in MW-25 or MW-3.

### Pesticides/PCBs

One pesticide (4,4'-DDD) was detected in a concentration that slightly exceeds the NJDEP GWQC in MW-24. 4,4'-DDD was detected in concentrations above the criteria in MW-24 from both sampling rounds. PCB compounds were not detected in site monitor wells from either sampling round (Figure 4.2-32).

### Metals

As indicated in Table 4.2-18, of the 19 metals detected in site groundwater, only 6 (aluminum, arsenic, iron, manganese, sodium, and lead) were found in concentrations exceeding the NJDEP GWQC. In addition, manganese in MW-24 and MW-25, lead in MW-24, and sodium in MW-25 were found in concentrations greater than those determined for site-specific and Monmouth County maximum background at the Main Post. Lead was not detected in the filtered sample. However, aluminum and arsenic were found in concentrations below both maximum background levels where established. Although iron was detected in concentrations greater than the regional maximum background, iron was detected well below the site-specific background levels in the Main Post and is not a compound of concern. Sodium in MW-3 was found in a concentration greater than the site-specific background, but was well below the Monmouth County level. The elevated sodium levels in MW-25 may be caused by saline water intrusion from the Parkers Creek estuary. Sodium is not a compound of concern (Figure 4.2-32). As discussed in Subsection 4.1, groundwater flowing through glauconitic formations contains abundant

manganese. In addition, manganese is a common metal found in tidally influenced environments. Therefore, manganese is not identified as a compound of concern.

#### TPHs

TPH concentrations were detected just above the laboratory quantitation limit in MW-24 and MW-25 from both the February and March sampling rounds.

#### **4.2.12.8 Recommendations**

The geophysical surveys identified several anomalies indicative of buried waste and fill material within the suspected boundaries of the site M-18 area. One anomaly was indicative of a UST or storage tank component. The geophysical results indicate that soil borings and monitor wells were appropriately located to evaluate subsurface conditions downgradient and within landfill boundaries.

The soil sampling results indicated that six SVOCs were detected at SB-06 in concentrations that exceeded the NJDEP criteria and established background concentrations.

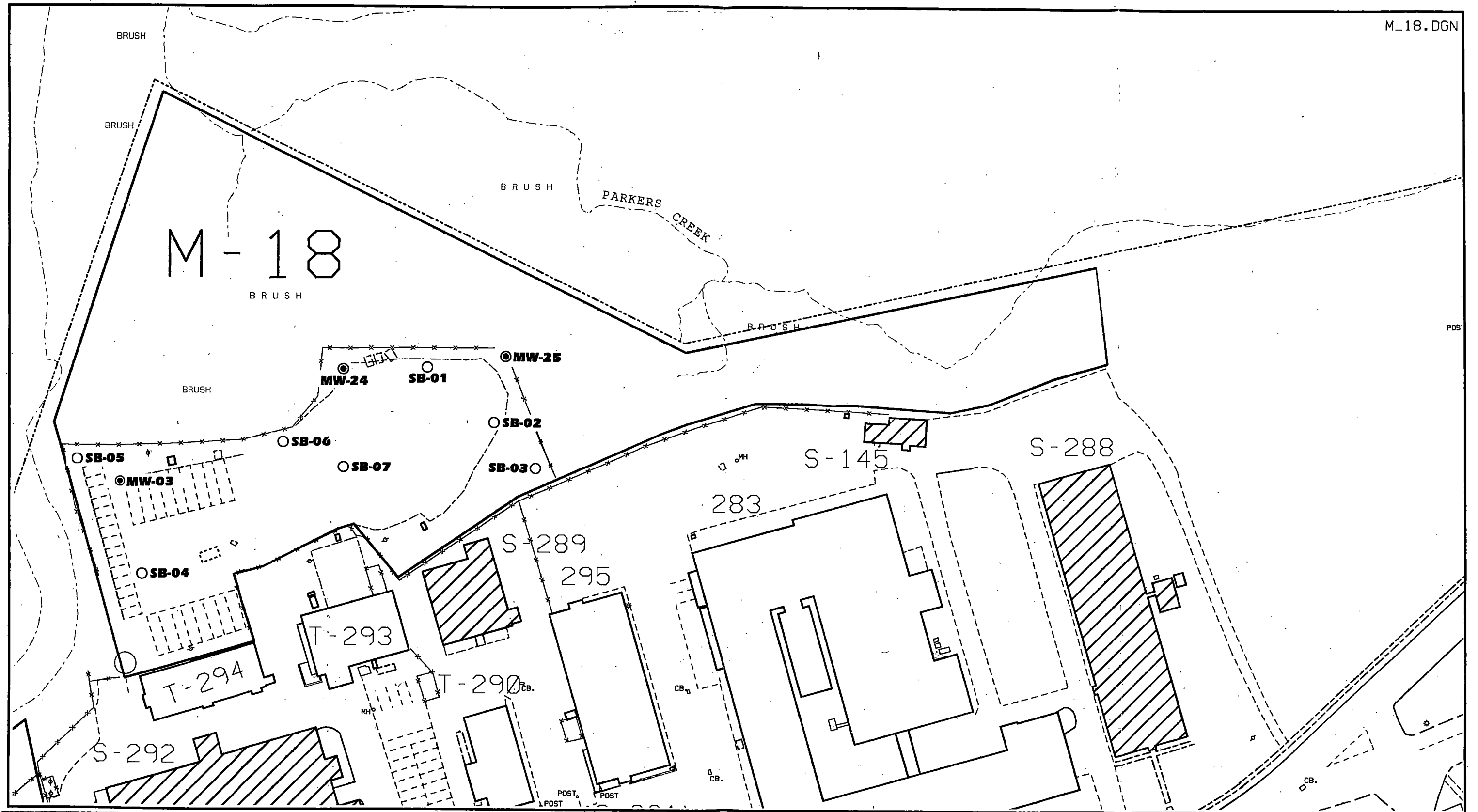
The groundwater sampling results indicate that 4,4-DDD was detected at a concentration just above the NJDEP GWQC in one well (MW-24) from both sampling rounds. Lead was detected in one location above NJDEP GWQC and background. TPH concentrations were also detected just above laboratory quantitation limits in MW-24 and MW-25 in both sampling rounds.

Trenching will be performed at the suspected UST or UST component location to confirm the geophysical results and to excavate if necessary. A PID will be used to conduct field screening during the excavation. The excavation will be performed in conjunction with confirmatory sampling, in accordance with the *Technical Requirements for Site Remediation* (NJDEP, 1993), if a UST is encountered to ensure that NJDEP SCC are achieved. NJDEP will be requested to send a representative to observe the excavation.



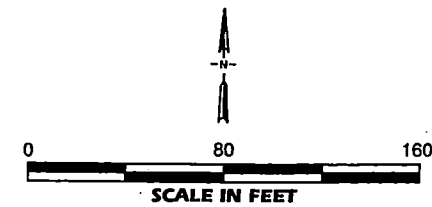
Additionally, soil at soil boring SB-06 will be excavated. If it is determined that the suspected UST is the source of contamination at SB-06, this location will be remediated in conjunction with the UST. Confirmatory sampling will also be conducted.

DPW proposes that a long-term groundwater monitoring program be developed and implemented for the site. Aqueous samples would be collected and analyzed on a quarterly basis to further evaluate water quality conditions at the site. Groundwater samples would be collected from existing monitor wells. Compounds of concern identified in the first two rounds of sampling would be targeted for the monitoring program.



**LEGEND**

- |                                             |                             |                |                            |
|---------------------------------------------|-----------------------------|----------------|----------------------------|
| ○ Soil Boring                               | — Road (paved)              | Wooded Area    | Site                       |
| ⊙ Soil Boring/Monitor Well                  | - - - Road/Trails (unpaved) | Tree/Bush      | - - - Brook/Creek          |
| - - - Approximate Location of Suspected UST | *** Fence                   | * Light Pole   | - - - Base Boundary        |
|                                             | □ Building                  | ⊕ Utility Pole | Marshy Area                |
|                                             |                             |                | - - - Approximate Boundary |



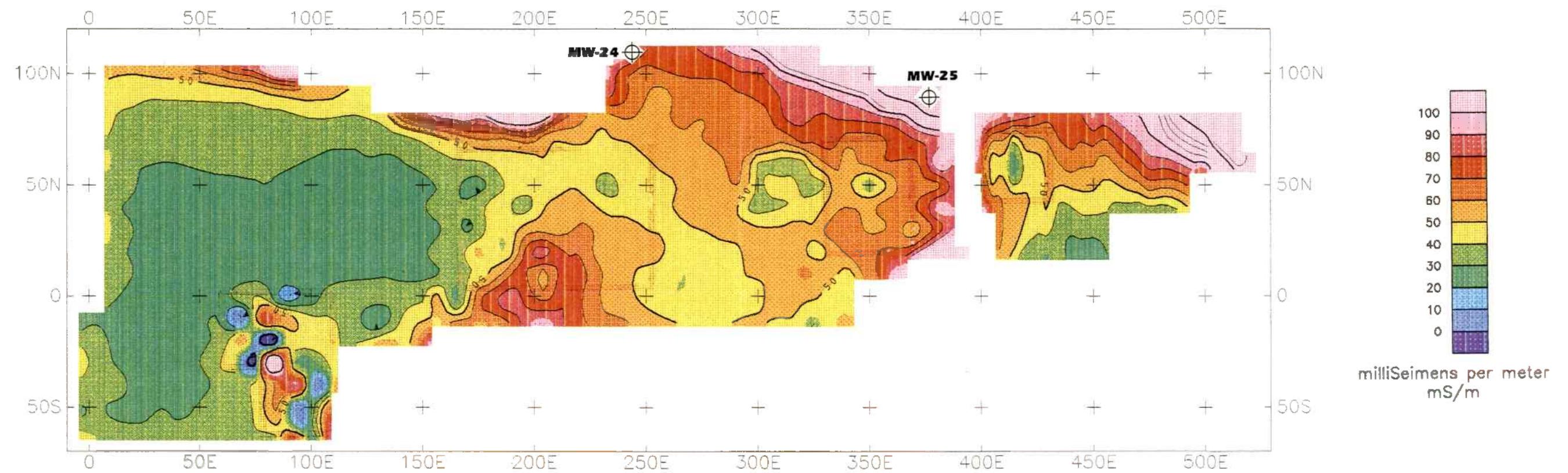
**Fort Monmouth, Main Post**

**FIGURE 4.2-28  
FORMER TRAINING AREA (M-18)  
SAMPLING LOCATIONS**

95P-3188

6/23/95





LEGEND

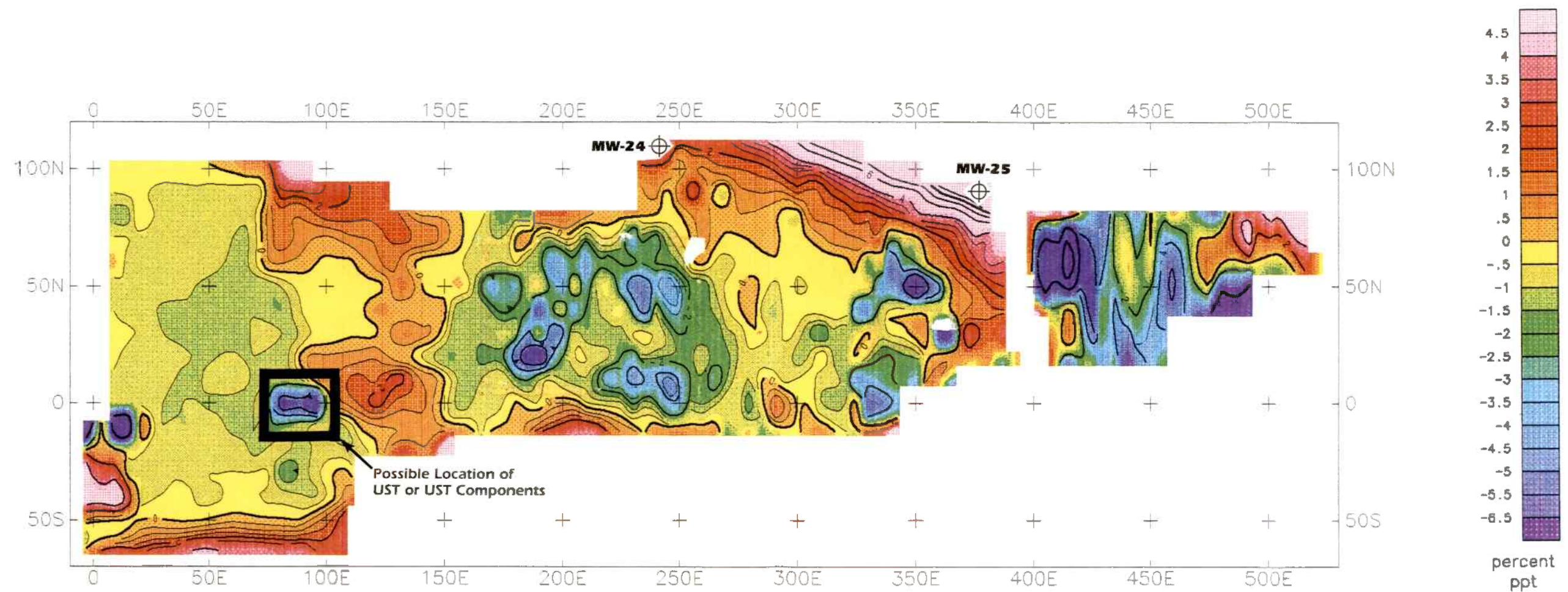


Monitor Well

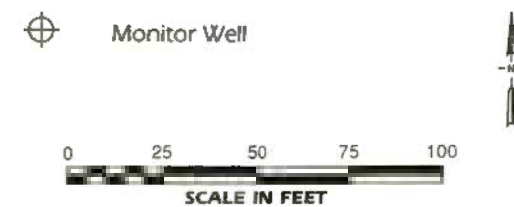


Fort Monmouth, Main Post Site M-18

**FIGURE 4.2-29**  
**ELECTROMAGNETIC SURVEY**  
**QUADRATURE COMPONENT - SITE M-18**



**LEGEND**

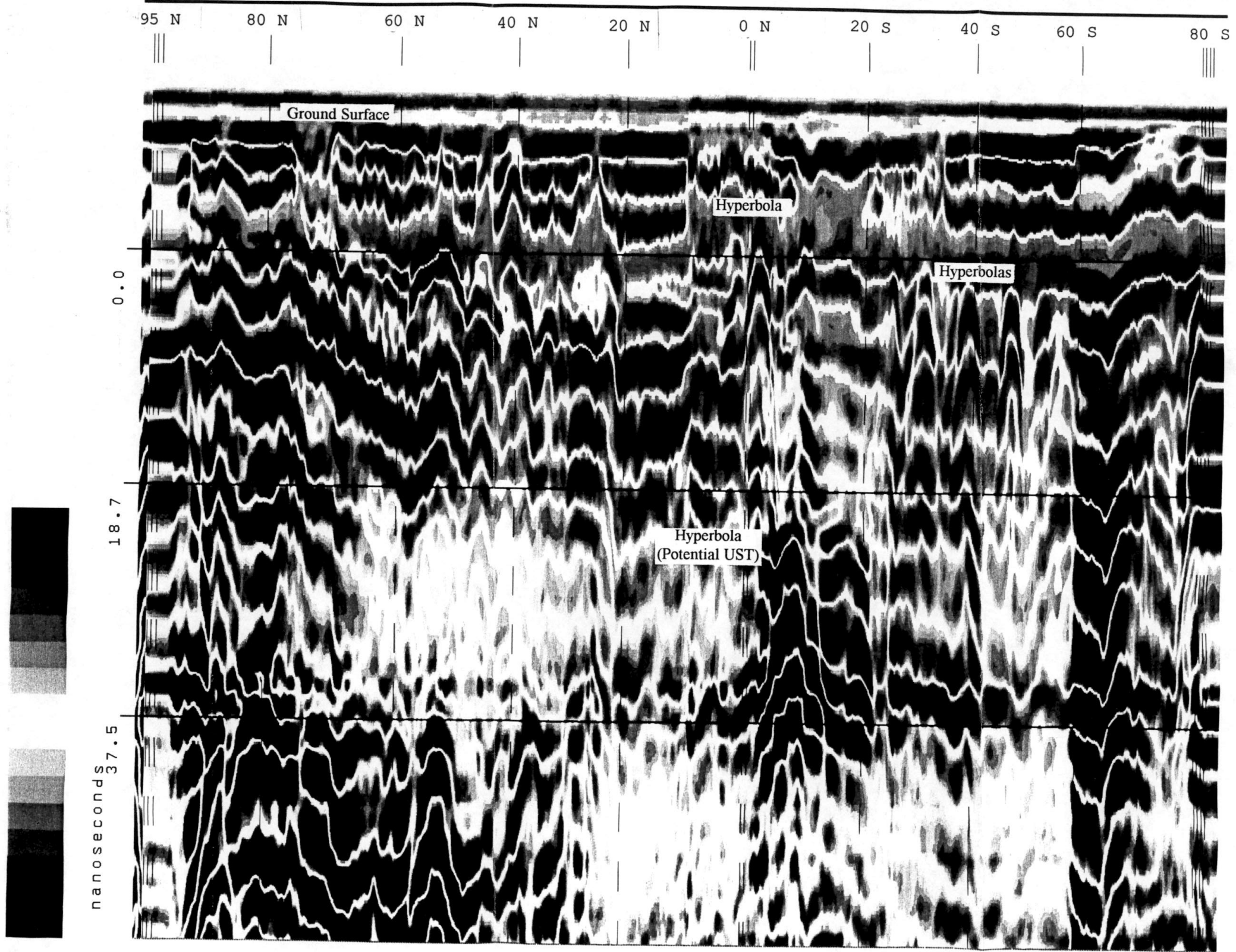


**Fort Monmouth, Main Post Site M-18**

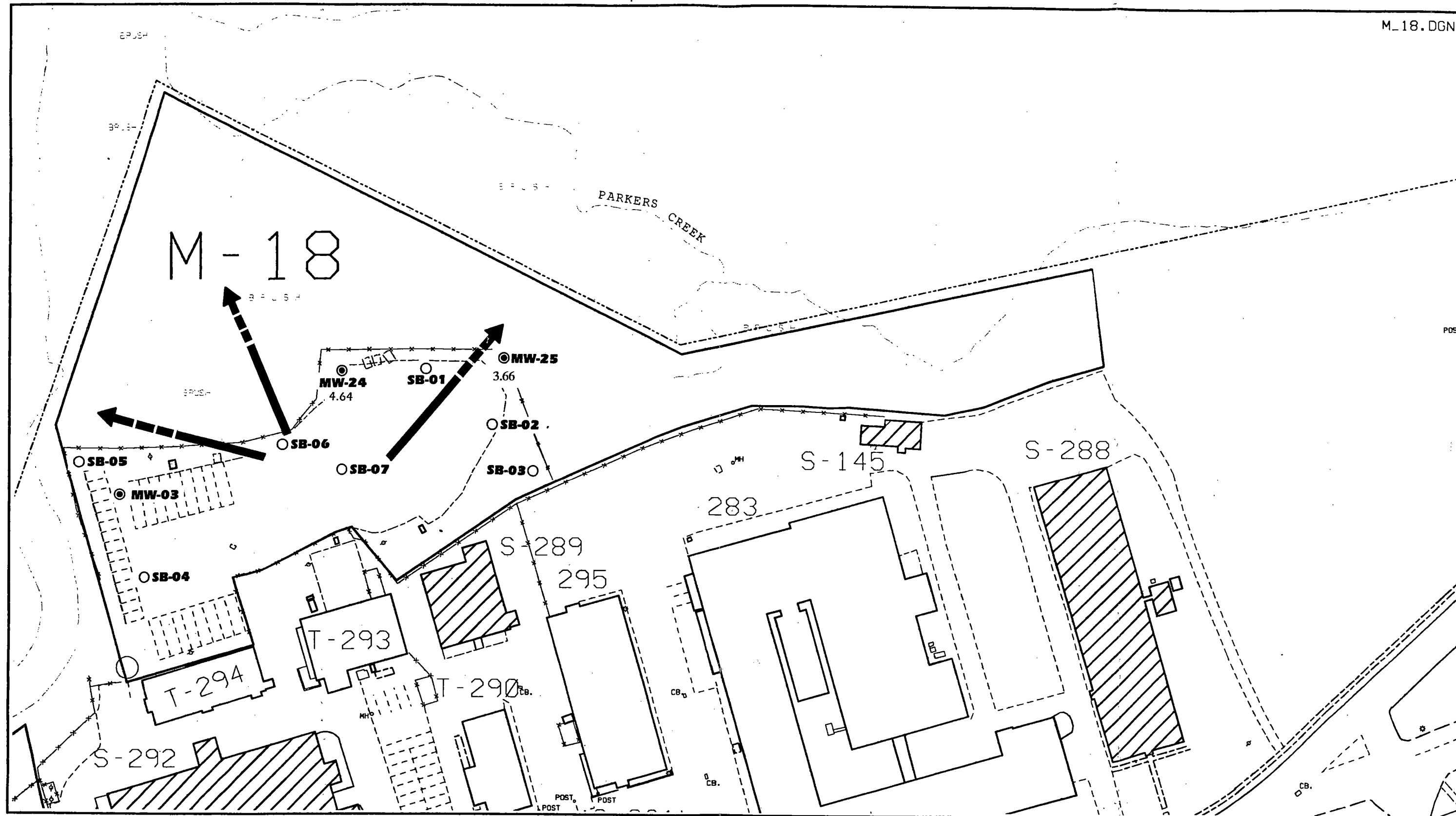
**FIGURE 4.2-30  
ELECTROMAGNETIC SURVEY  
IN PHASE COMPONENT - SITE M-18**



File 39 FILE39 Created November 30, 1994 17:06:26  
 512 samples/scan 25.004 scans/sec  
 Position: -6 NS range: 75 NS 8 Bits  
 Dielectric Constant: 0 Antenna: 3102  
 Range Gain 4 9 25 44 51  
 Vert. IIR low Pass N=2 F=38  
 Vert. IIR high Pass N=2 F=8  
 Horiz. IIR stacking TC=4  
 Ft. Monmouth NJ  
 Main Post Site M18  
 Line 100E, Marks at 20' intervals  
 Start: 95N End: 80S  
 Gray Scale Table #4 Gray Scale Transform #1 Contrast 7: 0%



**FIGURE 4.2-30A RADAR PROFILE DEPICTING  
 POTENTIAL UST AT SITE M-18**



|               |                                                          |                             |                |                      |
|---------------|----------------------------------------------------------|-----------------------------|----------------|----------------------|
| <b>LEGEND</b> | ○ Soil Boring                                            | — Road (paved)              | Wooded Area    | Site                 |
|               | ● MW-24<br>4.64 Monitor Well<br>Water Elevation (FT/MSL) | - - - Road/Trails (unpaved) | Tree/Bush      | Brook/Creek          |
|               | → Groundwater Flow Direction<br>(Dashed where inferred)  | *** Fence                   | * Light Pole   | - - - Base Boundary  |
|               |                                                          | □ Building                  | ○ Utility Pole | Marshy Area          |
|               |                                                          |                             |                | Approximate Boundary |

95P-3188

SCALE IN FEET

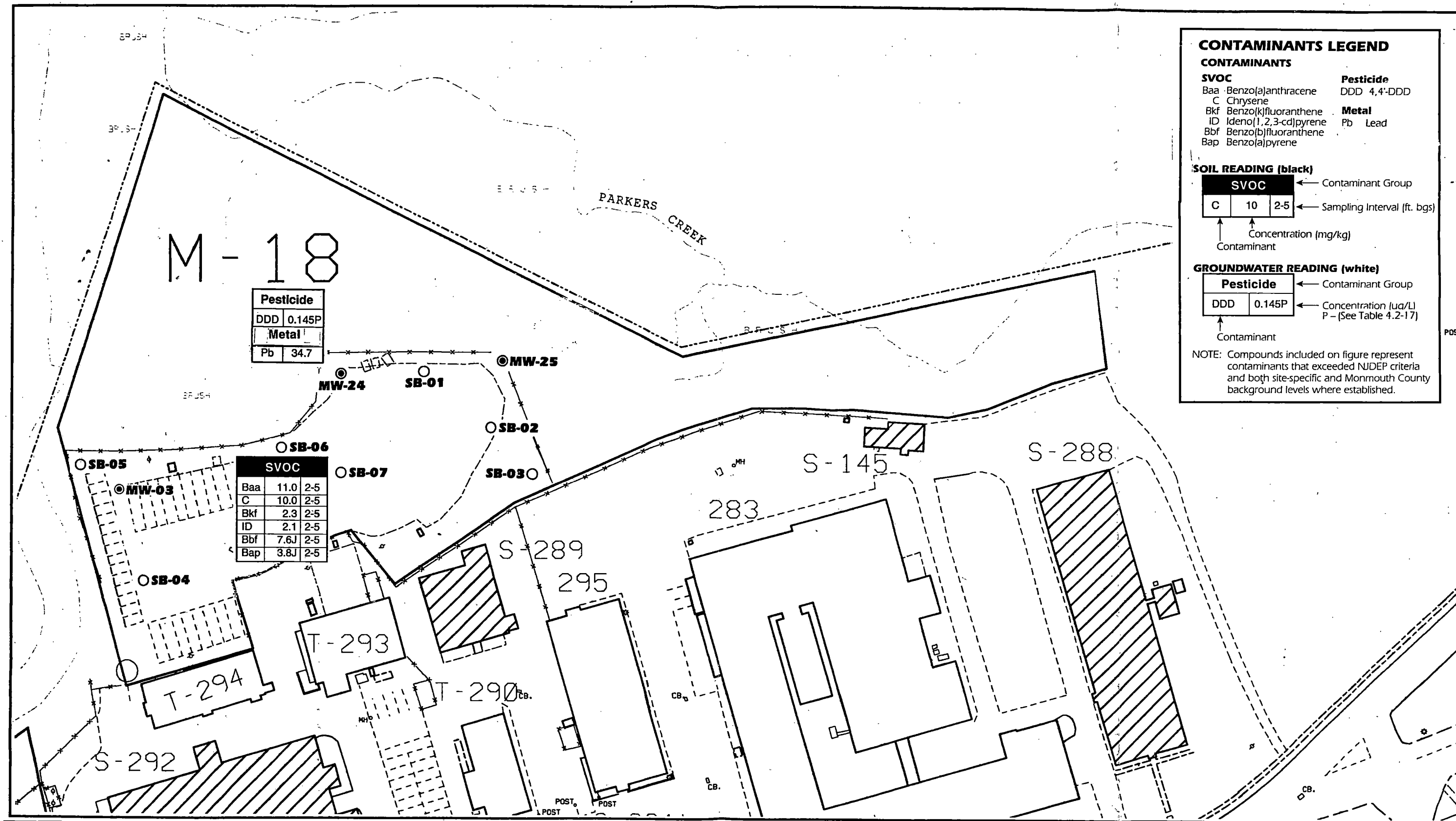
Fort Monmouth, Main Post

**FIGURE 4.2-31**

**FORMER TRAINING AREA (M-18)**

**APPROXIMATE GROUNDWATER FLOW DIRECTIONS**

(Groundwater Elevations Recorded from March 1995 Sampling Round)



**CONTAMINANTS LEGEND**

**CONTAMINANTS**

|                          |                  |
|--------------------------|------------------|
| <b>SVOC</b>              | <b>Pesticide</b> |
| Baa Benzo(a)anthracene   | DDD 4,4'-DDD     |
| C Chrysene               |                  |
| Bkf Benzo(k)fluoranthene | <b>Metal</b>     |
| ID Ideno(1,2,3-cd)pyrene | Pb Lead          |
| Bbf Benzo(b)fluoranthene |                  |
| Bap Benzo(a)pyrene       |                  |

**SOIL READING (black)**

| SVOC |    |     |
|------|----|-----|
| C    | 10 | 2-5 |

← Contaminant Group  
← Sampling Interval (ft. bgs)  
↑ Concentration (mg/kg)  
↑ Contaminant

**GROUNDWATER READING (white)**

| Pesticide |        |
|-----------|--------|
| DDD       | 0.145P |

← Contaminant Group  
← Concentration (ua/L)  
P - (See Table 4.2-17)  
↑ Contaminant

NOTE: Compounds included on figure represent contaminants that exceeded NJDEP criteria and both site-specific and Monmouth County background levels where established.

**LEGEND**

|                            |                         |                        |
|----------------------------|-------------------------|------------------------|
| ○ Soil Boring              | — Road (paved)          | ⌋ Site                 |
| ● Soil Boring/Monitor Well | ⋯ Road/Trails (unpaved) | ⋯ Brook/Creek          |
|                            | *** Fence               | ⋯ Base Boundary        |
|                            | □ Building              | ⌘ Marshy Area          |
|                            |                         | ⋯ Approximate Boundary |
|                            | ⌋ Wooded Area           |                        |
|                            | ⌘ Tree/Bush             |                        |
|                            | ⌘ Light Pole            |                        |
|                            | ⌘ Utility Pole          |                        |

Fort Monmouth, Main Post

**FIGURE 4.2-32**

**FORMER TRAINING AREA (M-18)**

**DISTRIBUTION OF CONTAMINANTS IN**

**SITE SOIL AND GROUNDWATER**

95P-3188

SCALE IN FEET

5/23/95

## Site AOC-3

#### **4.2.13 Former Main Post Sanitary Treatment Plant (AOC-3)**

##### **4.2.13.1 Site Location**

The former Sanitary Treatment Plant (STP, AOC-3) was located on Parkers Creek north of Sherrill Avenue, between Buildings S-292 to the east and S-697 to the west (Figure 4.2-33). The approximate area of site AOC-3 is 96,000 ft<sup>2</sup> (2.2 acres).

##### **4.2.13.2 Site History**

This site was identified by the NJDEP as an area of concern (AOC) in the 8 June 1990 letter. The Main Post STP was built in 1941 to handle 700,000 gallons of sewage per day. As described in the IA, this STP consisted of a bar screen and grit chamber, comminutor, primary and secondary settling tanks, a mixing and aeration tank, and a baffled contact chlorination tank. Effluent from the STP was discharged to Parkers Creek. Sludge was treated in a three-stage anaerobic digester and discharged to underdrained sandbeds for drying. According to the IA and DEH employees, sludge was transported to the Charles Wood golf course and to landfills. This STP was closed on 3 September 1975 when the Main Post sewer system was connected to the Northeast Monmouth County Regional Sewerage Authority (NMCRSA) system. In 1981, all sludges and supernatant liquids were removed from the STP and the facility was cleaned and disinfected. The removal contractor was Modern Transportation Co. of Kearny, New Jersey. The physical facility was demolished in 1983. At present, this area is flat and grass covered.

##### **4.2.13.3 Sampling Effort**

Sediments from one location in the Parkers Creek outfall area were analyzed for TCL +30 parameters, TAL metals, and cyanide. Two soil borings were completed in the area of the former sludge-drying beds to identify the original land surface and collect soil samples from an interval just below the original surface for TCL +30 parameters, TAL metals, and cyanide (Figure 4.2-33).

#### **4.2.13.4 Soil Sampling Results**

Borings were drilled to depths of 12 ft bgs (depth where saturation was encountered). Samples were collected from one sampling interval (6 to 9.5 ft bgs) and were analyzed for the parameters listed in Table 3.6-1. The analytical results for site soils at specific sampling intervals, with the corresponding sample identifications, are listed in Appendix D. Table 4.2-19 compares the compounds detected in site soils with the NJDEP Residential Direct Contact SCC, and then compares the results to the subsequent site-specific and Monmouth County maximum background concentrations, where appropriate. In addition, compounds were also compared to the impact to groundwater SCC because no monitor wells were installed at the site.

##### **VOCs**

VOCs were not detected in site soils from either boring location.

##### **SVOCs**

SVOCs were not detected above laboratory quantitation limits in site soils. SVOCs detected below laboratory quantitation limits were found in concentrations well below their respective criteria.

##### **Pesticides/PCBs**

Of the six pesticides detected in site soil, none were detected above the NJDEP SCC or the impact to groundwater SCC (Table 4.2-19).

One PCB (Aroclor-1248) was detected in SB-02 above the laboratory quantitation limit. However, Aroclor-1248 was found in a concentration below both the NJDEP residential direct contact and impact to groundwater SCC.



Table 4.2-19  
Fort Monmouth - Main Post  
Summary of Detected Compounds  
In Soils at Site AOC - 3

| COMPOUND                    | METHOD<br>DETECTION<br>LIMIT<br><br>(mg/kg) | RESIDENTIAL<br>DIRECT<br>CONTACT SOIL<br>CLEANUP CRITERIA<br>(mg/kg) | MAXIMUM<br>BACKGROUND<br>CONCENTRATION<br><br>(mg/kg) | ANALYTICAL RESULTS                    |                                        |
|-----------------------------|---------------------------------------------|----------------------------------------------------------------------|-------------------------------------------------------|---------------------------------------|----------------------------------------|
|                             |                                             |                                                                      |                                                       | SB01-A02<br>12/14/94<br>(6-9.5 ftbgs) | SB02-A02<br>12/14/94<br>(6-9.5 ft bgs) |
| SVOCs (mg/kg)               |                                             |                                                                      |                                                       |                                       |                                        |
| Phenanthrene                | 0.165                                       | NLE                                                                  | 0.39                                                  | 0.09 J                                | ND                                     |
| Fluoranthene                | 0.198                                       | 2300                                                                 | 0.46                                                  | 0.11 J                                | ND                                     |
| Pyrene                      | 0.178                                       | 1700                                                                 | 1.5                                                   | 0.15 J                                | ND                                     |
| Benzo(a)anthracene          | 0.162                                       | 0.9                                                                  | 0.65                                                  | 0.077 J                               | ND                                     |
| Chrysene                    | 0.145                                       | 9                                                                    | 0.65                                                  | 0.099 J                               | ND                                     |
| bis(2-Ethylhexyl)phthalate  | 0.32                                        | 49                                                                   | 0.19 J                                                | 0.057 J                               | 0.053 J                                |
| Benzo(b)fluoranthene        | 0.188                                       | 0.9                                                                  | 0.9                                                   | 0.077 J                               | ND                                     |
| Benzo(a)pyrene              | 0.162                                       | 0.66                                                                 | 0.6                                                   | 0.055 J                               | ND                                     |
| Indeno(1,2,3-cd)pyrene      | 0.234                                       | 0.9                                                                  | 0.46                                                  | 0.046 J                               | ND                                     |
| Benzo(g,h,i)perylene        | 0.224                                       | NLE                                                                  | 0.64 B                                                | 0.049 J                               | ND                                     |
| PESTICIDES AND PCBs (mg/kg) |                                             |                                                                      |                                                       |                                       |                                        |
| 4,4'-DDE                    | 0.0037                                      | 2                                                                    | 0.096 P                                               | 0.044                                 | 0.022                                  |
| 4,4'-DDD                    | 0.0037                                      | 3                                                                    | 0.096 P                                               | 0.024                                 | 0.016                                  |
| 4,4'-DDT                    | 0.0037                                      | 2                                                                    | 0.11 D                                                | 0.035 P                               | 0.085                                  |
| alpha-Chlordane             | 0.0017                                      | NLE                                                                  | ND                                                    | ND                                    | 0.0052                                 |
| gamma-Chlordane             | 0.0017                                      | NLE                                                                  | ND                                                    | ND                                    | 0.0035 P                               |
| Aroclor-1248                | 0.036                                       | 0.49                                                                 | ND                                                    | ND                                    | 0.2 P                                  |
| METALS TOTAL (mg/kg)        |                                             |                                                                      |                                                       |                                       |                                        |
| Aluminum                    | 3.9                                         | NLE                                                                  | 15200                                                 | 3000                                  | 4020                                   |
| Arsenic                     | 0.35                                        | 20                                                                   | 22.9                                                  | 2.8                                   | 4.2                                    |
| Barium                      | 0.17                                        | 700                                                                  | 32.3                                                  | 14.4                                  | 12.5                                   |
| Beryllium                   | 0.10                                        | 1                                                                    | 2                                                     | 0.34                                  | 0.63                                   |
| Calcium                     | 2.2                                         | NLE                                                                  | 921                                                   | 310                                   | 226                                    |
| Cobalt                      | 0.86                                        | NLE                                                                  | 2.5                                                   | 0.72                                  | 1.5                                    |
| Chromium                    | 0.71                                        | 500                                                                  | 269                                                   | 39.9                                  | 61                                     |
| Copper                      | 2.2                                         | 600                                                                  | 8                                                     | 1.9                                   | 1.7                                    |
| Iron                        | 0.58                                        | NLE                                                                  | 55800                                                 | 15000                                 | 21700                                  |
| Lead                        | 0.40                                        | 400 <sup>2</sup>                                                     | 25.9 <sup>1</sup>                                     | 8.3                                   | 11.5                                   |
| Magnesium                   | 9.6                                         | NLE                                                                  | 7230                                                  | 690                                   | 1490                                   |
| Manganese                   | 0.18                                        | NLE                                                                  | 90.7                                                  | 13.8                                  | 15.6                                   |
| Nickel                      | 1.4                                         | 250                                                                  | 8.4                                                   | 1.9                                   | 3                                      |
| Potassium                   | (12.3-25.8)                                 | NLE                                                                  | 15400                                                 | 1760                                  | 4240                                   |
| Sodium                      | 3.8                                         | NLE                                                                  | 51.6                                                  | 17.4                                  | 18.6                                   |
| Selenium                    | 0.3                                         | 63                                                                   | 1.9                                                   | ND                                    | ND                                     |
| Vanadium                    | 0.53                                        | 370                                                                  | 94.1                                                  | 28                                    | 32.9                                   |
| Zinc                        | 0.41                                        | 1500                                                                 | 81.4                                                  | 19.1                                  | 30.8                                   |

Compounds exceeding NJDEP soil cleanup criteria are noted by bold numbers.

NLE - No Level Established

ND - Indicates that the compound was not detected at or below the quantification limits

J - Indicates that the concentration value was estimated due to detection at or near the detection limits

P - The percent difference between the results from two GC columns is greater than 25%, the lower of the two values is reported

D - Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis

ft bgs. - feet below ground surface.

Note: MDL's for metal analysis is actually the highest detection limit with potassium given as a range due to high variability.

<sup>1</sup> Monmouth County maximum background concentration.

<sup>2</sup> NJDEP criteria are referenced in the Site Remediation News, Winter 1995.

### Metals

As indicated in Table 4.2-19 all of the metals detected in site soil were found in concentrations below the NJDEP SCC.

### Cyanide

Cyanide was not detected in site soils from either soil boring.

#### **4.2.13.5 Sediment Sampling Results**

Sample location M8SD-1 appears to be tidally influenced, and based on conductivity results and field observations, was determined to be saltwater.

One sediment sample, M8SD-1, was collected at AOC-3 (Figure 4.2-33). Table 4.2-20 presents a comparison of detected sediment concentrations at sampling location M8SD-1 to marine/estuarine sediment criteria (Long et al., 1995), and maximum detected background concentrations.

### VOCs

2-Butanone was the only VOC detected above the laboratory quantitation limit in a site sediment sample. 2-Butanone is a common laboratory contaminant.

### SVOCs

Two SVOCs were detected below the laboratory quantitation limit in site sediment from location M8SD1.

### Pesticides/PCBs

Pesticides/PCBs were analyzed for but were not detected in the site sediment sample.

**Table 4.2-20**  
**Fort Monmouth - Main Post**  
**Summary of Detected Compounds in Sediment**  
**Site AOC-3**

| COMPOUND                     | METHOD<br>DETECTION<br>LIMIT<br><br>(mg/kg) | MARINE/ESTUARINE<br>BIOLOGICAL EFFECTS<br>LEVEL (ERL)*<br><br>(mg/kg) | MAXIMUM<br>DETECTED<br>BACKGROUND<br>CONCENTRATION | ANALYTICAL RESULTS |
|------------------------------|---------------------------------------------|-----------------------------------------------------------------------|----------------------------------------------------|--------------------|
|                              |                                             |                                                                       |                                                    | M8SD-1<br>12/1/94  |
| VOC's (mg/kg)                |                                             |                                                                       |                                                    |                    |
| 2-Butanone                   | 0.0041                                      | NLE                                                                   | 0.1                                                | 0.02               |
| SVOCs (mg/kg)                |                                             |                                                                       |                                                    |                    |
| Di-n-butylphthalate          | 0.215                                       | NLE                                                                   | 0.26 JB                                            | 0.68 J             |
| 2,2'-oxybis(1-Chloropropane) | 0.231                                       | NLE                                                                   | ND                                                 | 0.061 J            |
| PAHs (mg/kg)                 |                                             |                                                                       |                                                    |                    |
| Benzo(a)pyrene               | 0.162                                       | 0.43                                                                  | 1.2                                                | 0.079 J            |
| METALS TOTAL (mg/kg)         |                                             |                                                                       |                                                    |                    |
| Aluminum                     | 18.1                                        | NLE                                                                   | 9060                                               | 8830               |
| Arsenic                      | 2.5                                         | 8.2                                                                   | 14.5                                               | 13.2               |
| Barium                       | 1.4                                         | NLE                                                                   | 87.6                                               | 13                 |
| Beryllium                    | 1.0                                         | NLE                                                                   | 3.2                                                | 1.4                |
| Calcium                      | 8.1                                         | NLE                                                                   | 3180                                               | 1290               |
| Chromium                     | 4.3                                         | 81                                                                    | 88.1                                               | 74                 |
| Cobalt                       | 1.9                                         | NLE                                                                   | 119                                                | 5.5                |
| Copper                       | 1.6                                         | 34                                                                    | 48.4                                               | 3.1                |
| Iron                         | 3.2                                         | NLE                                                                   | 61900                                              | 40300              |
| Lead                         | 9.9                                         | 46.7                                                                  | 64.1                                               | 6.5                |
| Magnesium                    | 25.8                                        | NLE                                                                   | 3280                                               | 3670               |
| Manganese                    | 1.4                                         | NLE                                                                   | 70.2                                               | 51.7               |
| Nickel                       | 8.7                                         | 20.9                                                                  | 131                                                | 14                 |
| Potassium                    | 555                                         | NLE                                                                   | 10200                                              | 6640               |
| Selenium                     | 0.56                                        | NLE                                                                   | 1.7                                                | 0.42               |
| Sodium                       | 10.4                                        | NLE                                                                   | 189                                                | 3090               |
| Vanadium                     | 2.0                                         | NLE                                                                   | 49.1                                               | 39.3               |
| Zinc                         | 1.9                                         | 150                                                                   | 162                                                | 68.8               |

Compounds detected above NJDEP Sediment Guidance are noted by bold numbers.

\* - Value from Long et al. (1995).

ND - Compound was not detected at or above the quantification limit.

NLE - No Level Established

B - Compound was found in the sample and associated laboratory blank

J - Concentration was estimated due to detection at or below the quantification limit

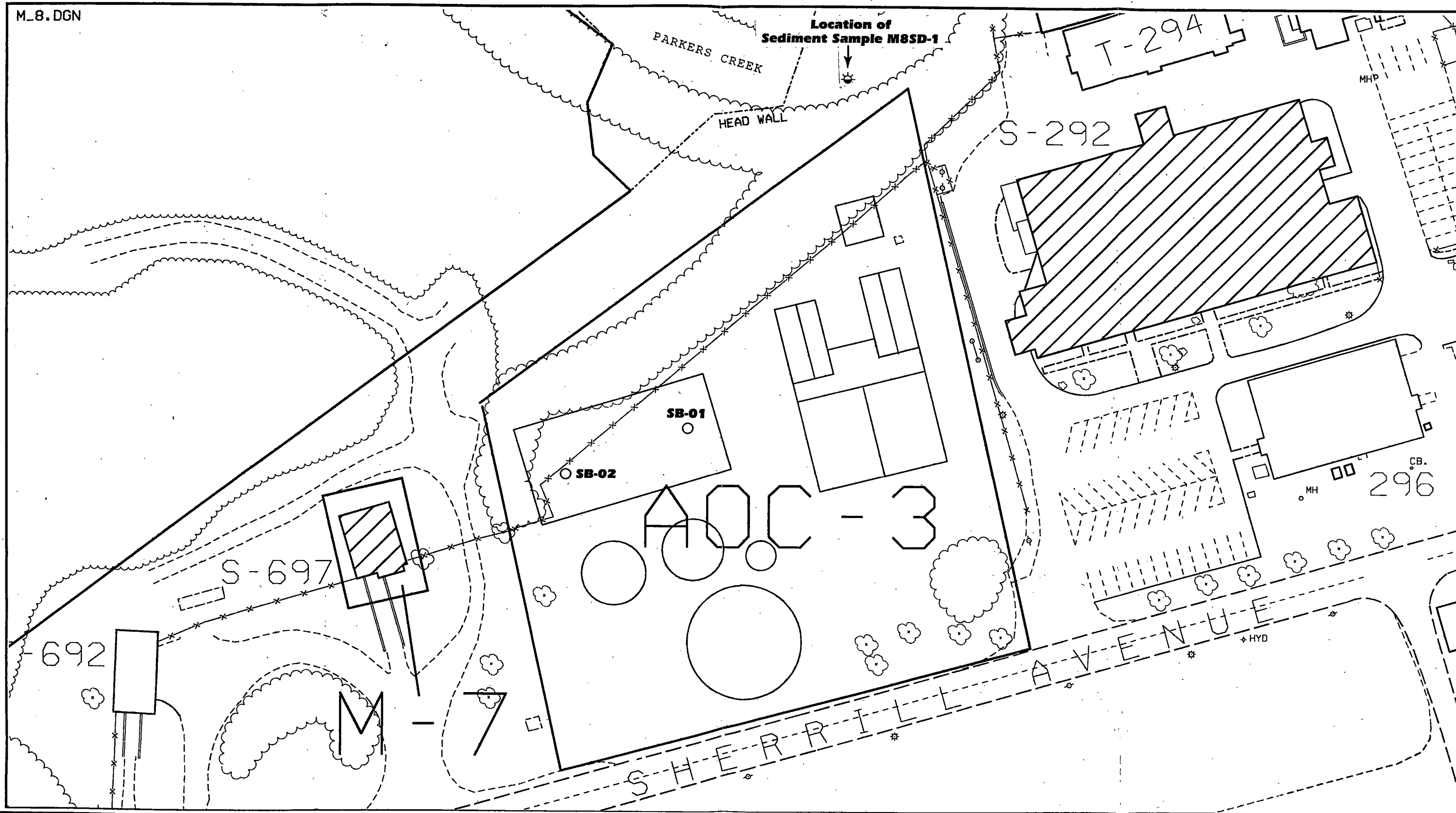
## Metals

As indicated in Table 4.2-20, of the 18 metals detected above laboratory quantitation limits, only one (arsenic) was found in a concentration slightly exceeding the established criteria. However, the concentration of arsenic was found at a level below the maximum detected background concentration.

### **4.2.13.6 Recommendations**

The results of the soil and sediment sampling indicated that compounds of concern were not detected above the NJDEP criteria and established background concentrations.

No further action will be taken.



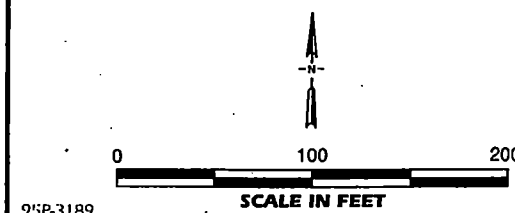
LEGEND

○ Soil Boring Location  
★ Sediment Sampling Location

— Road (paved)  
- - - Road/Trails (unpaved)  
\*\*\* Fence  
□ Building

~~~~~ Wooded Area  
☁ Tree/Bush
★ Light Pole
⊕ Utility Pole

▭ Site
- - - Brook/Creek
- - - Base Boundary
☁ Marshy Area
- - - Approximate Boundary



95P-3189

6/23/95

Fort Monmouth, Main Post

FIGURE 4.2-33
FORMER SANITARY TREATMENT PLANT (AOC-3)
SOIL AND SEDIMENT SAMPLING LOCATIONS

Former Sanitary Treatment Plant (STP)

4.2.14 Pre-1941 Sanitary Treatment Plant (STP)

4.2.14.1 Site Location

The pre-1941 STP for the Main Post was located on Parkers Creek in an area north of Allen Avenue in approximately the same location as current Building 259 (Figure 4.2-34). The approximate area of the STP is 130,000 ft² (2.9 acres).

4.2.14.2 Site History

This STP is shown on a 1935 Fort Monmouth map. The date of construction and period of operation are unknown, although the STP presumably operated until the Main Post STP (AOC-3) came on line in 1941.

4.2.14.3 Sampling Effort

The former STP is presented in Figure 4.2-34. Sediment coring was conducted at the former outfall and a sample was collected for TAL metals analysis.

4.2.14.4 Sediment Sample Results

Sediment at the STP was determined to be saltwater based on conductivity results and field observations. Therefore, detected concentrations of contaminants in the STP sediment were compared to marine/estuarine biological effects levels (Long et al., 1995) (Table 4.2-21).

One sediment sample, STPSD-1, was collected at the former STP (Figure 4.2-34).

Metals

As indicated in Table 4.2-21, of the 21 metals detected above laboratory quantitation limits, nine (arsenic, cadmium, chromium, copper, lead, mercury, nickel, silver, and zinc) were found in concentrations exceeding their respective established criteria. In addition, arsenic, cadmium,

Table 4.2-21
Fort Monmouth - Main Post
Summary of Detected Compounds in Sediments
Site - Pre-1941 Sanitary Treatment Plant

| COMPOUND | METHOD
DETECTION
LIMIT

(mg/kg) | MARINE/ESTUARINE
BIOLOGICAL EFFECTS
LEVEL (ERL)*

(mg/kg) | MAXIMUM
DETECTED
BACKGROUND
CONCENTRATION | ANALYTICAL RESULTS |
|----------------------|---|---|--|--------------------|
| | | | | STPSD-1
12/1/94 |
| METALS TOTAL (mg/kg) | | | | |
| Aluminum | 18.1 | NLE | 9060 | 9240 |
| Arsenic | 2.5 | 8.2 | 14.5 | 24.2 |
| Barium | 1.4 | NLE | 87.6 | 27.6 |
| Beryllium | 1.0 | NLE | 3.2 | 1.3 |
| Cadmium | 2.3 | 1.2 | ND | 4.2 |
| Calcium | 8.1 | NLE | 3180 | 1010 |
| Chromium | 4.3 | 81 | 88.1 | 93.5 |
| Cobalt | 1.9 | NLE | 119 | 13.5 |
| Copper | 1.6 | 34 | 48.4 | 35.2 |
| Iron | 3.2 | NLE | 61900 | 49200 |
| Lead | 9.9 | 46.7 | 64.1 | 59 |
| Magnesium | 25.8 | NLE | 3280 | 3390 |
| Manganese | 1.4 | NLE | 70.2 | 39.5 |
| Mercury | 0.32 | 0.15 | 1.7 | 0.57 |
| Nickel | 8.7 | 20.9 | 131 | 26.5 |
| Potassium | 555 | NLE | 10200 | 6760 |
| Selenium | 0.56 | NLE | 1.7 | 0.88 |
| Silver | 2.1 | 1 | ND | 5.2 |
| Sodium | 10.4 | NLE | 189 | 2330 |
| Vanadium | 2.0 | NLE | 49.1 | 49.5 |
| Zinc | 1.9 | 150 | 162 | 386 |

Compounds detected above NJDEP Sediment Guidance are noted by bold numbers.

* - Value from Long et al. (1995).

ND - Compound was not detected at or above the quantification limit.

NLE - No Level Established

chromium, and zinc were found in concentrations slightly exceeding their respective background concentrations. However, copper, lead, mercury, and nickel were found in concentrations below their respective maximum background levels.

4.2.14.5 Recommendations

Nine metals were detected above NJDEP criteria in the sediment sample collected at the outfall area. In addition, four metals (arsenic, cadmium, chromium, and zinc) exceeded their respective maximum background concentrations. The other five metals were detected below established background concentrations.

Although four metals were detected in sediment at levels exceeding NJDEP criteria and background, in the worst case the criteria were exceeded by a factor of three. Since the samples was taken at the outfall of the STP, the results are believed to be the worst case and the area of contamination is probably small. Access to this portion of Lafetra Creek is restricted although the stream is on the property boundary. The STP has not been used since 1941, and, presumably, the local ecology has reached an equilibrium. Therefore, since remediation would disrupt the ecology of the site, no further action will be taken.

PARKERS CREEK

CONTAMINANTS LEGEND

CONTAMINANTS

Metals

As Arsenic
Cd Cadmium
Cr Chromium
Zn Zinc

| Metal | Contaminant Group |
|---------|-----------------------|
| As 24.2 | Concentration (mg/kg) |

Contaminant

NOTE: Compounds included on figure represent contaminants that exceeded NJDEP criteria and both site-specific and established maximum background.

| Metal | Concentration (mg/kg) |
|-------|-----------------------|
| As | 24.2 |
| Cd | 4.2 |
| Cr | 93.5 |
| Zn | 386 |

Location of
Sediment Sample
STPSD-1

Pre-1941
STP

TENNIS
COURTS

LOCKWOOD AVENUE

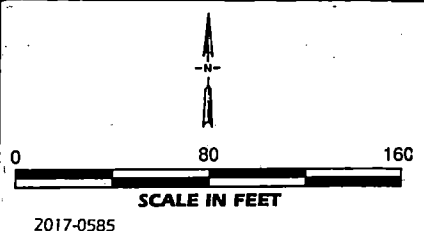
ALLEN AVENUE

CEL AVENUE

M_19.DGN

LEGEND

- Sediment Sampling Location
- Road (paved)
- Road/Trails (unpaved)
- Fence
- Building
- Wooded Area
- Tree/Bush
- Light Pole
- Utility Pole
- Site
- Brook/Creek
- Base Boundary
- Marshy Area



Fort Monmouth, Main Post
FIGURE 4.2-34
PRE-1941 SANITARY
TREATMENT PLANT
(Distribution of Contaminants
in Site Sediment)

Main Post PCB Transformers

4.2.15 PCB Transformers

4.2.15.1 Site Location

During the 1993 investigation (WESTON, 1993) all locations where PCB transformers had formerly been located were inspected for evidence of spills. Eight sites were identified where a PCB transformer was either formerly located over soil and thus evidence of a spill could not be determined visually, or was formerly located on concrete and there was discoloration in the concrete. These locations are listed in Table 3.5-1. Figure 4.2-35 presents the Main Post transformer site sample locations.

4.2.15.2 Site History

All PCB transformers (contain greater than 500 ppm PCBs) have been removed from Fort Monmouth. However, the former locations of these transformers were not previously investigated for spilled PCBs.

4.2.15.3 Sampling Effort

As discussed in Subsection 3.5, soil samples were taken below pole-mounted transformers and on four sides of an outdoor pad-mounted transformer. Concrete samples were taken from stained areas on outdoor concrete pads or in interior vaults with concrete floors. All samples were analyzed for PCBs.

4.2.15.4 PCB Sampling Results

The results of the PCB transformer sampling are presented in Table 4.2-22. Four of the eight transformers sampled at the Main Post area were found to have PCBs in soil or concrete above applicable cleanup criteria.

All other transformers sampled in the Main Post either had results below detection limits, or had detectable levels of PCBs below applicable cleanup criteria.

Table 4.2-22
Results of Transformer Site Sampling on Main Post

| Location
(Building No.) | Sample
ID | Method
Detection
Limit
(mg/kg) | Medium | NJDEP Cleanup
Criteria (mg/kg) | Total PCBs
(mg/kg) |
|----------------------------|--------------|---|----------|-----------------------------------|-----------------------|
| 292 | MPT5-TR01 | 0.24 | Soil | 0.49 | 0.68 |
| 686 | MPT6-TR01 | 0.045 | Soil | 0.49 | 0.18 |
| 718 | MPT4-TR01 | 0.051 | Soil | 0.49 | 0.06 |
| 1002 | MPT7-CC01 | 2000* | Concrete | 0.055 | 8400 |
| 1004 | MPT8-TR01 | 0.45 | Soil | 0.49 | ND |
| 1208 | MPT2-CC01 | 2000* | Concrete | 0.055 | 19000 |
| 1209 | MPT1-CC01 | 400* | Concrete | 0.055 | 1500 |
| 1220 | MPT3-TR01 | 0.045 | Soil | 0.49 | ND |
| 1220 | MPT3-TR02 | 0.041 | Soil | 0.49 | ND |
| 1220 | MPT3-TR03 | 0.047 | Soil | 0.49 | 0.06 |
| 1220 | MPT3-TR04 | 0.045 | Soil | 0.49 | 0.09 |
| 1220 | MPT3-CC01 | 0.04 | Concrete | 0.055 | ND |

Compounds exceeding NJDEP cleanup criteria are noted by bold numbers

ND - Indicates that the compound was not detected at the quantification limit.

* = Method detection limit unit exceeded the NJDEP criteria.

The following transformer sites had PCBs in soil or concrete above applicable cleanup standards:

- MP-062 (Building 292).
- Indoor transformer vault in Building 1002.
- Indoor transformer vault in Building 1208.
- Indoor transformer vault in Building 1209.

PCBs were detected in soils above applicable soil standards in the soil beneath transformer MP-062, which was a pole-mounted transformer on the northwest side of Building 292. The sample beneath the transformer contained PCBs above the NJDEP SCC.

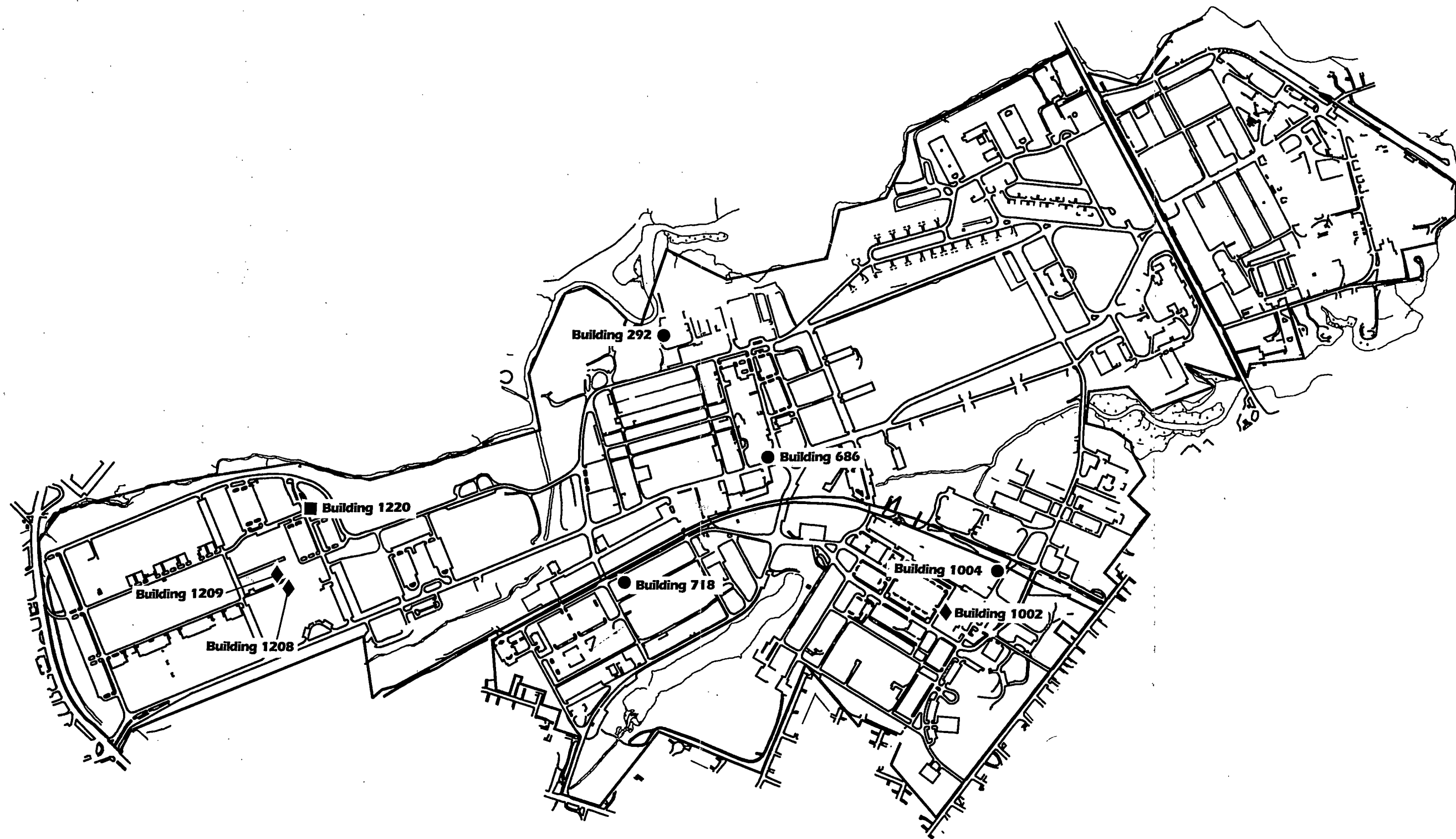
The concrete samples from visibly stained areas in the indoor transformer vaults in Buildings 1002, 1208, and 1209 each contained PCBs above the proposed indoor surface cleanup criteria of 0.055 mg/kg.

4.2.15.5 Recommendations

PCB levels in stained concrete were found to exceed NJDEP guidance levels in indoor vaults at Buildings 1002, 1208, and 1209. PCBs were also detected above applicable soil standards in the soil beneath transformer MP-062 on the northwest side of Building 292.

Since the indoor vaults are normally locked and are accessible by a very limited number of facility personnel, and the stained concrete cannot be removed without significantly disrupting electrical service, remedial work will be performed when the transformers are removed from service and the stained areas are made accessible. A warning sign will be posted, and workers entering the vaults will be trained to take precautions to prevent contamination.

Because the concentration of PCBs is only slightly above the SCC, additional sampling will be conducted beneath the former location of transformer MP-062 to determine the vertical and horizontal extent of PCBs in soil. The soil sampling will be performed in accordance with the NJDEP *Technical Requirements for Site Remediation* (NJDEP, 1993). Personal protective clothing will be worn accordingly.

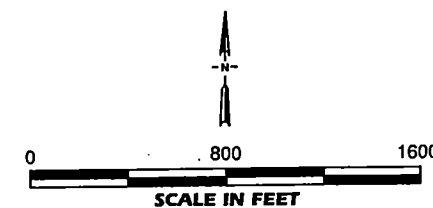


LEGEND

— Road (paved)
 □ Building

○ Lake
 ■ Marshy Area

● Pole
 ■ Pad
 ◆ Vault



2017-0593

6/30/95

Fort Monmouth, Main Post
FIGURE 4.2-35
MAIN POST TRANSFORMER SITE
SAMPLE LOCATIONS

Charles Wood Background Samples

4.3 CHARLES WOOD

This subsection presents a description of each Charles Wood site and presents the rationale for the sampling activities. The sites and the sampling effort are summarized in Table 4.3-1. Additional historical information on each site may be obtained from the *Investigation of Suspected Waste Sites at Fort Monmouth, New Jersey*, 1993.

The following subsections summarize the results of the sampling program that was implemented to characterize site conditions as specified in the report titled, *Site Investigation, Chemical Data Acquisition Plan (CDAP)*. Although the field investigation was generally conducted in accordance with the CDAP, minor changes were made. These changes are summarized in Table 4.3-2. A total of 19 soil borings and 16 monitor wells were installed and 3 sediment and 2 surface-water samples were collected in the Charles Wood area. Soil and groundwater samples were collected from the borings and monitor wells and were analyzed for compounds determined to be characteristic of the wastes associated with each area, i.e., TCL and TAL analytes (see Tables 3.6-1 and 3.8-1). Appendix D presents the results of the Charles Wood sampling activities. Detailed information regarding the specific sampling protocols for each site is provided in the following subsections. In addition to the results of groundwater and soil analyses, the lithologic descriptions and water-level information are used to provide a hydrogeologic interpretation of the site where appropriate.

Figure 4.3-1 shows the location of the nine Charles Wood sites discussed in this subsection.

4.3.1 Background Samples

The locations of background sampling locations were selected in areas believed to be unaffected by past base activities. They were identified in the report *The Investigation of Suspected Hazardous Waste Sites at Fort Monmouth, New Jersey* (WESTON, 1993), which was approved by NJDEP. The purpose of the collection of background characterization data was to identify levels of chemicals that are naturally occurring.

Table 4.3-1

Site Investigation Summary — Charles Wood

| Site Number | Site | Description | Potential Waste/Contaminants | Past Samples and Analyses | Investigation Activities |
|--------------------------|---------------------------------|---|--------------------------------|---|---|
| CHARLES WOOD AREA | | | | | |
| CW-1 | Wastewater treatment (lime pit) | 4-m ³ tank containing limestone for neutralizing liquid waste from Bldg. 2700. Sludge removal periodically. Acid/base drains not currently used. Pit discharge to sewage system. Limestone was replaced in 1992; contractor took limestone off-site. Built with bldg. around 1952. | Solvents and metals. | Analyzed old limestone. Sludge analyzed; found organics and metals. | Installed 4 soil boring/monitor wells, 1 on each side of pit. Collected soil samples (2 to 3 per boring) from 7 to 9 ft. Analyzed for TCL +30/TAL. Sampled groundwater for same parameters. |
| CW-2 | Wastewater treatment (lime pit) | Same as CW-1. | Solvents and metals. | Analyzed old limestone. | Same as CW-1. |
| CW-3, AOC-4 | Landfill | Operated during 1940s. Site identified in IA now used for storage of contractor equipment and debris. Site was cleared in mid-1995. | Administrative waste and wood. | None. | Work postponed. Trenching is planned to evaluate subsurface conditions. |
| CW-3A | Landfill | Site in west was used for leaves and small debris, and by off-site dumpers. 1969 aerial photo shows disturbed soil at west site. One partially buried drum found. May have been used for demolition debris. | Unknown. | None. | Used geophysics (magnetics, EM-31, and GPR) to evaluate possible subsurface disposal near Pulse Power Building. |
| CW-4 | Range (small arms) | Bldg. 2537. Indoor range. Cleaned and repainted in 1989. Has metal and sand bullet trap and filtered ventilation system. 3-ft diameter bare area to north of building with spent shells and bullet debris. Appears to be clean sand in back of building. | Lead. | None. | Collected 2 soil samples: 1 soil boring and 1 surface soil. Analyzed for TCL +30/TAL/TPH. |
| CW-5, AOC-3 | Heavy metals | Former treatment plant. Discharged to stream. Sludge removed from sludge drying bed and plant cleaned, disinfected, and dismantled. | Heavy metals and cyanide. | Sludge analyzed in 1981 — no heavy metals. | Sampled sludge (see CW-9) for metals. Installed 2 soil borings in area of sludge drying beds. Sampled sediment at outfall. Analyzed for TCL +30/TAL/CN. |

4.3-2

WESTON
ANALYTICAL
LABORATORY

Table 4.3-1

**Site Investigation Summary — Charles Wood
(Continued)**

| Site Number | Site | Description | Potential Waste/
Contaminants | Past Samples
and Analyses | Investigation Activities |
|------------------|-------------------------------------|--|----------------------------------|---|--|
| CW-6 | Pesticide Storage Building T-2044 | Pesticides no longer stored in CW area. Use pesticide contractor. Pesticides were stored in steel igloo on concrete base. Was mixed outside of igloo and Bldg. T-2044. | Pesticides and herbicides. | Soil sampled in 1989 for pesticides. High levels of chlordane (up to 595 mg/kg) and trace amounts of others detected. | 2 soil borings and installation of MW by Bldg. T-2044. Sampled soil, new well, and existing well MW-1 for TCL +30. Surface soil sample by ditch (TCL +30/TAL). |
| CW-9, AOC-3 | Sludge dump | Sludge was placed on golf course. Sludge temporarily stored south of Bldg. T-2044. Currently has dark gray soil that had been removed near Hole 1. | Heavy metals. | None. | Installed 2 MWs for TCL +30/TAL. 9 surface soil samples for TAL, 1 soil boring for TCL +30/TAL. |
| AOC-7 | Former hazardous waste storage area | Bldg. 2500 area. Has been used as storage area since 1961. Used as temporary hazardous waste storage area in 1987. Security guard overcome by fumes in 1987. Currently open field, no evidence of contamination. | Solvents, oil, and metals. | None. | Installed 6 soil borings. Analyzed for TCL +30. |
| PCB Transformers | Buildings | Several transformers in this area. All transformers were tested in 1990 for PCBs. Those with PCBs > 500 ppm were removed or remediated. | PCBs. | Transformers sampled — several >500 ppm. See transformer list. | Sampled PCB transformer locations. |

4.3-3

WESTON
ENGINEERS
DESIGN/CONSULTANTS

Table 4.3-2

Differences Between Proposed and Actual Work at Charles Wood

| Site | Differences |
|------------|---|
| CW-1, CW-2 | In accordance with work plan, only one sample was taken per soil boring instead of three because no contamination was detected during field efforts. |
| CW-3 | Site had not been cleared prior to field effort; therefore, no investigation was conducted. |
| CW-4 | Because contaminated soil had not been excavated prior to the field effort, one soil boring was installed instead of three surface soil samples. |
| CW-6, CW-9 | The location of the monitor well was moved from site CW-6 to CW-9 because there was an existing well near the proposed location at CW-6. The existing monitor well at CW-6 was sampled. Surface soil sample SS-01 was analyzed for TAL metals, which was not originally proposed in the CDAP. |

A total of five background soil borings, which were converted into monitor wells, were installed and two separate soil intervals were sampled from each boring. Two rounds of groundwater samples were collected from each location. Soil and groundwater samples were analyzed for the parameters listed in Tables 3.6-1 and 3.8-1. Background monitor wells were labeled as "B" wells, i.e., MW-06B. Charles Wood background locations are shown in Figure 4.3-2 and are labeled B-6, B-7, etc. Monitor well MW-06B was installed at background location B-6 and a similar practice was followed at the other background locations. Two background surface-water and sediment samples were also collected (Figure 4.3-2).

4.3.1.1 Hydrogeologic Interpretation

The five background monitor wells installed at the Charles Wood area were installed to depths ranging from 14 ft bgs to 15 ft bgs. Total depths were determined during drilling activities and were based on the depth where groundwater was encountered. The lithology and depth to groundwater varied between background locations, and this information is presented on the lithologic logs in Appendix A.

4.3.1.2 Soil Sampling Results

Soil samples were collected from two discrete intervals: 0 to 2 ft bgs and 2 ft bgs to depth to groundwater. Soil boring depths varied between the background locations, depending on the depth where water was encountered. The analytical results for background soil at specific sampling intervals are presented in Appendix D. Table 4.1-7 summarizes the maximum concentrations detected in background soil at Charles Wood.

VOCs

VOCs were not detected in Charles Wood background soil.

SVOCs

A total 10 SVOCs were detected below laboratory quantitation limits in background soil at the Charles Wood area (Table 4.1-7).

Pesticides/PCBs

Two pesticides (4,4'-DDE and 4,4'-DDT) were detected above the laboratory quantitation limit in background soil at the Charles Wood area.

Metals

As indicated in Table 4.1-7, 19 metals were detected in background soil at the Charles Wood area.

Cyanide

Cyanide was not detected in background soil at the Charles Wood area.

4.3.1.3 Groundwater Sampling Results

Two rounds of groundwater sampling were conducted at Charles Wood. The analytical results for groundwater samples from the individual sampling rounds are listed in Appendix D. Table 4.1-7 summarizes the maximum background concentrations detected in background water at Charles Wood.

VOCs

VOCs were not detected in Charles Wood background groundwater.

SVOCs

Two SVOCs were detected in background groundwater at Charles Wood (Table 4.1-7).

Pesticides/PCBs

Pesticides/PCBs were not detected in background groundwater at Charles Wood.

Metals

As indicated in Table 4.1-7, 19 total metals were detected in background groundwater at Charles Wood.

4.3.1.4 Surface-Water Sampling Results

Two upgradient surface-water samples, SS-B3 and SS-B4, were selected as background at Charles Wood (Figure 4.3-2). Contaminants detected in background surface water and corresponding sample identifications are presented in Appendix D. Table 4.1-9 summarizes the maximum detected concentrations in total and soluble background surface water at Charles Wood.

VOCs

VOCs were not detected in total background surface water. Soluble background surface-water samples at Charles Wood were analyzed for VOCs.

SVOCs

One SVOC, bis(2-ethylhexyl) phthalate, was detected below laboratory quantitation limits in background surface water (total) at Charles Wood. SVOCs were not analyzed for in soluble background surface-water samples at Charles Wood.

Metals

In total background surface water, 13 metals were detected above laboratory quantitation limits at Charles Wood. Similarly, 11 metals in soluble background surface water were detected above laboratory quantitation limits.

4.3.1.5 Sediment Sampling Results

Two upgradient sediment samples, SS-B3 and SS-B4, were selected as background at Charles Wood (Figure 4.3-2). Contaminants detected in background sediment and corresponding sample identifications are presented in Appendix D. Table 4.1-9 summarizes the maximum detected concentrations in background sediment at Charles Wood.

VOCs

VOCs were not detected in background sediment at Charles Wood.

SVOCs

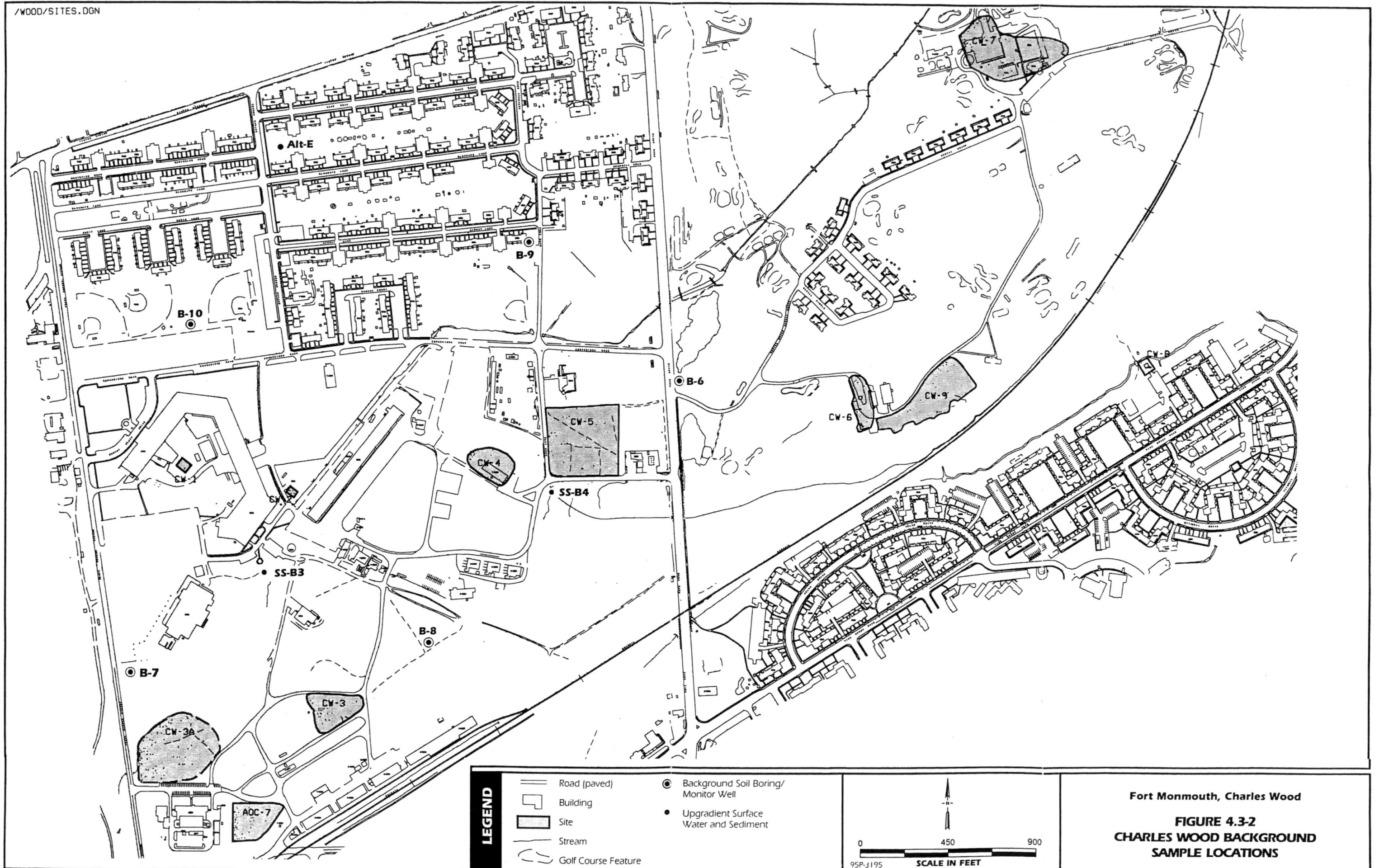
Bis(2-ethylhexyl) phthalate and di-n-butyl phthalate were detected below the laboratory quantitation limits in Charles Wood sediment. Six PAHs were detected below laboratory quantitation limits in Charles Wood sediment.

Pesticides

Three pesticides (4,4'-DDD, 4,4'-DDE, and 4,4'-DDT) were detected in Charles Wood background sediment.

Metals

A total of 17 metals were detected in background sediment at Charles Wood above laboratory quantitation limits.



Site CW-1

4.3.2 Wastewater Treatment Lime Pit 1 (CW-1)

4.3.2.1 Site Location

Wastewater Treatment Lime Pit 1 (CW-1) is located in the central area of the Hexagon Building (Building 2,700) at Charles Wood just east of the west wing of the building (Figure 4.3-3). The approximate area of CW-1 is 2,960 ft² (0.07 acre).

4.3.2.2 Site History

This lime pit (CW-1) was built concurrently with the Hexagon Building; construction was completed in 1952. This is one of two 4-cubic-meter (m³) acid neutralization pits that contain limestone chips; the other pit (CW-2) is discussed in Subsection 4.3.3. Liquid wastes from the north and west wings of the Hexagon Building passed through this pit before being discharged to the sanitary sewer. Chemical wastes of up to 150 m³ per day were generated from the shops and laboratories of the Hexagon Building; this waste output was reduced to 115 m³ per day in June 1978 (USATHAMA, 1980). According to the IA, a licensed waste hauler was hired to dispose of concentrated wastes, such as etching solutions and organic solvents.

Each neutralization pit has a concrete floor and concrete block and mortar walls, and measures 7 ft by 13 ft wide by 8 ft high. The cover is constructed of concrete with a steel access panel. Several wooden baffles divide the pit into sections.

In October 1992, the pit was cleaned out, inspected, and the limestone chips replaced. A vacuum truck was used to remove the sludge and stones from the pit, after which the pit was rinsed with water. All sludge, stones, and rinse water were placed in drums and disposed of as a hazardous waste. At present, laboratory wastes are managed under the installation hazardous waste program, which forbids the discharge of these wastes to the sewer.

4.3.2.3 Sampling Effort

The elevated concentrations of halogenated hydrocarbons (HHCs) found in samples collected during the 1992 cleanout indicates the possibility that solvents were discharged into the lime pits. Neither concrete nor concrete block is an effective barrier to the migration of halogenated solvents. Halogenated solvents may have migrated from the lime pit into surrounding soils and possibly into groundwater. To investigate this potential, a monitor well was proposed for construction on each side of the lime pit (MW-26 through MW-29, shown in Figure 4.3-3); however, the proposed monitor well locations were slightly adjusted to avoid the buried conduit and underground water and acid lines. The wells were positioned accordingly to investigate the potential of halogenated solvent migration from the lime pit into the surrounding soil and groundwater. Continuous split-spoon samples were screened with an HNu or OVM. According to the CDAP, if any VOCs were detected, soil samples were to be collected from 7 to 9 ft bgs, from the interval with the highest instrument readings, and from just above the water table; otherwise, one sample was to be collected from 7 to 9 ft bgs from each boring. Because no elevated OVM readings were recorded, soil samples were collected from the 7 to 9 ft bgs interval only. Soil samples were analyzed for TCL +30 parameters and TAL metals. Two rounds of groundwater sampling were conducted from each well and analyzed for TCL +30 parameters and TAL metals.

4.3.2.4 Hydrogeologic Interpretation

Lithologic logs from monitor well locations MW-26 through MW-29 indicate that the lithology consists of a thin soil cover (0.3 ft) underlain by a well sorted olive-orange-brown medium-coarse-grained quartz sand.

Groundwater saturation was observed at approximately 7.5 ft bgs at all well locations. The four monitor wells were screened across the water table and were completed to 15 ft bgs at each location. Water-level elevation data, measured on 6 March 1995, prior to the March 1995 sampling round, indicate that the local groundwater flow direction is northeast, toward the Hexagon Research and Development Building. Based on groundwater elevation measurements,

monitor wells MW-28 and MW-29 are downgradient of the area under investigation (Figure 4.3-4).

4.3.2.5 Soil Sampling Results

Four soil samples, one in each monitor well borehole, were collected between 7 and 9 ft bgs and were analyzed for the parameters listed in Table 3.6-1. The analytical results for site soils, with the corresponding sample identifications, are listed in Appendix D. Table 4.3-3 compares the detected compounds with the NJDEP SCC, and then compares the results with the subsequent site-specific and Monmouth County maximum background limits.

VOCs

VOCs were not detected in site soil.

SVOCs

One SVOC (di-n-butyl phthalate) was detected above laboratory quantitation limits in site soil. However, the concentration of this compound was less than the NJDEP SCC and the maximum site-specific background.

Pesticides/PCBs

Pesticides were not detected above laboratory quantitation limits in site soil. PCBs were not detected in site soil.

Metals

As indicated in Table 4.3-4, all of the metals detected in site soil were found in concentrations below the NJDEP SCC, where established.

Table 4.3-3
Fort Monmouth - Charles Wood
Summary of Detected Compounds
In Soils at Site CW-1

| COMPOUND | METHOD
DETECTION
LIMIT
(mg/kg) | RESIDENTIAL
DIRECT CONTACT
SOIL CLEANUP
CRITERIA
(mg/kg) | MAXIMUM
BACKGROUND
CONCENTRATION
(mg/kg) | ANALYTICAL RESULTS | | | |
|----------------------------|---|--|---|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|
| | | | | SB26-A02
12/19/94
(7-9 ft bgs) | SB27-A02
12/19/94
(7-9 ft bgs) | SB28-A02
12/19/94
(7-9 ft bgs) | SB29-A02
12/19/94
(7-9 ft bgs) |
| SVOC's (mg/kg) | | | | | | | |
| Benzo(b)fluoranthene | 0.188 | 0.9 | 0.078 J | ND | ND | ND | 0.070 J |
| Benzo(a)pyrene | 0.162 | 0.66 | ND | ND | ND | ND | 0.073 J |
| bis(2-Ethylhexyl)phthalate | 0.32 | 49 | 0.17 J | 0.075 J | 0.090 J | ND | ND |
| Di-n-butylphthalate | 0.215 | 5700 | 2.0 B | 0.081 | 0.086 | 0.077 | 0.130 |
| PESTICIDES/PCBs (mg/kg) | | | | | | | |
| 4,4'-DDE | 0.0037 | 2 | 0.071 | 0.0038 J | ND | ND | ND |
| METALS TOTAL (mg/kg) | | | | | | | |
| Aluminum | 3.9 | NLE | 15700 | 4070 | 5120 | 4850 | 4010 |
| Arsenic | 0.35 | 20 | 31.6 | 4.1 | 4.5 | 5.6 | 2.2 |
| Barium | 0.17 | 700 | 26 | 3.4 | 4.4 | 4.2 | 2.7 |
| Beryllium | 0.10 | 1 | 1.7 | 0.41 | 0.45 | 0.84 | 0.33 |
| Calcium | 2.2 | NLE | 653 | 236 | 283 | 229 | 669 |
| Cobalt | 0.71 | NLE | 4.5 | ND | 0.73 | 0.86 | ND |
| Chromium | 1.6 | 500 | 128 | 52.2 | 71.7 | 59.7 | 46.4 |
| Copper | 2.2 | 600 | 7.27 ¹ | 1.8 | 2 | 1.1 | 1.2 |
| Iron | 0.58 | NLE | 45500 | 10800 | 14500 | 12900 | 9440 |
| Lead | 0.40 | 400 ² | 15.1 ¹ | 3.9 | 5.9 | 2 | 3.3 |
| Potassium | (12.3-25.8) | NLE | 10600 | 2700 | 3540 | 3660 | 2700 |
| Magnesium | 9.6 | NLE | 3960 | 960 | 1310 | 1310 | 943 |
| Manganese | 0.18 | NLE | 120 ¹ | 7.2 | 10.6 | 8 | 5.4 |
| Mercury | 0.49 | 14 | ND | ND | ND | 0.21 | ND |
| Sodium | 3.8 | NLE | 56.8 | 33.4 | 29.7 | 20.4 | 15.5 |
| Nickel | 1.4 | 250 | 8.3 | 1.5 | 3.1 | 2.7 | 1.4 |
| Vanadium | 0.53 | 370 | 59.6 | 28.8 | 42.4 | 31.8 | 26.7 |
| Zinc | 0.41 | 1500 | 55.6 | 12.8 | 16.2 | 15.2 | 11.7 |

Compounds detected above NJDEP standards are noted by bold numbers

NLE - No Level Established

ND - Indicates that the compound was not detected at or below the quantification limits

ft bgs - Feet below ground surface

J - Indicates that the concentration value was estimated due to detection at or near the quantification limits

B - Compound was observed in the sample and associated laboratory blank

Note: MDL's for metal analysis is actually the highest detection limit with potassium given as a range due to high variability.

¹ Monmouth County maximum background concentration.

² NJDEP criteria are referenced in the Site Remediation News, Winter 1995.

Table 4.3-4
Fort Monmouth - Charles Wood
Summary of Average Concentrations of Detected
Compounds in Groundwater - Site CW-1

| COMPOUND | METHOD DETECTION
LIMIT
(µg/L) | NJDEP
GROUNDWATER
QUALITY
CRITERIA
(µg/L) | MAXIMUM
BACKGROUND
CONCENTRATION
(µg/L) | ANALYTICAL RESULTS (µg/L) | | | |
|--------------------------------------|-------------------------------------|---|--|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| | | | | SAMPLING DATE | | | |
| | | | | MW-26
2/21/95, 3/14/95
(avg.) | MW-27
2/21/95, 3/14/95
(avg.) | MW-28
2/21/95, 3/14/95
(avg.) | MW-29
2/21/95, 3/14/95
(avg.) |
| VOC's (µg/L) | | | | | | | |
| 1,2-Dichloroethene (total) | 4.4 | 10 | ND | ND | ND | ND | 235 |
| Trichloroethene (TCE) | 2.0** | 1 | ND | ND | ND | 35.5 | 885 |
| Tetrachloroethene (PCE) ¹ | 4.0** | 1* | ND | 4.5J | ND | ND | ND |
| SVOC's (µg/L) | | | | | | | |
| 1,2,4 Trichlorobenzene | 9.6** | 9 | ND | ND | ND | ND | 4J |
| bis-(2Ethylhexyl)phthalate | 9.7 | 30* | 600 | 3.75J | 2J | 1.5J | 3J |
| Di-n-butyl phthalate | 6.5 | 900 | ND | ND | 5.25J | ND | ND |
| METALS TOTAL (µg/L) | | | | | | | |
| Aluminum | 24 | 200 | 8210 | 3857.5 | 5695 | 3815 | 2370 |
| Arsenic | 1.9 | 8* | 25.1 | 4.375 | 4.7 | 4 | 1.625 |
| Barium | 1.7 | 2000 | 400 ² | 98.7 | 127 | 53.05 | 50.8 |
| Beryllium | 0.9 | 20* | 7 ² | ND | 0.72 | ND | ND |
| Calcium | 10.4 | NLE | 8700 | 25350 | 24100 | 15050 | 28350 |
| Cadmium | 2.8 | 4 | 6 ² | ND | 2.1 | ND | ND |
| Cobalt | 2.3 | NLE | 30.6 | 9.6 | 14.5 | 6.95 | 4.8 |
| Chromium | 2.9 | 100 | 49.6 | 40.575 | 55.55 | 28.15 | 19.7 |
| Copper | 1.9 | 1000 | 730 ² | 4.525 | 5.675 | 2.675 | ND |
| Iron | 6.4 | 300 | 27000 ² | 7796.65 | 11295 | 6185 | 4555 |
| Potassium | 685 | NLE | 10000 ² | 12450 | 12950 | 12900 | 11000 |
| Magnesium | 18.3 | NLE | 25000 ² | 9155 | 13650 | 4080 | 5520 |
| Manganese | 1.8 | 50 | 480 ² | 91.15 | 125 | 46.35 | 70.55 |
| Sodium | 30.5 | 50000 | 197000 ² | 64550 | 71700 | 18100 | 29400 |
| Nickel | 10.8 | 100 | 48.3 | 19.8 | 20.95 | 8.75 | 10.1 |
| Lead | 1.1 | 10* | <100 ² | 3.9 | 8.3 | 3.15 | 1.425 |
| Vanadium | 2.3 | NLE | 28.9 | 29.175 | 36.075 | 23.9 | 15.6 |
| Zinc | 3.8 | 5000 | 133 | 35.75 | 29.25 | 24.85 | 22.6 |

¹ - Same compound as listed by NJDEP Tetrachloroethylene

Compounds exceeding NJDEP groundwater quality criteria are noted by bold numbers.

NJDEP groundwater quality criteria consist of the higher number between the PQL or STANDARD

*PQL - Practical Quantitation Limit - was used as the NJDEP groundwater quality criteria

ND - Indicates that the compound was not detected at the quantification limit

J - Indicates that the concentration value was estimated due to detection at or near the quantification limits

NLE - No Level Established

** - Method detection limit exceeds the NJDEP groundwater quality criteria

² - Monmouth County maximum background concentration

4.3.2.6 Groundwater Sampling Results

Monitor wells at site CW-1 were sampled for the analytical parameters listed in Table 3.8-1. The analytical results for the individual sampling rounds are listed in Appendix D. Table 4.3-4 compares the average concentrations of the detected compounds from the February and March sampling rounds with the NJDEP GWQC, and then compares the results with the subsequent site-specific and Monmouth County maximum background concentrations, where appropriate. Figure 4.3-5 presents the locations of the compounds detected above both NJDEP criteria and maximum background.

VOCs

Three VOCs (tetrachloroethene, trichloroethene, and 1,2-dichloroethene) were detected in site groundwater in concentrations exceeding the NJDEP GWQC. Tetrachloroethene was detected below the laboratory quantitation limit in MW-26 in the March sampling round only; however, the concentration exceeded the NJDEP GWQC. Trichloroethene was detected in MW-28 and MW-29 in both sampling rounds. 1,2-Dichloroethene (total) was detected in MW-29 only in both sampling rounds. VOCs were not detected in MW-27. Figure 4.3-5 presents the locations of the averaged concentration of compounds detected above the NJDEP GWQC and the maximum background levels established at Charles Wood.

SVOCs

SVOCs were not detected in the site monitor wells above laboratory quantitation limits and the NJDEP GWQC from either sampling round.

Pesticides/PCBs

Pesticides/PCBs were not detected in the site monitor wells from either sampling round.

Metals

As indicated in Table 4.3-4, of the 18 metals detected in site groundwater, 4 metals (aluminum, iron, manganese, and sodium) were found in concentrations exceeding the NJDEP GWQC; however, aluminum, iron, and manganese were detected in concentrations below the site-specific and Monmouth County maximum background levels. Although sodium was detected in concentrations greater than the site-specific background level, sodium was found in concentrations well below the Monmouth County maximum background level.

4.3.2.7 Recommendations

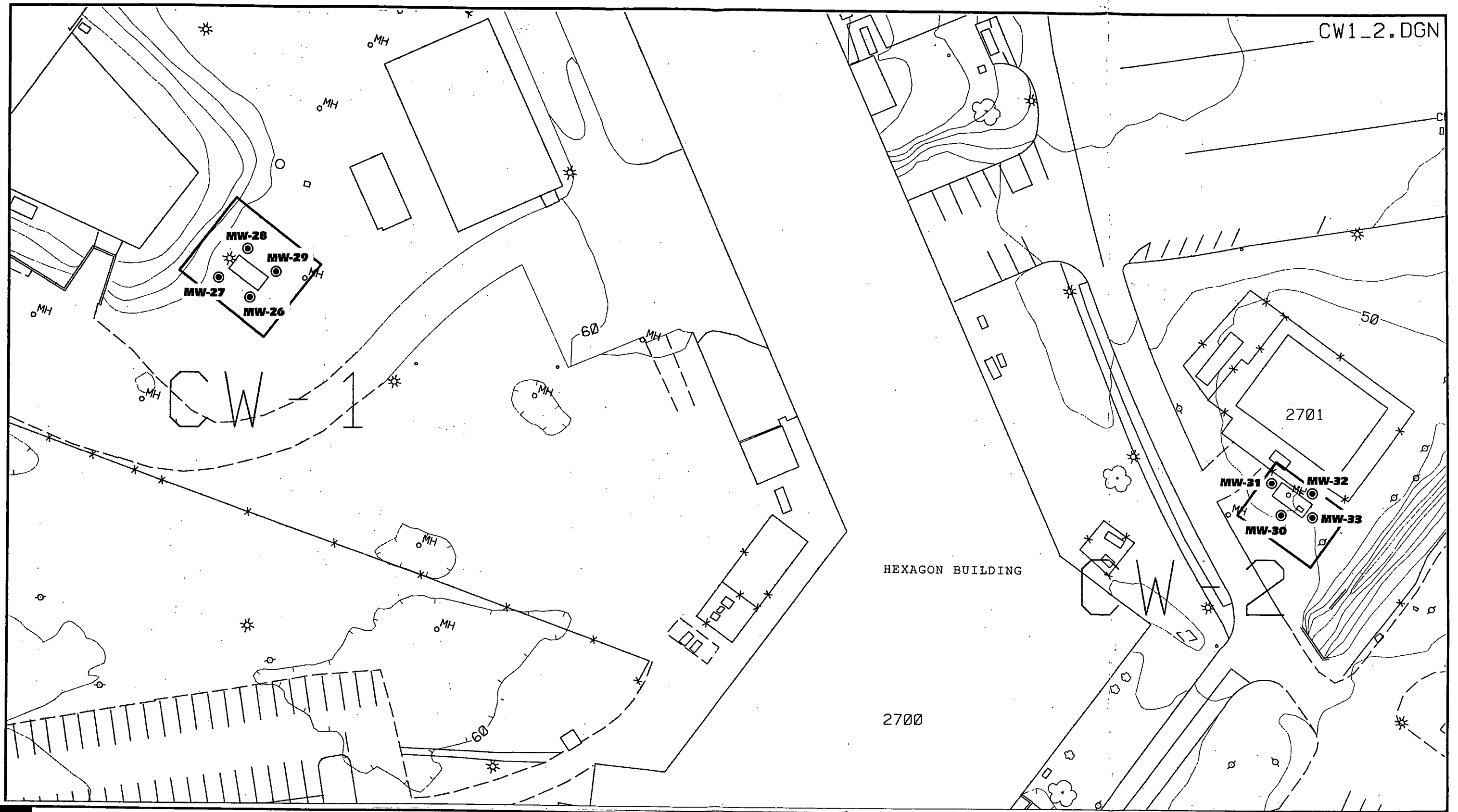
The soil sample results indicate that compounds of concern were either not detected or were below laboratory quantitation limits and NJDEP criteria.

The groundwater sampling results indicate that TCE, PCE, and 1,2-dichlorobenzene were detected in the groundwater downgradient of the site at levels that exceeded the NJDEP criteria.

Although NJDEP groundwater criteria were exceeded by three VOCs at this site, immediate remedial action is not required. The probable source of contamination has been eliminated since chemicals are not being disposed of in the pit. The pit was cleaned in October 1992 and the limestone sludge was removed and disposed of as a hazardous waste. Hazardous waste is currently collected for proper disposal off-site and waste is no longer disposed of in the pit. The groundwater is believed to flow toward the headwaters of Wampum Brook, and the shallow groundwater probably flows into Wampum Brook. There is no use of groundwater between the source and Wampum Brook. Surface-water samples were taken in Wampum Brook in the Charles Wood area and Mill Creek (as Wampum Brook is called further to the east) for use as background samples. No VOCs were detected in these samples, therefore, there is no immediate threat to human health.

The extent of VOC concentrations in groundwater will be investigated by soil-gas survey techniques. The soil-gas survey will be performed on an established grid pattern to estimate the

lateral extent of VOCs in the vicinity of the neutralization pit. The results of the soil-gas survey will be used to locate two additional monitor wells at the downgradient edge of the plume. DPW proposes that a long-term groundwater monitoring program be developed and implemented for the site. Aqueous samples would be collected and analyzed on a quarterly basis to further evaluate water quality conditions at the site. Groundwater samples would be collected from existing monitor wells and the two newly installed monitor wells. Compounds of concern identified in the first two rounds of sampling would be targeted for the monitoring program.



| | | | | |
|---------------|----------------------------|----------------|-------------|----------------------|
| LEGEND | ● Soil Boring/Monitor Well | — Road (paved) | Wooded Area | Site |
| | ⋯ Road/Trails (unpaved) | Tree/Bush | Brook/Creek | Base Boundary |
| | *** Fence | * Light Pole | Marshy Area | Approximate Boundary |
| | □ Building | ♂ Utility Pole | | |

0 50 100

SCALE IN FEET

Fort Monmouth, Main Post

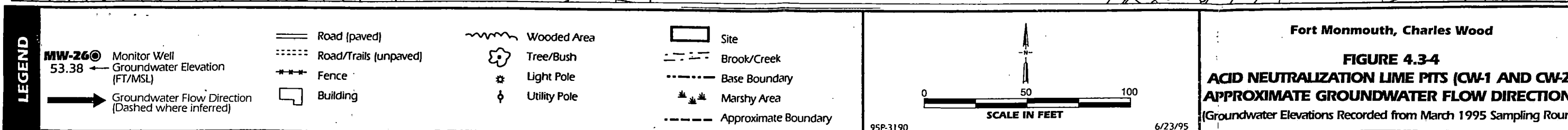
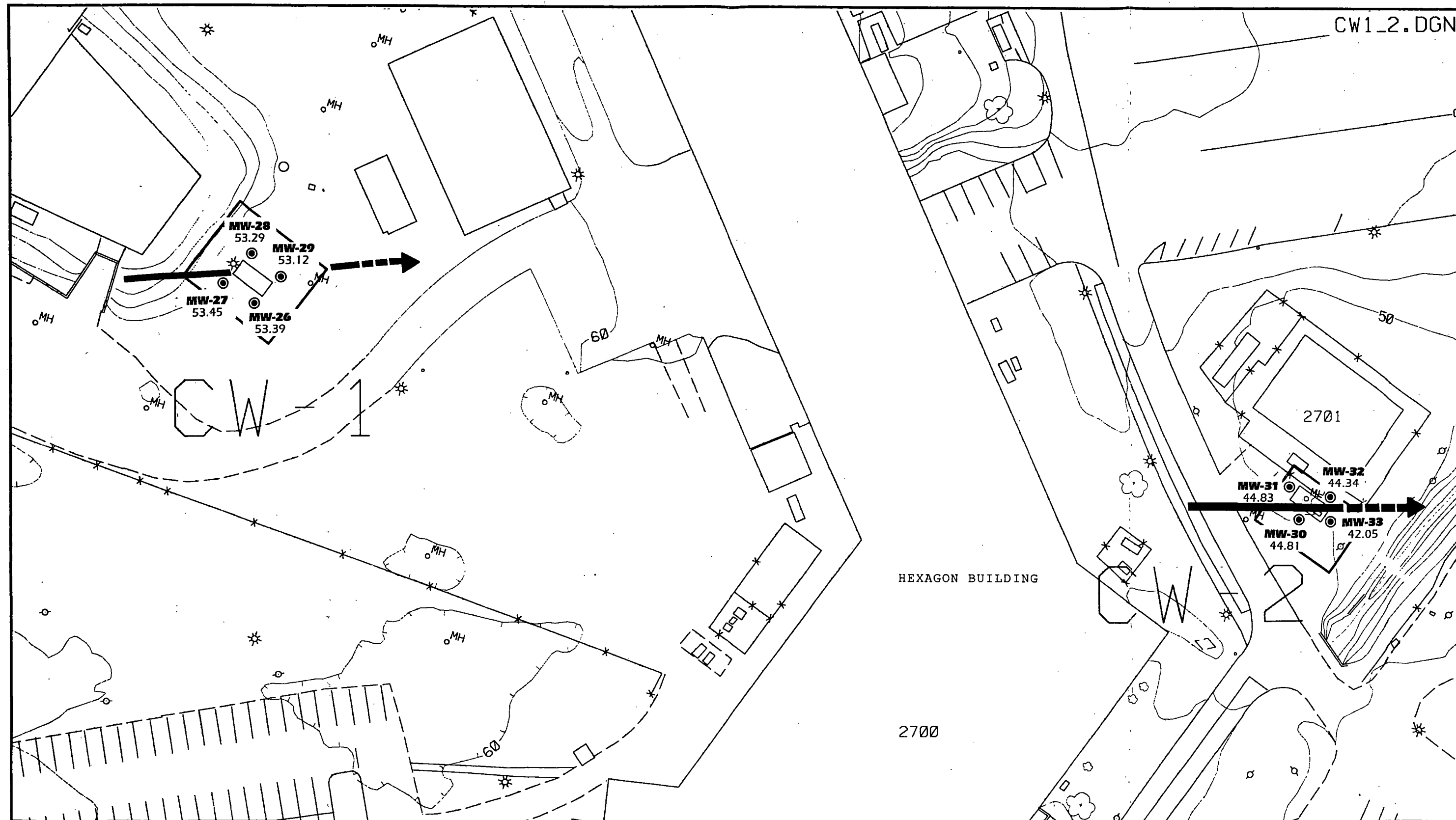
FIGURE 4.3-3

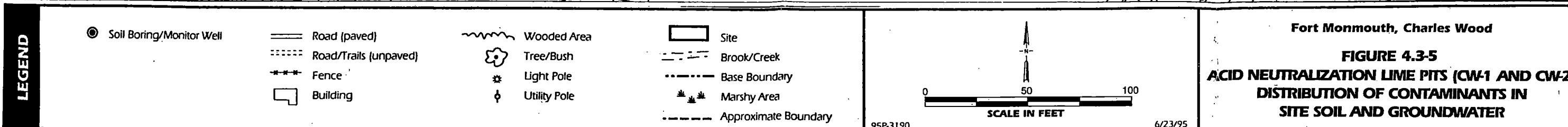
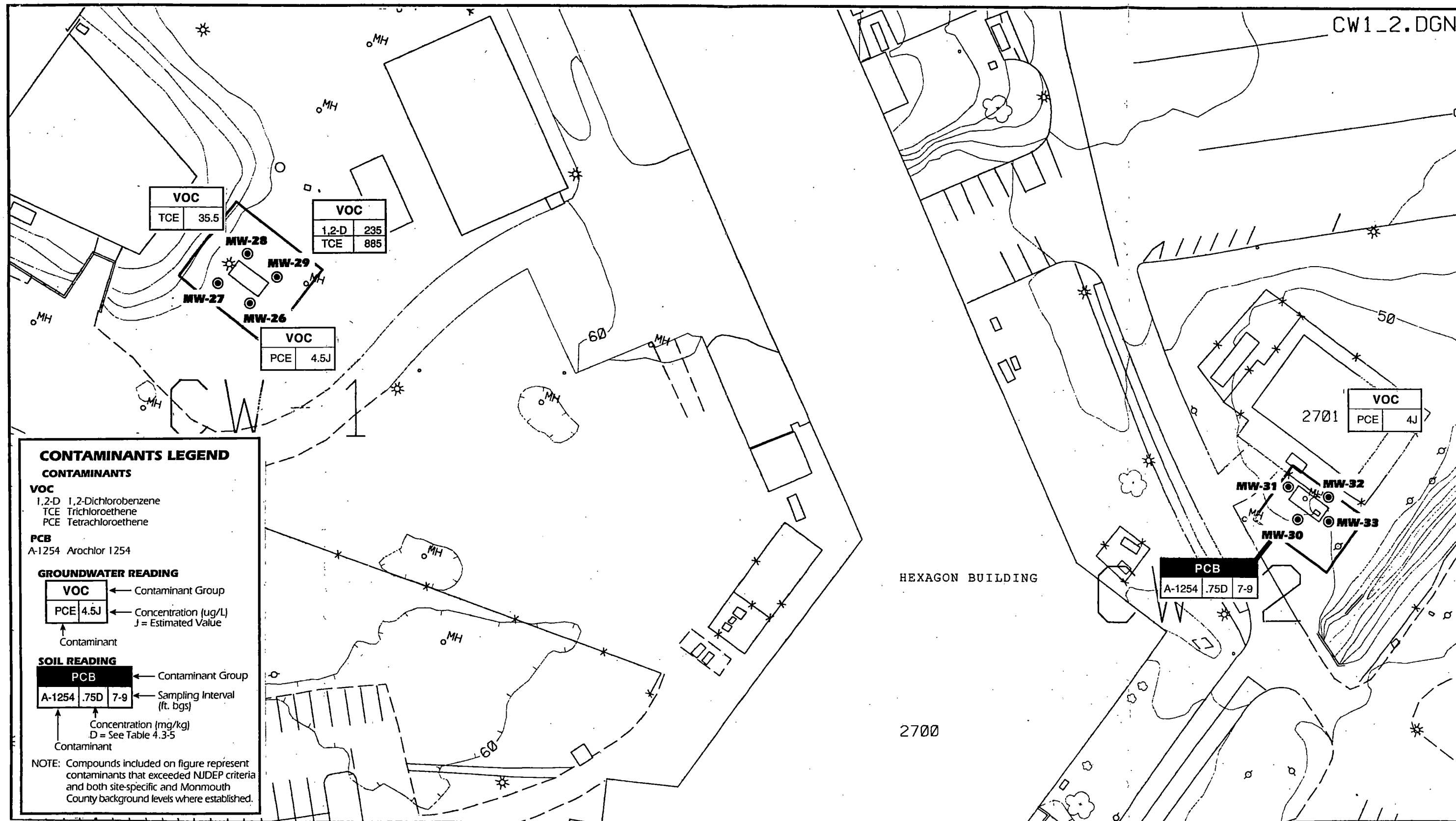
ACID NEUTRALIZATION LINE PITS (CW-1 AND CW-2)

SAMPLING LOCATIONS

95P-3190

6/23/95





Site CW-2

4.3.3 Wastewater Treatment Lime Pit 2 (CW-2)

4.3.3.1 Site Location

Wastewater Treatment Lime Pit 2 (CW-2) is located southeast of the Hexagon Building (Building 2700) at Charles Wood near an electrical substation (Figure 4.3-3). The approximate area of site CW-2 is 1,751 ft² (0.04 acre).

4.3.3.2 Site History

Like Lime Pit 1, Lime Pit 2 (CW-2) was built concurrently with the Hexagon Building; construction was completed in 1952. Liquid wastes from the east and south wings of the Hexagon Building passed through this pit before being discharged to the sanitary sewer. Additional details, including the estimated quantities of wastes discharged through the lime pits, pit construction, and cleanout and replacement of the limestone, were discussed in Subsection 4.3.2.2.

Unlike Lime Pit 1, during cleanout this pit was found to have received sewage. A dye test was conducted and revealed that toilets from the guard shack and a bathroom for the handicapped near the east entrance were mistakenly connected to this pit. The plumbing has been rerouted to discharge the wastewater from the toilets directly to the sanitary sewer.

In October 1992, the pit was cleaned out, inspected, and the limestone chips replaced. A vacuum truck was used to remove the sludge and stones from the pit, after which the pit was rinsed with water. All sludge, stones, and rinse water were placed in drums and disposed of as a hazardous waste. At present, laboratory wastes are managed under the installation hazardous waste program, which forbids the discharge of these wastes to the sewer.

4.3.3.3 Sampling Effort

As in the case of Lime Pit 1, the elevated concentrations of HHCs in sludge, rinse, and grab samples suggest the possibility that solvents were discharged into the lime pits and that they may

have migrated from the lime pits into surrounding soils and possibly into groundwater. To investigate this potential, a monitor well was constructed on each side of the lime pit (MW-30 through MW-33, shown in Figure 4.3-3). Continuous split-spoon samples were screened with an HNu or OVM. According to the CDAP, if any VOCs were detected, soil samples were to be collected from 7- to 9-ft bgs (near the base of the neutralization pit), from the interval with the highest instrument readings, and from just above the water table; otherwise, one sample was to be collected from the 7- to 9-ft interval of each boring. Because no elevated OVM readings were recorded during borehole activities, one sample from the 7- to 9-ft bgs interval was collected for the required parameters. Soil samples were analyzed for TCL +30 parameters and TAL metals. Two rounds of groundwater samples were collected from each well and analyzed for TCL +30 parameters and TAL metals.

4.3.3.4 Hydrogeologic Interpretation

Lithologic logs from site monitor wells MW-30 and MW-31 indicate that the lithology consists of a thin soil cover (0.3 ft) underlain by fill material and reworked natural sediments. The components of the manmade materials consisted of quartz gravel and concrete, wood fragments, and pieces of old electrical conduit. The reworked natural sediments consisted of an interbedded green-gray silty fine-grained sand and green-gray fine-grained sandy silt. Lithologic logs from MW-32 and MW-33 indicate that the lithology consists of a thin soil cover (0.3 ft) underlain by shallow fill material and probable natural sediments. The filled material consisted of concrete fragments (to 2 ft bgs). The probable natural sediments consisted of an interbedded olive-gray moderately sorted silty fine-grained sand and a green moderately sorted very micaceous fine-grained sandy silt.

Groundwater saturation was observed between 1 and 8 ft bgs. The four monitor wells were screened across the water table and total depths ranged from 15 to 16 ft bgs. Water-level elevation data, measured on 6 March 1995, prior to the March 1995 sampling round, indicate that local groundwater flow is eastward (Figure 4.3-4). Based on groundwater elevation measurements, monitor wells MW-32 and MW-33 are downgradient of the former lime pit.

4.3.3.5 Soil Sampling Results

Four soil samples, one in each monitor well borehole, were collected and analyzed for the parameters listed in Table 3.6-1. Samples were collected between 7 and 9 ft bgs. The compounds detected in site soils, with the corresponding sample identifications, are listed in Appendix D. Table 4.3-5 compares site soil quality with the NJDEP SCC, and then compares the results with the subsequent site-specific and Monmouth County maximum background levels, where appropriate.

VOCs

Two VOCs (methylene chloride and 2-butanone) were detected in concentrations above laboratory quantitation limits. Methylene chloride and 2-butanone are common laboratory contaminants. Both compounds were detected in concentrations well below the NJDEP SCC.

SVOCs

Eight SVOCs were detected above laboratory quantitation limits in soil borings, but in concentrations below the NJDEP SCC. All SVOCs detected below quantitation limits were found in concentrations below the NJDEP SCC where established.

Pesticides/PCBs

Three pesticides (4,4'-DDE, 4,4'-DDD, and 4,4'-DDT) were detected in concentrations above laboratory quantitation limits, but were well below the NJDEP SCC.

One PCB (Aroclor-1254) in SB-30 was detected slightly above the laboratory quantitation limit as well as the NJDEP SCC (Figure 4.3-5). However, the PCB compound was not detected in groundwater samples from the corresponding well location, MW-30. PCBs were not detected in SB-31, SB-32, and SB-33.

Table 4.3-5
Fort Monmouth - Charles Wood
Summary of Detected Compounds
in Soils from Site CW-2

| COMPOUND | METHOD
DETECTION
LIMIT | RESIDENTIAL
DIRECT CONTACT
SOIL CLEANUP
CRITERIA | MAXIMUM
BACKGROUND
CONCENTRATION | ANALYTICAL RESULTS | | | |
|----------------------------|------------------------------|---|--|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|
| | | | | SB30-A02
12/16/94
(7-9 ft bgs) | SB31-A02
12/16/94
(7-9 ft bgs) | SB32-A02
12/16/94
(7-9 ft bgs) | SB33-A02
12/16/94
(7-9 ft bgs) |
| VOC's (mg/kg) | | | | | | | |
| Methylene Chloride | 0.0027 | 49 | ND | 0.088 | 0.086 | 0.017 | ND |
| 2-Butanone | 0.0041 | 1000 | ND | ND | 0.012 J | 0.008 J | ND |
| SVOC's (mg/kg) | | | | | | | |
| Napthalene | 0.277 | 230 | ND | 0.15 J | ND | ND | ND |
| 2-Methylnaphthalene | 0.287 | NLE | ND | 0.1 J | ND | ND | ND |
| Acenaphthene | 0.221 | 3400 | ND | 0.17 J | ND | ND | ND |
| Dibenzofuran | 0.215 | NLE | ND | 0.093 J | ND | ND | ND |
| Fluorene | 0.208 | 2300 | ND | 0.21 J | ND | ND | ND |
| Phenanthrene | 0.165 | NLE | ND | 1.3 | ND | ND | 0.075 J |
| Anthracene | 0.152 | 10000 | ND | 0.33 J | ND | ND | ND |
| Carbazole | 0.145 | NLE | ND | 0.18 J | ND | ND | ND |
| Fluoranthene | 0.198 | 2300 | 0.042 J | 1.5 | ND | ND | 0.073 J |
| Pyrene | 0.178 | 1700 | 0.048 J | 1.1 | ND | ND | 0.067 J |
| Benzo(a)anthracene | 0.162 | 0.9 | 0.046 J | 0.69 | ND | ND | ND |
| Chrysene | 0.145 | 9 | 0.083 J | 0.71 | ND | ND | 0.043 J |
| bis(2-Ethylhexyl)phthalate | 0.32 | 49 | 0.170 J | 0.16 J | 0.1 J | 0.059 J | ND |
| Benzo(b)fluoranthene | 0.188 | 0.9 | 0.078 J | 0.79 | ND | ND | ND |
| Benzo(k)fluoranthene | 0.205 | 0.9 | 0.041 J | 0.28 J | ND | ND | ND |
| Benzo(a)pyrene | 0.162 | 0.66 | 0.047 J | 0.62 | 0.13 J | 0.053 J | 0.094 J |
| Indeno(1,2,3-cd)pyrene | 0.234 | 0.9 | ND | 0.37 J | ND | ND | ND |
| Benzo(g,h,i)perylene | 0.224 | NLE | 0.042 J | 0.35 J | ND | ND | ND |
| Dibenzo(a,h)anthracene | 0.198 | 0.66 | ND | 0.089 J | ND | ND | ND |
| PESTICIDES (mg/kg) | | | | | | | |
| Aroclor-1254 | 0.039 | 0.49 | ND | 0.75 D | ND | ND | ND |
| 4,4'-DDE | 0.0037 | 2 | 0.071 | 0.0035 JP | 0.0035 J | ND | 0.0083 P |
| 4,4'-DDD | 0.0037 | 3 | ND | 0.012 P | 0.0098 | 0.0073 | 0.26 |
| 4,4'-DDT | 0.0037 | 2 | 0.053 | 0.062 P | 0.0058 | ND | 0.046 |
| METALS TOTAL (mg/kg) | | | | | | | |
| Aluminum | 3.9 | NLE | 15700 | 6450 | 5430 | 2920 | 7310 |
| Arsenic | 0.35 | 20 | 31.6 | 5.7 | 8.5 | 2.6 | 15.7 |
| Barium | 0.17 | 700 | 26 | 36.2 | 58.6 | 23.6 | 326 |
| Beryllium | 0.1 | 1 | 1.7 | 0.58 | 0.51 | 0.28 | 1.5 |
| Calcium | 2.2 | NLE | 653 | 655 | 976 | 502 | 1270 |
| Cadmium | 0.86 | 1 | ND | ND | ND | ND | 0.9 |
| Cobalt | 0.71 | NLE | 4.5 | 0.95 | 4.2 | 0.91 | 5.9 |
| Chromium | 1.6 | 500 | 128 | 69.9 | 48.6 | 32.2 | 56.5 |
| Copper | 2.2 | 600 | 7.27 ¹ | 2.7 | 2.9 | 2.7 | 5.5 |
| Iron | 0.58 | NLE | 45500 | 20400 | 19200 | 11100 | 17600 |
| Lead | 0.4 | 400 ² | 15.1 ¹ | 8.1 | 7.5 | 3.1 | 5.6 |
| Magnesium | 9.6 | NLE | 3960 | 1720 | 1270 | 776 | 1880 |
| Manganese | 0.18 | NLE | 120 ¹ | 25.1 | 24.8 | 12.5 | 35.1 |
| Nickel | 1.4 | 250 | 8.3 | 4.9 | 11.2 | 2.6 | 23.2 |
| Potassium | (12.3-25.8) | NLE | 10600 | 4210 | 2610 | 1980 | 3350 |
| Selenium | 0.3 | 63 | 0.85 | 0.29 | 0.7 | 0.2 | 4.2 |
| Vanadium | 0.53 | 370 | 59.6 | 36.6 | 29.1 | 19.4 | 23.6 |
| Zinc | 0.41 | 1500 | 55.6 | 27.8 | 44.2 | 19.3 | 63.9 |

Compounds exceeding NJDEP soil cleanup criteria are noted by bold numbers.

J- Indicates that the concentration value was estimated due to detection at or near the quantification limit

P- The percent difference between the results from two GC columns is greater than 25% the lower of the two values is reported

ND - Indicates that the compound was not detected at or below the quantification limits

NLE- No Level Established

ft bgs. - feet below ground surface.

Note: MDL's for metal analysis is actually the highest detection limit with potassium given as a range due to high variability.

¹ Monmouth County maximum background concentrations.

² NJDEP criteria are referenced in Site Remediation News, Winter 1995.

D - Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis.

Metals

As indicated in Table 4.3-5, of the 18 metals detected in site soil, only beryllium in SB-33 was found at a concentration slightly exceeding the NJDEP SCC. Although beryllium was detected in a concentration greater than the established Monmouth County background level, the metal was detected below the site-specific background level.

4.3.3.6 Groundwater Sampling Results

Monitor wells at site CW-2 were sampled for the analytical parameters listed in Table 3.8-1. The analytical results for groundwater samples from the individual sampling rounds are listed in Appendix D. Table 4.3-6 compares the average concentrations of the detected compounds from the February and March sampling rounds with the NJDEP GWQC, and then compares the results with the site-specific and Monmouth County maximum background levels, where appropriate.

VOCs

Tetrachloroethene was the only VOC detected in site groundwater. The compound was detected in a concentration that was below the quantitation limit but slightly exceeding the NJDEP GWQC from the March sampling round only in MW-32 (Figure 4.3-5). Tetrachloroethene was not detected in MW-32 in the February sampling round.

SVOCs

One SVOC (di-n-butyl phthalate) was detected above the laboratory quantitation limit in MW-31 from the March sampling round. Di-n-butyl phthalate was detected well below the NJDEP GWQC. SVOCs detected below the laboratory quantitation limit were also detected below the NJDEP GWQC.

Table 4.3-6
Fort Monmouth - Charles Wood
Summary of Average Concentrations of Detected
Compounds in Groundwater - Site CW-2

| COMPOUND | METHOD
DETECTION
LIMIT
(µg/L) | NJDEP
GROUNDWATER
QUALITY
CRITERIA
(µg/L) | MAXIMUM
BACKGROUND
CONCENTRATION
(µg/L) | ANALYTICAL RESULTS (µg/L) | | | |
|--------------------------------------|--|---|--|------------------------------------|------------------------------------|------------------------------------|------------------------------------|
| | | | | SAMPLING DATE | | | |
| | | | | MW30
2/21/95, 3/14/95
(avg.) | MW31
2/21/95, 3/14/95
(avg.) | MW32
2/21/95, 3/14/95
(avg.) | MW33
2/21/95, 3/14/95
(avg.) |
| VOC's (µg/L) | | | | | | | |
| Tetrachloroethene (PCE) ¹ | 2.7** | 1* | ND | ND | ND | 4J | ND |
| SVOCs (µg/L) | | | | | | | |
| 1,2,4 Trichlorobenzene | 9.6** | 9 | ND | ND | 5J | ND | ND |
| bis-(2ethylhexyl)phthalate | 9.7 | 30* | 600 | 2J | ND | 1.5 J | 1.5 J |
| Di-n-butylphthalate | 6.5 | 900 | ND | 4J | 5.5 | 4J | 4J |
| METALS TOTAL (µg/L) | | | | | | | |
| Aluminum | 24 | 200 | 8210 | 129 | 17.65 | 447.5 | 676 |
| Arsenic | 1.9 | 8* | 25.1 | ND | ND | ND | 1.5 |
| Barium | 1.7 | 2000 | 400 ¹ | 233.5 | 180.5 | 211 | 234 |
| Calcium | 10.4 | NLE | 8700 | 63600 | 36050 | 46250 | 51250 |
| Cobalt | 2.3 | NLE | 30.6 | ND | ND | ND | 2.9 |
| Chromium | 2.9 | 100 | 49.6 | ND | ND | ND | 2.15 |
| Copper | 1.9 | 1000 | 730 ¹ | 3.8 | 2.15 | 2 | 11.9 |
| Iron | 6.4 | 300 | 27000 ¹ | 45750 | 36350 | 48950 | 54450 |
| Potassium | 685 | NLE | 4630 | 9980 | 8710 | 9580 | 8455 |
| Magnesium | 18.3 | NLE | 25000 ¹ | 7045 | 4775 | 5595 | 6100 |
| Manganese | 1.8 | 50 | 480 ¹ | 365 | 222.5 | 268.5 | 273 |
| Sodium | 30.5 | 50000 | 36400 | 17100 | 10325 | 11800 | 14350 |
| Nickel | 10.8 | 100 | 48.3 | 10.65 | ND | 11.75 | 2.7 |
| Lead | 1.1 | 10* | <100 ¹ | ND | ND | 0.7 | 3.3 |
| Vanadium | 2.3 | NLE | 28.9 | ND | ND | 3.05 | 5.15 |
| Zinc | 3.8 | 5000 | 133 | 5.7 | 3.9 | 13.85 | 25.6 |

¹ Same compound as listed by NJDEP Tetrachloroethylene

Compounds exceeding NJDEP groundwater quality criteria are noted by bold numbers.

*PQL - Practical Quantitation Limit - was used as the NJDEP groundwater quality criteria

NLE - No Level Established

J - Indicates that the concentration value was estimated due to detection at or near the quantitation limits

ND - Indicates that the compound was not detected at or below the quantitation limit

** Method detection limit exceeded NJDEP groundwater quality criteria

¹ - Monmouth County maximum background concentrations.

Pesticides/PCBs

Pesticides/PCBs were not detected in the site monitor wells from either sampling round.

Metals

As indicated in Table 4.3-6, of the 16 metals detected in site groundwater, 3 metals (aluminum, iron, and manganese) were found in concentrations exceeding the NJDEP GWQC. In addition, iron was detected in concentrations greater than those determined for site-specific and Monmouth County maximum background at Charles Wood. The presence of iron in exceedence of the NJDEP GWQC may be attributable to the high concentrations of iron present in natural soil found in Monmouth County. Therefore, iron is not identified as a compounds of concern. Although manganese was detected in concentrations above the site-specific background level in MW-30, MW-32, and MW-33, manganese was found in concentrations below the Monmouth County background level. Aluminum was found in concentrations below both the site-specific and Monmouth County maximum background levels.

4.3.3.7 Recommendations

The results of the soil sampling indicate that one PCB compound (Aroclor-1254) was detected in SB-30 at a concentration slightly above the NJDEP SCC. PCB compounds were not detected in the other three soil borings. In addition, PCBs were not detected in groundwater samples in the corresponding well location, MW-30.

Groundwater sampling results indicate that PCE was detected in the groundwater in one of the four wells (MW-32) in one of the two sampling rounds at levels slightly exceeding the NJDEP GWQC.

Although NJDEP groundwater criteria were exceeded by one VOC at this site, immediate remedial action is not required. The source of contamination has been eliminated since chemicals are not being disposed of in the pit. The pit was cleaned in October 1992 and the limestone

sludge was removed and disposed of as a hazardous waste. Hazardous waste is currently collected for proper disposal off-site and waste is no longer disposed of in the pit. Shallow groundwater flows toward and discharges to the headwaters of Wampum Brook, as indicated by water-level measurements from site monitor wells. There are no known uses of groundwater at or downgradient of the site. Surface-water samples were taken in Wampum Brook in the Charles Wood area and Mill Creek (as Wampum Brook is called further to the east) for use as background samples. No VOCs were detected in these samples, therefore, there is no immediate threat to human health.

The extent of PCE concentrations in groundwater will be investigated by soil-gas survey techniques. The soil-gas survey will be performed on an established grid pattern to estimate the lateral extent of VOCs in the vicinity of the neutralization pit. The results of the soil-gas survey will be used to locate two additional monitor wells if necessary. DPW proposes that a long-term groundwater monitoring program be developed and implemented for the site. Aqueous samples would be collected and analyzed on a quarterly basis to further evaluate water quality conditions at the site. Groundwater samples would be collected from existing monitor wells and from the two newly installed monitor wells. Compounds of concern identified in the first two rounds of sampling would be targeted for the monitoring program. When the additional monitor wells are installed, soil samples will be collected for PCB analysis because of the detection of PCBs in a soil sample collected from SB-30.

Site CW-3

4.3.4 Landfill 3 (CW-3)

4.3.4.1 Site Location

Landfill 3 is located in the southeastern part of Charles Wood (Figure 4.3-6) and has been designated a construction area. The approximate area of Landfill 3 is 39,758 ft² (0.91 acre).

4.3.4.2 Site History

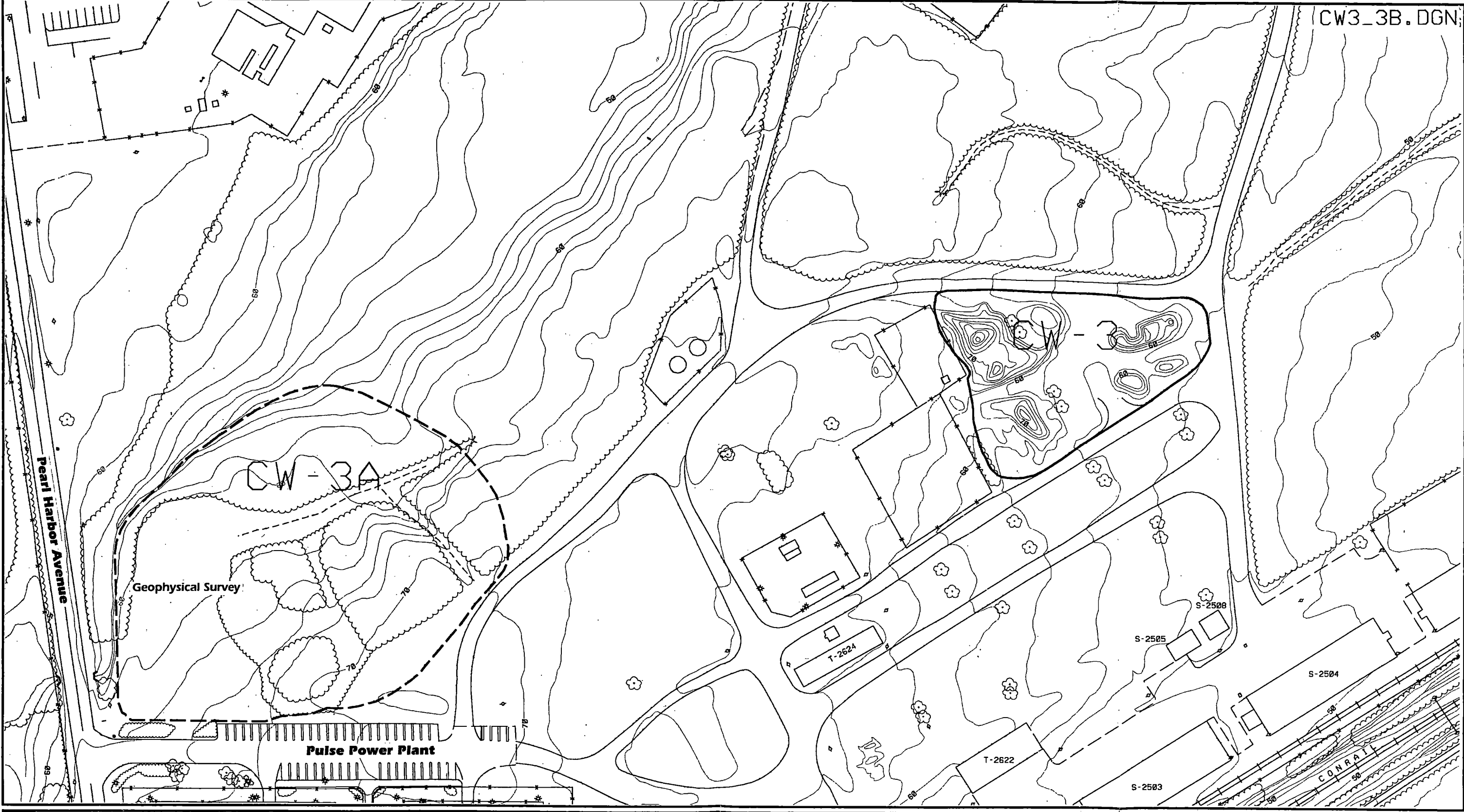
According to the IA, the Army Air Force used this area to dispose of administrative-type wastes and wood in the 1940s. Beginning in 1951, the aerial photographs show a cleared area used for storage. In 1981 and 1986, this area was relatively clear. During the 1993 site visit, the CW-3 area was being used as a construction rubble dump. Material observed included soil piles, brush, concrete, wood demolition debris, wood pallets, metal, and PVC pipe. There is no evidence of a subsurface landfill, and long-term Fort Monmouth employees said that this area was not used as a landfill.

4.3.4.3 Sampling Effort

Landfill 3 is shown in Figure 4.3-6. During the field investigation activities conducted between November 1994 and January 1995 at Fort Monmouth, construction rubble was present at site CW-3. The proposed sampling activities included collecting surface soil samples for TCL +30 parameters and TAL metal analysis if any evidence of soil staining was observed following the removal of the rubble. In addition, if high levels of chemical constituents were found in soils, monitor wells would be installed and sampled twice for TCL +30 parameters and TAL metals. Field sampling activities were postponed until the rubble could be removed. In June 1995, the construction rubble was removed. Exploratory trenches are planned to determine if any subsurface debris or soil staining is evident. However, because the area is believed to not have been used as a landfill, it is not anticipated that subsurface debris and soil staining will be found.

4.3.4.4 Recommendations

Investigation activities were not conducted as part of this investigation because of construction rubble that was present at the site during the field effort, which prohibited sample collection as planned. The rubble was removed and properly disposed of in June 1995 and exploratory trenches are planned to determine if any subsurface debris or soil staining is present. Field screening will be performed during excavation using a PID. NJDEP will be requested to send a representative to observe the investigation. In the absence of any elevated PID readings or evidence of subsurface debris, the excavation will be backfilled and no further action will be taken. If contamination is identified, then sampling will be conducted in accordance with the *Technical Requirements for Site Remediation* (NJDEP, 1993). Soil sample analytes will be collected and analyzed for the full range of contaminants.



LEGEND

— Road (paved)

----- Road/Trails (unpaved)

*** Fence

□ Building

~~~~~ Wooded Area

✿ Tree/Bush

✱ Light Pole

⚡ Utility Pole

▭ Site

- - - Brook/Creek

- - - Base Boundary

⚡ Marshy Area

- - - Approximate Boundary

0 100 200

SCALE IN FEET

2017-0583

10/18/93

**Fort Monmouth, Charles Wood**

**FIGURE 4.3-6**

**LANDFILLS 3 (CW-3) AND 3A (CW-3A)**

4.3-37

Site CW-3A

Site CW-3A

### **4.3.5 Debris Site (CW-3A)**

#### **4.3.5.1 Site Location**

Debris Site CW-3A is located west of the CW-3 area, north of Pulse Power, Building 2707 (Figure 4.3-6). The approximate area of site CW-3A is 116,000 ft<sup>2</sup> (2.6 acres).

#### **4.3.5.2 Site History**

According to long-term Fort Monmouth employees, the area north of Pulse Power was used as a disposal area. The 1957 aerial photograph shows the CW-3A area with bare ground. According to *Fort Monmouth History and Place Names, 1917-1959*, 90 buildings at Charles Wood were razed in late 1955 and during 1956. It is possible that the demolition debris from these buildings was placed in this area. In the 1974 aerial photo, a steel igloo is visible on this area. By 1986, the western part of this area had not revegetated. During the 1993 site visit, some small debris was observed in the woods.

#### **4.3.5.3 Sampling Effort**

Site CW-3A is also presented in Figure 4.3-6. Surface geophysics were conducted in this area because it was not known if subsurface disposal had occurred in this area and in accessible cleared areas to the southeast in the construction areas. Magnetic and electromagnetic (EM-31) measurements were collected on 10-ft centers. GPR was also used to assess the degree of subsurface soil disturbance.

#### **4.3.5.4 Geophysical Results**

The geophysical investigation at Charles Wood site CW-3A utilized EM, MAG, and GPR methods to characterize the site. Prior to the investigation, a site walk revealed numerous metallic objects on the surface in the form of pipes, sheet metal, metal cans, and concrete, as well as nonmetallic objects such as asphalt and construction debris. The debris was noted and considered during data interpretation.

The EM survey revealed prominent anomalous signatures not attributed to surface debris at grid coordinates 40N to 70N/40E to 70E and 140N to 160N/190E to 210E. These anomalies are shown on the EM quadrature and in-phase contour plots, Figures 4.3-7 and 4.3-8, respectively, as either violet or blue contour intervals (high and low conductivity, respectively). These two EM anomalies are confirmed by the magnetometer survey as being ferrous material. As shown on the total magnetic field and magnetic gradient contour plots, Figures 4.3-9 and 4.3-10, respectively, these anomalies are represented as a high and low pair or magnetic dipole with violet and blue contour intervals. Other subtle anomalies exist throughout the area, as depicted on the EM in-phase plot in Figure 4.3-8, which may indicate metallic debris. However, the size and magnitude of these EM signals are negligible. Also, the EM quadrature plot (Figure 4.3-7) shows high apparent conductivity, represented by the violet contour interval, along the north and western borders of the site. This higher conductivity may be due to a subsurface change in lithology.

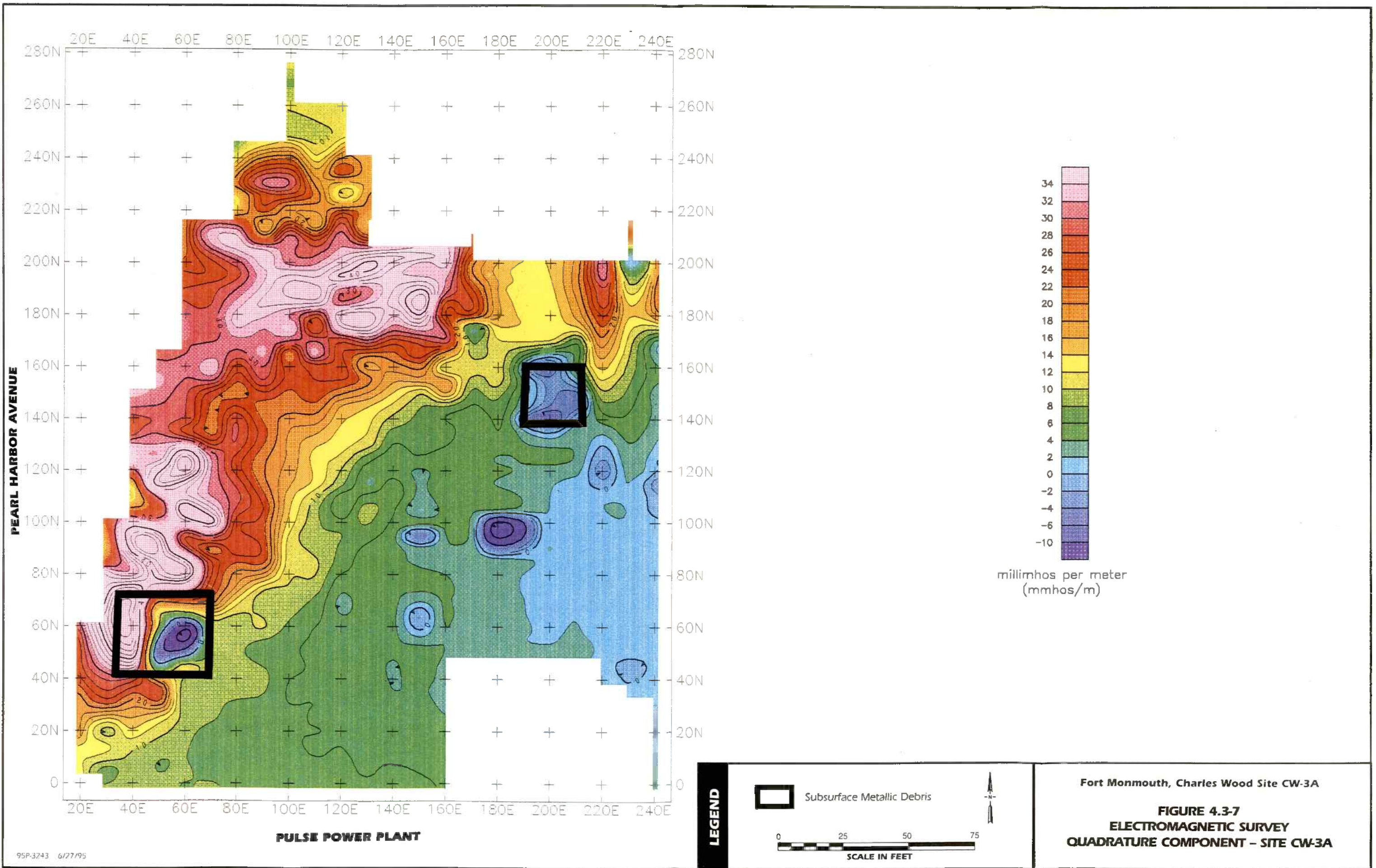
The GPR survey at CW-3A revealed chaotic reflectors within grid coordinates 40N to 70N/40E to 70E, confirming the EM and MAG anomalies at a depth of approximately 2 to 3 ft bgs. These chaotic reflectors are indicative of buried metallic debris and are shown on the GPR profile along 60N in Figure 4.3-10A.

#### **4.3.5.5 Recommendations**

Geophysical surveys indicated two areas where subsurface metallic debris may be present.

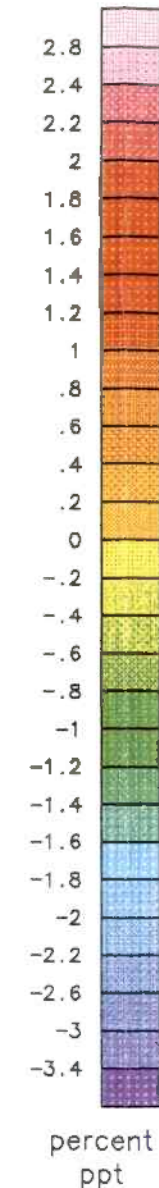
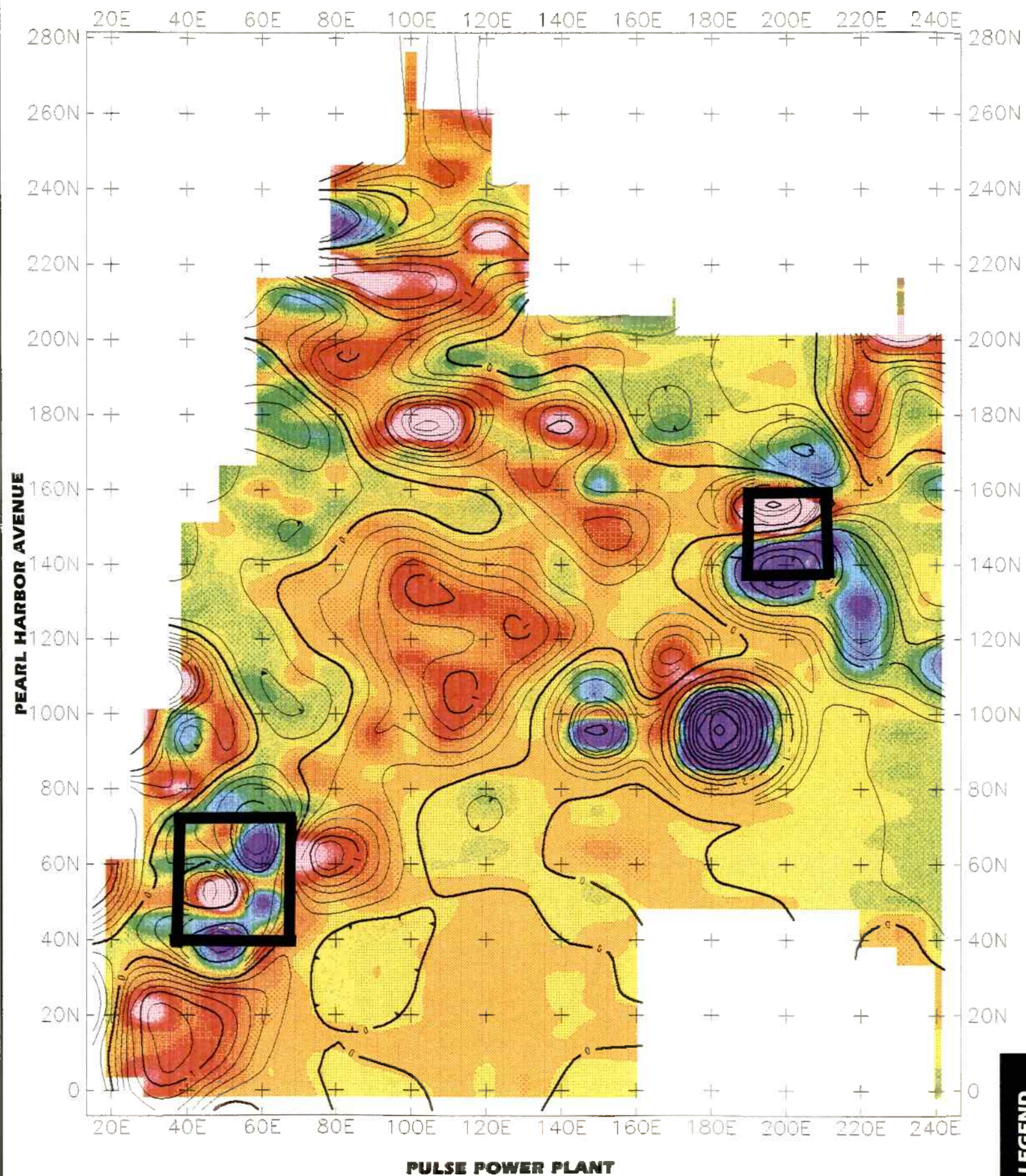
Exploratory trenching will be performed to investigate areas where subsurface metallic debris may be present. Field screening will be conducted with a PID during the excavation. NJDEP will be requested to send a representative to observe the excavation. In the absence of elevated PID readings or evidence of subsurface debris, the excavation will be backfilled and no further action will be taken. If contamination is identified, then sampling will be conducted in accordance with the *Technical Requirements for Site Remediation* (NJDEP, 1993). Soil sample analytes will be collected and analyzed for the full range of contaminants.





95P-3243 6/27/95





LEGEND

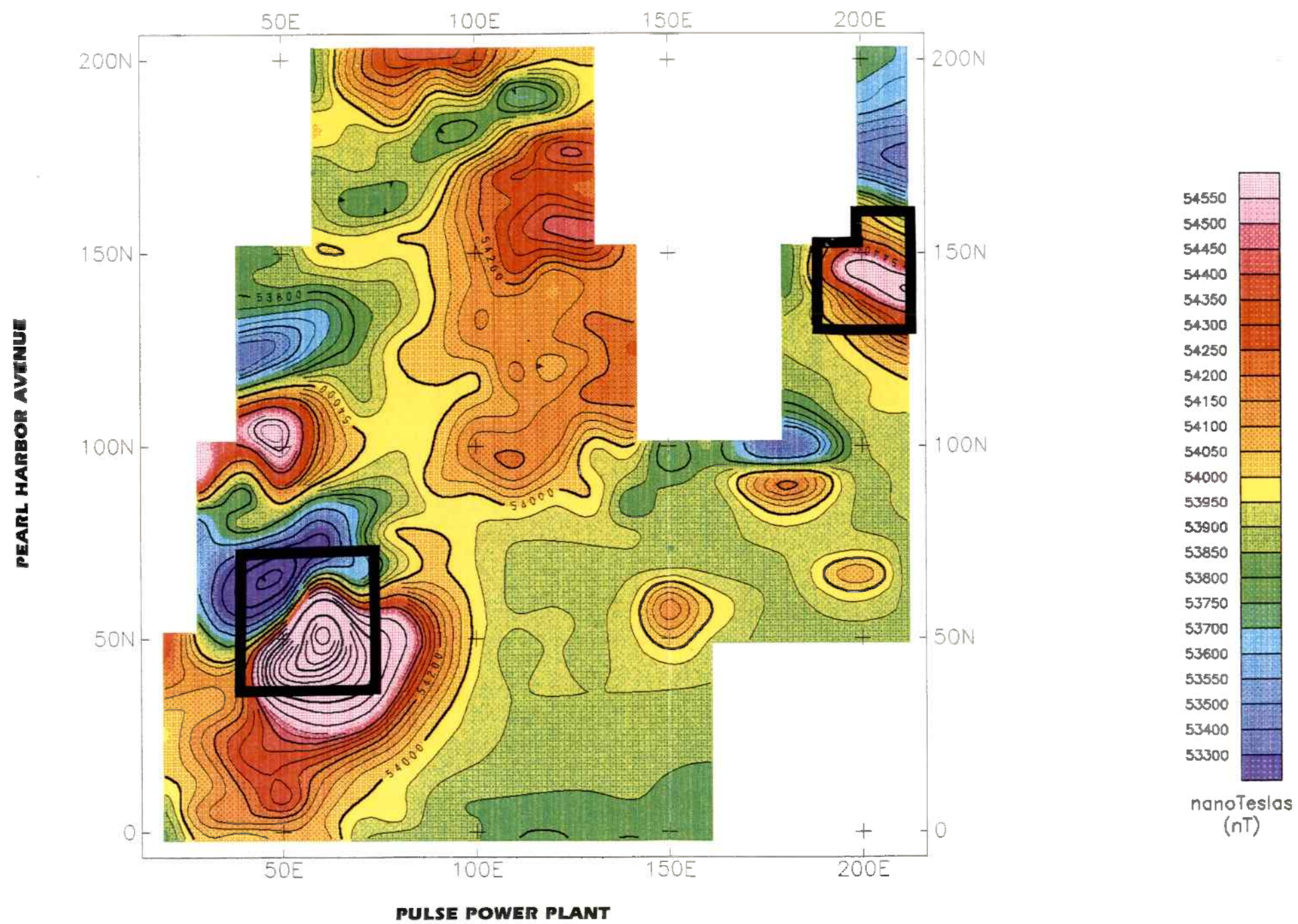
 Subsurface Metallic Debris



Fort Monmouth, Charles Wood Site CW-3A

**FIGURE 4.3-8**  
**ELECTROMAGNETIC SURVEY**  
**IN PHASE COMPONENT - SITE CW-3A**





**LEGEND**



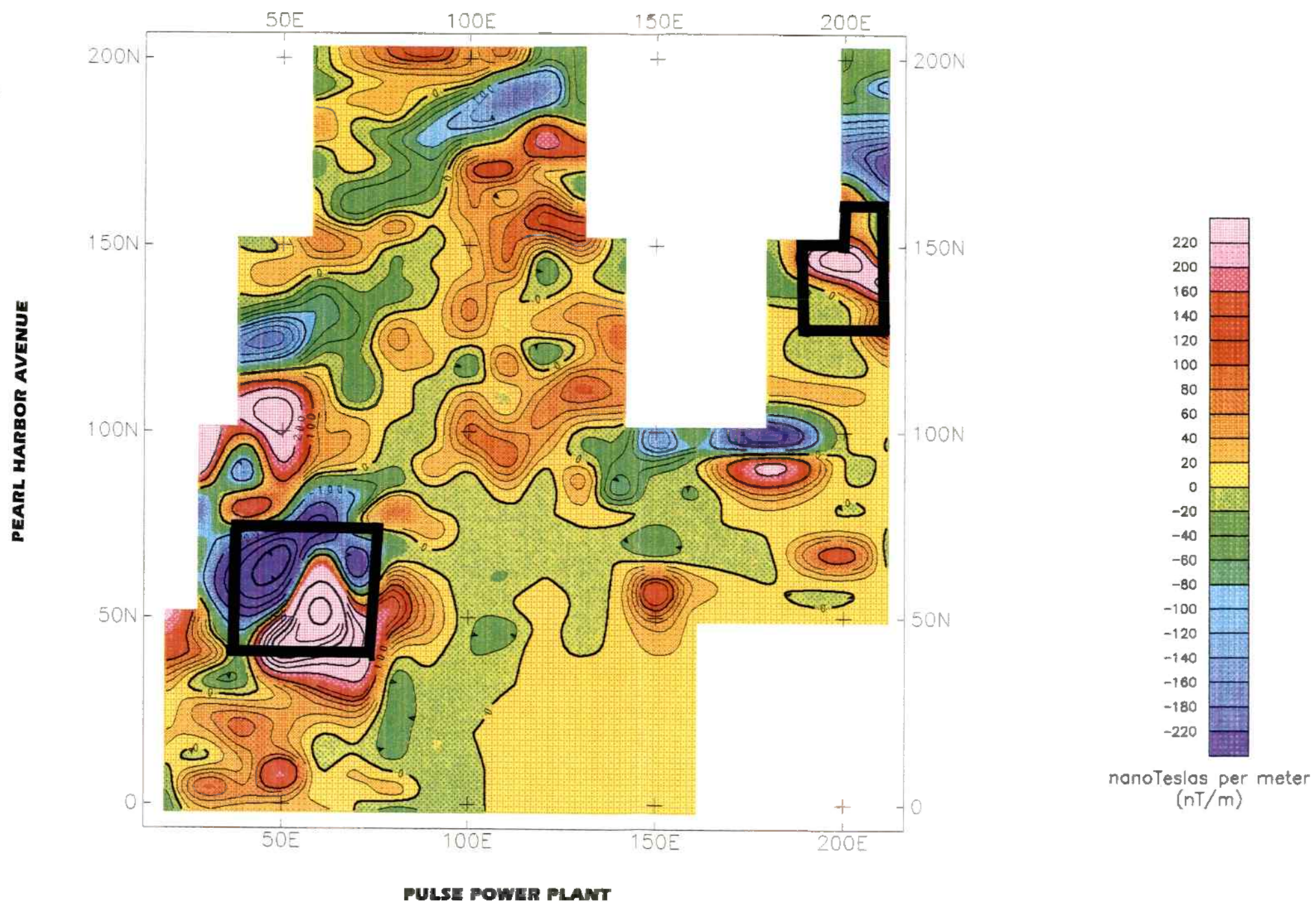
Subsurface Metallic Debris



Fort Monmouth, Charles Wood Site CW-3A

**FIGURE 4.3-9**  
**MAGNETOMETER SURVEY**  
**TOTAL MAGNETIC FIELD - SITE CW-3A**





LEGEND



Subsurface Metallic Debris



Fort Monmouth, Charles Wood Site CW-3A

**FIGURE 4.3-10**  
**MAGNETOMETER SURVEY**  
**MAGNETIC GRADIENT - SITE CW-3A**

File 9 FILE9 Created December 15, 1994 11:46:54

512 samples/scan 25.004 scans/sec  
Position: -3 NS range: 100 ns 8 Bits  
Dielectric Constant: 0 Antenna: 3102

Range Gain -4 12 36 44 47

Vert: IIR low pass N=2 F=48  
Vert: IIR high pass N=2 F=8

Horiz: IIR stacking TC=4

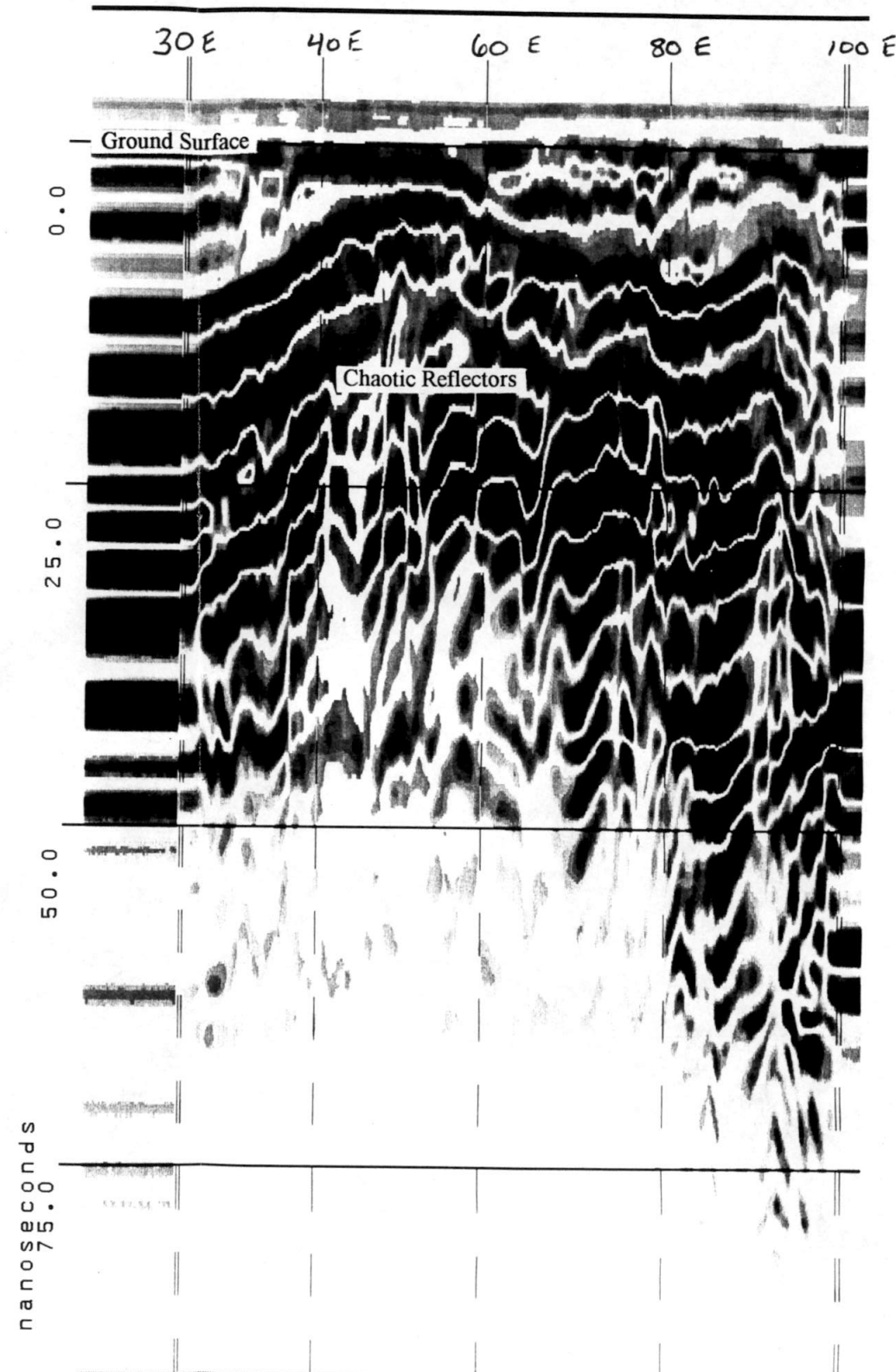
Ft. Monmouth NJ

Charles Woods SITE CW3A

Line 60 N ; Marks at 20' intervals

Start: 30 E; End: 100 E

Gray Scale Table #4 Gray Scale Transform #1 Contrast 7: 0%



**FIGURE 4.3-10A RADAR PROFILES SHOWING  
SUBSURFACE ANOMALY  
AT SITE CW-3A**

## Site CW-4

#### **4.3.6 Range (Small Arms) (CW-4)**

##### **4.3.6.1 Site Location**

The small arms firing range is a one-story building (Building T-2537) located in the central portion of the Charles Wood area (Figure 4.3-11). The approximate area of site CW-4 is 32,000 ft<sup>2</sup> (0.7 acre). The range is used for indoor firing of small arms. The small arms are fired into a metal baffle that deflects the rounds down into a sand pit. Currently, the sand is sifted and spent rounds and shell-casings are disposed of off-site. The firing range area is ventilated by a blower through a filter. The filter currently used is a Flanders Filters Model No. 0-00J-C-11-00-CL-12-00-GGF. It has an efficiency of 95%, based on a di-octyl-phthalate (DOP) test. A manufacturer's representative stated that he believes this filter would be close to 100% efficient in removing the likely particulates generated in a firing range.

Spent rounds are visible at the surface of a bare patch of soil about 3 ft in diameter northeast of the building. A pile of sand is on the northwest side of the building.

##### **4.3.6.2 Site History**

Interviews with facility personnel indicate that the interior of the building is cleaned periodically. The building is currently in use.

##### **4.3.6.3 Sampling Effort**

The CW-4 site is presented in Figure 4.3-11. The facility personnel intend to excavate the soil at the bare patch until spent rounds and shell casings are no longer visible. Because contaminated soil had not been excavated prior to the field effort, one soil boring was installed in place of two of the three surface soil samples proposed in the CDAP. The soil boring was drilled near the debris pile to a depth of 8 ft bgs, where saturation was noted at approximately 6.1 ft bgs. The lithology consisted of an orange-brown sand with trace silt. The soil sample from soil boring SB-01 was collected at a depth of 4 to 6 ft bgs and analyzed for TCL +30 parameters, TAL metals, and TPHs. One surface soil sample was collected from the bottom of



the sand pile (sample SS-01) using a scoop to dig 6 inches below the bottom of the pile in one location. No firing debris was observed. Surface soil boring SS-01 was analyzed for TAL metals only.

#### **4.3.6.4 Soil Sampling Results**

Two soil samples were collected, one sample (SB-01) from the 2- to 6-ft bgs sampling interval in the soil boring at the debris pile, and one sample (SS-01) from the 0 to 0.5-ft bgs interval from the sand pile in the rear of the building. The samples were analyzed for the parameters listed in Table 3.6-1. The analytical results for site soils are listed in Appendix D. Table 4.3-7 compares the detected compound concentrations with the NJDEP SCC, and then compares the results with the subsequent site-specific and Monmouth County maximum background concentrations. In addition, the results were also compared with the impact to groundwater SCC because no monitor wells were installed at this site.

#### **VOCs**

VOCs were not detected in site soil.

#### **SVOCs**

SVOCs were not detected in site soil.

#### **TPHs**

Petroleum hydrocarbons were not detected in site soil.

#### **Pesticides/PCBs**

Pesticides/PCBs were not detected in site soil.

**Table 4.3-7**  
**Fort Monmouth - Charles Wood**  
**Summary of Detected Compounds**  
**In Soils from Site CW-4**

| COMPOUND       | METHOD<br>DETECTION<br>LIMIT<br><br>(mg/kg) | RESIDENTIAL<br>DIRECT CONTACT<br>SOIL CLEANUP<br>CRITERIA<br><br>(mg/kg) | MAXIMUM<br>BACKGROUND<br>CONCENTRATION<br><br>(mg/kg) | ANALYTICAL RESULTS                   |                                        |
|----------------|---------------------------------------------|--------------------------------------------------------------------------|-------------------------------------------------------|--------------------------------------|----------------------------------------|
|                |                                             |                                                                          |                                                       | SB01-A02<br>12/21/94<br>(4-6 ft bgs) | SS01-A01<br>11/30/95<br>(0-0.5 ft bgs) |
| METALS (mg/kg) |                                             |                                                                          |                                                       |                                      |                                        |
| Aluminum       | 3.9                                         | NLE                                                                      | 15700                                                 | 5030                                 | 687                                    |
| Arsenic        | 0.35                                        | 20                                                                       | 31.6                                                  | 1.5                                  | 7.8                                    |
| Antimony       | 0.3                                         | 14                                                                       | ND                                                    | ND                                   | 2.5                                    |
| Barium         | 0.17                                        | 700                                                                      | 26                                                    | 2.7                                  | 17.7                                   |
| Beryllium      | 0.1                                         | 1                                                                        | 1.7                                                   | 0.47                                 | 0.76                                   |
| Calcium        | 2.2                                         | NLE                                                                      | 653                                                   | 302                                  | 699                                    |
| Chromium       | 1.6                                         | 500                                                                      | 128                                                   | 63.5                                 | 58.3                                   |
| Cobalt         | 0.71                                        | NLE                                                                      | 4.5                                                   | ND                                   | 0.62                                   |
| Copper         | 2.2                                         | 600                                                                      | 7.27 <sup>1</sup>                                     | 379                                  | 3.2                                    |
| Iron           | 0.58                                        | NLE                                                                      | 45500                                                 | 11500                                | 19700                                  |
| Lead           | 0.4                                         | 400 <sup>2</sup>                                                         | 15.1 <sup>1</sup>                                     | 1440                                 | 8.9                                    |
| Magnesium      | 9.6                                         | NLE                                                                      | 3960                                                  | 1320                                 | 1450                                   |
| Manganese      | 0.18                                        | NLE                                                                      | 120 <sup>1</sup>                                      | 8.8                                  | 26.2                                   |
| Nickel         | 1.4                                         | 250                                                                      | 8.3                                                   | 1.5                                  | 2.3                                    |
| Potassium      | (12.3-25.8)                                 | NLE                                                                      | 10600                                                 | 3490                                 | 2720                                   |
| Silver         | 0.54                                        | 110                                                                      | 0.26 <sup>1</sup>                                     | ND                                   | 0.76                                   |
| Selenium       | 0.3                                         | 63                                                                       | 0.85                                                  | ND                                   | 0.33                                   |
| Sodium         | 3.8                                         | NLE                                                                      | 50000                                                 | ND                                   | 16                                     |
| Vanadium       | 0.53                                        | 370                                                                      | 59.6                                                  | 20.6                                 | 37.3                                   |
| Zinc           | 0.41                                        | 1500                                                                     | 55.6                                                  | 42.6                                 | 24.6                                   |

Compound exceeding NJDEP soil cleanup criteria are noted by bold numbers.

ND - Indicates that the compound was not detected at or below the quantification limits

NLE - No Level Established

Note: MDL's for metal analysis is actually the highest detection limit with potassium given as a range due to high variability.

<sup>1</sup> Monmouth County maximum background concentrations.

<sup>2</sup> NJDEP criteria are referenced in Site Remediation News, Winter 1995.

## Metals

As indicated in Table 4.3-7, of the 20 metals detected in site soil, only lead was found in a concentration exceeding the NJDEP SCC. In addition, lead was detected in a concentration in SB-01 greater than the site-specific and Monmouth County maximum background levels for Charles Wood. The presence of lead in exceedance of criteria in the soil is reflective of the site's use for disposal of spent rounds. Figure 4.3-12 shows the locations of the compounds detected above the NJDEP SCC and above the established background levels for Charles Wood.

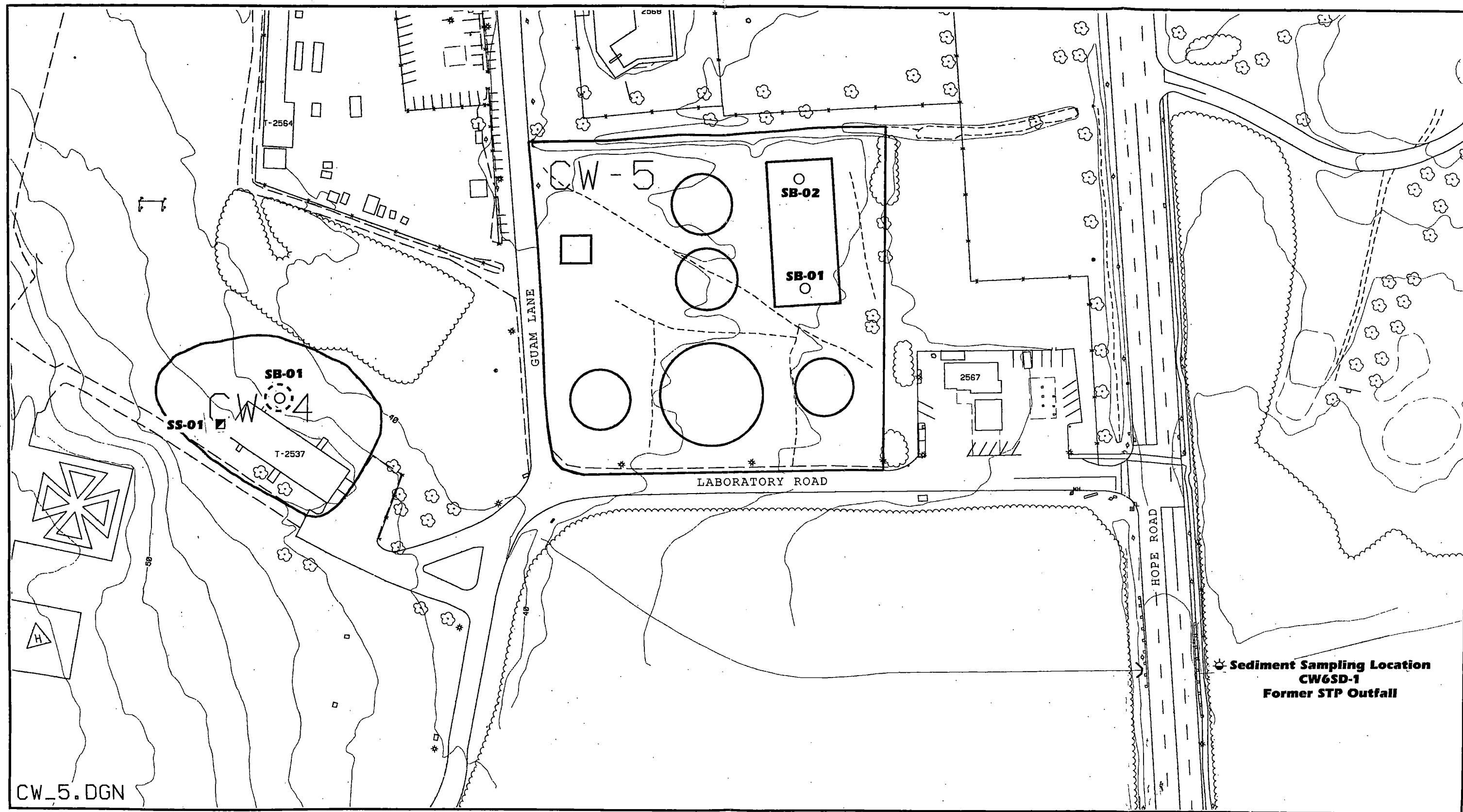
### **4.3.6.5 Recommendations**

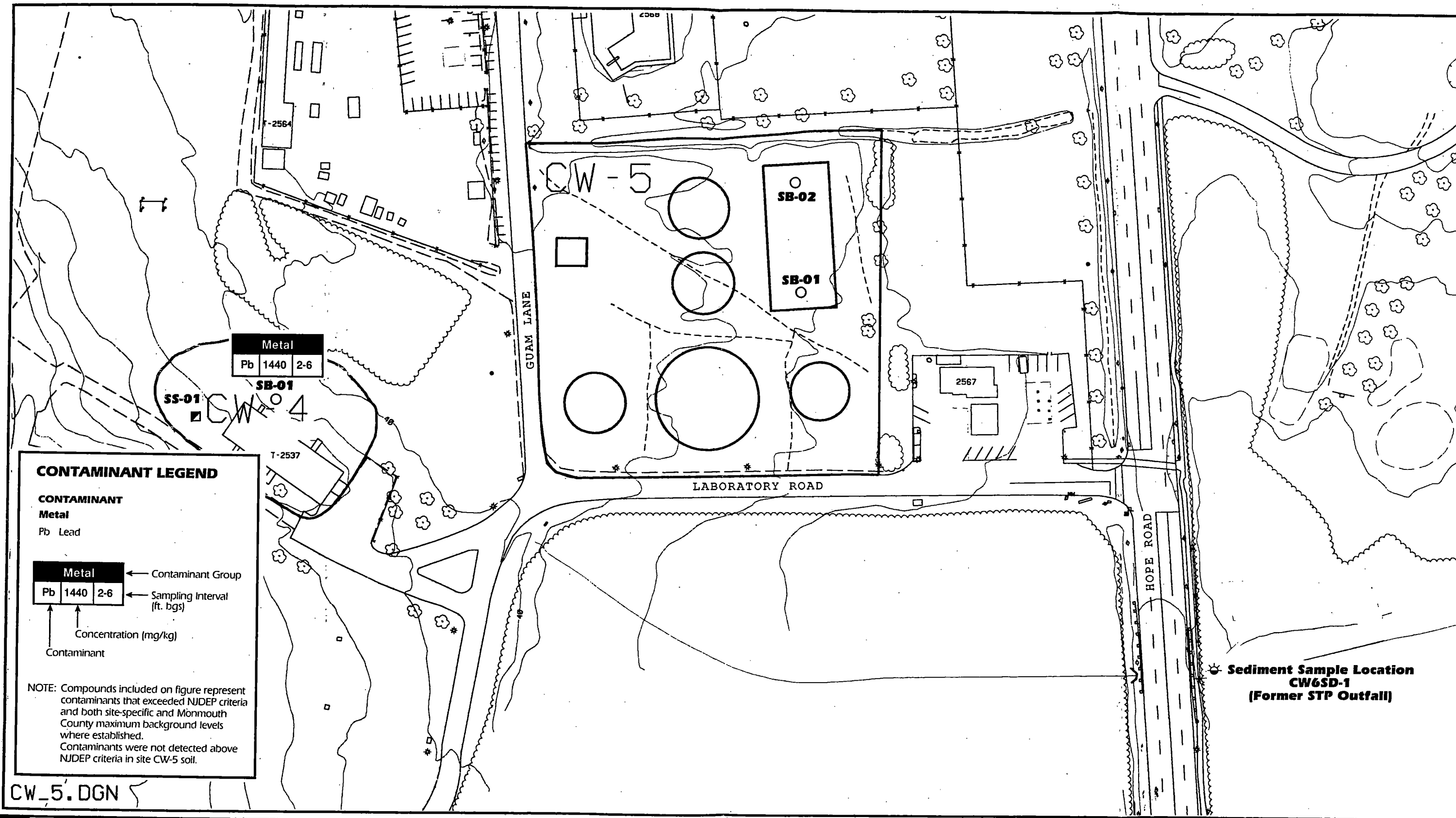
Soil sampling results indicate that only lead was detected at a concentration exceeding the NJDEP SCC at the spent round disposal area.

DPW has submitted the necessary documentation to HQAMC/AEC to obtain the proper funding to remediate the site in FY 1996. Depending on funding availability, the affected soil will be removed and confirmation samples will be collected at the base of the excavation.

The contaminated soil will be removed and disposed of in accordance with applicable regulations. The area of contamination is approximately 8 feet in diameter. The estimated depth of excavation is assumed to be 7 feet. Excavation will be performed in conjunction with confirmatory sampling to ensure that NJDEP SCC are achieved. It is estimated that 17 yd<sup>3</sup> of soil will be excavated, assuming that soil is excavated to a depth of 7 feet. NJDEP will be requested to send a representative to observe the excavation.







Site CW-5

#### **4.3.7 Former Sanitary Treatment Plant (CW-5)**

##### **4.3.7.1 Site Location**

The former STP at Charles Wood was located in the southwest corner of the area bounded by Hope Road to the east, Corregidor Road to the north, Guam Lane to the west, and Laboratory Road to the south (Figure 4.3-11). The approximate area of the STP was 134,080 ft<sup>2</sup> (3.1 acres).

##### **4.3.7.2 Site History**

The Charles Wood STP was built in 1942 to handle 800,000 gallons of sewage per day. As described in the IA, this STP consisted of a grit chamber screen, comminutor, primary and secondary settling tanks, biofilters, and a baffled contact chlorination tank. Sludge was treated in two anaerobic digesters and discharged to underdrained sand beds for final drying. Supernatant liquid from digester sludge and drainage from the sand beds were recycled through the STP for additional treatment. The chlorinated effluent was discharged to a tributary of Wampum Brook on the east side of Hope Road. Sludge went to the golf course and to landfills. This STP was closed on 29 October 1975 when the Charles Wood sewer system was connected to the NMCRSA system. In 1981, all sludges and supernatant liquids were removed from the STP, and the facility was cleaned and disinfected. The removal contractor was Modern Transportation Co. of Kearny, New Jersey. Mercury used in the distributor seal on the biofilter was removed and disposed of by the Directorate of Logistics. The physical facility was demolished in 1983. In 1993, a youth center was constructed on this site.

##### **4.3.7.3 Sampling Effort**

The CW-5 site is presented in Figure 4.3-11. One sediment sample from the outfall area east of Hope Road was collected and analyzed for TCL +30 parameters, TAL metals, and cyanide. Two soil borings were completed and soil samples collected in an effort to evaluate the impact of the former sludge-drying beds on soil quality in the original land surface. Soil borings SB-01 and SB-02 were completed to 8- and 6-ft bgs, respectively. Saturation was observed between 5.5- and 7-ft bgs. The lithology consisted of a yellow-brown gravelly sand fill underdrain by a

greenish-gray silty sand. Soil boring samples were analyzed for TCL +30 parameters, TAL metals, and cyanides.

#### **4.3.7.4 Soil Sampling Results**

Two soil samples, one in each borehole, were collected from the 6- to 8-ft bgs sampling interval and were analyzed for the parameters listed in Table 3.6-1. The analytical results for site soils are listed in Appendix D. Table 4.3-8 compares the detected compounds with the NJDEP SCC, and then compares the results with the site-specific and Monmouth County maximum background levels. In addition, the detected compounds were also compared with the impact to groundwater SCC because no monitor wells were installed at this site.

#### **VOCs**

One VOC (2-butanone) was detected in SB-01. The concentration was detected well below both applicable SCC (residential and impact to groundwater) and background. 2-Butanone is a common laboratory contaminant.

#### **SVOCs**

One SVOC was detected above the laboratory quantitation limit in site soil in SB-01, but below the NJDEP SCC and background. In addition, all compounds detected below quantitation limits were also detected well below both SCCs.

#### **Pesticides/PCBs**

Five pesticides and two PCBs were detected in concentrations above laboratory quantitation limits in SB-01 and SB-02, but were detected well below both of their respective SCCs and background.

**Table 4.3-8**  
**Fort Monmouth - Charles Wood**  
**Summary of Detected Compounds in**  
**Soil from Site CW-5**

| COMPOUND                   | METHOD<br>DETECTION<br>LIMIT<br><br>(mg/kg) | RESIDENTIAL<br>DIRECT CONTACT<br>SOIL CLEANUP<br>CRITERIA<br><br>(mg/kg) | MAXIMUM<br>BACKGROUND<br>CONCENTRATION<br><br>(mg/kg) | ANALYTICAL RESULTS                 |                                    |
|----------------------------|---------------------------------------------|--------------------------------------------------------------------------|-------------------------------------------------------|------------------------------------|------------------------------------|
|                            |                                             |                                                                          |                                                       | SB01-A02<br>12/20/94<br>6-8 ft bgs | SB02-A02<br>12/20/94<br>6-8 ft bgs |
| VOC's (mg/kg)              |                                             |                                                                          |                                                       |                                    |                                    |
| 2-Butanone                 | 0.0041                                      | 1000                                                                     | ND                                                    | 0.013                              | 0.01 J                             |
| SVOC's (mg/kg)             |                                             |                                                                          |                                                       |                                    |                                    |
| Indeno(1,2,3-cd)pyrene     | 0.234                                       | 0.9                                                                      | ND                                                    | 0.066 J                            | ND                                 |
| Benzo(a)anthracene         | 0.162                                       | 0.9                                                                      | 0.046 J                                               | 0.14 J                             | ND                                 |
| bis(2-Ethylhexyl)phthalate | 0.32                                        | 49                                                                       | 0.17 J                                                | 0.21                               | ND                                 |
| Benzo(b)fluoranthene       | 0.188                                       | 0.9                                                                      | 0.078 J                                               | 0.22 J                             | ND                                 |
| Benzo(k)fluoranthene       | 0.205                                       | 0.9                                                                      | 0.041 J                                               | 0.084 J                            | ND                                 |
| Benzo(a)pyrene             | 0.162                                       | 0.66                                                                     | 0.047 J                                               | 0.110 J                            | ND                                 |
| Chrysene                   | 0.145                                       | 9                                                                        | 0.083 J                                               | 0.15 J                             | ND                                 |
| Fluoranthene               | 0.198                                       | 2300                                                                     | 0.042 J                                               | 0.21 J                             | ND                                 |
| Phenanthrene               | 0.165                                       | NLE                                                                      | ND                                                    | 0.085 J                            | ND                                 |
| Pyrene                     | 0.178                                       | 1700                                                                     | 0.048 J                                               | 0.25 J                             | ND                                 |
| PESTICIDES (mg/kg)         |                                             |                                                                          |                                                       |                                    |                                    |
| Aroclor-1254               | 0.042                                       | 0.49                                                                     | ND                                                    | 0.17                               | ND                                 |
| Aroclor-1260               | 0.042                                       | 0.49                                                                     | ND                                                    | 0.15                               | ND                                 |
| alpha-Chlordane            | 0.002                                       | NLE                                                                      | ND                                                    | 0.0084 P                           | ND                                 |
| gamma-Chlordane            | 0.002                                       | NLE                                                                      | ND                                                    | 0.0092                             | ND                                 |
| 4,4'-DDE                   | 0.0037                                      | 2                                                                        | 0.071                                                 | 0.21 P                             | 0.0058                             |
| 4,4'-DDD                   | 0.0037                                      | 3                                                                        | ND                                                    | 0.087                              | 0.0035 J                           |
| 4,4'-DDT                   | 0.0037                                      | 2                                                                        | 0.053                                                 | 0.087                              | ND                                 |
| METAL TOTAL (mg/kg)        |                                             |                                                                          |                                                       |                                    |                                    |
| Aluminum                   | 3.9                                         | NLE                                                                      | 15700                                                 | 3920                               | 3400                               |
| Arsenic                    | 0.35                                        | 20                                                                       | 31.6                                                  | 3.8                                | 1.5                                |
| Barium                     | 0.17                                        | 700                                                                      | 26                                                    | 36.2                               | 21                                 |
| Beryllium                  | 0.1                                         | 1                                                                        | 1.7                                                   | 0.14                               | 0.32                               |
| Calcium                    | 2.2                                         | NLE                                                                      | 653                                                   | 1000                               | 851                                |
| Chromium                   | 1.6                                         | 500                                                                      | 128                                                   | 42.2                               | 38.3                               |
| Cobalt                     | 0.71                                        | NLE                                                                      | 4.5                                                   | 1                                  | ND                                 |
| Copper                     | 2.2                                         | 600                                                                      | 7.27 <sup>1</sup>                                     | 21.5                               | 2                                  |
| Iron                       | 0.58                                        | NLE                                                                      | 45500                                                 | 8950                               | 5930                               |
| Lead                       | 0.4                                         | 400 <sup>2</sup>                                                         | 15.1 <sup>1</sup>                                     | 20.7                               | 3.3                                |
| Magnesium                  | 9.6                                         | NLE                                                                      | 3960                                                  | 527                                | 717                                |
| Manganese                  | 0.18                                        | NLE                                                                      | 120 <sup>1</sup>                                      | 19.7                               | 7.2                                |
| Mercury                    | 0.49                                        | 14                                                                       | ND                                                    | 0.63                               | ND                                 |
| Nickel                     | 1.4                                         | 250                                                                      | 8.3                                                   | 2.7                                | 1.6                                |
| Potassium                  | (12.3-25.8)                                 | NLE                                                                      | 10600                                                 | 944                                | 1880                               |
| Silver                     | 0.54                                        | 110                                                                      | 26 <sup>1</sup>                                       | 7.4                                | ND                                 |
| Sodium                     | 3.8                                         | NLE                                                                      | 56.8                                                  | 28.9                               | 13.5                               |
| Selenium                   | 0.3                                         | 63                                                                       | 0.85                                                  | 0.4                                | 0.35                               |
| Thallium                   | 0.36                                        | 2                                                                        | ND                                                    | ND                                 | 0.33                               |
| Vanadium                   | 0.53                                        | 370                                                                      | 59.6                                                  | 20.7                               | 21.4                               |
| Zinc                       | 0.41                                        | 1500                                                                     | 55.6                                                  | 40.4                               | 11.4                               |

Compounds exceeding NJDEP soil cleanup criteria are noted by bold numbers.

J - Indicates that the concentration value was estimated due to detection at or near the quantification limits

ND - Indicates that the compound was not detected at or below the quantification limits

NLE - No level established

Note: MDL's for metal analysis is actually the highest detection limit with potassium given as a range due to high variability.

P- The percent difference between the results from two GC columns is greater than 25%, the lower of the two values is reported

<sup>1</sup> Monmouth County maximum background concentrations.

<sup>2</sup> NJDEP criteria are referenced in Site Remediation News, Winter 1995.

## Metals

As indicated in Table 4.3-8, all metals detected in site soils were found in concentrations below the NJDEP SCC, where established.

### **4.3.7.5 Sediment Sampling Results**

The STP sediment sampling location was determined to be freshwater because the area is not tidally influenced. One sediment sample, CW6SD-1, was collected at the former outfall of the STP (Figure 4.3-11).

## VOCs

VOCs were analyzed for but were not detected in site sediment samples.

## SVOCs

One SVOC [bis(2-ethylhexyl) phthalate] was detected above the laboratory quantitation limit from location C6SD1. NJDEP sediment guidance values are not established for this compound. This compound is a common laboratory contaminant.

## Pesticides/PCBs

Three pesticide compounds (4,4'-DDD, 4,4'-DDT, and 4,4'-DDE) were detected in concentrations exceeding the NJDEP sediment guidance criteria. However, the concentrations were found in levels below their respective background concentrations. PCBs were not detected in site sediment samples.

## Metals

As indicated in Table 4.3-9, no metals were detected in concentrations greater than the NJDEP sediment guidance criteria.

### **4.3.7.6 Recommendations**

Three compounds (4,4'-DDT, 4,4'-DDD, and 4,4'-DDE) were detected in the sediment at levels that were above the NJDEP sediment guidance criteria but below background. Soil results were below the NJDEP SCC and established maximum background.

No further action will be taken.





**Table 4.3-9**  
**Fort Monmouth - Charles Wood**  
**Summary of Detected Compounds in Sediment**  
**Site CW-5**

| COMPOUND                   | METHOD<br>DETECTION<br>LIMIT | NJDEP<br>SEDIMENT<br>GUIDANCE * | MAXIMUM<br>DETECTED<br>BACKGROUND<br>CONCENTRATION | ANALYTICAL RESULTS GIVEN<br>BY WESTON SAMPLE LOCATION |
|----------------------------|------------------------------|---------------------------------|----------------------------------------------------|-------------------------------------------------------|
|                            |                              |                                 |                                                    | C6SD-1<br>12/1/94                                     |
| SVOCs (mg/kg)              |                              |                                 |                                                    |                                                       |
| bis-(2-Ethylhexy)phthalate | 0.32                         | NLE                             | 0.23                                               | 0.45                                                  |
| Dimethylphthalate          | 0.145                        | NLE                             | ND                                                 | 0.40 J                                                |
| Di-n-butylphthalate        | 0.215                        | NLE                             | 0.12                                               | 0.081 J                                               |
| Di-n-octyl phthalate       | 0.185                        | NLE                             | ND                                                 | 0.11 J                                                |
| PAHs (mg/kg)               |                              |                                 |                                                    |                                                       |
| Benzo (a)anthracene        | 0.162                        | 0.23                            | 0.09                                               | 0.079 J                                               |
| Benzo (b)fluoranthene      | 0.188                        | NLE                             | 0.16                                               | 0.1 J                                                 |
| Chrysene                   | 0.145                        | 0.4                             | 0.14                                               | 0.087                                                 |
| Fluoranthene               | 0.198                        | 0.6                             | 0.12                                               | 0.16 J                                                |
| Phenanthrene **            | 0.165                        | 0.225, 0.326                    | 0.079                                              | 0.098 J                                               |
| Pyrene                     | 0.178                        | 0.35                            | 0.41                                               | 0.19 J                                                |
| PESTICIDES/PCBs (mg/kg)    |                              |                                 |                                                    |                                                       |
| 4,4'-DDD                   | 0.0042                       | 0.002                           | 0.015                                              | 0.005 P                                               |
| 4,4'-DDE                   | 0.0042                       | 0.002                           | 0.096                                              | 0.0067                                                |
| 4,4'-DDT **                | 0.0042                       | 0.003, 0.00183                  | 0.11                                               | 0.0029 JP                                             |
| Heptachlor epoxide         | 0.0021                       | NLE                             | ND                                                 | 0.0042 P                                              |
| METALS TOTAL (mg/kg)       |                              |                                 |                                                    |                                                       |
| Aluminum                   | 6.1                          | NLE                             | 6660                                               | 866                                                   |
| Arsenic                    | 0.35                         | 33                              | 5.8                                                | 0.74                                                  |
| Barium                     | 0.48                         | NLE                             | 45.7                                               | 9.6                                                   |
| Calcium                    | 2.7                          | NLE                             | 2960                                               | 509                                                   |
| Chromium                   | 1.5                          | 80                              | 36.9                                               | 7.8                                                   |
| Cobalt                     | 0.64                         | NLE                             | 4.2                                                | 1.3                                                   |
| Copper                     | 0.55                         | 70                              | 24.5                                               | 7.4                                                   |
| Iron                       | 1.1                          | NLE                             | 19600                                              | 6910                                                  |
| Lead                       | 1.8                          | 35                              | 142                                                | 9.3                                                   |
| Magnesium                  | 8.7                          | NLE                             | 2560                                               | 320                                                   |
| Manganese                  | 0.45                         | NLE                             | 65.1                                               | 25.8                                                  |
| Potassium                  | 186                          | NLE                             | 1700                                               | 256                                                   |
| Sodium                     | 3.5                          | NLE                             | 271                                                | 54                                                    |
| Vanadium                   | 0.66                         | NLE                             | 39.5                                               | 5.4                                                   |
| Zinc                       | 0.64                         | 120                             | 126                                                | 22.5                                                  |

Compounds detected above NJDEP Sediment Guidance are bolded.

\* - NOAA (1990) ER-L guidance. Values for DDE and DDD are not presented in NJDEP Sediment Quality Evaluations (1991).

\*\* - Standards developed using equilibrium partitioning approach in accordance with NJDEP Guidance for Sediment Quality Evaluation (1991). Total organic carbon concentrations of 1% assumed based on organic carbon content detected in adjacent sample.

ND - Compound was not detected at or above the quantification limit.

NLE - No Level Established

J - Concentration was estimated due to detection at or below the quantification limit

P - The percent difference between the results from the two GC columns is greater than 25%, the lower of the two values is reported

Site CW-6

#### **4.3.8 Pesticide Storage Building T-2044 (CW-6)**

##### **4.3.8.1 Site Location**

Building T-2044 is part of a small complex of buildings in the south-central portion of the Charles Wood area. The complex consists of Building T-2044, Building T-2070, and two metal igloos. The buildings are currently used to store golf course maintenance and landscaping equipment, such as mowers and tractors. The approximate area of site CW-6 is 25,000 ft<sup>2</sup> (0.6 acre).

##### **4.3.8.2 Site History**

The golf course maintenance complex may predate the purchase of the golf course by the Army. Pesticides and herbicides were formerly stored and mixed in this area. The IA contains a 1979 inventory of pesticides and herbicides that were used on the golf course and stored in Building T-2044. Some of the pesticides that were present in significant quantities are malathion, floribale sevin, resmethrin, Borocel IV, chlordane, and Dibrom. The IA also discusses a pest control program that was in effect in 1979. The compounds that were used in large quantities include carbaryl (sevin), malathion, chlordane, and diazinon. Some of the herbicides mentioned in the IA include 2,4-D, Dacthal, 2,4,5-T, and sodium arsenite.

The course groundskeeper, who has been part of the grounds crew for 33 years (1960 to 1993), said pesticides and herbicides were kept in a metal igloo and were mixed in two areas marked A and B in Figure 4.3-13. Area A is on a currently grass-covered area south of the igloo. At area A two USTs were excavated and the chlordane-contaminated soil was disposed of in spring 1995. Area B is on pavement near the office door in T-2044. This paved area has a drain that empties into a ditch in the woods immediately behind T-2044. The supervisor said that pesticide containers were not rinsed, but were disposed of to the landfill as is. Prior to 1980, the containers would have been disposed of at a landfill on the Main Post, such as site M-8.

Pesticides and herbicides are not currently stored or mixed on-site. The facility has hired an outside contractor to come in and apply pesticides and herbicides.

#### **4.3.8.3 Sampling Effort**

Limited sampling in 1989 determined that NJDEP SCC were exceeded in one soil sample. The sampling report did not clearly identify the location of the sample.

To confirm the existence of contamination and evaluate the effect on groundwater, two soil borings were completed at locations where pesticides mixing was believed to have occurred. These locations are just north of Building T-2044 (SB-02) and just south of the pavement that extends in front of Building T-2044 (SB-34). The borings were advanced to the water table and soil samples were taken at 6 to 12 inches and at 2 feet and analyzed for TCL +30 parameters. One surface soil sample was taken in the runoff ditch that runs into the woods southwest of Building T-2044 (Figure 4.3-13).

One monitor well was installed in these borings (MW-34), shown in Figure 4.3-13, and groundwater samples were collected in two sampling rounds and analyzed for TCL +30 parameters. Furthermore, a pre-existing monitor well (MW-01) was sampled twice for TCL +30 parameters in an effort to further evaluate the nature and extent of contamination on site groundwater quality.

The location of the monitor well proposed in the CDAP (MW-35) at site CW-6 was moved to site CW-9 because an existing monitor well was located near the proposed well location.

#### **4.3.8.4 Hydrogeologic Interpretation**

The lithologic logs from MW-34 indicate that the lithology consists of a thin soil cover (0.3 ft) underlain by a brown fine-medium-grained sand with olive-brown sand laminae. Saturation was observed at approximately 4 ft bgs. Monitor well MW-34 was screened across the water table and was drilled to 14.5 ft bgs. Water-level elevation data, measured on 6 March 1995, prior to the March sampling round, indicate that local groundwater flow is east toward site CW-9 (Figure 4.3-14).

The following subsections summarize the soil and groundwater analytical results for site CW-6.

#### **4.3.8.5 Soil Sampling Results**

A total of four soil samples were collected: two in the MW-34 borehole, one in SB-02, and one in SS-01. The soil samples were analyzed for the parameters listed in Table 3.6-1. Sample depths of soil borings were 0 to 2 and 2 to 4 ft bgs in SB-34 and 0.5 to 1 ft bgs in SB-02. The surface soil sample was collected from 0 to 0.5 ft bgs. The analytical results for site soils at specific sampling intervals are listed in Appendix D. Table 4.3-10 compares the detected compounds with the NJDEP SCC, and then compares the results with the site-specific and Monmouth County maximum background concentrations, where appropriate.

##### **VOCs**

VOCs were not detected in site soil.

##### **SVOCs**

SVOCs were not detected above laboratory quantitation limits in site soil.

##### **Pesticides/PCBs**

Seven pesticides were detected above laboratory quantitation limits in either SB-34, SB-02, and SS-01 from predominantly the 0- to 2-ft bgs sampling interval. In addition, one compound (dieldrin) was detected in a concentration exceeding the NJDEP SCC and background in SB-34 (0 to 2 ft bgs). Subsequently, dieldrin was not detected in groundwater samples from MW-34. Three of the compounds detected were below the NJDEP SCC and three do not have established criteria. PCBs were not detected in site soil. Figure 4.3-15 presents the locations of compounds detected above maximum background and the NJDEP criteria.

**Table 4.3-10**  
**Fort Monmouth - Charles Wood**  
**Summary of Detected Compounds**  
**In Soil at Site CW-6**

| COMPOUND               | METHOD<br>DETECTION<br>LIMIT | RESIDENTIAL<br>DIRECT CONTACT<br>SOIL CLEANUP<br>CRITERIA | MAXIMUM<br>BACKGROUND<br>CONCENTRATION | ANALYTICAL RESULTS                 |                                    |                                       |                             |
|------------------------|------------------------------|-----------------------------------------------------------|----------------------------------------|------------------------------------|------------------------------------|---------------------------------------|-----------------------------|
|                        |                              |                                                           |                                        | SB34-A01<br>1/3/95<br>(0-2 ft bgs) | SB34-A02<br>1/3/95<br>(2-4 ft bgs) | SB02-A01<br>5/10/95<br>(0.5-1 ft bgs) | SS01-A01<br>11/30/94<br>(1) |
| SVOC's (mg/kg)         |                              |                                                           |                                        |                                    |                                    |                                       |                             |
| Phenanthrene           | 0.165                        | NLE                                                       | ND                                     | ND                                 | 0.24 J                             | ND                                    | ND                          |
| Fluoranthene           | 0.198                        | 2300                                                      | 0.042 J                                | 0.049 J                            | 0.18 J                             | ND                                    | ND                          |
| Pyrene                 | 0.178                        | 1700                                                      | 0.048 J                                | 0.056 J                            | 0.270 J                            | ND                                    | ND                          |
| Benzo(a)anthracene     | 0.162                        | 0.9                                                       | 0.046 J                                | ND                                 | 0.160 J                            | ND                                    | ND                          |
| Chrysene               | 0.145                        | 9                                                         | 0.083 J                                | ND                                 | 0.15 J                             | ND                                    | ND                          |
| Benzo(b)fluoranthene   | 0.188                        | 0.9                                                       | 0.078 J                                | ND                                 | 0.11 J                             | ND                                    | ND                          |
| Benzo(a)pyrene         | 0.162                        | 0.66                                                      | 0.047 J                                | ND                                 | 0.087 J                            | ND                                    | ND                          |
| Indeno(1,2,3-cd)pyrene | 0.234                        | 0.9                                                       | ND                                     | ND                                 | 0.054 J                            | ND                                    | ND                          |
| Benzo(g,h,i)perylene   | 0.224                        | NLE                                                       | 0.042 J                                | 0.057                              | 0.066                              | ND                                    | ND                          |
| PESTICIDES (mg/kg)     |                              |                                                           |                                        |                                    |                                    |                                       |                             |
| Heptachlor epoxide     | 0.002                        | NLE                                                       | ND                                     | 0.018 P                            | ND                                 | 0.0078 P                              | 0.032 R                     |
| Dieldrin               | 0.0039                       | 0.042                                                     | ND                                     | 0.061 DP                           | ND                                 | ND                                    | ND                          |
| alpha-Chlordane        | 0.002                        | NLE                                                       | ND                                     | 0.14 P                             | 0.0034 P                           | .07 JD                                | 0.870 CD                    |
| gamma-Chlordane        | 0.002                        | NLE                                                       | ND                                     | 0.11 P                             | 0.0027 P                           | .068 JD                               | 0.800 CD                    |
| 4,4'-DDE               | 0.0037                       | 2                                                         | 0.071                                  | 0.074 P                            | ND                                 | 0.34 JCD                              | 0.13                        |
| 4,4'-DDD               | 0.0037                       | 3                                                         | 0.053                                  | 0.0095 P                           | ND                                 | 2.9 CD                                | 0.86 C                      |
| 4,4'-DDT               | 0.0037                       | 2                                                         | ND                                     | 0.180 P                            | .011 P                             | ND                                    | 0.81 C                      |
| METALS TOTAL (mg/kg)   |                              |                                                           |                                        |                                    |                                    |                                       |                             |
| Aluminum               | 3.9                          | NLE                                                       | 15700                                  | NS                                 | NS                                 | NS                                    | 5130                        |
| Arsenic                | 0.35                         | 20                                                        | 31.6                                   | NS                                 | NS                                 | NS                                    | 11.6                        |
| Barium                 | 0.17                         | 700                                                       | 26                                     | NS                                 | NS                                 | NS                                    | 72.2                        |
| Calcium                | 2.2                          | NLE                                                       | 653                                    | NS                                 | NS                                 | NS                                    | 4430                        |
| Cadmium                | 0.86                         | 1                                                         | 0.135 <sup>2</sup>                     | NS                                 | NS                                 | NS                                    | 4.4                         |
| Chromium               | 1.6                          | 500                                                       | 128                                    | NS                                 | NS                                 | NS                                    | 65.8                        |
| Copper                 | 2.2                          | 600                                                       | 7.27 <sup>2</sup>                      | NS                                 | NS                                 | NS                                    | 69.8                        |
| Iron                   | 0.58                         | NLE                                                       | 45500                                  | NS                                 | NS                                 | NS                                    | 10900                       |
| Lead                   | 0.4                          | 400 <sup>3</sup>                                          | 15.1 <sup>2</sup>                      | NS                                 | NS                                 | NS                                    | 203                         |
| Magnesium              | 9.6                          | NLE                                                       | 3960                                   | NS                                 | NS                                 | NS                                    | 1260                        |
| Manganese              | 0.18                         | NLE                                                       | 120 <sup>4</sup>                       | NS                                 | NS                                 | NS                                    | 78.8                        |
| Mercury                | 0.49                         | 14                                                        | ND                                     | NS                                 | NS                                 | NS                                    | 6                           |
| Potassium              | (12.3-25.8)                  | NLE                                                       | 10600                                  | NS                                 | NS                                 | NS                                    | 1420                        |
| Silver                 | 0.54                         | 110                                                       | 0.26 <sup>2</sup>                      | NS                                 | NS                                 | NS                                    | 1.5                         |
| Sodium                 | 3.8                          | NLE                                                       | 56.8                                   | NS                                 | NS                                 | NS                                    | 103                         |
| Selenium               | 0.3                          | 63                                                        | 0.85                                   | NS                                 | NS                                 | NS                                    | 0.7                         |
| Vanadium               | 0.53                         | 370                                                       | 59.6                                   | NS                                 | NS                                 | NS                                    | 21.8                        |
| Zinc                   | 0.41                         | 1500                                                      | 55.6                                   | NS                                 | NS                                 | NS                                    | 463                         |

Compounds exceeding NJDEP soil cleanup criteria are bolded

NA - Not Analyzed; NS - Not Sampled

ND - Compound was not detected at or below the quantification limits

J - Indicates that the concentration value was estimated due to detection at or near the quantification limits

NLE - No Level Established

C - Pesticide identification was confirmed by GC/MS

D - Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis

P - The percent difference between the results from two GC columns is greater than 25%, the lower of the two values is reported

R - Data rejected; URS The Data Validator

Note: MDL's for metal analysis is actually the highest detection limit with potassium given as a range due to high variability.

Note: Metals were analyzed (SS-01), but were not proposed in the scope of work.

(1) - VOC/SVOC's were collected from 6" to 12" bgs, pesticides and metals were collected from 0"-6" bgs.

<sup>2</sup> Monmouth County maximum background concentrations.

<sup>3</sup> NJDEP criteria are referenced in Site Remediation News, Winter 1995.

## Metals

As indicated in Table 4.3-10, of the 18 metals detected in site soils, only cadmium was found in a concentration exceeding the NJDEP SCC in SS-01. In addition, cadmium was detected in a concentration greater than that determined for site-specific and Monmouth County maximum background at Charles Wood. However, in accordance with the NJDEP *Cleanup Standards for Contaminated Sites* (NJDEP, 1992), the arithmetic mean of cadmium was calculated from the 10 surface soil samples at sites CW-6 and CW-9, since the samples were collected within the same sampling interval (0 to 6 inches). The arithmetic mean or concentration was then compared with the NJDEP SCC and established background. The arithmetic mean (1 mg/kg) was found at a level equal to the NJDEP SCC (1 mg/kg). However, sites CW-06 and CW-09 are located on a golf course. A *Summary of Selected Soil Constituents and Contaminants at Background Locations in New Jersey*, 1993, provides a separate background concentration level for cadmium in golf course areas. When comparing the arithmetic mean of the analytical results at the two sites with the arithmetic mean for cadmium on golf courses in Table 9 of that document (2.26 mg/kg), the analytical result is found in a concentration below established background. Cadmium is reported in higher concentrations on golf courses due to the direct application of fertilizers, herbicides, and pesticides (Field et al., 1993). Therefore, cadmium is not considered a compounds of concern. Although metals were sampled for in surface soil location SS-01, a metals analysis was not proposed in the original scope of work.

### **4.3.8.6 Groundwater Sampling Results**

Monitor wells MW-34 and MW-1 were sampled for the analytical parameters listed in Table 3.8-1. The analytical results for groundwater samples from the individual sampling rounds are listed in Appendix D. Table 4.3-11 compares the average concentrations of the detected compounds from the February and March sampling rounds with the NJDEP GWQC, and then compares the results with the subsequent site-specific and Monmouth County maximum background concentrations, where appropriate.

**Table 4.3-11**  
**Fort Monmouth - Charles Wood**  
**Summary of Average Concentrations of Detected**  
**Compounds in Groundwater - Site CW-6**

| COMPOUND                          | METHOD DETECTION<br>LIMIT | NJDEP<br>GROUNDWATER<br>QUALITY<br>CRITERIA | MAXIMUM<br>BACKGROUND<br>CONCENTRATION | ANALYTICAL RESULTS (µg/L)          |                                    |
|-----------------------------------|---------------------------|---------------------------------------------|----------------------------------------|------------------------------------|------------------------------------|
|                                   |                           |                                             |                                        | SAMPLING DATE                      |                                    |
|                                   | (µg/L)                    | (µg/L)                                      | (µg/L)                                 | MW34<br>2/10/95, 3/13/95<br>(avg.) | MW01<br>5/10/95, 5/27/95<br>(avg.) |
| <b>VOC (µg/L)</b>                 |                           |                                             |                                        |                                    |                                    |
| Benzene                           | 2.4**                     | 1*                                          | ND                                     | ND                                 | 8                                  |
| Ethylbenzene                      | 3.1                       | 700                                         | ND                                     | ND                                 | 1J                                 |
| Xylene (total)                    | 3.8                       | 40                                          | ND                                     | ND                                 | 2J                                 |
| <b>Pesticide and PCB's (µg/L)</b> |                           |                                             |                                        |                                    |                                    |
| 4,4'-DDD                          | 0.097                     | 0.1                                         | ND                                     | ND                                 | 0.086J                             |
| gamma-chlordane                   | 0.046                     | NLE                                         | ND                                     | ND                                 | .035JP                             |
| alpha-chlordane                   | 0.046                     | NLE                                         | ND                                     | ND                                 | 0.0545                             |

Compounds exceeding NJDEP groundwater quality criteria are noted by bold numbers.

NJDEP groundwater quality criteria consist of the higher number between the PQL or STANDARD

\*PQL - Practical Quantitation Limit -was used as the NJDEP groundwater quality criteria

ND - Indicates that the compound was not detected

J - Indicates that the concentration value was estimated due to detection at or near the detection limits

\*\* - Method detection limit exceeded NJDEP groundwater quality criteria

P - Percent difference between the results from the GC columns is greater than 25%, the lower of the two values is reported



## VOCs

One VOC (benzene) was detected above the laboratory quantitation limit in MW-1 from the February sampling round only. In addition, benzene was found in a concentration exceeding the NJDEP GWQC. Figure 4.3-15 presents the locations of the compounds detected above both background and criteria.

## SVOCs

SVOCs were not detected above laboratory quantitation limits in site monitor wells MW-34 and MW-1 from either sampling round. In addition, SVOCs were detected below the NJDEP GWQC.

## Pesticides/PCBs

One pesticide (alpha-chlordane) was detected in a concentration slightly above the laboratory quantitation limit in MW-1; however, NJDEP GWQCs are not established for alpha-chlordane. PCBs were not detected in site monitor wells from either sampling round.

### **4.3.8.7 Recommendations**

The pesticide dieldrin and the metal cadmium were detected in the soil at two different locations, each at levels that exceeded NJDEP SCC and background. However, the average concentrations of dieldrin and cadmium in surface soil samples at CW-6 and CW-9 did not exceed the NJDEP SCC. Cadmium is typically present at elevated levels at golf courses. Groundwater samples indicated that benzene was detected in the existing monitor well (MW-1), which is attributed to a previously removed UST. Benzene was not detected in downgradient wells. Pesticides were not detected in any groundwater samples above NJDEP criteria.

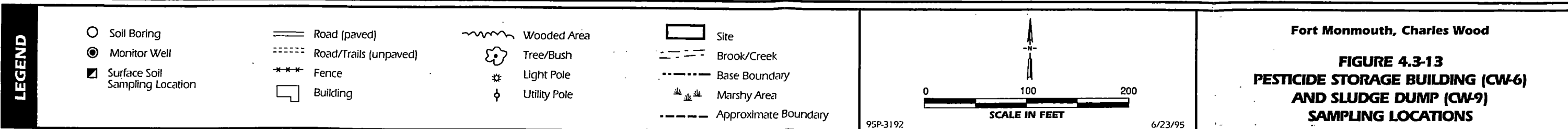
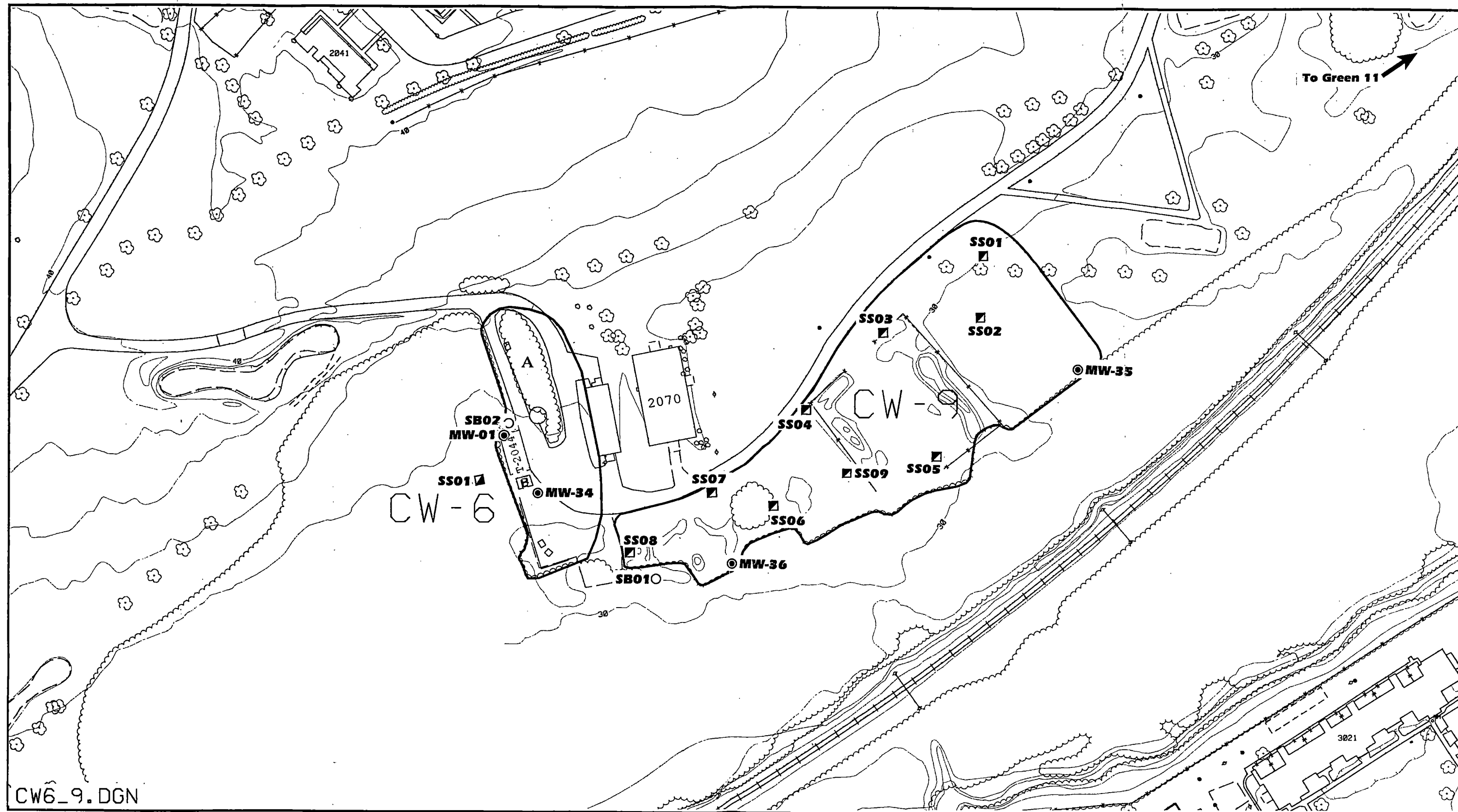
NJDEP groundwater criteria were exceeded for one VOC, but the measured value was just slightly above the GWQC. Therefore, no immediate remedial action is necessary.

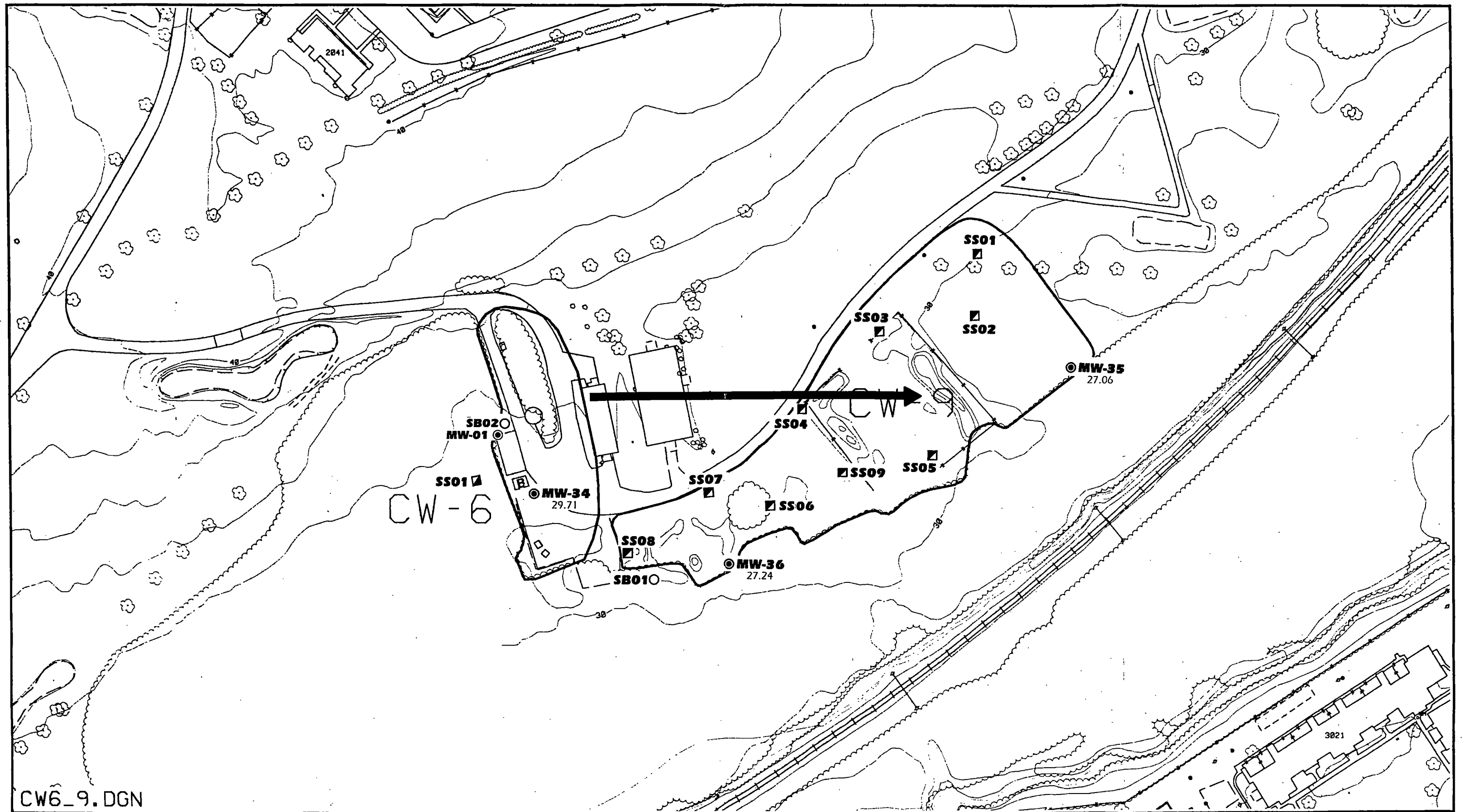
DPW proposes that a long-term groundwater monitoring program be developed and implemented for the site. Aqueous samples would be collected and analyzed on a quarterly basis to further



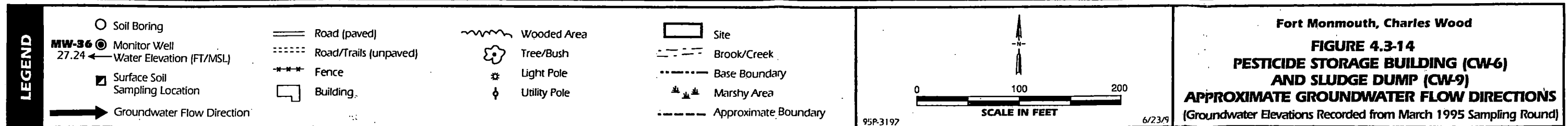
evaluate water quality conditions at the site. Groundwater samples would be collected from existing monitor wells. Compounds of concern identified in the first two rounds of sampling would be targeted for the monitoring program.

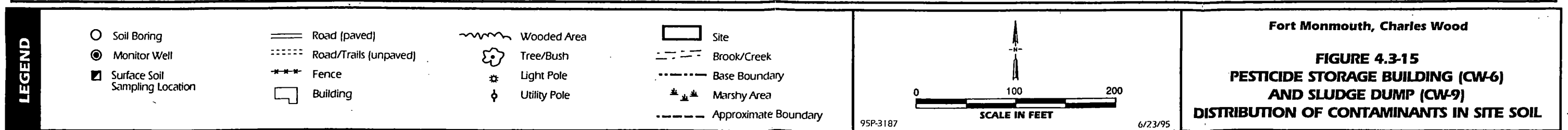
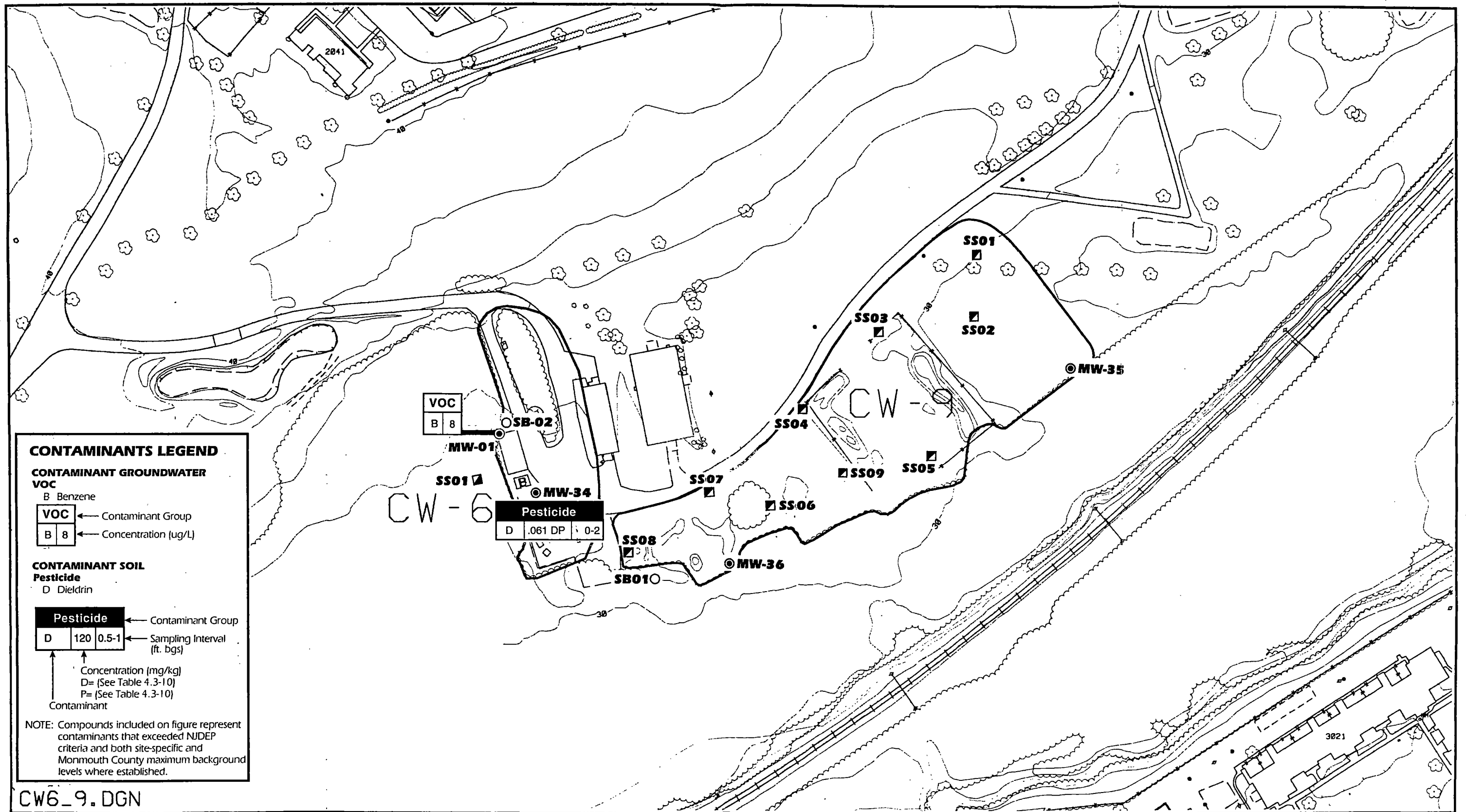






CW6\_9.DGN





Site CW-9

### **4.3.9 Sludge Dump (CW-9)**

#### **4.3.9.1 Site Location**

The sludge dump (CW-9) as identified in the IA is located in the southern part of Charles Wood, south and southeast of Building 2070 and west of green 11 and tee 12 of the golf course (Figure 4.3-13). The approximate area of site CW-9 is 79,933 ft<sup>2</sup> (1.8 acres).

#### **4.3.9.2 Site History**

Since the 1940s, sludge generated at the STPs has been stored in this area before being used as a soil conditioner and fertilizer on the golf course. Sludge piles are visible in the 1957, 1961, 1974, and 1981 aerial photographs. During the 1993 site visit, a pile of sludge removed from fairway 1 on the golf course was observed south of Building 2070. According to long-term Fort Monmouth employees, at least three other fairways (8, 10, and 11) have 4 to 5 inches of sludge over the native sand; sludge may have been used to fill in low areas.

#### **4.3.9.3 Sampling Effort**

Two monitor wells were installed (MW-35 and MW-36), one soil sample from soil boring SB-01 and nine from surface soil locations SS-01 through SS-09 were collected, and two rounds of groundwater sampling were conducted in an effort to evaluate the impact of past site activities on soil and groundwater quality. Monitor wells MW-35 and MW-36 and soil boring SB-01 were analyzed for TCL +30 parameters and TAL metals. Surface soil locations SS-01 through SS-09 were analyzed for TAL metals only. The sampling locations are presented in Figure 4.3-13. MW-35 was relocated from site CW-6 because an existing monitor well was located at the proposed well location. The monitor well (MW-35) was then relocated to a downgradient location at CW-9 to monitor groundwater quality downgradient of the area under investigation.

#### **4.3.9.4 Hydrogeologic Interpretation**

Lithologic logs from MW-35 and MW-36 indicate that the lithology consists of a thin soil cover (0.3 ft) underlain by an orange-olive-brown predominantly medium-grained quartz sand with silt laminae. Saturation was observed at 4 ft bgs. Monitor wells were screened across the water table, with total depths of 14.5 and 14 ft bgs in MW-35 and MW-36, respectively. Water-level elevation data, measured on 6 March 1995, prior to the March 1995 sampling round, indicate that the local groundwater flow direction is east (Figure 4.3-14). Based on groundwater elevation measurements, monitor wells MW-35 and MW-36 are downgradient of the area under investigation.

#### **4.3.9.5 Soil Sampling Results**

One soil sample was collected from the 2- to 4-ft bgs sampling interval in a boring installed to a depth of 6 ft bgs. One sample from each surface soil location was collected from the 0- to 0.5-ft bgs interval. The soil samples collected were analyzed for the parameters listed in Table 3.6-1. The analytical results for site soil are listed in Appendix D. Tables 4.3-12 and 4.3-13 compare the compounds detected with the NJDEP SCC, and then compare the results with the subsequent site-specific and Monmouth County maximum background concentrations, where appropriate.

##### **VOCs**

VOCs were not detected in site soil.

##### **SVOCs**

SVOCs were not detected above laboratory quantitation limits in site soil.



**Table 4.3-12**  
**Fort Monmouth - Charles Wood**  
**Summary of Detected Compounds in Soil from Boring Location SB-01**  
**Site CW-9**

| COMPOUND             | METHOD<br>DETECTION<br>LIMIT | RESIDENTIAL<br>DIRECT CONTACT<br>SOIL CLEANUP<br>CRITERIA | MAXIMUM<br>BACKGROUND<br>CONCENTRATION | ANALYTICAL RESULTS                 |
|----------------------|------------------------------|-----------------------------------------------------------|----------------------------------------|------------------------------------|
|                      |                              |                                                           |                                        | SB01-A02<br>1/4/95<br>(2-4 ft bgs) |
| (mg/kg)              | (mg/kg)                      | (mg/kg)                                                   | (mg/kg)                                |                                    |
| SVOCs (mg/kg)        |                              |                                                           |                                        |                                    |
| Di-n-butylphthalate  | 0.215                        | 5700                                                      | ND                                     | 0.076                              |
| PESTICIDES (mg/kg)   |                              |                                                           |                                        |                                    |
| 4,4'-DDE             | 0.0037                       | 2                                                         | 0.071                                  | 0.0076 P                           |
| 4,4'-DDT             | 0.0037                       | 2                                                         | 0.053                                  | 0.008 P                            |
| METALS TOTAL (mg/kg) |                              |                                                           |                                        |                                    |
| Aluminum             | 3.9                          | NLE                                                       | 15700                                  | 3830                               |
| Arsenic              | 0.35                         | 20                                                        | 31.6                                   | 2.6                                |
| Barium               | 0.17                         | 700                                                       | 26                                     | 6.6                                |
| Beryllium            | 0.1                          | 1                                                         | 1.7                                    | 0.39                               |
| Calcium              | 2.2                          | NLE                                                       | 653                                    | 366                                |
| Cobalt               | 0.71                         | NLE                                                       | 4.5                                    | 1                                  |
| Chromium             | 1.6                          | 500                                                       | 128                                    | 44                                 |
| Copper               | 2.2                          | 600                                                       | 7.27 <sup>1</sup>                      | 2.3                                |
| Iron                 | 0.58                         | NLE                                                       | 45500                                  | 9720                               |
| Lead                 | 0.4                          | 400 <sup>2</sup>                                          | 15.1 <sup>1</sup>                      | 3.9                                |
| Magnesium            | 9.6                          | NLE                                                       | 3960                                   | 698                                |
| Manganese            | 0.18                         | NLE                                                       | 120 <sup>1</sup>                       | 11.9                               |
| Mercury              | 0.49                         | 14                                                        | ND                                     | 0.12                               |
| Nickel               | 1.4                          | 250                                                       | 8.3                                    | 2.8                                |
| Potassium            | (12.3-25.8)                  | NLE                                                       | 10600                                  | 1480                               |
| Sodium               | 3.8                          | NLE                                                       | 56.8                                   | 21.4                               |
| Vanadium             | 0.53                         | 370                                                       | 59.6                                   | 27.4                               |
| Zinc                 | 0.41                         | 1500                                                      | 55.6                                   | 12.8                               |

Compounds exceeding NJDEP soil cleanup criteria are noted by bold numbers.

ND - Compound was not detected at or below the quantification limits

NLE - No Level Established

P- the percent difference between the results from the two GC columns is greater than 25%, the lower of the two values is reported

Note: MDL's for metal analysis is actually the highest detection limit with potassium given as a range due to high variability.

<sup>1</sup> Monmouth County maximum background concentrations.

<sup>2</sup> NJDEP criteria are referenced in Site Remediation News, Winter 1995.

**Table 4.3-13**  
**Fort Monmouth - Charles Wood**  
**Summary of Detected Compounds in Soil from Surface Locations**  
**Site CW-9**

| COMPOUND                                                  | METHOD<br>DETECTION<br>LIMIT | RESIDENTIAL<br>DIRECT CONTACT<br>SOIL CLEANUP<br>CRITERIA | MAXIMUM<br>BACKGROUND<br>CONCENTRATION | ANALYTICAL RESULTS |          |          |          |          |          |          |          |          |
|-----------------------------------------------------------|------------------------------|-----------------------------------------------------------|----------------------------------------|--------------------|----------|----------|----------|----------|----------|----------|----------|----------|
|                                                           |                              |                                                           |                                        | 11/30/94           |          |          |          |          |          |          |          |          |
|                                                           | (mg/kg)                      | (mg/kg)                                                   | (mg/kg)                                | SS01-A01           | SS02-A01 | SS03-A01 | SS04-A01 | SS05-A01 | SS06-A01 | SS07-A01 | SS08-A01 | SS09-A01 |
| <b>METALS TOTAL (mg/kg) Sample Interval :0"-6" ft bgs</b> |                              |                                                           |                                        |                    |          |          |          |          |          |          |          |          |
| Aluminum                                                  | 3.9                          | NLE                                                       | 15700                                  | 7350               | 5730     | 3600     | 4380     | 6930     | 5450     | 3910     | 4070     | 7700     |
| Arsenic                                                   | 0.35                         | 20                                                        | 31.6                                   | 13.6               | 12.1     | 6.9      | 6.3      | 15.6     | 9.3      | 10.5     | 7.2      | 7.7      |
| Barium                                                    | 0.17                         | 700                                                       | 26                                     | 23.4               | 28.9     | 65.4     | 51.2     | 32.5     | 33       | 40.7     | 19.2     | 40.8     |
| Beryllium                                                 | 0.1                          | 1                                                         | 1.7                                    | 0.73               | 0.68     | 0.57     | 0.55     | 0.9      | 0.72     | 0.58     | 0.56     | 1        |
| Calcium                                                   | 2.2                          | NLE                                                       | 653                                    | 2680               | 2650     | 1960     | 19600    | 3570     | 3610     | 4370     | 1630     | 3440     |
| Cadmium                                                   | 0.86                         | 1                                                         | 0.135 <sup>1</sup>                     | ND                 | ND       | ND       | ND       | ND       | ND       | 2.6      | ND       | ND       |
| Cobalt                                                    | 0.71                         | NLE                                                       | 4.5                                    | ND                 | ND       | ND       | 1.3      | 1.9      | 1.7      | ND       | ND       | 1.8      |
| Chromium                                                  | 1.6                          | 500                                                       | 128                                    | 56.7               | 57.2     | 24.9     | 28.3     | 60.5     | 46.9     | 164      | 56.2     | 70       |
| Copper                                                    | 2.2                          | 600                                                       | 7.27 <sup>1</sup>                      | 9.6                | 10.3     | 5        | 17.7     | 8.8      | 11.1     | 17.4     | 9        | 9.6      |
| Iron                                                      | 0.58                         | NLE                                                       | 45500                                  | 20600              | 18200    | 10800    | 12200    | 22200    | 17900    | 9880     | 11300    | 25600    |
| Lead                                                      | 0.49                         | 400 <sup>2</sup>                                          | 15.1 <sup>1</sup>                      | 19.9               | 30.1     | 13.5     | 56.8     | 27.4     | 17       | 82.3     | 35.5     | 20.1     |
| Magnesium                                                 | 9.6                          | NLE                                                       | 3960                                   | 1910               | 2010     | 815      | 2260     | 2280     | 1720     | 1620     | 893      | 2590     |
| Manganese                                                 | 0.18                         | NLE                                                       | 120 <sup>1</sup>                       | 85.1               | 46.8     | 22.3     | 106      | 59.2     | 56       | 140      | 37       | 69.5     |
| Mercury                                                   | 0.49                         | 14                                                        | ND                                     | 0.2                | 0.23     | ND       | ND       | 0.14     | ND       | 7.9      | 0.69     | ND       |
| Nickel                                                    | 1.4                          | 250                                                       | 8.3                                    | 6                  | 3.3      | ND       | 5.7      | 6.9      | 4.9      | 4.3      | 2.4      | 5.8      |
| Potassium                                                 | (12.3-25.8)                  | NLE                                                       | 10600                                  | 1600               | 2620     | 1460     | 2060     | 3950     | 3180     | 1720     | 1250     | 5130     |
| Silver                                                    | 0.54                         | 110                                                       | 0.26 <sup>1</sup>                      | 2.5                | 2.8      | ND       | ND       | 0.77     | 0.71     | 1.2      | 3.3      | 1.3      |
| Sodium                                                    | 3.8                          | NLE                                                       | 56.8                                   | 35.6               | 33.9     | 77.4     | 118      | 49.7     | 49.7     | 40.6     | 34.5     | 60.9     |
| Selenium                                                  | 0.30                         | 63                                                        | 0.85                                   | 0.56               | 0.62     | 0.75     | 0.28     | 0.63     | 0.41     | 0.57     | 0.6      | 0.48     |
| Vanadium                                                  | 0.53                         | 370                                                       | 59.6                                   | 45.7               | 34       | 15.7     | 22.9     | 33.1     | 30.3     | 15.6     | 29.3     | 32       |
| Zinc                                                      | 0.41                         | 1500                                                      | 55.6                                   | 53.7               | 61.2     | 25.8     | 92.3     | 47.8     | 62.3     | 77       | 36       | 48.1     |

Compounds exceeding NJDEP soil cleanup criteria are noted by bold numbers.

ND - Compound was not detected at or below the quantitation limits

NLE - No Level Established

Note: MDL's for metal analysis is actually the highest detection limit with potassium given as a range due to high variability.

<sup>1</sup> Monmouth County maximum background concentrations.

<sup>2</sup> NJDEP criteria are referenced in Site Remediation News, Winter 1995.

Note: Metals detected in a duplicate sample from SS-01 were detected below the NJDEP SCC.

4.3-82

### **Pesticides/PCBs**

Two pesticides (4,4'-DDE and 4,4'-DDT) were detected above laboratory quantitation limits in SB-01. Both compounds were detected well below their respective SCCs. PCBs were not detected in site soil.

### **Metals**

As indicated in Tables 4.3-12 and 4.3-13, of the 21 metals detected in site soil, only beryllium and cadmium were found in concentrations equal to or greater than the NJDEP SCC. In addition, cadmium was detected in SS-07 at a concentration (Table 4.3-13) greater than the site-specific and Monmouth County maximum background levels established at Charles Wood. However, in accordance with NJDEP *Cleanup Standards for Contaminated Sites* (NJDEP, 1992), the concentration of cadmium at sites CW-06 and CW-09 were averaged and then compared to the NJDEP SCC and established background. The average concentration of cadmium was found to be equal to the SCC when compared with the soil sampling results in the area. Cadmium was not considered to be of a high concentration (see "Metals" in Subsection 4.3.8.5). Cadmium was not detected at any other surface soil location. Although beryllium was found in a concentration greater than the Monmouth County maximum background level, beryllium was detected in a concentration below the site-specific level. Beryllium was found at only one location (SS-09) at a concentration equal to the NJDEP SCC. The concentration of beryllium was also averaged and when compared to the NJDEP SCC, was found at a concentration below the NJDEP SCC and maximum background.

#### **4.3.9.6 Groundwater Sampling Results**

Monitor wells at site CW-9 were sampled for the analytical parameters listed in Table 3.8-1. Table 4.3-14 compares the average concentrations of the detected compounds from the February and March sampling rounds with the NJDEP GWQC, and then compares the results with the subsequent site-specific and Monmouth County maximum background levels, where appropriate.

**Table 4.3-14**  
**Fort Monmouth - Charles Wood**  
**Summary of Average Concentrations of Detected**  
**Compounds in Groundwater - Site CW-9**

| COMPOUND                   | METHOD DETECTION<br>LIMIT<br>(µg/L) | NJDEP<br>GROUNDWATER<br>QUALITY<br>CRITERIA<br>(µg/L) | MAXIMUM<br>BACKGROUND<br>CONCENTRATION<br>(µg/L) | ANALYTICAL RESULTS (µg/L)          |                                    |
|----------------------------|-------------------------------------|-------------------------------------------------------|--------------------------------------------------|------------------------------------|------------------------------------|
|                            |                                     |                                                       |                                                  | SAMPLING DATE                      |                                    |
|                            |                                     |                                                       |                                                  | MW35<br>2/20/95, 3/13/95<br>(avg.) | MW36<br>2/20/95, 3/13/95<br>(avg.) |
| <b>SVOCs (µg/L)</b>        |                                     |                                                       |                                                  |                                    |                                    |
| bis-(2ethylhexyl)phthalate | 9.7                                 | 30*                                                   | 600                                              | ND                                 | 4 J                                |
| <b>METALS TOTAL (µg/L)</b> |                                     |                                                       |                                                  |                                    |                                    |
| Aluminum                   | 24                                  | 200                                                   | 8210                                             | <b>226</b>                         | <b>575</b>                         |
| Barium                     | 1.7                                 | 2000                                                  | 400 <sup>1</sup>                                 | 37.25                              | 31.3                               |
| Beryllium                  | 0.9                                 | 20*                                                   | 2.8                                              | 0.175                              | ND                                 |
| Calcium                    | 10.4                                | NLE                                                   | 8700                                             | 23400                              | 35050                              |
| Cobalt                     | 2.3                                 | NLE                                                   | 30.6                                             | 2.45                               | 2.85                               |
| Chromium                   | 2.9                                 | 100                                                   | 49.6                                             | ND                                 | 5.7                                |
| Iron                       | 6.4                                 | 300                                                   | 27000 <sup>1</sup>                               | 104.2                              | <b>1250</b>                        |
| Lead                       | 1.1                                 | 10*                                                   | <100 <sup>1</sup>                                | ND                                 | 2                                  |
| Magnesium                  | 18.3                                | NLE                                                   | 25000 <sup>1</sup>                               | 5875                               | 7835                               |
| Manganese                  | 1.8                                 | 50                                                    | 480 <sup>1</sup>                                 | 40.1                               | 217                                |
| Nickel                     | 10.8                                | 100                                                   | 48.3                                             | 5.65                               | 5.65                               |
| Potassium                  | 685                                 | NLE                                                   | 10000 <sup>1</sup>                               | 2035                               | 4000                               |
| Sodium                     | 30.5                                | 50000                                                 | 197000 <sup>1</sup>                              | 4480                               | 5900                               |
| Vanadium                   | 2.3                                 | NLE                                                   | 28.9                                             | ND                                 | 3.85                               |
| Zinc                       | 3.8                                 | 5000                                                  | 133                                              | 26.75                              | 27                                 |

Compounds exceeding NJDEP groundwater quality criteria are noted by bold numbers.

NJDEP groundwater quality criteria consist of the higher number between the PQL or STANDARD

\*PQL - Practical Quantitation Limit -was used as the NJDEP groundwater quality criteria

ND - Indicates that the compound was not detected

J - Indicates that the concentration value was estimated due to detection at or near the detection limits

<sup>1</sup> - Monmouth County maximum background concentration.

### VOCs

VOCs were not detected in site monitor wells from either sampling round.

### SVOCs

SVOCs were not detected above laboratory quantitation limits in site monitor wells from either sampling round.

### Pesticides/PCBs

Pesticides/PCBs were not detected in site monitor wells from either sampling round.

### Metals

As indicated in Table 4.3-14, of the 15 metals detected in site groundwater, only 3 (aluminum, iron, and magnesium) were found in concentrations exceeding the NJDEP GWQC; however, all three metals were detected in concentrations below the site-specific and Monmouth County maximum background levels.

#### **4.3.9.7 Recommendations**

The average concentrations of cadmium and beryllium in surface soil samples at CW-6 and CW-9 do not exceed the NJDEP SCC. Cadmium is typically present at elevated levels at golf courses. No compounds of concern were detected in site groundwater above NJDEP criteria.

No further action will be taken.

Site AOC-7

#### **4.3.10 Former Hazardous Waste Storage Area (AOC-7)**

##### **4.3.10.1 Site Location**

NJDEP identified this site as an area of concern (AOC) (NJDEP, 1990). A temporary hazardous waste storage area was located in an approximately 1-acre fenced site to the east of Building 2708 (Figure 4.3-16). The site is currently a grassy field surrounded by a 7-ft high fence. A former gas station (Building T-2500) is located to the east of the site. The approximate area of site AOC-7 is 41,000 ft<sup>2</sup> (0.9 acre).

##### **4.3.10.2 Site History**

Reviews of aerial photographs from 1961 to 1986 show that this site was a fenced storage area. The 1961 photographs show that the fenced area extended about 50 feet farther to the west than it does today. This western area is now part of the fenced area around Building 2708, which is part of the Pulse Power Laboratory. Large rectangular objects are visible next to the fence on all four sides. These may be cargo or truck vans. The 1969 photograph is similar, but there are three irregular groups of objects at the northwest corner of the lot. The 1974 photograph is similar, except there are five circular igloos along the west fence. In 1986, the site is smaller because the Pulse Power Laboratory is in the western portion of the site. There are objects that appear to be drums along the fence on the south and southeast of the site. The objects are densely packed in a 10- to 20-ft band next to the fence. There are additional objects along the north fence and possibly along the west fence. Personnel interviews indicate that the site was used for a 6-month period in 1987 for temporary storage of hazardous waste (in drums). As part of a program to remove all improperly labeled drums from Fort Monmouth, the facility collected the drums and staged them at this site.

The drums were stored on wood pallets, generally along the fence line. The pallets were not usually stored on a plastic ground cover. Clean Venture, Inc. sampled the drums, labeled them, completed manifests, and arranged for disposal. For the most part, the drums contained solvents, degreasers, and oils. The drums were screened for external radiation and none was detected. Clean Venture did not characterize the drums to the extent of identifying specific compounds,

but some of the solvents that were used at Fort Monmouth at that time are 1,1,2-trichloroethane, 1,1,1-trichloroethane, and benzene.

The only known release of material during the operation occurred on 7 October 1987. A pallet of 5-gallon containers of malathion, a pesticide, was picked up at Sandy Hook. The containers were deteriorated, so the pallet was placed on a plastic ground cover. During the night, the top popped off one of the containers. A security guard became temporarily nauseated from the fumes. The next day the containers were repacked in a drum. The quantity of material that was released is considered small, and it is believed that little, if any, material was spilled on the ground.

#### **4.3.10.3 Sampling Effort**

Six soil borings were completed and soil samples collected in an effort to identify the nature and extent of past site activities on soil quality. Soil borings were drilled to groundwater and the soil cuttings were screened with a photoionization detector (PID). Since no elevated PID readings were recorded, soil samples were collected from the interval just above the water table. The total depths of the borings varied from 12 to 14 ft bgs. Lithologic logs from the site borings indicate that the lithology consists of a thin soil cover (0.3 ft) underlain by coarsening downward olive-brown silty medium-grained sand to olive-brown medium-grained sand sequence. The locations of the soil borings were biased toward the fence line, as shown in Figure 4.3-16, because an examination of aerial photographs showed that materials were stored next to the fence. Soil samples were analyzed for TCL +30 parameters and TAL metals.

#### **4.3.10.4 Soil Sampling Results**

Six soil samples, one from each boring, were collected from intervals ranging from 8 to 14 ft bgs. Site soil samples were analyzed for the parameters listed in Table 3.6-1. Table 4.3-15 compares the detected compounds in site soil with the NJDEP SCC, and then compares the results with the site-specific and Monmouth County maximum background levels, where



**Table 4.3-15**  
**Fort Monmouth - Charles Wood**  
**Summary of Detected Compounds in**  
**Soil from Site AOC- 7 (CW-7)**

| COMPOUND                   | METHOD<br>DETECTION<br>LIMIT | RESIDENTIAL<br>DIRECT CONTACT<br>SOIL CLEANUP<br>CRITERIA | MAXIMUM<br>BACKGROUND<br>CONCENTRATION | ANALYTICAL RESULTS                     |                                        |                                      |                                       |                                       |                                        |
|----------------------------|------------------------------|-----------------------------------------------------------|----------------------------------------|----------------------------------------|----------------------------------------|--------------------------------------|---------------------------------------|---------------------------------------|----------------------------------------|
|                            |                              |                                                           |                                        | SB01-A02<br>12/21/95<br>(10-12 ft bgs) | SB02-A02<br>12/21/95<br>(10-12 ft bgs) | SB03-A02<br>12/21/95<br>(6-8 ft bgs) | SB04-A02<br>12/21/95<br>(8-10 ft bgs) | SB05-A02<br>12/21/95<br>(8-10 ft bgs) | SB06-A03<br>12/21/95<br>(12-14 ft bgs) |
| VOC's (mg/kg)              |                              |                                                           |                                        |                                        |                                        |                                      |                                       |                                       |                                        |
| 2 - Butanone               | 0.0041                       | 1000                                                      | ND                                     | ND                                     | 0.002 J                                | ND                                   | ND                                    | ND                                    | ND                                     |
| SVOCs (mg/kg)              |                              |                                                           |                                        |                                        |                                        |                                      |                                       |                                       |                                        |
| bis(2-Ethylhexyl)phthalate | 0.32                         | 49                                                        | 0.17 J                                 | 0.075 J                                | ND                                     | 0.34 J                               | ND                                    | ND                                    | ND                                     |
| PESTICIDES (mg/kg)         |                              |                                                           |                                        |                                        |                                        |                                      |                                       |                                       |                                        |
| 4,4'-DDT                   | 0.0037                       | 2                                                         | 0.053                                  | ND                                     | ND                                     | 0.004                                | ND                                    | ND                                    | ND                                     |
| METALS TOTAL (mg/kg)       |                              |                                                           |                                        |                                        |                                        |                                      |                                       |                                       |                                        |
| Aluminum                   | 3.9                          | NLE                                                       | 15700                                  | 3650                                   | 4340                                   | 3820                                 | 5170                                  | 3490                                  | 3610                                   |
| Arsenic                    | 0.35                         | 20                                                        | 31.6                                   | 8.6                                    | 1.7                                    | 8.4                                  | 12.7                                  | 2.8                                   | 5.9                                    |
| Barium                     | 0.17                         | 700                                                       | 26                                     | 2.5                                    | 4.5                                    | 4.5                                  | 6.2                                   | 3.6                                   | 2.4                                    |
| Beryllium                  | 0.1                          | 1                                                         | 1.7                                    | 0.31                                   | 0.29                                   | 0.28                                 | 0.45                                  | 0.3                                   | 0.26                                   |
| Calcium                    | 2.2                          | NLE                                                       | 653                                    | 69                                     | 91.9                                   | 134                                  | 275                                   | 63.9                                  | 43.7                                   |
| Cobalt                     | 0.7                          | NLE                                                       | 4.5                                    | ND                                     | 0.94                                   | 0.68                                 | ND                                    | ND                                    | ND                                     |
| Chromium                   | 1.6                          | 500                                                       | 128                                    | 61.1                                   | 61.6                                   | 73.6                                 | 83.4                                  | 64.7                                  | 61.1                                   |
| Copper                     | 2.2                          | 600                                                       | 7.27 <sup>1</sup>                      | 1.6                                    | 1.6                                    | 1.8                                  | 2.2                                   | 1.4                                   | 1.3                                    |
| Iron                       | 0.58                         | NLE                                                       | 45500                                  | 10800                                  | 12400                                  | 11100                                | 15900                                 | 11400                                 | 11000                                  |
| Lead                       | 0.4                          | 400 <sup>2</sup>                                          | 15.1 <sup>1</sup>                      | 6.3                                    | 6.9                                    | 4.5                                  | 8.5                                   | 6.3                                   | 4.9                                    |
| Magnesium                  | 9.6                          | NLE                                                       | 3960                                   | 694                                    | 852                                    | 602                                  | 919                                   | 720                                   | 766                                    |
| Manganese                  | 0.18                         | NLE                                                       | 120 <sup>1</sup>                       | 3.6                                    | 8.2                                    | 12.7                                 | 11.3                                  | 2.8                                   | 1.8                                    |
| Nickel                     | 1.4                          | 250                                                       | 8.3                                    | 1.8                                    | 2.6                                    | 1.9                                  | 2.1                                   | 1.6                                   | 1.3                                    |
| Potassium                  | (12.3-25.8)                  | NLE                                                       | 10600                                  | 2060                                   | 2360                                   | 1740                                 | 2570                                  | 2200                                  | 2280                                   |
| Sodium                     | 3.8                          | NLE                                                       | 56.8                                   | 18.8                                   | 12                                     | 11.7                                 | 13.8                                  | 14.7                                  | 11.5                                   |
| Selenium                   | 0.3                          | 63                                                        | 0.85                                   | 0.26                                   | 0.2                                    | ND                                   | 0.3                                   | 0.26                                  | ND                                     |
| Zinc                       | 0.41                         | 1500                                                      | 55.6                                   | 8.9                                    | 12                                     | 10.5                                 | 15.8                                  | 9                                     | 9.1                                    |

Compounds exceeding NJDEP soil cleanup criteria are noted by bold numbers.

J - Indicates that the concentration value was estimated due to detection at or near the quantification limits

NLE - No Level Established

ND - Indicates that the compound was not detected at or below the quantification limits

<sup>1</sup> Monmouth County maximum background concentrations.

<sup>2</sup> NJDEP criteria are referenced in Site Remediation News, Winter 1995.

appropriate. In addition, the results were compared with the impact to groundwater SCC because no monitor wells were installed at the site.

### **VOCs**

VOCs were not detected above laboratory quantitation limits in site soil.

### **SVOCs**

SVOCs were not detected above laboratory quantitation limits in site soil.

### **Pesticides/PCBs**

One pesticide (4,4'-DDT) was detected above the laboratory quantitation limit in SB-02; however, 4,4'-DDT was detected in a concentration well below both the NJDEP residential direct contact SCCs and impact to groundwater SCC. PCBs were not detected in site soil from any boring location.

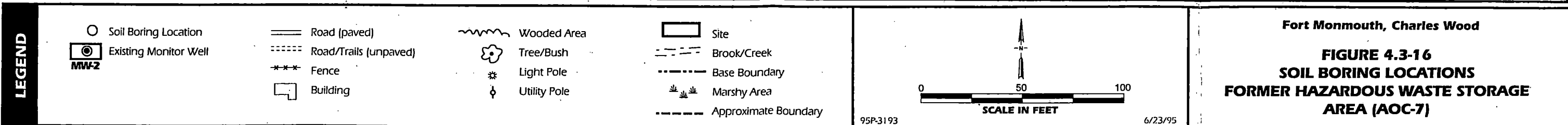
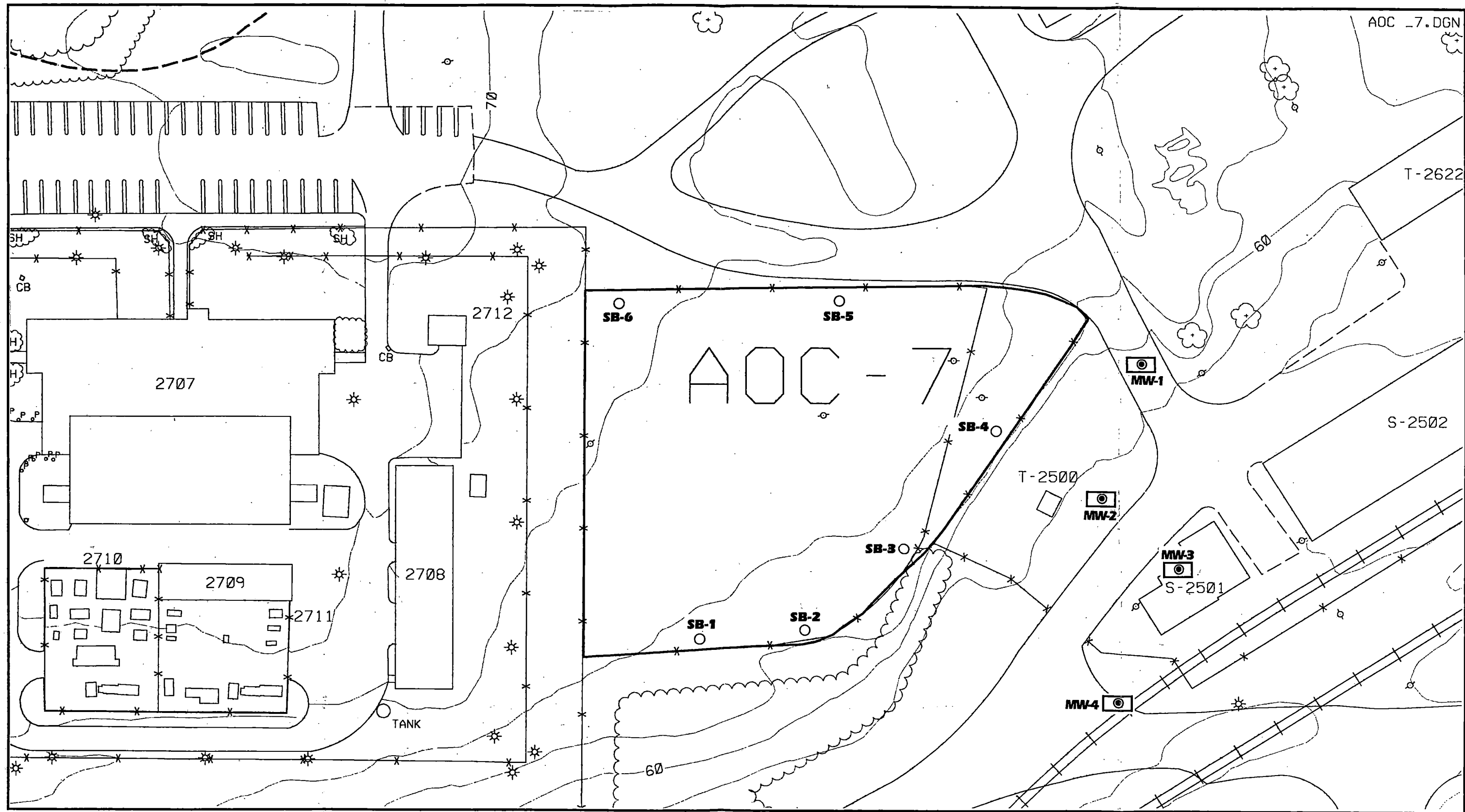
### **Metals**

As indicated in Table 4.3-15, all metals detected in site soil were found in concentrations below the NJDEP SCC.

#### **4.3.10.5 Recommendations**

No compounds of concern were detected at this site at levels that exceeded NJDEP criteria.

No further action will be taken.



# Charles Wood PCB Transformers

#### **4.3.11 PCB Transformers**

##### **4.3.11.1 Site Location**

During the 1993 investigation (WESTON, 1993), all locations where PCB transformers had formerly been located were inspected for evidence of spills. Three sites were identified where a PCB transformer was either formerly located over soil and thus evidence of a spill could not be determined visually, or formerly located on concrete and there was discoloration in the concrete. These locations are listed in Table 3.5-1 and identified in Figure 4.3-17.

##### **4.3.11.2 Site History**

All PCB transformers (contain greater than 500 ppm PCBs) have been removed from Fort Monmouth; however, the former locations of these transformers were not previously investigated for spilled PCBs. The concrete pad outside Building 2000 was removed between the time of the 1993 investigation and the current field effort.

##### **4.3.11.3 Sampling Effort**

As discussed in Subsection 3.5, soil samples were taken from below pole-mounted transformers. Because the concrete pad near Building 2000 had been removed, four soil samples were taken downgradient of the former pad location, as indicated in Figure 4.3-18.

##### **4.3.11.4 PCB Sampling Results**

The results of the PCB transformer sampling are presented in Table 4.3-16. One of the four transformer sites sampled at the Charles Wood area was found to have PCBs in soil or concrete above NJDEP SCC.

PCBs were detected in four discrete soil samples above NJDEP SCC. The soil samples were collected downslope of the former location of transformer CW035, which was an exterior pad transformer northeast of Building 2000. This pad had been removed prior to sampling.

**Table 4.3-16**  
**Results of Transformer Site Sampling on Charles Wood**

| Location<br>(Building No.) | Sample<br>ID | Method<br>Detection<br>Limit<br>(mg/kg) | Medium | NJDEP Soil<br>Criteria (mg/kg) | Total PCBs<br>(mg/kg) |
|----------------------------|--------------|-----------------------------------------|--------|--------------------------------|-----------------------|
| 2000                       | CW07-TR01    | 23*                                     | Soil   | 0.49                           | <b>100</b>            |
| 2000                       | CW07-TR02    | 4.4*                                    | Soil   | 0.49                           | <b>27</b>             |
| 2000                       | CW07-TR03    | 4.4*                                    | Soil   | 0.49                           | <b>26</b>             |
| 2000                       | CW07-TR04    | .91*                                    | Soil   | 0.49                           | <b>6</b>              |
| 2018                       | CW07-TR05    | 4.5*                                    | Soil   | 0.49                           | ND                    |
| 2018                       | CW07-TR06    | 0.47                                    | Soil   | 0.49                           | ND                    |
| 2276                       | CWAE-TR01    | 0.21                                    | Soil   | 0.49                           | ND                    |

Compounds exceeding NJDEP cleanup criteria are noted by bold numbers

ND - Indicates that the compound was not detected at the quantification limit.

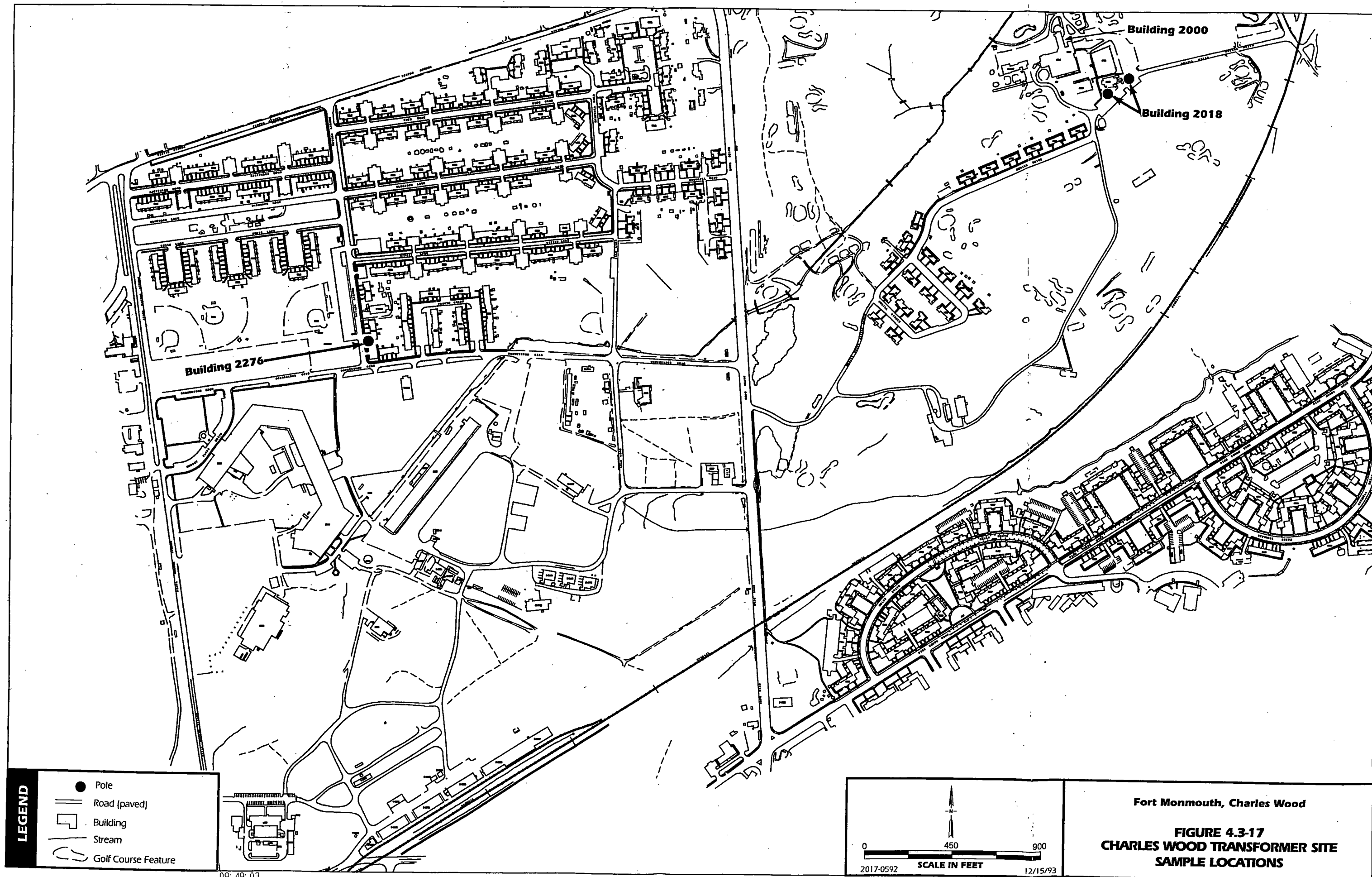
\* = Method Detection Limit exceeded NJDEP criteria.

All other transformers sampled in the Charles Wood area either had results below detection limits, or had detectable levels of PCBs below applicable cleanup criteria.

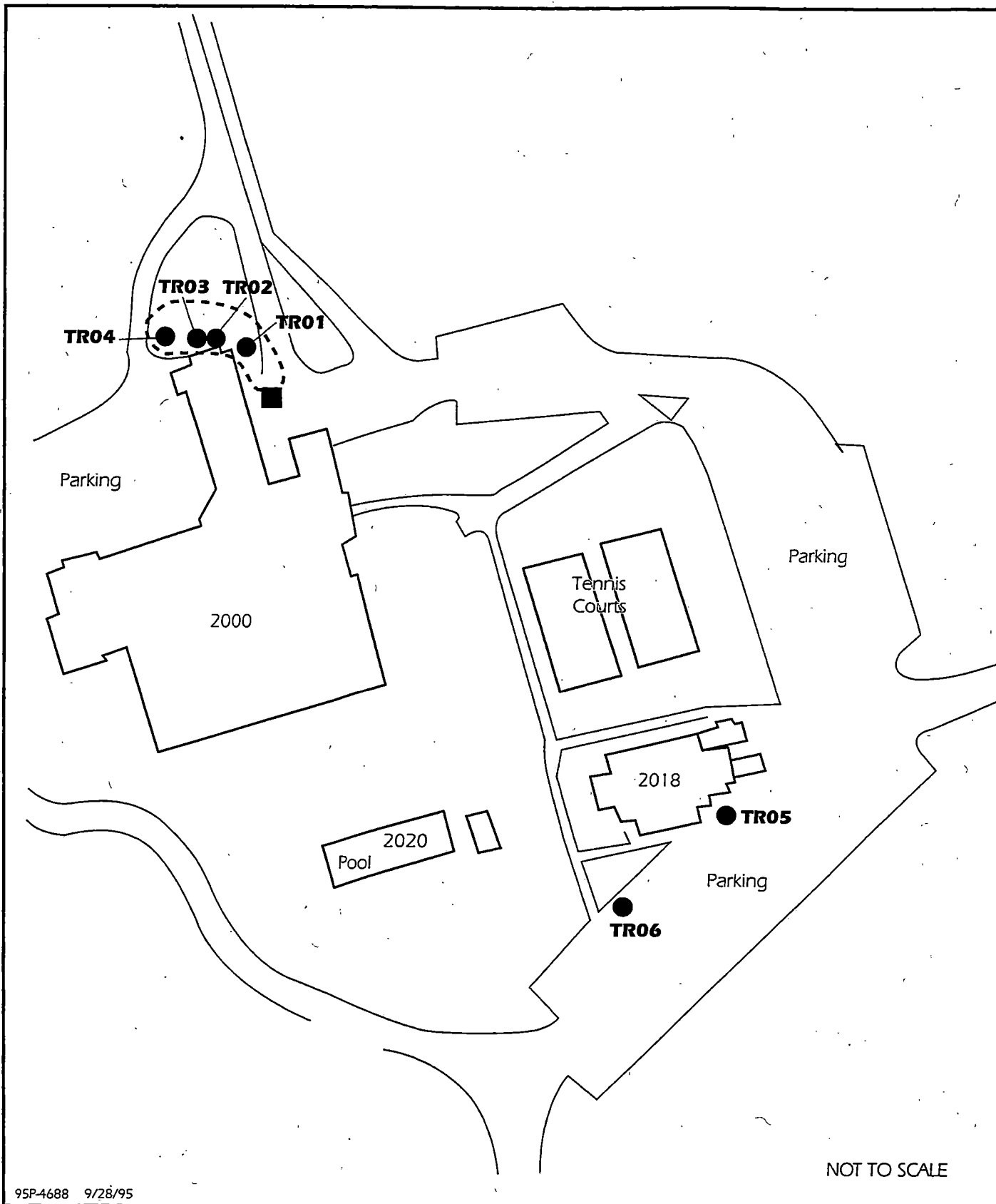
#### **4.3.11.5 Recommendations**

PCBs were detected above the NJDEP criteria in each of the four soil samples collected downgradient of the former transformer location northeast of Building 2000 (transformer CW-035). PCBs were not detected above NJDEP criteria in samples collected from the other three sampling locations.

Additional samples will be taken to further delineate the extent of contamination and the contaminated soil will be removed and disposed of in accordance with applicable regulations. The depth of contamination is assumed to be 6 inches. Excavation will be performed in conjunction with confirmatory soil sampling to ensure that NJDEP SCC are achieved.

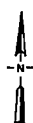






# **LEGEND**

- Sampling Location
- Former Transformer Pad
- - - Soil Remediation Boundary



Fort Monmouth, Charles Wood

**FIGURE 4.3-18**  
**EXTENT OF REMEDIATION AT**  
**TRANSFORMER SITE - BUILDING 2000**

# **SECTION 5**

## **DATA QUALITY**



## SECTION 5

### DATA QUALITY

#### 5.1 INTRODUCTION

Quality assurance/quality control (QA/QC) procedures were incorporated into the Fort Monmouth site investigation program to ensure collection of quality data for each area of the site investigated. Additionally, such QA/QC procedures were employed to ensure that all information, data, and resulting decisions of the site investigation are technically sound, statistically valid (accurate and precise), properly documented, and ensure the completeness of the data. The mechanism for employing the project QA/QC procedures was the CDAP. Procedures in the CDAP facilitated identifying and monitoring the proper sample collection, handling, and laboratory protocols to be used during the site investigation.

Chemical analyses were conducted to determine the type and concentration of contaminants present in the various media at the site and to provide environmental data, as was discussed in Section 2 of this report. Overall, analyses or tests were chosen based on the compounds produced or used within the specific area or the environmental data needed.

The analytical methods that were used for sample analysis are listed in Table 5.1-1. Information on sample containers, preservation, and holding times is presented in Table 5.1-2.

All analytical work completed for the site investigation was performed or administered by WESTON's Environmental Metrics Division. WESTON's Gulf Coast Laboratory, located in University Park, IL, performed all analytical analyses. This laboratory is certified by NJDEP (certification number 54669).



**Table 5.1-1**

**Analytical Methods for Sample Analysis**

| Matrix        | Parameter*                                                                                                                                                                                |
|---------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Sediment      | TCL Volatiles<br>TCL Semivolatiles<br>TCL Pesticides/PCBs<br>TAL Metals<br>Cyanide                                                                                                        |
| Surface Water | TCL Volatiles<br>TCL Semivolatiles<br>TCL Pesticides/PCBs<br>TAL Metals (Filtered)<br>TAL Metals (Unfiltered)<br>Cyanide                                                                  |
| Soil          | TCL Volatiles<br>TCL Semivolatiles<br>TCL Pesticides/PCBs<br>TCL Pesticides<br>PCBs (SW 8080)<br>TAL Metals<br>Cyanide<br>TPH (EPA 418.1)                                                 |
| Concrete      | PCBs (SW 8080)                                                                                                                                                                            |
| Groundwater   | TCL Volatiles<br>TCL Semivolatiles<br>TCL Pesticides/PCBs<br>TAL Metals (Unfiltered)<br>TAL Metals (Filtered)<br>Cyanide<br>TPH (EPA 418.1)<br>Sulfate (EPA 375.4)<br>Ammonia (EPA 350.2) |

\* All analytical methods derived from *Test Methods for Evaluation of Solid Waste*, SW-846, Third Edition, 1992; EPA CLP Document Nos. OLM01.8 and ILM02.1; "Methods for Chemical Analysis of Water and Waste," EPA 600/4-79-020.



Table 5.1-2

## Summary of Sample Containers, Volume, Preservation, and Maximum Holding Times

| Parameter             | Sample Container                                           | Container Volume   | Preservation                                                                                                                     | Maximum Holding Time                                                                                                |
|-----------------------|------------------------------------------------------------|--------------------|----------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|
| <b>Nonaqueous</b>     |                                                            |                    |                                                                                                                                  |                                                                                                                     |
| Cyanide               | Flint glass bottle, black phenolic cap, polyethylene liner | 4, 8, 16, or 32 oz | 4°C until analysis                                                                                                               | 12 days                                                                                                             |
| Metals                | Flint glass bottle, black phenolic cap, polyethylene liner | 4, 8, 16, or 32 oz | 4°C until analysis                                                                                                               | 180 days except for Hg, which is 26 days                                                                            |
| Pesticides/PCBs       | Amber glass, Teflon-lined cap                              | 1,000 mL           | Cool, 4°C, dark                                                                                                                  | Extraction must be started within 14 days. Analysis - 40 days from VTSR.                                            |
| Semivolatile Organics | Amber glass, Teflon-lined cap                              | 1,000 mL           | Cool, 4°C, dark                                                                                                                  | Extraction must be started within 14 days. Analysis - 40 days from VTSR.                                            |
| Sulfates              | Plastic, glass                                             | 100 mL             | Cool, 4°C                                                                                                                        | 28 days                                                                                                             |
| TPH                   | Glass                                                      | 4 oz               | Cool, 4°C                                                                                                                        | 28 days; gasoline in soil, 7 days                                                                                   |
| Volatile Organics     | Glass, polypropylene cap, white teflon liner               | 120 mL             | Cool, 4°C                                                                                                                        | 10 days                                                                                                             |
| <b>Aqueous</b>        |                                                            |                    |                                                                                                                                  |                                                                                                                     |
| Cyanide               | Plastic bottle, plastic cap, plastic liner                 | 1,000 mL           | 0.6 g ascorbic acid if residual $\text{Cl}_2$ , NaOH to pH>12, cool, 4°C until analysis. $\text{CaCO}_3$ in presence of sulfide. | 12 days                                                                                                             |
| Metals                | Plastic bottle, plastic cap, plastic liner                 | 1,000 mL           | $\text{HNO}_3$ to pH<2                                                                                                           | 180 days                                                                                                            |
| Pesticide/PCBs        | Amber glass, Teflon-lined cap                              | 1,000 mL           | Cool, 4°C, dark                                                                                                                  | Extraction aqueous continuous liquid-liquid extraction must be started within 7 days. Analysis - 40 days from VTSR. |

5-3

WESTON  
ANALYTICAL  
RESEARCH CONSULTANTS

**Table 5.1-2**  
**Summary of Sample Containers, Volume, Preservation, and Maximum Holding Time**  
**(Continued)**

| Parameter             | Sample Container                                             | Container Volume | Preservation                                                                                     | Maximum Holding Time                                                                                                |
|-----------------------|--------------------------------------------------------------|------------------|--------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|
| Semivolatile Organics | Amber glass, Teflon-lined cap                                | 1,000 mL         | Cool, 4°C, dark                                                                                  | Extraction aqueous continuous liquid-liquid extraction must be started within 7 days. Analysis - 40 days from VTSR. |
| Sulfates              | Plastic, glass                                               | 100 mL           | Cool, 4°C                                                                                        | 28 days                                                                                                             |
| TPH                   | Glass                                                        | 1 liter          | Cool, 4°C                                                                                        | 7 days                                                                                                              |
| Volatile Organics     | Glass, black phenolic plastic screw cap, Teflon-lined septum | 40 mL            | Cool, 4°C, dark, 0.08% Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> if residual Cl <sub>2</sub> | 10 days                                                                                                             |

TPH - Total Petroleum Hydrocarbons

VTSR - Validated time of sample receipt (at the laboratory)



## 5.2 QUALITY CONTROL PROCEDURES

To meet the QA/QC objectives of the project, the field work and laboratory analyses followed the standardized methods or procedures that were described in the CDAP and are summarized in the subsections that follow.

### 5.2.1 Field and Laboratory Quality Control Samples

Standard analytical QC checks instituted by field and laboratory personnel included (but were not limited to):

- Field/rinsate blanks — Samples prepared using analyte-free water supplied by the laboratory or purchased from commercial sources that certify the quality of the water. Field/rinsate blanks were routed through decontaminated sampling equipment prior to collection. Preservatives or additives were added as required, and the blank sample was then sealed. The field/rinsate blank was shipped with real samples collected for the same parameter group. During field sampling, a field/rinsate blank was collected and analyzed from each group of water or soil/solid samples for every 10 samples received daily.
- Trip blanks — Volatile organic sample containers prepared in the laboratory using analyte-free water. The trip blanks accompanied the field samples during transport to the site; during collection, packaging, and transport to the laboratory; and during analysis, and were contained in the same type of sample container as those used in the specific sampling effort. One trip blank sample was included with each shipment of aqueous samples designated for VOC analysis.
- Duplicate samples — Samples collected from the same sampling location at the same time. Soil duplicates were homogenized (with the exception of VOC samples). At least one duplicate sample was analyzed from each group of samples of a similar matrix type for every 20 samples received.
- Matrix spike/matrix spike duplicate (MS/MSD) — Samples in which compounds are added before extraction and analysis. The recoveries for spiked compounds can be used to assess how well the method used for analysis recovers target compounds (i.e., a measure of matrix interference in the sample). When reviewed in conjunction with other QC data, MS/MSDs may indicate reanalysis using a more appropriate method. At least one spiked sample analysis was performed on each group of samples of a similar matrix type and concentration for each batch of samples or for every 20 samples received, whichever was more frequent.

- Surrogate spiking — Samples in which surrogate compounds are added before sample preparation for organics analysis. The review for spiked surrogate compounds can be used to assess method accuracy for each sample matrix.

### 5.2.2 Field Activities

The accuracy of field measurements obtained from site instruments was maintained on-site by appropriate calibration procedures, as described in detail in the CDAP.

The field investigation procedures used to perform the site investigation were presented in the Fort Monmouth CDAP. The field procedures included:

- Surface and subsurface soil sampling.
- Installation of monitor wells.
- Groundwater sampling.
- Monitor well casing elevation surveying.
- Surface-water and sediment sampling.
- Concrete pad sampling.
- Ancillary field activities, such as decontamination, field measurements, and fluids management.

Sample identification and documentation procedures were followed in the field as specified in the CDAP, including:

- Sample containers were labeled with the appropriate information.
- The sample was entered into the chain-of-custody record.
- A unique sample code was assigned to each sample collected.
- Signed custody seals were applied on opposite sides of the container lid.
- Samples were shipped to WESTON's laboratories as environmental samples and complied with all DOT requirements for such shipment.



A bound field notebook was maintained by the Field Team Leader at the site to record daily activities, including sample collection and tracking information. Quantitative field data, such as water-level measurements, were recorded in bound field notebooks. Qualitative or descriptive field data (such as soil textures) obtained from soil borings and monitor wells were recorded in the field in field notebooks, reduced using a standardized lithologic coding system.

### **5.2.3 Laboratory Activities**

#### **5.2.3.1 Laboratory Equipment Quality Control**

The reliability and credibility of laboratory analytical instruments and QA of analytical results were ensured by documented calibration procedures and QC samples (such as method blanks and method spikes). A review of the calibration procedures and the calibration frequencies that are standard operating procedures (SOPs) employed by WESTON's Environmental Metrics Division is provided in the CDAP. The following instruments were used to analyze environmental samples:

- Gas chromatograph (GC).
- Gas chromatograph/mass spectrometer (GC/MS).
- Atomic absorption spectrophotometer: furnace (AA).
- Inductively coupled plasma spectrometer (ICP).
- Cold vapor mercury analyzer: flameless AA.
- Spectrophotometer.

Certain TCL VOCs, such as methylene chloride, acetone, 2-butanone, and toluene, are commonly detected as laboratory contaminants. In order to ensure that the data reported are not biased by potential laboratory contamination, certain QA procedures, including reagent blank analysis, were taken. Assessment of the reagent blanks is discussed in Subsection 5.3.2.

#### **5.2.3.2 Laboratory Data**

In addition to the data collected in the field and recorded on the chain-of-custody forms, data describing the processing of samples were accumulated in the laboratory and recorded in laboratory notebooks.

Data reduction was performed by the individual analysts and consisted of calculating concentrations in samples from the raw data obtained from the measuring instruments. The complexity of the data reduction was dependent on the specific analytical method and the number of discrete operations (e.g., extractions, dilutions, and concentrations) involved in obtaining a sample that could be measured.

System reviews were performed at all levels. The individual analyst constantly reviewed the quality of data through calibration checks, QC sample results, and performance evaluation (PE) samples. The Section Manager and/or the Analytical Project Manager reviewed data for consistency and reasonableness with other generated data and to determine if program requirements had been satisfied. Selected hard copy output of data (e.g., chromatograms, spectra, etc.) was reviewed to ensure that results were interpreted correctly. The Quality Assurance Officer independently conducted a review of selected projects to determine if laboratory and client QA/QC requirements had been met. The final routine review was performed by the Laboratory Manager prior to reporting the results to the client.

### **5.3 DATA QUALITY**

#### **5.3.1 Data Reporting**

Laboratory reports contain final results, methods of analysis, levels of detection, surrogate recovery data, and method blank data. In addition, special analytical problems and/or any modifications of referenced methods were noted.

#### **5.3.2 Data Validation/Usability Review**

Separate from the laboratory's internal data review/data validation, an independent review of the final analytical data packages was performed to validate results and to determine usability. The validation was performed by URS Consultants, Inc. (URS) as a subcontractor to Malcolm Pirnie, Inc.

The data validation was performed in accordance with U.S. Environmental Protection Agency (EPA) *Region II Modifications to the National Functional Guidelines for Organic Data Review, Multimedia, Multiconcentration* (January 1992) and *Region II Modifications to the Laboratory Data Validation Functional Guidelines for Evaluating Inorganic Analysis* (January 1992). For non-CLP procedures, the data were validated following the intent of the National Functional Guidelines.

### 5.3.3 Results of Data Validation/Usability Review

Malcolm Pirnie issued a Data Validation Report (June 1995) that gave the results of their validation. URS performed data validation services on 84 environmental samples. The matrix type and number of samples were as follows:

| Matrix           | No. of Samples |
|------------------|----------------|
| Groundwater      | 33             |
| Surface water    | 5              |
| Sediment         | 6              |
| Surface soil     | 10             |
| Soil boring      | 24             |
| Transformer soil | 4              |
| Concrete         | 2              |

URS reported that a majority of the analytical results were usable as reported, despite minor deviations from EPA CLP criteria, which do not jeopardize the chemical representativeness of the data.

There were several instances, however, where compounds or whole fractions were rejected by URS based on deviations from CLP methodologies and/or data validation criteria.

| Sample ID     | Compound or Fraction                             |
|---------------|--------------------------------------------------|
| B9-SB01-A02   | Acetone                                          |
| B9-SB01-C02   | Acetone                                          |
| MPA3-SB01-A02 | Acetone                                          |
| MP08-SD01-A01 | Semivolatiles, pesticides/PCBs                   |
| MP16-SS01-A01 | Dieldrin                                         |
| CW06-SS01-A01 | Heptachlor epoxide                               |
| MP02-MW01-A01 | Total and dissolved aluminum, chromium, and iron |

The results for these samples are provided in this report, but are flagged in the Results summary tables. The Data Validation Report includes a discussion of the data quality and completeness.

#### **5.3.4 Results of Field and Trip Blanks**

During the Fort Monmouth site investigation, field/rinsate blanks and trip blanks were submitted for analysis (numbers of samples are shown in Tables 5.3-1 and 5.3-2), as discussed in Section 3 of this report. The results of the analyses of the field/rinsate blanks were used to assess the efficiency of the equipment decontamination procedures in preventing cross-contamination between samples, and to determine if the compounds detected in the characterization samples were attributable to the sampling equipment or to the site. The results of trip blank analyses were used to determine if compounds detected in samples analyzed for volatile organics were introduced during shipment or from containers and were not attributable to the site. A discussion of the difference between the samples contracted in the scope of work and the actual effort is included in Section 4.

A summary of the compounds detected in field/rinsate blanks is provided in Table 5.3-3. Inorganics, VOCs, and SVOCs were each detected in at least one field/rinsate blank collected during field activities. All of the organic compounds detected are common laboratory contaminants and were likely introduced into the samples during laboratory analysis.

**Table 5.3-1  
Main Post Samples Collected**

| MEDIA/PARAMETER                 | INVESTIGATION SAMPLES |       | QA/QC SAMPLES * |       | TOTAL SAMPLES |       |
|---------------------------------|-----------------------|-------|-----------------|-------|---------------|-------|
|                                 | Scope of Work         | Taken | Scope of Work   | Taken | Scope of Work | Taken |
| <b>Surface and shallow soil</b> |                       |       |                 |       |               |       |
| TCL VOA                         | 4                     | 4     | 1               | 2     | 5             | 6     |
| TCL BNA                         | 4                     | 6     | 1               | 0     | 5             | 6     |
| TCL pesticide/PCB               | 6                     | 6     | 1               | 0     | 7             | 6     |
| TCL PCB                         | 8                     | 8     | 1               | 0     | 9             | 8     |
| TAL Metals                      | 2                     | 2     | 1               | 0     | 3             | 2     |
| <b>Soil Borings</b>             |                       |       |                 |       |               |       |
| TCL VOA                         | 38                    | 31    | 2               | 2     | 40            | 33    |
| TCL BNA                         | 26                    | 15    | 1               | 1     | 27            | 16    |
| Pesticide/PCB                   | 15                    | 15    | 1               | 1     | 16            | 16    |
| TAL Metal                       | 13                    | 16    | 1               | 1     | 14            | 17    |
| TAL Cyanide                     | 12                    | 11    | 1               | 1     | 13            | 12    |
| TPH                             | 24                    | 15    | 2               | 0     | 26            | 15    |
| <b>Sediment</b>                 |                       |       |                 |       |               |       |
| TCL VOA                         | 3                     | 3     | 1               | 3     | 4             | 6     |
| TCL BNA                         | 3                     | 3     | 1               | 1     | 4             | 4     |
| Pesticide/PCB                   | 3                     | 3     | 1               | 1     | 4             | 4     |
| TAL Metal                       | 4                     | 6     | 1               | 1     | 5             | 7     |
| TAL Cyanide                     | 3                     | 4     | 1               | 1     | 4             | 5     |
| <b>Concrete</b>                 |                       |       |                 |       |               |       |
| TCL PCB                         | 6                     | 4     | 1               | 1     | 7             | 5     |
| <b>Surface Water</b>            |                       |       |                 |       |               |       |
| TCL VOA                         | 8                     | 8     | 1               | 1     | 9             | 9     |
| TCL BNA                         | 8                     | 8     | 1               | 1     | 9             | 9     |
| Pesticide/PCB                   | 8                     | 8     | 1               | 1     | 9             | 9     |
| TAL Metal (Total)               | 8                     | 8     | 1               | 1     | 9             | 9     |
| TAL Metals (Dissolved)          | 8                     | 8     | 1               | 1     | 9             | 9     |
| TAL Cyanide                     | 8                     | 8     | 1               | 1     | 9             | 9     |
| <b>Groundwater</b>              |                       |       |                 |       |               |       |
| TCL VOA                         | 60                    | 60    | 25              | 38    | 85            | 98    |
| TCL BNA                         | 60                    | 60    | 9               | 16    | 69            | 76    |
| Pesticide/PCB                   | 60                    | 60    | 9               | 16    | 69            | 76    |
| TAL Metal (Total)               | 58                    | 56    | 9               | 15    | 67            | 71    |
| TAL Metals (Dissolved)          | 58                    | 56    | 9               | 15    | 67            | 71    |
| TAL Cyanide                     | 52                    | 52    | 9               | 10    | 61            | 62    |
| Sulfate                         | 12                    | 12    | 2               | 4     | 14            | 15    |
| Ammonia                         | 8                     | 8     | 2               | 4     | 10            | 13    |
| TPH                             | 6                     | 6     | 2               | 5     | 8             | 11    |

\* QA/QC samples are trip blanks, field blanks, and duplicates.

**Table 5.3-2**  
**Charles Wood Samples Collected**

| MEDIA/PARAMETER                 | INVESTIGATION SAMPLES |       |          | QA/QC SAMPLES * |       |          | TOTAL SAMPLES |       |          |
|---------------------------------|-----------------------|-------|----------|-----------------|-------|----------|---------------|-------|----------|
|                                 | Scope of Work         | Taken | Analyzed | Scope of Work   | Taken | Analyzed | Scope of Work | Taken | Analyzed |
| <b>Surface and shallow soil</b> |                       |       |          |                 |       |          |               |       |          |
| TCL VOA                         | 1                     | 1     | 1        | 1               | 2     | 2        | 2             | 3     | 3        |
| TCL BNA                         | 1                     | 1     | 1        | 1               | 0     | 0        | 2             | 1     | 1        |
| TCL pesticide/PCB               | 1                     | 1     | 1        | 1               | 0     | 0        | 2             | 1     | 1        |
| TCL PCB                         | 6                     | 7     | 7        | 1               | 1     | 1        | 7             | 8     | 8        |
| TAL Metals                      | 13                    | 11    | 11       | 1               | 1     | 1        | 14            | 12    | 12       |
| <b>Soil Borings</b>             |                       |       |          |                 |       |          |               |       |          |
| TCL VOA                         | 52                    | 32    | 32       | 3               | 1     | 1        | 55            | 33    | 33       |
| TCL BNA                         | 52                    | 31    | 31       | 3               | 1     | 1        | 55            | 32    | 32       |
| Pesticide/PCB                   | 52                    | 31    | 31       | 3               | 1     | 1        | 55            | 32    | 32       |
| TAL Metal                       | 48                    | 31    | 31       | 3               | 2     | 2        | 51            | 33    | 33       |
| TAL Cyanide                     | 12                    | 12    | 12       | 1               | 1     | 1        | 13            | 13    | 13       |
| TPH                             | 0                     | 1     | 1        | 0               | 0     | 0        | 0             | 1     | 1        |
| <b>Sediment</b>                 |                       |       |          |                 |       |          |               |       |          |
| TCL VOA                         | 3                     | 3     | 3        | 1               | 0     | 0        | 4             | 3     | 3        |
| TCL BNA                         | 3                     | 3     | 3        | 1               | 0     | 0        | 4             | 3     | 3        |
| Pesticide/PCB                   | 3                     | 3     | 3        | 1               | 0     | 0        | 4             | 3     | 3        |
| TAL Metal                       | 3                     | 4     | 4        | 1               | 0     | 0        | 4             | 4     | 4        |
| TAL Cyanide                     | 3                     | 3     | 3        | 1               | 0     | 0        | 4             | 3     | 3        |
| <b>Concrete</b>                 |                       |       |          |                 |       |          |               |       |          |
| TCL PCB                         | 1                     | 0     | 0        | 1               | 0     | 0        | 2             | 0     | 0        |
| <b>Surface Water</b>            |                       |       |          |                 |       |          |               |       |          |
| TCL VOA                         | 2                     | 2     | 2        | 1               | 0     | 0        | 3             | 2     | 2        |
| TCL BNA                         | 2                     | 2     | 2        | 1               | 0     | 0        | 3             | 2     | 2        |
| Pesticide/PCB                   | 2                     | 2     | 2        | 1               | 0     | 0        | 3             | 2     | 2        |
| TAL Metal (Total)               | 2                     | 2     | 2        | 1               | 0     | 0        | 3             | 2     | 2        |
| TAL Metals (Dissolved)          | 2                     | 2     | 2        | 1               | 0     | 0        | 3             | 2     | 2        |
| TAL Cyanide                     | 2                     | 2     | 2        | 1               | 0     | 0        | 3             | 2     | 2        |
| <b>Groundwater</b>              |                       |       |          |                 |       |          |               |       |          |
| TCL VOA                         | 38                    | 34    | 34       | 22              | 25    | 25       | 60            | 59    | 59       |
| TCL BNA                         | 38                    | 34    | 34       | 6               | 6     | 6        | 44            | 40    | 40       |
| Pesticide/PCB                   | 38                    | 34    | 34       | 6               | 6     | 6        | 44            | 40    | 40       |
| TAL Metal (Total)               | 34                    | 30    | 30       | 6               | 4     | 4        | 40            | 34    | 34       |
| TAL Metals (Dissolved)          | 34                    | 30    | 30       | 6               | 4     | 4        | 40            | 34    | 34       |
| TAL Cyanide                     | 10                    | 10    | 10       | 2               | 2     | 2        | 12            | 12    | 12       |

\* QA/QC samples are trip blanks, field blanks, and duplicates.

**Table 5.3-3**  
**Summary of Field/Rinsate and Trip Blanks (µg/l)**

| Sample ID          | Inorganics                                                                                                                                                                                                                                                                                     | VOC's                                   | SVOC's | Pesticides/<br>PCBs |
|--------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|--------|---------------------|
| <b>Trip Blanks</b> |                                                                                                                                                                                                                                                                                                |                                         |        |                     |
| CW01-SB26-D02      | N/A                                                                                                                                                                                                                                                                                            | ND                                      | N/A    | N/A                 |
| CW01-SB31-D02      | N/A                                                                                                                                                                                                                                                                                            | ND                                      | N/A    | N/A                 |
| CW02-SB31-D02      | N/A                                                                                                                                                                                                                                                                                            | ND                                      | N/A    | N/A                 |
| CW02-SB33-D02      | N/A                                                                                                                                                                                                                                                                                            | ND                                      | N/A    | N/A                 |
| CW05-SB01-D02      | N/A                                                                                                                                                                                                                                                                                            | ND                                      | N/A    | N/A                 |
| CW06-SB34-D02      | N/A                                                                                                                                                                                                                                                                                            | ND                                      | N/A    | N/A                 |
| CW09-SB01-D02      | silver (.93), aluminum (3830), arsenic (2.6),<br>barium (6.6), beryllium (.39), calcium (366),<br>cobalt (1.0), chromium (44), copper (2.3),<br>iron (9720), mercury (.12), manganese<br>(11.9), lead (3.9), vanadium (27.4),<br>zinc (12.8), sodium (21.4), nickel (2.8),<br>potassium (1480) | ND                                      | N/A    | N/A                 |
| CWA7-SB04-D02      | N/A                                                                                                                                                                                                                                                                                            | ND                                      | N/A    | N/A                 |
| MPA-SB01-D02       | N/A                                                                                                                                                                                                                                                                                            | ND                                      | N/A    | N/A                 |
| MPA-SB02-D02       | N/A                                                                                                                                                                                                                                                                                            | ND                                      | N/A    | N/A                 |
| MP18-SB07-D01      | N/A                                                                                                                                                                                                                                                                                            | ND                                      | N/A    | N/A                 |
| MP18-SB25-D02      | N/A                                                                                                                                                                                                                                                                                            | acetone (30),<br>chloroform (3J)        | N/A    | N/A                 |
| B3-SB01-D03        | N/A                                                                                                                                                                                                                                                                                            | ND                                      | N/A    | N/A                 |
| B4-SB01-D01        | N/A                                                                                                                                                                                                                                                                                            | ND                                      | N/A    | N/A                 |
| B5-SB01-D02        | N/A                                                                                                                                                                                                                                                                                            | ND                                      | N/A    | N/A                 |
| B9-SB01-D02        | N/A                                                                                                                                                                                                                                                                                            | acetone<br>(8,300,000),<br>benzene (6J) | N/A    | N/A                 |
| B10-SB01-D02       | N/A                                                                                                                                                                                                                                                                                            | acetone (22)                            | N/A    | N/A                 |
| CW09-SS01-D01      | N/A                                                                                                                                                                                                                                                                                            | ND                                      | N/A    | N/A                 |
| MP16-SS01-D01      | N/A                                                                                                                                                                                                                                                                                            | ND                                      | N/A    | N/A                 |
| MP08-SD01-D01      | N/A                                                                                                                                                                                                                                                                                            | ND                                      | N/A    | N/A                 |
| CW01-MW26-D02      | N/A                                                                                                                                                                                                                                                                                            | ND                                      | N/A    | N/A                 |
| CW01-MW29-D01      | N/A                                                                                                                                                                                                                                                                                            | acetone (20), 2-<br>butanone (36)       | N/A    | N/A                 |
| CW06-MW01-D02      | N/A                                                                                                                                                                                                                                                                                            | ND                                      | N/A    | N/A                 |
| CW06-MW34-D01      | N/A                                                                                                                                                                                                                                                                                            | 2-butanone (30)                         | N/A    | N/A                 |
| MP04-MW07-D01      | N/A                                                                                                                                                                                                                                                                                            | acetone (13), 2-<br>butanone (27)       | N/A    | N/A                 |
| MP05-MW11-D02      | ND                                                                                                                                                                                                                                                                                             | ND                                      | ND     | ND                  |
| MP08-MW12-D02      | ND                                                                                                                                                                                                                                                                                             | ND                                      | ND     | ND                  |
| MP08-MW15-D01      | ND                                                                                                                                                                                                                                                                                             | acetone (20), 2-<br>butanone (37)       | ND     | ND                  |
| MP14-MW20-D02      | ND                                                                                                                                                                                                                                                                                             | ND                                      | ND     | ND                  |
| B3-MW03B-D01       | N/A                                                                                                                                                                                                                                                                                            | 2-butanone (15)                         | ND     | ND                  |
| B3-MW03B-D02       | N/A                                                                                                                                                                                                                                                                                            | ND                                      | ND     | ND                  |
| B10-MW10B-D01      | N/A                                                                                                                                                                                                                                                                                            | 2-butanone (14)                         | ND     | ND                  |
| B10-MW10B-D02      | N/A                                                                                                                                                                                                                                                                                            | ND                                      | ND     | ND                  |

**Table 5.3-3**  
**Summary of Field/Rinsate and Trip Blanks (µg/l)**  
**(continued)**

| Sample ID                   | Inorganics                                                                                                                                                                             | VOC's                               | SVOC's                                | Pesticides/<br>PCBs |
|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|---------------------------------------|---------------------|
| <b>Field/Rinsate Blanks</b> |                                                                                                                                                                                        |                                     |                                       |                     |
| CW01-SB31-E02               | N/A                                                                                                                                                                                    | ND                                  | N/A                                   | N/A                 |
| CW09-SB01-E02 SOL           | N/A                                                                                                                                                                                    | acetone (5200),<br>chloroform (3J)  | N/A                                   | N/A                 |
| MPA-SB01-E02                | N/A                                                                                                                                                                                    | acetone (240 B),<br>chloroform (6J) | N/A                                   | N/A                 |
| B9-SB01-E02                 | N/A                                                                                                                                                                                    | acetone (130)                       | N/A                                   | N/A                 |
| CW09-SS01-E01               | N/A                                                                                                                                                                                    | ND                                  | N/A                                   | N/A                 |
| MP16-SS01-E01               | N/A                                                                                                                                                                                    | ND                                  | N/A                                   | N/A                 |
| MP08-SD01-E01               | N/A                                                                                                                                                                                    | ND                                  | N/A                                   | N/A                 |
| CW01-MW26-E02               | aluminum (20.2), calcium (105), iron (12.0),<br>potassium (67.9), magnesium (34.3), sodium<br>(132), lead (2.6)                                                                        | ND                                  | N/A                                   | N/A                 |
| CW01-MW26-E02 SOL           | aluminum (18.4), calcium (115), iron (16.8),<br>potassium (119), magnesium (47.6), sodium<br>(156), lead (1.5), antimony (13.2)                                                        | N/A                                 | N/A                                   | N/A                 |
| CW01-MW29-E01               | calcium (113), sodium (321)                                                                                                                                                            | ND                                  | N/A                                   | N/A                 |
| CW01-MW29-E01 SOL           | calcium (72.3), sodium (137), nickel (12.9)                                                                                                                                            | ND                                  | N/A                                   | N/A                 |
| CW06-MW01-E02               | N/A                                                                                                                                                                                    | N/A                                 | N/A                                   | N/A                 |
| CW09-MW35-E01               | aluminum (231), barium (40.8), calcium<br>(21100), cobalt (4.0), iron (85.8), potassium<br>(2090), magnesium (5580), manganese<br>(43.9), sodium (7230), nickel (10.8), zinc<br>(60.7) | acetone (12), 2-<br>butanone (25)   | ND                                    | ND                  |
| CW09-MW35-E01 SOL           | calcium (191), iron (3.8),<br>potassium (82.5), sodium (654),<br>vanadium (2.8), zinc (2.6)                                                                                            | N/A                                 | N/A                                   | N/A                 |
| MP04-MW07-E01               | aluminum (18.1), barium (.81), calcium<br>(57.4), iron (62.7), sodium (116), zinc (3.8)                                                                                                | acetone (10), 2-<br>butanone (27)   | ND                                    | ND                  |
| MP04-MW07-E01 SOL           | beryllium (.31), calcium (82.6), iron (4.3),<br>potassium (68.8), sodium (81.4), zinc (2.4)                                                                                            | N/A                                 | N/A                                   | N/A                 |
| MP05-MW11-E02               | calcium (289), potassium (737), sodium<br>(165)                                                                                                                                        | chloroform (33)                     | ND                                    | ND                  |
| MP05-MW11-E02 SOL           | sodium (147), calcium (55.4)                                                                                                                                                           | N/A                                 | N/A                                   | N/A                 |
| MP08-MW12-E02               | aluminum (27), calcium (109), iron (13.2),<br>sodium (87.3), vanadium (3.0), copper (2.1)                                                                                              | ND                                  | bis (2-Ethylhexyl)<br>phthalate (2J)  | ND                  |
| MP08-MW12-E02 SOL           | calcium (95.7), iron (7.4), sodium (120),<br>zinc (4.1)                                                                                                                                | N/A                                 | N/A                                   | N/A                 |
| MP08-MW15-E01               | calcium (107), sodium (140), nickel (11.4)                                                                                                                                             | 2-butanone (38)                     | bis (2-Ethylhexyl)<br>phthalate (3JB) | ND                  |
| MP08-MW15-E01 SOL           | calcium (57.1), sodium (156)                                                                                                                                                           | N/A                                 | N/A                                   | N/A                 |
| MP14-MW20-E02               | calcium (103), iron (9.6), sodium (56.3),<br>lead (1.5), zinc (3.9)                                                                                                                    | ND                                  | ND                                    | ND                  |
| MP14-MW20-E02 SOL           | barium (1.2), calcium (102), iron (9.2),<br>sodium (142), zinc (4.2)                                                                                                                   | N/A                                 | N/A                                   | N/A                 |
| MP18-MW03-E01               | aluminum(33.2), barium(.92),<br>calcium(65.6), cobalt(2.2), chromium(2.2),<br>iron(19.3), manganese(1.1),sodium(101).                                                                  |                                     |                                       |                     |



**Table 5.3-3**  
**Summary of Field/Rinsate and Trip Blanks (µg/l)**  
**(continued)**

| Sample ID         | Inorganics                                                                                                                                                                                | VOC's                      | SVOC's                             | Pesticides/<br>PCBs |
|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|------------------------------------|---------------------|
| MP18-MW03-E01 SOL | aluminum(20.5), calcium(45.4), cobalt(2.2), chromium(4.1), iron(13.1), manganese(.72), sodium(94.1)                                                                                       |                            |                                    |                     |
| MP18-MW24-E01     | aluminum (25), calcium (282), iron (13.4), magnesium (20), sodium (160), antimony (21)                                                                                                    | 2-butanone (21)            | ND                                 | ND                  |
| MP18-MW24-E01 SOL | aluminum (28.4), calcium (161), copper (2.7), iron (13.5), magnesium (23.9), sodium(118)                                                                                                  | N/A                        | N/A                                | N/A                 |
| MP18-MW24-E02     | aluminum (20), calcium (460), copper (5.4), iron (24.5), sodium (75.8)                                                                                                                    | ND                         | bis (2-Ethylhexyl) phthalate (140) | ND                  |
| MP18-MW24-E02 SOL | calcium (106), copper (4), iron (15.7), sodium (97.2)                                                                                                                                     | N/A                        | N/A                                | N/A                 |
| B3-MW03B-E01      | aluminum (26.2), barium (1.0), calcium (123), iron (16.5), sodium (820), zinc (2.0)                                                                                                       | 2-butanone (17)            | ND                                 | ND                  |
| B3-MW03B-E01 SOL  | aluminum (173), barium (113), calcium (25400), cobalt (7.3), iron (109), potassium (13200), magnesium (5790), manganese (90.1), sodium (20800), nickel (61.5), antimony (16.7), zinc (27) | N/A                        | N/A                                | N/A                 |
| B3-MW03B-E02      | aluminum(27.1), calcium(368), iron(10.1), magnesium(46), sodium(296)                                                                                                                      | 1,1,1-trichloroethane (8J) | ND                                 | ND                  |
| B3-MW03B-E02 SOL  | aluminum (17.2), calcium (163), iron (9.3), magnesium (61.3), sodium (179)                                                                                                                | N/A                        | N/A                                | N/A                 |
| B10-MW10B-E01     | calcium (33.6), manganese (2.7), sodium (95)                                                                                                                                              | 2-butanone (15)            | ND                                 | ND                  |
| B10-MW10B-E01 SOL | calcium (111), sodium (70.4)                                                                                                                                                              | N/A                        | N/A                                | N/A                 |
| B10-MW10B-E02     | calcium (141), iron (9.3), magnesium (24), sodium (170), zinc (6.5)                                                                                                                       | ND                         | diethylphthalate (2JB)             | ND                  |
| B10-MW10B-E02 SOL | calcium (130), iron (9.8), zinc (6.4), sodium (231)                                                                                                                                       | N/A                        | N/A                                | N/A                 |

Note: Numbers in () represent the concentration.

N/A - Not Applicable/No Sample

ND - Not Detected

Additionally, the low contaminant concentrations detected in the field blanks indicate that significant cross-contamination between samples did not occur. VOCs were detected in several of the trip blanks submitted for laboratory analysis. All of the VOCs detected are common laboratory contaminants and, similar to the field/rinsate blanks, were likely introduced into the samples during laboratory analysis. A summary of the analytical results for trip blanks is provided in Table 5.3-3.

### **5.3.5 Duplicates**

Duplicate samples for groundwater, surface water, sediment, and soil were collected following the protocols in the *Site Investigation Fort Monmouth, NJ, Main Post and Charles Wood Areas, Chemical Data Acquisition Plan* (WESTON, December 1994) and are discussed in the subsections that follow. The degree of variation between the sample values (not including values below the quantitation limit) is presented in Table 5.3-4 by media.

#### **5.3.5.1 Groundwater**

Of the groundwater duplicate results, 70% were within 10% of the routine sample value and only 16% were not within 20% of the routine sample value. These data indicate reasonable agreement among the groundwater results. Groundwater sample results generally exhibit slight variation due to the homogeneous characteristics of liquid samples.

#### **5.3.5.2 Surface Water**

Of the surface-water duplicate results, 63% were within 10% of the routine sample and only 1 sample result was not within 20% of the routine sample. These data indicate reasonable agreement among the surface-water results. Surface-water sample results generally exhibit little variation due to the homogeneous characteristics of liquid samples.

**Table 5.3-4**  
**Duplicate Sample Data Within Given Ranges of Percent Variation**

| Medium                         | Variation in Duplicate Results |       |       |       |       |       |       |       |       |        |      |
|--------------------------------|--------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|--------|------|
|                                | 0-10                           | 10-20 | 20-30 | 30-40 | 40-50 | 50-60 | 60-70 | 70-80 | 80-90 | 90-100 | >100 |
| Soil Borings and Surface Soils | 31                             | 11    | 7     | 4     | 1     | 3     | 7     | 7     | 1     |        | 3    |
| Sediment                       | 9                              | 7     |       | 2     |       |       |       |       |       |        |      |
| Surface Water                  | 12                             | 6     |       |       |       |       | 1     |       |       |        |      |
| Groundwater                    | 106                            | 20    | 12    | 5     | 1     | 3     |       | 1     | 1     | 1      | 1    |

### **5.3.5.3 Sediments**

Of the sediment duplicate results, 50% were within 10% of the routine sample and only 11% were not within 30% of the routine sample. These data indicate reasonable agreement among the sediment sample results. Sediment sample results tend to show more variation due to the heterogeneity of solid samples.

### **5.3.5.4 Soils**

Of the soil duplicate results, 41% (surface soil and soil boring samples) were within 10% of the routine sample and 35% were not within 30% of the routine sample. These data indicate reasonable agreement among the soil sample results. Soil sample results tend to show more variation, in general, due to the nonhomogeneous nature of solid samples.

## **5.4 TENTATIVELY IDENTIFIED COMPOUNDS (TICs)**

Tentatively identified compounds (TICs) were identified for volatile and semivolatile analyses. The sum of all TICs for every sample is provided in the data tables in Appendix D. In general, the sum of the TICs was small, less than 1 mg/kg for most solids and less than 600 µg/L for water. Significant amounts of TICs occurred in the sediment samples and the soil boring samples. The highest concentration of TICs for any sediment sample was 72 mg/kg, and the highest concentration for any soil sample was 18 mg/kg, both for semivolatile samples. By comparison, the proposed NJDEP cleanup criteria have a limit for total organics of 10,000 mg/kg. The highest concentration of volatile TICs for any solid sample was 1.1 mg/kg. By comparison, the proposed NJDEP limit for total volatile compounds is 1,000 mg/kg. Therefore, the concentration of TICs in solid samples will have no impact on whether it is less than the NJDEP cleanup criteria.

## **5.5 COMPARISON OF ANALYTICAL DETECTION LIMITS AND REMEDIATION STANDARDS**

For certain compounds, the analytical method detection limits exceeded the NJDEP remediation standards. The compounds for which this occurred, along with the most stringent NJDEP remediation standard values and laboratory detection limits, are presented in Table 5.5-1.

The laboratory performed the analysis using the EPA Contract Laboratory Program (CLP) Statement of Work, "Organics Analysis, Multimedia, Multiconcentration," and "Inorganics Analysis, Multimedia, Multiconcentration," for TCL/TAL analyses as specified in the report *Investigation of Suspected Hazardous Waste Sites at Fort Monmouth, New Jersey*, and as approved by NJDEP in a letter dated 20 April 1994. The detection limits are generally in accordance with the method standards.

The detection limits for many surface-water analyses, including VOCs, SVOCs, and pesticides/PCBs, exceeded the most stringent NJDEP criteria. However, additional sampling is proposed at all surface-water sites.

For groundwater, 19 compounds, including VOCs, SVOCs, and pesticides, exceeded the NJDEP criteria. However, additional sampling is proposed for all monitor wells.

Only one compound exceeded NJDEP criteria in soil samples; i.e., toxaphene. Toxaphene was not present in significant quantities in the 1979 inventory of pesticides contained in the IA. Remedial action or additional sampling is proposed for the two pesticide storage areas, i.e., M-16 at the Main Post and CW-6 at Charles Wood.

For sediment, 13 compounds exceeded NJDEP criteria, including SVOCs, pesticides/PCBs, and 2 metals. Because sediment samples were taken at former locations of STP outfalls (STP had not been operating for at least 20 years), metals are the compounds that are of most concern. The detection limit of mercury was generally only slightly above the NJDEP criteria. The detection limit for antimony was generally close to the regulatory limit. Antimony is not believed to have been used in significant quantities at Fort Monmouth because the major activities have been training and research in electronics.

**Table 5.5-1**  
**COMPOUNDS FOR WHICH THE ANALYTICAL DETECTION LIMIT EXCEEDS**  
**NJDEP REMEDIATION STANDARDS**

| COMPOUND                    | NJDEP<br>STANDARD | METHOD<br>DETECTION LIMIT |
|-----------------------------|-------------------|---------------------------|
| <b>SURFACE WATER (µg/L)</b> |                   |                           |
| 1,2-Dichloroethane          | 0.291             | 2.4                       |
| 2,4,6-Trichlorophenol       | 2.14              | 5.6                       |
| 2,4-Dinitrotoluene          | 0.11              | 5.8                       |
| 3,3'-Dichlorobenzidine      | 0.0386            | 2.8                       |
| 4,4'-DDE                    | 0.000588          | 0.1                       |
| 4,4'-DDT                    | 0.000588          | 0.1                       |
| Aldrin                      | 0.000135          | 0.05                      |
| alpha-BHC                   | 0.00391           | 0.05                      |
| alph-Chlordane              | 0.000277          | 0.05                      |
| Aroclor-1016                | 0.000244          | 1                         |
| Aroclor-1221                | 0.000244          | 2                         |
| Aroclor-1232                | 0.000244          | 1                         |
| Aroclor-1242                | 0.000244          | 1                         |
| Aroclor-1248                | 0.000244          | 1                         |
| Aroclor-1254                | 0.000244          | 1                         |
| Aroclor-1260                | 0.000244          | 1                         |
| Benzene                     | 0.15              | 3.3                       |
| Benzo(a)anthracene          | 0.0028            | 4.9                       |
| Benzo(a)pyrene              | 0.0028            | 4.9                       |
| Benzo(b)fluoranthene        | 0.0028            | 5.7                       |
| Benzo(k)fluoranthene        | 0.0028            | 6.2                       |
| bis(2-Chloroethyl) ether    | 0.0311            | 9.7                       |
| bis(2-Ethylhexy)phthalate   | 1.76              | 9.7                       |
| Carbon Tetrachloride        | 0.363             | 1.5                       |
| Chrysene                    | 0.0028            | 4.4                       |
| cis-1,3-Dichloropropene     |                   | 3                         |
| Dibenz(a,h)anthracene       | 0.0028            | 6                         |
| Dieldrin                    | 0.0019            | 0.1                       |
| Endosulfan sulfate          | 0.93              | 0.1                       |
| Endrin                      | 0.0023            | 0.1                       |
| gamma-Chlordane             |                   | 0.05                      |
| Heptachlor                  | 0.000208          | 0.05                      |
| Heptachlor epoxide          | 0.000103          | 0.05                      |
| Hexachlorobenzene           | 0.000748          | 5.5                       |
| Hexachloroethane            | 2.73              | 5.3                       |
| Indeno(1,2,3-cd)pyrene      | 0.0028            | 7.1                       |
| Methoxychlor                | 0.03              | 0.5                       |
| Methylene Chloride          | 2.49              | 2.7                       |
| Toxaphene                   | 0.0002            | 5                         |
| Vinyl Chloride              | 0.083             | 7.9                       |
|                             |                   |                           |
| <b>GOUNDWATER (µg/L)</b>    |                   |                           |
| 1,1,2,2-Tetrachloroethene   | 2                 | 4.2                       |
| 1,1,2-Trichloroethane       | 3                 | 4.3                       |

**Table 5.5-1  
(Continued)**

|                           |        |      |
|---------------------------|--------|------|
| 1,2,4-Trichlorobenzene    | 9      | 9.6  |
| 1,2-Dichloroethane        | 0.3    | 2.4  |
| 1,2-Dichloropropane       | 0.5    | 1.7  |
| Aldrin                    | 0.002  | 0.05 |
| alpha-BHC                 | 0.006  | 0.05 |
| Benzene                   | 0.2    | 3.3  |
| Bromodichloromethane      | 0.3    | 2    |
| cis-1,3-Dichloropropene   | 0.2    | 3    |
| Dieldrin                  | 0.002  | 0.1  |
| Hexachlorobutadiene       | 1      | 4.6  |
| Methylene Chloride        | 2      | 2.7  |
| Pentachlorophenol         | 0.3    | 4    |
| Toxaphene                 | 0.03   | 5    |
| trans-1,3-Dichloropropene | 0.2    | 2.4  |
|                           |        |      |
| <b>SOIL (mg/kg)</b>       |        |      |
| Toxaphene                 | 0.1    | 210  |
|                           |        |      |
| <b>SEDIMENT (mg/kg)</b>   |        |      |
| 2-Methylnaphthalene       | 65     | 580  |
| Acenaphthene              | 150    | 580  |
| Anthracene                | 85     | 580  |
| Dibenzo (a,h) anthracene  | 60     | 580  |
| Mercury                   | 0.15   | 0.13 |
| Antimony                  | 2      | 5.4  |
| 2-BHC                     | 0.394  | 2.9  |
| Heptachlor                | 0.148  | 2.9  |
| Endrin                    | 0.0654 | 5.9  |
| 4,4' DDT                  | 1.83   | 5.9  |
| alpha-Chlordane           | 0.5    | 2.9  |
| gamma-Chlordane           | 0.5    | 2.9  |
| Aroclor                   | 38.7   | 59   |



# **SECTION 6 CONCLUSIONS AND RECOMMENDATIONS**





## SECTION 6

### CONCLUSIONS AND RECOMMENDATIONS

#### 6.1 MAIN POST

The conclusions and recommendations discussed in the following subsections are for the Main Post area of Fort Monmouth, and are based on the results of the site investigation activities. These conclusions and recommendations are also presented with the site-specific discussions in Section 4 and are summarized in Table 6.1-1.

##### 6.1.1 Landfill 2 (M-2)

Investigation activities performed at site M-2 included the following:

- Sampling of two surface-water locations.
- Installation and sampling of three monitor wells.
- Tidal monitoring.

##### 6.1.1.1 Conclusions

The surface-water sampling results indicate that two VOCs were detected at the two surface-water locations at concentrations greater than NJDEP surface-water criteria, and above maximum background concentrations. In addition, soluble lead was detected at a concentration greater than NJDEP criteria and the maximum background concentrations. Because the site formerly had a New Jersey Pollutant Discharge Elimination System (NJPDES) permit (permit No. 0057274), surface water has been sampled since 1985. The results from the current round of surface-water sampling for VOCs are less than the maximum results from previous rounds.

Chlorobenzene was detected in the groundwater at concentrations exceeding the NJDEP GWQC and background in both downgradient monitor wells from both sampling rounds and in the upgradient well during one sampling round.



Table 6.1-1

Main Post Site Summary and Recommendations

| Site                              | Compounds that Exceed<br>NJDEP Criteria and Maximum Background                                                                                                                                                 | Recommendations                                                                                                                                                                                                      |
|-----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| M-2<br>Landfill                   | Groundwater:<br>Chlorobenzene in 3 wells<br>Surface water:<br>Tetrachloroethene<br>Trichloroethene                                                                                                             | Conduct groundwater and surface-water monitoring on a long-term basis.                                                                                                                                               |
| M-3<br>Landfill                   | Groundwater:<br>Chlorobenzene (low value) in 1 well<br>Lead in 1 sample<br>Surface water:<br>None                                                                                                              | Conduct groundwater and surface-water monitoring on a long-term basis. Excavate partially exposed drum and conduct confirmatory sampling.                                                                            |
| M-4 Landfill                      | Groundwater:<br>DDT (low value) in 1 well                                                                                                                                                                      | Conduct groundwater monitoring on a long-term basis.                                                                                                                                                                 |
| M-5<br>Landfill                   | Groundwater:<br>Tetrachloroethene in 1 well                                                                                                                                                                    | Conduct groundwater monitoring and sampling of surface-water location SS-6 on a long-term basis.                                                                                                                     |
| M-8<br>Landfill                   | Groundwater:<br>Tetrachloroethene in 1 well<br>Benzene in 1 well<br>Chlorobenzene in 2 wells                                                                                                                   | Conduct groundwater monitoring and sampling of surface-water location SS-7 on a long-term basis.                                                                                                                     |
| M-12<br>Landfill                  | Groundwater:<br>None                                                                                                                                                                                           | Conduct groundwater monitoring on a long-term basis.                                                                                                                                                                 |
| M-14<br>Landfill                  | Groundwater:<br>None<br>Surface water:<br>None                                                                                                                                                                 | Conduct groundwater and surface-water monitoring on a long-term basis.                                                                                                                                               |
| M-15<br>Water Tank                | Soil:<br>DDT<br>DDE<br>Lead<br>Cadmium<br>Zinc                                                                                                                                                                 | Excavate contaminated soil and perform confirmatory sampling.                                                                                                                                                        |
| M-16<br>Former Pesticide<br>Bldg. | Soil:<br>Aldrin in 1 sample<br>Dieldrin in 4 samples<br>Heptachlor in 1 sample<br>DDE in 1 sample<br>DDT in 2 samples<br>Groundwater:<br>None                                                                  | Excavate contaminated soil and perform confirmatory sampling. Abandon site monitor well.                                                                                                                             |
| M-18<br>Former Training<br>Area   | Soil:<br>Chrysene (all SVOCs in 1 sample)<br>Benzo(a)anthracene<br>Benzo(b)fluoranthene<br>Benzo(k)fluoranthene<br>Benzo(a)pyrene<br>Indeno(1,2,3-cd)pyrene<br>Groundwater:<br>DDD in 1 well<br>Lead in 1 well | Locate and excavate possible UST and any contaminated soil and perform confirmatory sampling. Excavate stained soil at SB-06 and conduct confirmatory sampling. Conduct groundwater monitoring on a long-term basis. |



Table 6.1-1

**Main Post Site Summary and Recommendations  
(Continued)**

| Site                                      | Compounds that Exceed<br>NJDEP Criteria and Maximum Background   | Recommendations                                                                                                                                         |
|-------------------------------------------|------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| AOC-3<br>Former Sewage<br>Treatment Plant | Soil:<br>None<br>Sediment:<br>None                               | No further action.                                                                                                                                      |
| Pre-1941<br>Treatment Plant               | Sediment:<br>Arsenic<br>Cadmium<br>Chromium<br>Zinc              | No further action.                                                                                                                                      |
| PCB<br>Transformers                       | Soil:<br>Building 292<br>Concrete:<br>Buildings 1002, 1208, 1209 | Remediate stained concrete when transformers are removed. Conduct confirmatory sampling. Sample soil at Bldg. 292 to determine extent of contamination. |



The results of the tidal monitoring indicate that there is no apparent relationship between the changing creek levels and the water levels in upgradient monitor well MW-1; however, a direct relationship was observed between changing creek levels and the water levels in downgradient monitor wells MW-2 and MW-3. Conductivity and salinity results indicate the presence of freshwater in the creek at site M-2. Freshwater was indicated at monitor wells MW-1 and MW-3. A moderate to high specific conductance was measured at monitor well MW-2, which is unexplained.

#### **6.1.1.2 Recommendations**

Although groundwater sample results at site M-2 exceeded NJDEP criteria for one VOC, and surface-water results were slightly exceeded by two VOCs, immediate remedial action is not required for several reasons. Immediate remedial action is usually based on an immediate threat to human health. Shallow groundwater flows toward Mill Creek, as indicated by water-level measurements in site monitor wells, and there are no known uses of groundwater at or downgradient of the site. Although there is slight VOC contamination in Mill Creek, there is no use of this water for human consumption. In fact, Mill Creek becomes saline immediately downgradient of site M-2. Therefore, the groundwater and surface waters are not used for drinking water.

In addition, surface-water sampling has been performed at this site since 1986, and since the landfill has not been used for decades, the concentrations of VOCs seem, at worst, to be stable and possibly decreasing. Presumably, since no material is being added to the source (the landfill), natural degradation will decrease groundwater and surface-water contamination levels in the future. Although downgradient surface-water samples were not taken during this round, previous sampling at site M-8 indicated that NJDEP surface-water criteria were not exceeded for VOCs. Therefore, the only portion of Mill Creek for which NJDEP surface-water criteria are exceeded is the portion between sites M-2 and M-8. All of this portion is on Fort Monmouth property and, therefore, access to it is restricted.

Since the existing monitor wells and surface-water sampling locations are adequately placed to monitor downgradient groundwater and surface water, the Fort Monmouth Directorate of Public Works (DPW) proposes that a long-term surface-water and groundwater monitoring program be developed and implemented for the site. Aqueous samples would be collected and analyzed on a quarterly basis to further evaluate water quality conditions at the site. Groundwater samples would be collected from existing monitor wells, and surface-water samples would be collected from points yet to be determined. Compounds of concern identified in the first two rounds of sampling would be targeted for the monitoring program.

### **6.1.2 Landfill 3 (M-3)**

Investigation activities performed at site M-3 included the following:

- Geophysical surveys.
- Installation and sampling of three monitor wells.
- Sampling of three surface-water locations.

#### **6.1.2.1 Conclusions**

The geophysical surveys indicate that the extent of the identified waste material is within the suspected boundaries of the landfill. Site monitor wells have been installed in appropriate locations to monitor groundwater quality upgradient and downgradient of the waste material. In an isolated area of the site the GPR results indicated hyperbolic radar signatures typical of a buried drum or drums. A partially exposed drum was also observed at this location.

Groundwater quality results indicate that chlorobenzene was detected in one downgradient well below laboratory quantitation limits, but just above NJDEP GWQC and background from one sampling round. Lead was also detected at levels above NJDEP GWQC and background.

The surface-water quality results indicate that no organic or inorganic concentrations exceeded both NJDEP surface-water criteria and the maximum background concentration. Because the site formerly had an NJPDES permit, surface water has been sampled since 1986. The results from

the current round of surface-water sampling for VOCs are less than the maximum results from previous rounds.

#### **6.1.2.2 Recommendations**

Although NJDEP groundwater criteria were exceeded for one VOC, immediate remedial action is not required for several reasons. First, the measured value for the VOC was below the quantitation limit and just slightly above the GWQC. In addition, the shallow groundwater flows toward Lafetra Creek, as indicated by water-level measurements in site monitor wells, and there are no known uses of groundwater at or downgradient of the site. Surface-water samples did not exceed NJDEP surface-water criteria. Therefore, there is no immediate threat to human health.

In addition, because surface-water sampling has been performed at this site since 1986, and the landfill has not been used for decades, the concentrations of VOCs seem, at worst, to be stable and possibly decreasing. Presumably, since no material is being added to the source (the landfill), natural degradation will decrease groundwater and surface-water contamination levels in the future.

Since the existing monitor wells and surface-water sampling locations are adequately placed to monitor downgradient groundwater and surface water, DPW proposes that a long-term surface-water and groundwater monitoring program be developed and implemented for the site. Aqueous samples would be collected and analyzed on a quarterly basis to further evaluate water quality conditions at the site. Groundwater samples would be collected from existing monitor wells, and surface-water samples would be collected from points yet to be determined. Compounds of concern identified in the first two rounds of sampling would be the targeted for the monitoring program.

The partially exposed drum will be excavated. The area immediately around and under the drum will be investigated for additional drums. Any excavated drums will be examined to determine if hazardous materials were present or still exist. The drum and the excavation will be monitored with a photoionization detector (PID). NJDEP will be requested to send a representative to

monitor the excavation. If there is no indication that the drum contained, or still contains, hazardous materials and elevated readings are not observed on the PID, the excavation will be backfilled and no further action will be taken. If contamination is identified, additional sampling will be conducted in accordance with the *Technical Requirements for Site Remediation* (NJDEP, 1993).

### **6.1.3 Landfill 4 (M-4)**

Investigation activities performed at site M-4 included the following:

- Installation and sampling of three monitor wells.

#### **6.1.3.1 Conclusions**

One pesticide compound was detected at a concentration just above the NJDEP GWQC and background in the upgradient well in both the routine and duplicate samples. The pesticide was not detected in downgradient monitor wells, and also was not detected during previous sampling at downgradient location SS-5 (WESTON, 1993).

#### **6.1.3.2 Recommendations**

Although NJDEP groundwater criteria were exceeded for one pesticide, no immediate remedial action is required. The measured value of the pesticide was just slightly above the GWQC. Shallow groundwater flows toward Mill Creek, as indicated by water-level measurements in site monitor wells, and there are no known uses of groundwater at or downgradient of the site. No surface-water sampling was performed at this site during this project. The surface water was previously sampled downstream, but was not analyzed for pesticides. Since Mill Creek flows on Fort Monmouth property between sites M-4 and M-8, access to this stream is restricted.

In addition, surface-water sampling has been performed at this site since 1986, and since the landfill has not been used for decades, the concentrations of VOCs seem, at worst, to be stable

and possibly decreasing. Presumably, since no material is being added to the source (the landfill), natural degradation will decrease groundwater and surface-water contamination levels in the future.

Since the existing monitor well locations are adequately placed to monitor downgradient groundwater, DPW proposes that a long-term groundwater monitoring program be developed and implemented for the site. Aqueous samples would be collected and analyzed on a quarterly basis to further evaluate water quality conditions at the site. Groundwater samples would be collected from existing monitor wells. Compounds of concern (including pesticides) identified in the first two rounds of sampling would be targeted for the long-term groundwater and surface-water monitoring program.

#### **6.1.4 Landfill 5 (M-5)**

Investigation activities performed at site M-5 included the following:

- Installation and sampling of two monitor wells.

##### **6.1.4.1 Conclusions**

PCE was detected in the upgradient well in concentrations exceeding NJDEP GWQC and background from both sampling rounds. Because the site formerly had an NJPDES permit, surface water has been sampled since 1986. During previous investigations, PCE was also detected at downgradient surface-water sampling location SS-6 (WESTON, 1993). Surface water was not sampled at site M-5 during this investigation because the maximum VOC concentrations at this site during previous rounds of sampling were less than the maximum concentrations at site M-2, which is upgradient. For site M-2, the results of the current round of surface-water sampling for VOCs are less than the maximum results from previous rounds.



#### **6.1.4.2 Recommendations**

Although groundwater sample results exceeded NJDEP criteria for one VOC, immediate remedial action is not required. Shallow groundwater at the site flows toward Mill Creek and Lafetra Creek, and there are no known uses of groundwater at or downgradient of the site. No surface-water sampling was performed at this site during this project. Previous sampling rounds have indicated that some VOC concentrations exceed NJDEP surface-water criteria in Mill Creek adjacent to site M-5. However, previous rounds of sampling have indicated that VOC concentrations do not exceed surface-water criteria at site M-8, which is downgradient of site M-5. Therefore, there is little immediate threat to human health.

In addition, surface-water sampling has been performed at this site since 1986, and since the landfill has not been used for decades, the concentrations of VOCs seem, at worst, to be stable and possibly decreasing. Presumably, since no material is being added to the source (the landfill), natural degradation will decrease groundwater and surface-water contamination levels in the future.

Since the existing monitor wells and surface-water sampling locations are adequately placed to monitor downgradient groundwater and surface water, DPW proposes that a long-term surface-water and groundwater monitoring program be developed and implemented for the site. Aqueous samples would be collected and analyzed on a quarterly basis to further evaluate water quality conditions at the site. Groundwater samples would be collected from existing monitor wells and surface-water samples would be collected from points yet to be determined. Compounds of concern identified in the first two rounds of sampling would be targeted for the monitoring program.

#### **6.1.5 Landfill 8 (M-8)**

Investigation activities performed at site M-8 included the following:

- Abandonment of previously installed monitor wells and piezometers.
- Installation and sampling of four monitor wells.

- Tidal monitoring.

#### **6.1.5.1 Conclusions**

Due to highly turbid conditions and poor water-level recovery of the original monitor wells, all original monitor wells and piezometers were abandoned.

Groundwater sampling results indicate low concentrations of benzene and chlorobenzene were detected in two downgradient monitor wells, and PCE concentrations were detected in the upgradient well (MW-12) exceeding NJDEP GWQC. Additionally, PCE and other VOCs were previously detected at location SS-7, downgradient of site M-8.

Because the site formerly had an NJPDES permit, surface water has been sampled since 1986. However, surface water was not sampled at site M-8 during this investigation because the maximum VOC concentrations at this site during previous rounds of sampling were less than the maximum concentrations at sites M-2 and M-3, which are upstream. The concentrations of VOCs at site M-8 for previous rounds were less than the NJDEP surface-water criteria.

The results of the tidal monitoring indicate that there is no apparent relationship between creek levels and water levels in MW-12 because of its distance from the creek. A poor to moderate relationship was measured between MW-14 and creek levels. A direct relationship was observed between creek levels and MW-13 and MW-15. The conductivity and salinity measurements in Parkers Creek indicate the presence of brackish to salty water at site M-8. Groundwater sampled from MW-12 indicates freshwater. Monitor wells MW-13, MW-14, and MW-15 indicate brackish to salty water in an area of the water-bearing unit close to Parkers Creek.

#### **6.1.5.2 Recommendations**

Although groundwater sample results exceeded NJDEP criteria for three VOCs, immediate remedial action is not required. Groundwater flows toward Lafetra Creek, as indicated by water-level measurements in site monitor wells, and there are no known uses of groundwater at or

downgradient of the site. In fact, groundwater at three of the four monitor wells is brackish and unsuitable for drinking. The brackish water is a result of the proximity of the wells to Parkers Creek, and the direct relationship of tidal fluctuations and site groundwater levels. No surface-water sampling was performed at this site during this project. Previous sampling rounds have indicated that VOC concentrations did not exceed NJDEP surface-water criteria in the stream. Therefore, there is little immediate threat to human health.

In addition, surface-water sampling has been performed at this site since 1986, and since the landfill has not been used for decades, the concentrations of VOCs seem, at worst, to be stable and possibly decreasing. Presumably, since no material is being added to the source (the landfill), natural degradation will decrease groundwater and surface-water contamination levels in the future.

Since the existing monitor wells and surface-water sampling locations are adequately placed to monitor downgradient groundwater and surface water, DPW proposes that a long-term surface-water and groundwater monitoring program be developed and implemented for the site. Aqueous samples would be collected and analyzed on a quarterly basis to further evaluate water quality conditions at the site. Groundwater samples would be collected from existing monitor wells and surface-water samples would be collected from points yet to be determined. Compounds of concern identified in the first two rounds of sampling would be targeted for the monitoring program.

#### **6.1.6 Landfill 12 (M-12)**

Investigation activities performed at site M-12 included the following:

- Geophysical surveys.
- Installation and sampling of three monitor wells.
- Tidal monitoring.



#### **6.1.6.1 Conclusions**

The results of the geophysical surveys indicate that the identified fill and buried ferrous material are present within the suspected boundaries of the landfill. Monitor wells are positioned to adequately monitor groundwater downgradient of these areas.

Groundwater sampling results indicate that no compounds of concern exceeded NJDEP GWQC from upgradient and downgradient wells.

The results of the tidal monitoring relate to both sites M-12 and M-14. The data indicate that there is no apparent relationship between creek levels and water levels in MW-19 and MW-20. A poor to moderate relationship was measured between MW-16, MW-17, and MW-18 and creek levels. A direct relationship was observed between creek levels and MW-21. The conductivity and salinity measurements in Husky Brook indicate the presence of brackish to salty water at sites M-12 and M-14. Groundwater sampled from monitor wells at each location indicates freshwater.

#### **6.1.6.2 Recommendations**

Although no compounds of concern were identified at site M-12, because of the site's history of being used as a landfill, DPW proposes that a long-term groundwater monitoring program be developed and implemented for the site. Aqueous samples would be collected and analyzed on a long-term basis to further evaluate water quality conditions at the site. Groundwater samples would be collected from existing monitor wells. Contaminants identified in the first two rounds of sampling would be targeted for the monitoring program.

#### **6.1.7 Landfill 14 (M-14)**

Investigation activities performed at site M-14 included the following:

- Geophysical surveys.
- Installation and sampling of three monitor wells.

- Sampling of two surface-water locations.
- Tidal monitoring.

#### **6.1.7.1 Conclusions**

The results of the geophysical surveys indicate that fill and some metallic debris exist throughout the site; however, a discrete landfill boundary was not identified at site M-14. This may be due in part to the composition of the fill material and the small amount of subsurface metallic material present at the site.

The groundwater and surface-water sampling results indicate that no compounds of concern were detected above NJDEP GWQC and surface-water criteria.

Tidal monitoring was conducted at site M-12 and site M-14 simultaneously. The results of the tidal monitoring are discussed in Subsection 6.1.6.

#### **6.1.7.2 Recommendations**

Although no compounds of concern were identified at site M-14, because of the site's history of being used as a landfill, DPW proposes that a long-term surface-water and groundwater monitoring program be developed and implemented for the site. Aqueous samples would be collected and analyzed on a quarterly basis to further evaluate water quality conditions at the site. Groundwater samples would be collected from existing monitor wells and surface-water samples would be collected from points yet to be determined. Contaminants identified in the first two rounds of sampling would be targeted for the monitoring program.

#### **6.1.8 Water Tank (M-15)**

Investigation activities performed at site M-15 included the following:

- Collection of two surface soil samples near the water tank.

#### **6.1.8.1 Conclusions**

Two pesticide compounds and three metals, cadmium, zinc, and lead, were detected in surface soil at levels that exceeded NJDEP residential SCC and maximum background.

#### **6.1.8.2 Recommendations**

DPW has submitted the necessary documentation to Headquarters, Army Materiel Command/Army Environmental Center (HQAMC/AEC) to obtain the proper funding to remediate the site in FY 1996. Depending on funding availability, the affected soil will be excavated and disposed of in accordance with the applicable regulations. The area of contamination encompasses the perimeter of the tank, about 10 feet at the widest point. The depth of contamination is assumed to be 6 inches. Excavation will be performed in conjunction with confirmatory soil sampling to ensure that NJDEP SCC are achieved. It is estimated that 13 yd<sup>3</sup> of soil will be excavated, assuming that soil is excavated to a depth of 6 inches. NJDEP will be requested to send a representative to observe the excavation.

#### **6.1.9 Former Pesticide Storage Building (M-16)**

Investigation activities performed at site M-16 included the following:

- Collection of four surface soil samples.
- Collection of two soil samples from discrete depth intervals at one soil boring location.
- Installation and sampling of one monitor well.

#### **6.1.9.1 Conclusions**

Pesticide compounds were detected at four surface soil sampling locations and in one soil boring sample (0 to 2-foot interval) in concentrations above NJDEP criteria and background.

No compounds of concern were detected in the groundwater above NJDEP criteria.

#### **6.1.9.2 Recommendations**

DPW has submitted the necessary documentation to HQAMC/AEC to obtain the proper funding to remediate the site in FY 1996. Depending on funding availability, the affected soil will be excavated and disposed of in accordance with the applicable regulations. The area of contamination is approximately 50 feet by 20 feet. The depth of contamination is assumed to be 12 inches. Excavation will be conducted in conjunction with confirmatory soil sampling to ensure that NJDEP SCC are achieved. It is estimated that 56 yd<sup>3</sup> of soil will be excavated, assuming that soil will be excavated to a depth of 12 inches. NJDEP will be requested to send a representative to observe the excavation.

The site monitor well will be properly abandoned due to the nondetection of compounds of concern in groundwater. The remedial activities proposed will remediate potential source areas of pesticides detected in soil.

#### **6.1.10 Former Training Area (M-18)**

Investigation activities performed at site M-18 included the following:

- Geophysical surveys.
- Soil sampling at nine soil boring locations.
- Installation and sampling of two monitor wells.

##### **6.1.10.1 Conclusions**

The geophysical surveys identified several anomalies indicative of buried waste and fill material within the suspected boundaries of the site M-18 area. One anomaly was indicative of a UST or storage tank component. The geophysical results indicate that soil borings and monitor wells were appropriately located to evaluate subsurface conditions downgradient and within landfill boundaries.

The soil sampling results indicated that six SVOCs were detected at SB-06 in concentrations that exceeded the NJDEP criteria and established background concentrations.

The groundwater sampling results indicate that 4,4-DDD was detected at a concentration just above the NJDEP GWQC in one well (MW-24) from both sampling rounds. Lead was detected in one location above NJDEP GWQC and background. TPH concentrations were also detected just above laboratory quantitation limits in MW-24 and MW-25 in both sampling rounds.

#### **6.1.10.2 Recommendations**

Trenching will be performed at the suspected UST or UST component location to confirm the geophysical results and to excavate if necessary. A PID will be used to conduct field screening during the excavation. The excavation will be performed in conjunction with confirmatory sampling, in accordance with the *Technical Requirements for Site Remediation* (NJDEP, 1993), if a UST is encountered to ensure that NJDEP SCC are achieved. NJDEP will be requested to send a representative to observe the excavation.

Additionally, soil at soil boring SB-06 will be excavated. If it is determined that the suspected UST is the source of contamination at SB-06, this location will be remediated in conjunction with the UST. Confirmatory sampling will also be conducted.

DPW proposes that a long-term groundwater monitoring program be developed and implemented for the site. Aqueous samples would be collected and analyzed on a quarterly basis to further evaluate water quality conditions at the site. Groundwater samples would be collected from existing monitor wells. Compounds of concern identified in the first two rounds of sampling would be targeted for the monitoring program.

#### **6.1.11 Former Main Post Sanitary Treatment Plant (AOC-3)**

Investigation activities performed at site AOC-3 included the following:



- Collection of two soil samples from two soil boring locations.
- Collection of one sediment sample from one location in the Parkers Creek outfall area.

#### **6.1.11.1 Conclusions**

The results of the soil and sediment sampling indicated that compounds of concern were not detected above the NJDEP criteria and established background concentrations.

#### **6.1.11.2 Recommendations**

No further action will be taken.

#### **6.1.12 Pre-1941 Sanitary Treatment Plant**

Investigation activities performed at the former STP included the following:

- Collection of one sediment sample from the outfall area.

#### **6.1.12.1 Conclusions**

Nine metals were detected above NJDEP criteria in the sediment sample collected at the outfall area. In addition, four metals (arsenic, cadmium, chromium, and zinc) exceeded their respective maximum background concentrations. The other five metals were detected below established background concentrations.

#### **6.1.12.2 Recommendations**

Although four metals were detected in sediment at levels exceeding NJDEP criteria and background, in the worst case the criteria were exceeded by a factor of three. Since the samples was taken at the outfall of the STP, the results are believed to be the worst case and the area of

contamination is probably small. Access to this portion of Lafetra Creek is restricted although the stream is on the property boundary. The STP has not been used since 1941, and, presumably, the local ecology has reached an equilibrium. Therefore, since remediation would disrupt the ecology of the site, no further action will be taken.

#### **6.1.13 PCB Transformers — Main Post**

Investigation activities relative to the former location of PCB transformers included the following:

- Collection of soil and concrete samples for PCB analysis.

##### **6.1.13.1 Conclusions**

PCB levels in stained concrete were found to exceed NJDEP guidance levels in indoor vaults at Buildings 1002, 1208, and 1209. PCBs were also detected above applicable soil standards in the soil beneath transformer MP-062 on the northwest side of Building 292.

##### **6.1.13.2 Recommendations**

Since the indoor vaults are normally locked and are accessible by a very limited number of facility personnel, and the stained concrete cannot be removed without significantly disrupting electrical service, remedial work will be performed when the transformers are removed from service and the stained areas are made accessible. A warning sign will be posted, and workers entering the vaults will be trained to take precautions to prevent contamination.

Because the concentration of PCBs is only slightly above the SCC, additional sampling will be conducted beneath the former location of transformer MP-062 to determine the vertical and horizontal extent of PCBs in soil. The soil sampling will be performed in accordance with the NJDEP *Technical Requirements for Site Remediation* (NJDEP, 1993).

## **6.2 CHARLES WOOD**

The conclusions and recommendations discussed in the following subsections are for the Charles Wood area of Fort Monmouth, and are based on the results of the site investigation activities.

These conclusions and recommendations are also presented with the site-specific discussions in Section 4 and are summarized in Table 6.2-1.

### **6.2.1 Wastewater Treatment Lime Pit 1 (CW-1)**

Investigation activities performed at site CW-1 included the following:

- Collection of soil samples from four soil borings.
- Installation and sampling of four monitor wells at each of the soil boring locations.

#### **6.2.1.1 Conclusions**

The soil sample results indicate that compounds of concern were either not detected or were below laboratory quantitation limits and NJDEP criteria.

The groundwater sampling results indicate that TCE, PCE, and 1,2-dichlorobenzene were detected in the groundwater downgradient of the site at levels that exceeded the NJDEP criteria.

#### **6.2.1.2 Recommendations**

Although NJDEP groundwater criteria were exceeded by three VOCs at this site, immediate remedial action is not required. The probable source of contamination has been eliminated since chemicals are not being disposed of in the pit. The pit was cleaned in October 1992 and the limestone sludge was removed and disposed of as a hazardous waste. Hazardous waste is

Table 6.2-1

Charles Wood Site Summary and Recommendations

| Site                                  | Compounds that Exceed NJDEP Criteria and Maximum Background                                                                | Recommendations                                                                                                                                                                                                                                                            |
|---------------------------------------|----------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CW-1<br>Acid Pit                      | Soil:<br>None<br>Groundwater:<br>1,2-Dichloroethene in 1 well<br>Trichloroethene in 2 wells<br>Tetrachloroethene in 1 well | Conduct soil-gas survey. Based on the results of the survey, install and sample two additional monitor wells. Conduct groundwater monitoring on a long-term basis for existing and newly installed monitor wells.                                                          |
| CW-2<br>Acid Pit                      | Soil:<br>PCBs in 1 sample<br>Groundwater:<br>Tetrachloroethene in 1 well                                                   | Conduct soil-gas survey. Based on the results of the survey, install and sample two additional monitor wells. Collect soil samples for PCBs from monitor well borings. Conduct groundwater monitoring on a long-term basis for existing and newly installed monitor wells. |
| CW-3                                  | No samples collected.                                                                                                      | Facility will perform trenching to investigate site. If there is no indication of subsurface contamination, then no further action will be taken.                                                                                                                          |
| CW-3A<br>Debris Site                  | Geophysics survey                                                                                                          | Facility will investigate geophysics anomalies by backhoe trenching. If there is no indication of subsurface contamination, no further action will be taken.                                                                                                               |
| CW-4<br>Indoor Firing Range           | Soil:<br>Lead                                                                                                              | The contaminated soil will be excavated and confirmatory sampling will be performed.                                                                                                                                                                                       |
| CW-5<br>Former Sewage Treatment Plant | Soil:<br>None<br>Sediment:<br>None                                                                                         | No further action.                                                                                                                                                                                                                                                         |
| CW-6<br>Pesticide Storage Building    | Soil:<br>Cadmium in 1 sample<br>Dieldrin in 1 sample<br>Groundwater:<br>Benzene in 1 sample                                | Conduct groundwater monitoring on a long-term basis.                                                                                                                                                                                                                       |
| CW-9<br>Sludge Dump                   | Soil:<br>Cadmium in 1 sample<br>Groundwater:<br>None                                                                       | No further action.                                                                                                                                                                                                                                                         |
| AOC-7<br>Former Drum Storage Area     | Soil:<br>None                                                                                                              | No further action.                                                                                                                                                                                                                                                         |
| PCB Transformers                      | Soil:<br>Building 2000 (4 samples)                                                                                         | Excavate contaminated soil and conduct confirmatory sampling.                                                                                                                                                                                                              |

currently collected for proper disposal off-site and waste is no longer disposed of in the pit. Shallow groundwater flows toward and discharges to the headwaters of Wampum Brook, as indicated by water-level measurements in site monitor wells. There are no known uses of groundwater between the acid neutralization pit and Wampum Brook. Surface-water samples were taken in Wampum Brook in the Charles Wood area and Mill Creek (as Wampum Brook is called further to the east) for use as background samples. No VOCs were detected in these samples, therefore, there is no immediate threat to human health.

The extent of VOC concentrations in groundwater will be investigated by soil-gas survey techniques. The soil-gas survey will be performed on an established grid pattern to estimate the lateral extent of VOCs in the vicinity of the neutralization pit. The results of the soil-gas survey will be used to locate two additional monitor wells, if necessary, at the downgradient edge of the plume. DPW proposes that a long-term groundwater monitoring program be developed and implemented for the site. Aqueous samples would be collected and analyzed on a quarterly basis to further evaluate water quality conditions at the site. Groundwater samples would be collected from existing monitor wells and the two newly installed monitor wells. Compounds of concern identified in the first two rounds of sampling would be targeted for the monitoring program.

### **6.2.2 Wastewater Treatment Lime Pit 2 (CW-2)**

Investigation activities performed at site CW-2 included the following:

- Collection of soil samples from four soil borings.
- Installation and sampling of four monitor wells at each of the soil boring locations.

#### **6.2.2.1 Conclusions**

The results of the soil sampling indicate that one PCB compound (Aroclor-1254) was detected in SB-30 at a concentration slightly above the NJDEP SCC. PCB compounds were not detected

in the other three soil borings. In addition, PCBs were not detected in groundwater samples in the corresponding well location, MW-30.

Groundwater sampling results indicate that PCE was detected in the groundwater in one of the four wells (MW-32) in one of the two sampling rounds at levels slightly exceeding the NJDEP GWQC.

#### **6.2.2.2 Recommendations**

Although NJDEP groundwater criteria were exceeded by one VOC at this site, immediate remedial action is not required. The source of contamination has been eliminated since chemicals are not being disposed of in the pit. The pit was cleaned in October 1992 and the limestone sludge was removed and disposed of as a hazardous waste. Hazardous waste is currently collected for proper disposal off-site and waste is no longer disposed of in the pit. Shallow groundwater flows toward and discharges to the headwaters of Wampum Brook, as indicated by water-level measurements in site monitor wells. There are no known uses of groundwater between the acid neutralization pit and Wampum Brook. Surface-water samples were taken in Wampum Brook in the Charles Wood area and Mill Creek (as Wampum Brook is called further to the east) for use as background samples. No VOCs were detected in these samples, therefore, there is no immediate threat to human health.

The extent of PCE concentrations in groundwater will be investigated by soil-gas survey techniques. The soil-gas survey will be performed on an established grid pattern to estimate the lateral extent of VOCs in the vicinity of the neutralization pit. The results of the soil-gas survey will be used to locate two additional monitor wells if necessary. DPW proposes that a long-term groundwater monitoring program be developed and implemented for the site. Aqueous samples would be collected and analyzed on a quarterly basis to further evaluate water quality conditions at the site. Groundwater samples would be collected from existing monitor wells and from the two newly installed monitor wells. Compounds of concern identified in the first two rounds of sampling would be targeted for the monitoring program. When the additional monitor wells are

installed, soil samples will be collected for PCB analysis because of the detection of PCBs in a soil sample collected from SB-30.

### **6.2.3 Landfill 3 (CW-3)**

Investigation activities were not conducted as part of this investigation because of construction rubble that was present at the site during the field effort, which prohibited sample collection as planned. The rubble was removed and properly disposed of in June 1995 and exploratory trenches are planned to determine if any subsurface debris or soil staining is present. Field screening will be performed during excavation using a PID. NJDEP will be requested to send a representative to observe the investigation. In the absence of any elevated PID readings or evidence of subsurface debris, the excavation will be backfilled and no further action will be taken. If contamination is identified, then sampling will be conducted in accordance with the *Technical Requirements for Site Remediation* (NJDEP, 1993). Soil sample analytes will be collected and analyzed for the full range of contaminants.

### **6.2.4 Debris Site (CW-3A)**

Investigation activities performed at site CW-3A included only geophysical surveys to evaluate accessible areas for potential subsurface waste.

#### **6.2.4.1 Conclusions**

Geophysical surveys indicated two areas where subsurface metallic debris may be present.

#### **6.2.4.2 Recommendations**

Exploratory trenching will be performed to investigate areas where subsurface metallic debris may be present. Field screening will be conducted with a PID during the excavation. NJDEP will be requested to send a representative to observe the excavation. In the absence of elevated PID readings or evidence of subsurface debris, the excavation will be backfilled and no further

action will be taken. If contamination is identified, then sampling will be conducted in accordance with the *Technical Requirements for Site Remediation* (NJDEP, 1993). Soil sample analytes will be collected and analyzed for the full range of contaminants.

#### **6.2.5 Range (Small Arms) (CW-4)**

Investigation activities performed at site CW-4 included the following:

- Collection of one surface soil sample.
- Collection of one soil boring sample.

##### **6.2.5.1 Conclusions**

Soil sampling results indicate that only lead was detected at a concentration exceeding the NJDEP SCC at the spent round disposal area.

##### **6.2.5.2 Recommendations**

DPW has submitted the necessary documentation to HQAMC/AEC to obtain the proper funding to remediate the site in FY 1996. Depending on funding availability, the affected soil will be excavated and disposed of in accordance with the applicable regulations.

The contaminated soil will be removed and disposed of in accordance with applicable regulations. The area of contamination is approximately 8 feet in diameter. The estimated depth of excavation is assumed to be 7 feet. Excavation will be performed in conjunction with confirmatory sampling to ensure that NJDEP SCC are achieved. It is estimated that 17 yd<sup>3</sup> of soil will be excavated, assuming that soil is excavated to a depth of 7 feet. NJDEP will be requested to send a representative to observe the excavation.



#### **6.2.6 Former Sanitary Treatment Plant (CW-5)**

Investigation activities performed at site CW-5 included the following:

- Collection of one sediment sample from the outfall area east of Hope Road.
- Installation of two soil borings and collection of two soil samples, one from each boring.

##### **6.2.6.1 Conclusions**

Three compounds (4,4'-DDT, 4,4'-DDD, and 4,4'-DDE) were detected in the sediment at levels that were above the NJDEP sediment guidance criteria but below background. Soil results were below the NJDEP SCC and established maximum background.

##### **6.2.6.2 Recommendations**

No further action will be taken.

#### **6.2.7 Pesticide Storage Building T-2044 (CW-6)**

Investigation activities performed at site CW-6 included the following:

- Installation of two soil borings and collection of two samples from SB-34 and one from SB-01.
- Installation and sampling of one monitor well.
- Sampling of existing monitor well MW-1.
- Collection of one surface soil sample from a drainage ditch.

### **6.2.7.1 Conclusions**

The pesticide dieldrin and the metal cadmium were detected in the soil at two different locations, each at levels that exceeded NJDEP SCC and background. However, the average concentrations of dieldrin and cadmium in surface soil samples at CW-6 and CW-9 did not exceed the NJDEP SCC. Cadmium is typically present at elevated levels at golf courses. Groundwater samples indicated that benzene was detected in the existing monitor well (MW-1), which is attributed to a previously removed UST. Benzene was not detected in downgradient wells. Pesticides were not detected in any groundwater samples above NJDEP criteria.

### **6.2.7.2 Recommendations**

NJDEP groundwater criteria were exceeded for one VOC, but the measured value was just slightly above the GWQC. In addition, one pesticide was detected in soils at a level above criteria and background, but was just slightly above the SCC. Therefore, no immediate remedial action is necessary.

DPW proposes that a long-term groundwater monitoring program be developed and implemented for the site. Aqueous samples would be collected and analyzed on a quarterly basis to further evaluate water quality conditions at the site. Groundwater samples would be collected from existing monitor wells. Compounds of concern identified in the first two rounds of sampling would be targeted for the monitoring program.

### **6.2.8 Sludge Dump (CW-9)**

Investigation activities performed at site CW-9 included the following:

- Installation and sampling of two monitor wells.
- Collection of one soil sample from a soil boring.
- Collection of nine surface soil samples.

#### **6.2.8.1 Conclusions**

The average concentration of cadmium in surface soil samples at CW-6 and CW-9 and beryllium in surface soil location SS-09 at site CW-9 do not exceed the NJDEP SCC. Cadmium is typically present at elevated levels at golf courses. No compounds of concern were detected in site groundwater above NJDEP criteria.

#### **6.2.8.2 Recommendations**

No further action will be taken.

#### **6.2.9 Former Hazardous Waste Storage Area (AOC-7)**

Investigation activities performed at site AOC-7 included the installation of six soil borings. One soil sample was collected from each boring at depths ranging from 8 to 14 feet.

#### **6.2.9.1 Conclusions**

No compounds of concern were detected at this site at levels that exceeded NJDEP criteria.

#### **6.2.9.2 Recommendations**

No further action will be taken.

#### **6.2.10 PCB Transformers — Charles Wood**

Investigation activities performed at the former PCB transformer locations included the collection of seven surface soil samples for PCB analysis.

### **6.2.10.1 Conclusions**

PCBs were detected above the NJDEP criteria in each of the four soil samples collected downgradient of the former transformer location northeast of Building 2000 (transformer CW-035). PCBs were not detected above NJDEP criteria in samples collected from the other three sampling locations.

### **6.2.10.2 Recommendations**

Additional samples will be taken to further delineate the extent of contamination and the contaminated soil will be removed and disposed of in accordance with applicable regulations. The depth of contamination is assumed to be 6 inches. Excavation will be performed in conjunction with confirmatory soil sampling to ensure that NJDEP SCC are achieved.

# ACRONYMS/REFERENCES



## LIST OF ACRONYMS

|                 |                                                               |
|-----------------|---------------------------------------------------------------|
| AA              | atomic absorption spectrophotometer                           |
| ACM             | asbestos-containing material                                  |
| AMC             | U.S. Army Materiel Command                                    |
| AOC             | area of concern                                               |
| ASTM            | American Society for Testing and Materials                    |
| ATV             | all terrain vehicle                                           |
| AVRADA          | U.S. Army Aviation Research and Development Activity          |
| AWQC            | ambient water quality criteria                                |
| bgs             | below ground surface                                          |
| BNA             | base/neutral/acid                                             |
| BRAC            | Base Realignment and Closure Program                          |
| CDAP            | Chemical Data Acquisition Plan                                |
| CECOM           | U.S. Army Communications and Electronics Command              |
| CFR             | Code of Federal Regulations                                   |
| CLP             | Contract Laboratory Program                                   |
| DCAA            | Defense Contract Audit Agency                                 |
| DENTAC          | U.S. Army Dental Activity                                     |
| DIS             | Defense Investigation Services                                |
| DOI             | U.S. Department of the Interior                               |
| DOP             | di-octyl-phthalate                                            |
| DOT             | U.S. Department of Transportation                             |
| DPW             | Directorate of Public Works, Fort Monmouth, New Jersey        |
| DQOs            | data quality objectives                                       |
| EM              | electromagnetic                                               |
| EPA             | U.S. Environmental Protection Agency                          |
| EqP             | equilibrium partitioning                                      |
| ER-L            | Effects Range-Low (NOAA)                                      |
| FSP             | Field Sampling Plan                                           |
| ft <sup>2</sup> | square feet                                                   |
| ft msl          | feet above mean sea level                                     |
| FWS             | U.S. Fish and Wildlife Service                                |
| GC/MS           | gas chromatograph/mass spectrometer                           |
| GC              | gas chromatograph                                             |
| GOGO            | government-owned, government-operated                         |
| gpm             | gallons per minute                                            |
| GPR             | ground penetrating radar                                      |
| GWQC            | NJDEP Groundwater Quality Criteria                            |
| HHCs            | halogenated hydrocarbons                                      |
| HQAMC/AEC       | Headquarters, Army Materiel Command/Army Environmental Center |
| IA              | Installation Assessment                                       |
| IATA            | International Air Transport Association                       |
| ICP             | inductively coupled plasma spectrometer                       |
| ID              | inside diameter                                               |
| ISC             | U.S. Army Information Systems Command                         |





## LIST OF ACRONYMS (Continued)

|                    |                                                       |
|--------------------|-------------------------------------------------------|
| ISMA               | U.S. Army Information System Management Agency        |
| kHz                | kiloHertz                                             |
| LABCOM             | U.S. Army Laboratory Command                          |
| m <sup>3</sup>     | cubic meter                                           |
| MAG                | magnetometry                                          |
| MCSS               | Monmouth County Soil Survey                           |
| MEDDAC             | U.S. Army Medical Department Activities               |
| mg/cm <sup>2</sup> | milligrams per square centimeter                      |
| mg/g               | milligrams per gram                                   |
| mg/kg              | milligrams per kilogram                               |
| mg/m <sup>3</sup>  | milligrams per cubic meter                            |
| MHz                | megaHertz                                             |
| mS/m               | milliSiemens per meter                                |
| MS                 | matrix spike                                          |
| MSD                | matrix spike duplicate                                |
| msl                | mean sea level                                        |
| µg/g               | microgram per gram                                    |
| µg/kg              | microgram per kilogram                                |
| µg/L               | microgram per liter                                   |
| NJAC               | New Jersey Administrative Code                        |
| NJDEP              | New Jersey Department of Environmental Protection     |
| NMCRSA             | Northeast Monmouth County Regional Sewerage Authority |
| NOAA               | National Oceanic and Atmospheric Administration       |
| nT                 | nanoTesla                                             |
| OVA                | organic vapor analyzer                                |
| OVM                | organic vapor monitor                                 |
| PAH                | polyaromatic hydrocarbon                              |
| PCB                | polychlorinated biphenyl                              |
| PCE                | tetrachloroethene                                     |
| PE                 | performance evaluation                                |
| PID                | photoionization detector                              |
| ppm                | parts per million                                     |
| ppth               | parts per thousand                                    |
| PQL                | practical quantitation levels                         |
| PVC                | polyvinyl chloride pipe                               |
| QA/QC              | quality assurance/quality control                     |
| QC                 | quality control                                       |
| R&D                | research and development                              |
| SBA                | Small Business Administration                         |
| SCC                | Soil Cleanup Criteria                                 |
| SHERP              | Safety, Health and Emergency Response Plan            |
| SI                 | site investigation                                    |
| SIR                | Subsurface Interface Radar™                           |





## LIST OF ACRONYMS (Continued)

|                 |                                                |
|-----------------|------------------------------------------------|
| SOP             | standard operating procedure                   |
| STP             | sanitary treatment plant                       |
| SVOC            | semivolatile organic compound                  |
| TAL             | Target Analyte List                            |
| TCL             | Target Compound List                           |
| TIC             | tentatively identified compound                |
| TOC             | site-specific organic carbon                   |
| TPH             | total petroleum hydrocarbons                   |
| TRI-TAC         | Joint Tactical Communications Office           |
| TSCA            | Toxic Substances Control Act                   |
| URS             | URS Consultants, Inc.                          |
| USACE           | U.S. Army Corps of Engineers                   |
| USACHCS         | U.S. Army Chaplain Center and School           |
| USAMPS          | U.S. Army Military Preparatory School          |
| USATHAMA        | U.S. Army Toxic and Hazardous Materials Agency |
| USC             | Unified Soil Classification                    |
| UST             | underground storage tank                       |
| vac             | vacuum                                         |
| VOA             | volatile organic analysis                      |
| VOC             | volatile organic compound                      |
| WESTON®         | Roy F. Weston, Inc.                            |
| yd <sup>3</sup> | cubic yard                                     |





Brown, G.A. and O.S. Zapecza. 1990. *Results of Test Drilling in Howell Township, Monmouth County, New Jersey*. USGS, West Trenton, NJ.

CECOM Historical Office. 1985. *A Concise History of Fort Monmouth, New Jersey*. Fort Monmouth, NJ.

Cosulich. 1981. *Engineering Design to Accompany Registration Statement, Fort Monmouth Solid Waste Landfill*. W.F. Cosulich Associates. May 1981.

EPA (U.S. Environmental Protection Agency). 1993. *Drinking Water Regulations and Health Advisories*, Office of Water, Washington, DC. May 1993.

EPA (U.S. Environmental Protection Agency). 1989. *Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities*.

EPA (U.S. Environmental Protection Agency). 1986. *Quality Criteria for Water*. EPA 440/5-86-001.

EPA (U.S. Environmental Protection Agency). 1982. *Sampling Protocols for Collecting Surface Water, Bed Sediment, Bivalves, and Fish for Priority Pollutant Analysis*. EPA-68-01-6195. 152 pp.

Fields, T.W., T.F. McNevin, R.A. Harkov, and J.V. Hunter. 1992. *A Summary of Selected Soils Constituents and Contaminants at Background Locations in New Jersey*. New Jersey Department of Environmental Protection, Site Remediation Programs and Division of Science and Research.

FWS (U.S. Fish and Wildlife Service). National Wetlands Inventory. Asbury Park Quadrangle Map.

FWS (U.S. Fish and Wildlife Service). National Wetlands Inventory. Long Branch Quadrangle Map.

Gill, H.E. 1962. *Groundwater Resources of Cape May County, N.J.: Saltwater Invasion of Principal Aquifers*. State of New Jersey Department of Conservation and Economic Development, Special Report 18.

Harriman, D.A. and B.P. Sargent. 1985. *Ground-Water Quality in East-Central New Jersey, and a Plan for Sampling Networks*. U.S. Geological Survey, Water-Resources Investigations Report 85-4243.

Harriman, D.A., D.A. Pope, and A.D. Gordon. 1989. *Water-Quality Data for the Potomac-Raritan-Magothy Aquifer System in the Northern Coastal Plain of New Jersey, 1923-86*. New Jersey Geological Survey Report 19.



Jablonski, L.A. 1968. *Groundwater Resources of Monmouth County, New Jersey*. USGS Special Report 23. USGS, Washington, DC.

Jablonski, C.F. and R.J. Baumley. 1989. *Soil Survey of Monmouth County, New Jersey*. U.S. Department of Agriculture, Soil Conservation Service.

Klein, C. and C.S. Hurlburt, Jr. 1985. *Manual of Mineralogy*. J. Wiley and Sons, NY.

Long, E.R., D.D. MacDonald, S.C. Smith, and F.D. Calder. 1995. "Incidence of Adverse Biological Effects Within Ranges of Chemical Concentrations in Marine and Estuarine Environments." In: *Environ. Mgmt.* Vol. 19, No. 1. pp. 81-97.

Malcolm Pirnie. 1995. Data Validation Report. June 1995.

McNeill, J.D. 1980. *Electromagnetic Terrain Conductivity Measurements at Low Induction Number*. Technical Note TN-6, Geonics, Ltd., Mississauga, Ontario.

MCSS (Monmouth County Soil Survey). 1989.

Meisler, H., J.A. Miller, L.L. Knobel, and R.L. Wait. 1988. "Region 22, Atlantic and Eastern Gulf Coastal Plan." In: *Hydrogeology: The Geology of North America*, W. Back, J.S. Rosenhein, and P.R. Seaber, editors. Vol. 0-2. pp. 209-218.

Minard, J.P. 1969. *Geology of Sandy Hook Quadrangle in Monmouth County, New Jersey*. U.S. Government Printing Office, Washington, DC.

NJDEP (New Jersey Department of Environmental Protection). Groundwater Quality Criteria (GWQC).

NJDEP (New Jersey Department of Environmental Protection). 1995. *Site Remediation News*, Winter 1995.

NJDEP (New Jersey Department of Environmental Protection). 1993a. *Ground Water Quality Standards*. NJAC 7:9-6. February 1993.

NJDEP (New Jersey Department of Environmental Protection). 1993b. *Technical Requirements for Site Remediation*. NJAC 7:26E. July 1993.

NJDEP (New Jersey Department of Environmental Protection). 1993c. *New Jersey Surface Water Quality Standards*. NJAC 7:9-4. February 1993.

NJDEP (New Jersey Department of Environmental Protection). 1992a. *Cleanup Standards for Contaminated Sites, Proposed New Rules*. NJAC 7:26D. February 1992.

NJDEP (New Jersey Department of Environmental Protection). 1992b. *Field Sampling Procedures Manual*. May 1992.



NJDEP (New Jersey Department of Environmental Protection). 1992c. Letter from Division of Parks and Forestry to Mr. Joseph Fallon. 18 September 1992.

NJDEP (New Jersey Department of Environmental Protection). 1991. Guidance for Sediment Quality Evaluations.

NJDEP (New Jersey Department of Environmental Protection). 1990. Letter to Mr. Dinker Desai. 8 June 1990.

NOAA (National Oceanic and Atmospheric Administration). 1990. "Potential for Biological Effects of Sediment Sorbed Contaminants." Tech Memorandum.

Tedrow, J.C.F. 1986. *Soils of New Jersey*. Robert E. Krieger Publishing Company, Malabar, FL. p. 349.

U.S. Army. 1959. *Fort Monmouth History and Place Names, 1917-1959*. Fort Monmouth, NJ.

USATHAMA (U.S. Army Toxic and Hazardous Materials Agency). 1980. *Installation Assessment of Fort Monmouth*. Report 171. May 1980.

USGS (U.S. Geological Survey). 1989. Asbury Park Quadrangle Map.

USGS (U.S. Geological Survey). 1981. Long Branch Quadrangle Map.

WESTON (Roy F. Weston, Inc.). 1994. *Chemical Data Acquisition Plan for Site Investigation at Fort Monmouth, New Jersey*.

WESTON (Roy F. Weston, Inc.). 1993. *Investigation of Suspected Waste Sites at Fort Monmouth, New Jersey*.

Zapeczka, O. 1989. *Hydrogeologic Framework of the New Jersey Coastal Plain*. USGS Professional Paper 1404-B. U.S. Government Printing Office, Washington, DC.



# APPENDICES



**APPENDIX A**

**MAIN POST AND CHARLES WOOD  
BOREHOLE LOGS AND WELL COMPLETION SUMMARIES**

**MAIN POST  
BOREHOLE LOGS AND WELL COMPLETION SUMMARIES**

**Borehole Location Data****Roy F. WESTON, Inc.**

BOREHOLE ID : MP2-MW1 PROJECT NAME: FT. MONMOUTH  
BEGIN DATE : 12/14/94 END DATE : 12/14/94

LOGGER/COMPANY : K. VALENTI

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : 0

TOTAL DEPTH : 22.00 DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 12.00  
INTERVAL: 0.00 ft. to 22.75 ft. BGS  
METHOD : HSA FLUID : WATER

BOREHOLE DIAMETER #2:  
INTERVAL:  
METHOD : FLUID :

BOREHOLE DIAMETER #3:  
INTERVAL:  
METHOD : FLUID :

DRILLING COMPANY : J.C. ANDERSON  
DRILLER : WELLINGTON REEVES  
DRILL RIG TYPE : CME-55

|                        | ESTIMATED | SURVEYED |
|------------------------|-----------|----------|
| SURFACE<br>ELEVATION : | 0.000     | 19.440   |
| N. COORDINATE :        | 0.0000    |          |
| E. COORDINATE :        | 0.0000    |          |

WELL PERMIT.....(Y)es (N)o: N PERMIT # : NJ 29 32584

HOLE ABANDONED... (Y)es (N)o: N

WELL INSTALLED... (Y)es (N)o: Y

WELL CLUSTER..... (Y)es (N)o: N No. OF WELLS : 0

WELL NEST..... (Y)es (N)o: N No. OF WELLS : 0

| PUMPS INSTALLED.. (Y)es (N)o: N | TYPE     | DEPTH |
|---------------------------------|----------|-------|
|                                 | PURGE :  | 0.00  |
|                                 | SAMPLE : | 0.00  |

**BOREHOLE TESTING**

BOREHOLE GEOPHYSICS..... (Y)es (N)o: N

SLUG TESTS..... (Y)es (N)o: N

PACKER TESTS..... (Y)es (N)o: N

PUMPING TESTS..... (Y)es (N)o: N

**COMMENTS :**

Latitude-North: 40 deg 18' 33.1"

Longitude-West: 74 deg 03' 08.8"

# Well Completion Summary

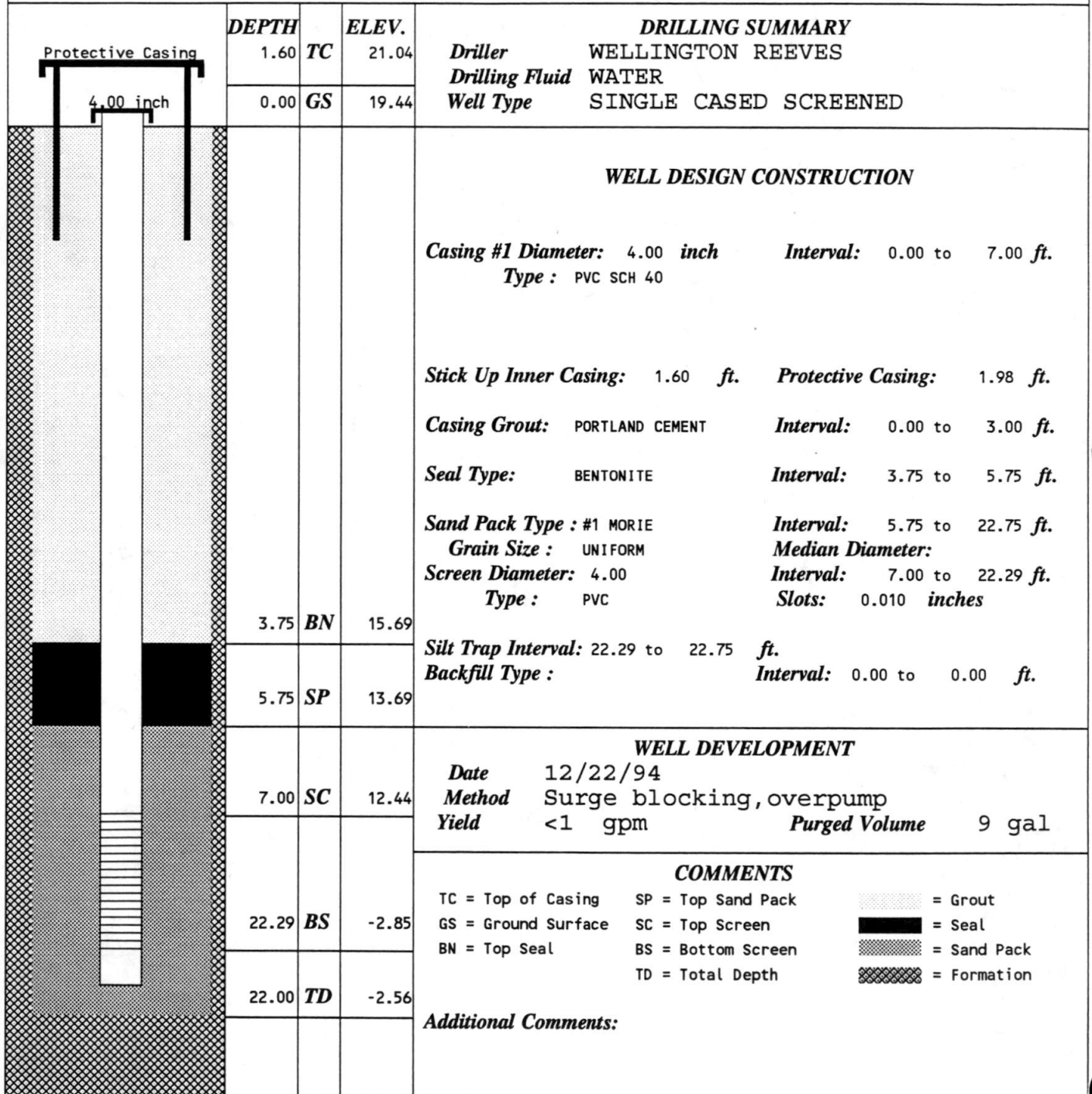
Roy F. WESTON, Inc.

**CLIENT** FT. MONMOUTH  
**SITE NAME** MAIN POST 2

**DRILLING FIRM** J.C. ANDERSON  
**INSPECTOR** K. VALENTI

**WELL ID** MP2-MW1  
**START DATE** 12/14/94  
**COMPLETION DATE** 12/14/94

## WATER LEVELS



**NOTE:** Well Diagram not to Scale

Elevations are feet above mean sea level



# Borehole Log

Roy F. WESTON, Inc.

PROJECT : FT. MONMOUTH  
 SITE NAME : MAIN POST 2  
 BORING ID : MP2-MW1  
 NORTHING : 0.0000 estimated  
 EASTING : 0.0000 estimated  
 ELEVATION : 19.440 surveyed

TOTAL DEPTH : 22.00  
 LOGGER : K. VALENTI  
 DRILLING COMPANY : J.C. ANDERSON  
 DRILLING RIG : CME-55  
 DATE STARTED : 12/14/94  
 DATE COMPLETED : 12/14/94

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION         | COLOR           | STRENGTH | MOISTURE | BLOW COUNT | FIELD INSTRUMENT READING | COMMENTS                                                                                            |
|-----------|-------|----------|------------|------------------------|-----------------|----------|----------|------------|--------------------------|-----------------------------------------------------------------------------------------------------|
|           |       |          | 75         | Silty sand, SM         | DK BROWN        | LSE      | MST      | 4          | HNU 0.0                  | Fill. Topsoil-organics.                                                                             |
|           |       |          |            | Poorly graded sand, SP | LT BROWN        | LSE      | MST      | 5          | HNU 0.0                  | Fill. M-F sand (parking lot fill) with some rounded stones.                                         |
| 18        | 1     |          |            | No Sample Recovered    |                 |          |          |            |                          |                                                                                                     |
| 17        | 2     |          | 100        | Poorly graded sand, SP | LT BROWN        | LSE      | MST      | 5          | HNU 0.0                  | Uncert./Fill? Mostly sand (m-f) little gravel, lit. silt, some small rounded stones, same as above. |
| 16        | 3     |          |            |                        |                 |          |          |            |                          |                                                                                                     |
| 15        | 4     |          | 100        | Silty sand, SM         | GRAYISH BROWN   | SFT      | WET      | 5          | HNU 0.0                  | Same as above interval. Mottling noted in matrix.                                                   |
|           |       |          |            | Sandy lean clay, CL    | LT ORANGE BROWN | FRM      | WET      | 10         | HNU 0.0                  | Orange-brown sand, some silt, clay. Gray mottling noted throughout matrix in spoon.                 |
| 14        | 5     |          |            | Poorly graded sand, SP | ORANGE-BROWN    | LSE      | WET      |            | HNU 0.0                  | 4" layer of dark orange to brown coarse to medium sand.                                             |
|           |       |          |            | Silty sand, SM         | GRAYISH BROWN   | FRM      | MST      |            | HNU 0.0                  | Mottling noted some small sub-angular to sub-rounded.                                               |
| 13        | 6     |          | 100        | Silty sand, SM         | GRAYISH-BROWN   | LSE      | WET      | 7          | HNU 0.0                  | Slight mottling, silty sand (wet)                                                                   |
|           |       |          |            | Sandy lean clay, CL    | LT GRAYISH BRN  | FRM      | WET      | 13         | HNU 0.0                  | Wet, mottled sandy clay (with silt)                                                                 |
| 12        | 7     |          |            |                        |                 |          |          |            |                          |                                                                                                     |
|           |       |          |            | Well-graded sand, SW   | ORANGE-BROWN    | LSE      | WET      |            | HNU 0.0                  | 2" coarse to medium sand.                                                                           |
|           |       |          |            | Sandy lean clay, CL    | BROWN LT GRAY   | SFT      | WET      |            | HNU 0.0                  | Wet, mottled sandy clay with silt.                                                                  |
| 11        | 8     |          | 100        | Silty sand, SM         | LT GRAY-BROWN   | LSE      | WET      | 6          | HNU 0.0                  | sharp contact.                                                                                      |
|           |       |          |            |                        |                 |          |          | 7          |                          |                                                                                                     |
|           |       |          |            |                        |                 |          |          | 7          |                          |                                                                                                     |
|           |       |          |            |                        |                 |          |          | 9          |                          |                                                                                                     |
| 10        | 9     |          |            | Silty sand, SM         | BROWNISH DK GRY | SFT      | WET      |            | HNU 0.0                  |                                                                                                     |
|           |       |          |            |                        |                 |          |          |            |                          |                                                                                                     |
| 9         | 10    |          | 100        | Silty sand, SM         | BRN-DK GRY/BLK  | SFT      | SAT      | 7          | HNU 0.0                  | Mostly silty sand. Mottle noted w/streaks of yellow & orange periodically throughout sps.           |
|           |       |          |            |                        |                 |          |          | 9          |                          |                                                                                                     |
|           |       |          |            |                        |                 |          |          | 10         |                          |                                                                                                     |
|           |       |          |            |                        |                 |          |          | 9          |                          |                                                                                                     |

# Borehole Log

Roy F. WESTON, Inc.

PROJECT : FT. MONMOUTH  
 SITE NAME : MAIN POST 2  
 BORING ID : MP2-MW1  
 NORTHING : 0.0000 estimated  
 EASTING : 0.0000 estimated  
 ELEVATION : 19.440 surveyed

TOTAL DEPTH : 22.00  
 LOGGER : K. VALENTI  
 DRILLING COMPANY : J.C. ANDERSON  
 DRILLING RIG : CME-55  
 DATE STARTED : 12/14/94  
 DATE COMPLETED : 12/14/94

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION     | COLOR            | STRENGTH | MOISTURE | BLOW COUNT        | FIELD INSTRUMENT READING | COMMENTS                                                                                  |
|-----------|-------|----------|------------|--------------------|------------------|----------|----------|-------------------|--------------------------|-------------------------------------------------------------------------------------------|
| 8 - 11    |       |          |            | Silty sand, SM     | BRN-DK GRY/BLK   | SFT      | SAT      |                   | HNU 0.0                  | Mostly silty sand. Mottle noted w/streaks of yellow & orange periodically throughout sps. |
| 7 - 12    |       |          | 100        | Silty sand, SM     | LT GRAYISH BRN   | LSE      | SAT      | 3<br>4<br>8       | HNU 0.0                  |                                                                                           |
|           |       |          |            | Sandy silt, ML     | DK GRAY TO BLK   | LSE      | MST      |                   | HNU 0.0                  |                                                                                           |
| 6 - 13    |       |          |            |                    |                  |          |          |                   |                          |                                                                                           |
| 5 - 14    |       |          | 100        | Sandy silt, ML     | LT BROWN         | SFT      | WET      | 4<br>4<br>4<br>4  | HNU 0.0                  |                                                                                           |
|           |       |          |            | Elastic silt, MH   | DK GRAY-BLACK    | SFT      | MST      |                   | HNU 0.0                  | Color is dk gray to black with green tint.                                                |
| 4 - 15    |       |          |            |                    |                  |          |          |                   |                          |                                                                                           |
| 3 - 16    |       |          | 100        | Elastic silt, MH   | DK GRAY. - BLACK | SFT      | MST      | 7<br>8<br>8<br>9  | HNU 0.0                  | Same lithology as above interval.                                                         |
|           |       |          |            | Silt, ML           | DK GRAY-BLACK    | FRM      | MST      |                   | HNU 0.0                  | Dk gray to black. More consolidated. W.L. at 15' bgs.                                     |
| 2 - 17    |       |          |            |                    |                  |          |          |                   |                          |                                                                                           |
| 1 - 18    |       |          | 100        | Elastic silt, MH   | DK GRAY          | FRM      | SAT      | 3<br>3<br>3<br>10 | HNU 0.0                  | Saturated 18-19.6. Clayey texture, very little sand                                       |
| 0 - 19    |       |          |            |                    |                  |          |          |                   |                          |                                                                                           |
|           |       |          |            | Silt with sand, ML | GREEN - DK GRAY  | SFT      | MST      |                   | HNU 0.0                  |                                                                                           |
| -1 - 20   |       |          | 100        | Silt with sand, ML | GREEN-DK GRAY    | LSE      | WET      | 7<br>9<br>13      | HNU 0.0                  |                                                                                           |

# Borehole Log

Roy F. WESTON, Inc.

|             |                  |                    |               |
|-------------|------------------|--------------------|---------------|
| PROJECT :   | FT. MONMOUTH     | TOTAL DEPTH :      | 22.00         |
| SITE NAME : | MAIN POST 2      | LOGGER :           | K. VALENTI    |
| BORING ID : | MP2-MW1          | DRILLING COMPANY : | J.C. ANDERSON |
| NORTHING :  | 0.0000 estimated | DRILLING RIG :     | CME-55        |
| EASTING :   | 0.0000 estimated | DATE STARTED :     | 12/14/94      |
| ELEVATION : | 19.440 surveyed  | DATE COMPLETED :   | 12/14/94      |

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION       | COLOR         | STRENGTH | MOISTURE | BLOW COUNT | FIELD INSTRUMENT READING | COMMENTS                                  |
|-----------|-------|----------|------------|----------------------|---------------|----------|----------|------------|--------------------------|-------------------------------------------|
| -1        | 21    |          |            | Silt with sand, ML   | GREEN-DK GRAY | LSE      | WET      |            | HNU 0.0                  |                                           |
| -2        | 22    |          |            | Interval Not Sampled |               |          |          |            |                          | Augered interval<br>TD of borehole 22.75. |
| -3        | 23    |          |            |                      |               |          |          |            |                          |                                           |
| -4        | 24    |          |            |                      |               |          |          |            |                          |                                           |
| -5        | 25    |          |            |                      |               |          |          |            |                          |                                           |
| -6        | 26    |          |            |                      |               |          |          |            |                          |                                           |
| -7        | 27    |          |            |                      |               |          |          |            |                          |                                           |
| -8        | 28    |          |            |                      |               |          |          |            |                          |                                           |
| -9        | 29    |          |            |                      |               |          |          |            |                          |                                           |
| -10       | 30    |          |            |                      |               |          |          |            |                          |                                           |

| BOREHOLE<br>/WELL ID | SMP<br>NUM | LTH<br>NUM | LITHOLOGY INT.<br>(FT BGS) | SAMPLING<br>METHOD | SIZE<br>GRAVEL PCT. | GRAVEL<br>SIZE<br>SAND | SAND<br>PCT | SILT<br>PCT | CLAY<br>PCT | ORGANIC<br>PCT | ROCK<br>TYPE | PLAST | SORT | STRENGTH | MOISTURE | STRAT<br>UNIT |
|----------------------|------------|------------|----------------------------|--------------------|---------------------|------------------------|-------------|-------------|-------------|----------------|--------------|-------|------|----------|----------|---------------|
| MP2-MW1              | 1          | 1          | 0.00                       | 0.20               | SPS                 |                        | 0           | MF          | 80          | 20             | 0            | 0     | NON  | MOD      | LSE      | MST           |
| MP2-MW1              | 1          | 2          | 0.20                       | 1.50               | SPS                 |                        | 0           | MF          | 100         | 0              | 0            | 0     | NON  | MOD      | LSE      | MST           |
| MP2-MW1              | 1          | 3          | 1.50                       | 2.00               | SPS                 |                        | 0           |             | 0           | 0              | 0            | 0     |      |          |          |               |
| MP2-MW1              | 2          | 1          | 2.00                       | 4.00               | SPS                 | F                      | 10          | MF          | 85          | 5              | 0            | 0     | NON  | MOD      | LSE      | MST           |
| MP2-MW1              | 3          | 1          | 4.00                       | 4.40               | SPS                 | F                      | 5           | MF          | 80          | 15             | 0            | 0     | LOW  | MOD      | SFT      | WET           |
| MP2-MW1              | 3          | 2          | 4.40                       | 5.20               | SPS                 |                        | 0           | F           | 30          | 20             | 50           | 0     | MOD  | MOD      | FRM      | WET           |
| MP2-MW1              | 3          | 3          | 5.20                       | 5.60               | SPS                 |                        | 0           | CM          | 100         | 0              | 0            | 0     | NON  | MOD      | LSE      | WET           |
| MP2-MW1              | 3          | 4          | 5.60                       | 6.00               | SPS                 |                        | 0           | MF          | 70          | 20             | 10           | 0     | LOW  | POR      | FRM      | MST           |
| MP2-MW1              | 4          | 1          | 6.00                       | 6.40               | SPS                 | F                      | 5           | F           | 70          | 25             | 0            | 0     | NON  | POR      | LSE      | WET           |
| MP2-MW1              | 4          | 2          | 6.40                       | 7.60               | SPS                 |                        | 0           |             | 30          | 20             | 50           | 0     | LOW  | MOD      | FRM      | WET           |
| MP2-MW1              | 4          | 3          | 7.60                       | 7.80               | SPS                 |                        | 0           | CM          | 100         | 0              | 0            | 0     | NON  | POR      | LSE      | WET           |
| MP2-MW1              | 4          | 4          | 7.80                       | 8.00               | SPS                 |                        | 0           |             | 30          | 20             | 50           | 0     | MOD  | MOD      | SFT      | WET           |
| MP2-MW1              | 5          | 1          | 8.00                       | 8.80               | SPS                 |                        | 0           | MF          | 85          | 15             | 0            | 0     | NON  | MOD      | LSE      | WET           |
| MP2-MW1              | 5          | 2          | 8.80                       | 10.00              | SPS                 |                        | 0           |             | 50          | 40             | 10           | 0     | LOW  | POR      | SFT      | WET           |
| MP2-MW1              | 6          | 1          | 10.00                      | 12.00              | SPS                 |                        | 5           |             | 65          | 30             | 0            | 0     | NON  | POR      | SFT      | SAT           |
| MP2-MW1              | 7          | 1          | 12.00                      | 12.60              | SPS                 |                        | 0           | FM          | 85          | 15             | 0            | 0     | NON  | MOD      | LSE      | SAT           |
| MP2-MW1              | 7          | 2          | 12.60                      | 14.00              | SPS                 |                        | 0           |             | 30          | 60             | 10           | 0     | NON  | MOD      | LSE      | MST           |
| MP2-MW1              | 8          | 1          | 14.00                      | 14.60              | SPS                 |                        | 0           |             | 40          | 50             | 10           | 0     | LOW  | POR      | SFT      | WET           |
| MP2-MW1              | 8          | 2          | 14.60                      | 16.00              | SPS                 |                        | 0           | F           | 10          | 60             | 30           | 0     | MOD  | WEL      | SFT      | MST           |
| MP2-MW1              | 9          | 1          | 16.00                      | 16.80              | SPS                 |                        | 0           |             | 10          | 60             | 30           | 0     | MOD  | MOD      | SFT      | MST           |
| MP2-MW1              | 9          | 2          | 16.80                      | 18.00              | SPS                 |                        | 0           |             | 5           | 55             | 40           | 0     | LOW  | POR      | FRM      | MST           |
| MP2-MW1              | 10         | 1          | 18.00                      | 19.60              | SPS                 |                        | 0           |             | 10          | 45             | 45           | 0     | MOD  | WEL      | FRM      | SAT           |
| MP2-MW1              | 10         | 2          | 19.60                      | 20.00              | SPS                 |                        | 0           |             | 25          | 50             | 25           | 0     | LOW  | MOD      | SFT      | MST           |
| MP2-MW1              | 11         | 1          | 20.00                      | 22.00              | SPS                 |                        | 0           |             | 25          | 50             | 25           | 0     | LOW  | MOD      | LSE      | WET           |
| MP2-MW1              | 12         | 1          | 22.00                      | 22.75              | NS                  |                        | 0           |             | 0           | 0              | 0            | 0     |      |          |          |               |

**Borehole Location Data****Roy F. WESTON, Inc.**

BOREHOLE ID : MP2-MW2  
BEGIN DATE : 12/13/94

PROJECT NAME: FT. MONMOUTH  
END DATE : 12/13/94

LOGGER/COMPANY : K. VALENTE

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : 0

TOTAL DEPTH : 18.00

DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 12.00

INTERVAL: 0.00 ft. to 18.00 ft. BGS

METHOD : HSA

FLUID : WATER

BOREHOLE DIAMETER #2:

INTERVAL:

METHOD :

FLUID :

BOREHOLE DIAMETER #3:

INTERVAL:

METHOD :

FLUID :

DRILLING COMPANY : J.C. ANDERSON

DRILLER : WELLS REEVE

DRILL RIG TYPE : CME-55

|                        | ESTIMATED | SURVEYED |
|------------------------|-----------|----------|
| SURFACE<br>ELEVATION : | 0.000     | 13.360   |
| N. COORDINATE :        | 0.0000    |          |
| E. COORDINATE :        | 0.0000    |          |

WELL PERMIT.....(Y)es (N)o: N PERMIT # : NJ 29 32585

HOLE ABANDONED... (Y)es (N)o: N

WELL INSTALLED... (Y)es (N)o: Y

WELL CLUSTER..... (Y)es (N)o: N No. OF WELLS : 0

WELL NEST..... (Y)es (N)o: N No. OF WELLS : 0

PUMPS INSTALLED.. (Y)es (N)o: N

PURGE :

DEPTH

0.00

SAMPLE :

0.00

**BOREHOLE TESTING**

BOREHOLE GEOPHYSICS..... (Y)es (N)o: N

SLUG TESTS..... (Y)es (N)o: N

PACKER TESTS..... (Y)es (N)o: N

PUMPING TESTS..... (Y)es (N)o: N

**COMMENTS :**

Moved original well location approx. 5' due S.E. of original  
staked location. MP2-MW-02 is a stickup well. Latitude-North  
40 deg 18' 31.8"/Longitude-West: 74 deg 03' 18.9"

# Well Completion Summary

Roy F. WESTON, Inc.

**CLIENT** FT. MONMOUTH  
**SITE NAME** MAIN POST AREA 2

**DRILLING FIRM** J.C. ANDERSON  
**INSPECTOR** K. VALENTE

**WELL ID** MP2 - MW2  
**START DATE** 12/13/94  
**COMPLETION DATE** 12/13/94

## WATER LEVELS

|                                                                                                                                                                                                         |                                 | DEPTH |    | ELEV. | DRILLING SUMMARY              |                         |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|-------|----|-------|-------------------------------|-------------------------|
| <p>Protective Casing<br/>4.00 inch</p>                                                                                                                                                                  |                                 | 2.14  | TC | 15.50 | <b>Driller</b>                | WELLS REEVE             |
|                                                                                                                                                                                                         |                                 | 0.00  | GS | 13.36 | <b>Drilling Fluid</b>         | WATER                   |
|                                                                                                                                                                                                         |                                 |       |    |       | <b>Well Type</b>              | SINGLE CASED SCREENED   |
|                                                                                                                                                                                                         | <b>WELL DESIGN CONSTRUCTION</b> |       |    |       |                               |                         |
|                                                                                                                                                                                                         |                                 |       |    |       | <b>Casing #1 Diameter:</b>    | 4.00 inch               |
|                                                                                                                                                                                                         |                                 |       |    |       | <b>Interval:</b>              | 0.00 to 7.00 ft.        |
|                                                                                                                                                                                                         |                                 |       |    |       | <b>Type :</b>                 | PVC SCH 40              |
|                                                                                                                                                                                                         |                                 |       |    |       | <b>Stick Up Inner Casing:</b> | 2.14 ft.                |
|                                                                                                                                                                                                         |                                 |       |    |       | <b>Protective Casing:</b>     | 2.36 ft.                |
|                                                                                                                                                                                                         |                                 |       |    |       | <b>Casing Grout:</b>          | PORTLAND CEMENT         |
|                                                                                                                                                                                                         |                                 |       |    |       | <b>Interval:</b>              | 0.00 to 3.46 ft.        |
|                                                                                                                                                                                                         |                                 |       |    |       | <b>Seal Type:</b>             | BENTONITE               |
|                                                                                                                                                                                                         |                                 |       |    |       | <b>Interval:</b>              | 3.46 to 5.46 ft.        |
|                                                                                                                                                                                                         |                                 |       |    |       | <b>Sand Pack Type :</b>       | #1 MORIE                |
|                                                                                                                                                                                                         |                                 |       |    |       | <b>Interval:</b>              | 5.46 to 18.00 ft.       |
|                                                                                                                                                                                                         |                                 |       |    |       | <b>Grain Size :</b>           | UNIFORM                 |
|                                                                                                                                                                                                         |                                 |       |    |       | <b>Median Diameter:</b>       |                         |
|                                                                                                                                                                                                         |                                 |       |    |       | <b>Screen Diameter:</b>       | 4.00                    |
|                                                                                                                                                                                                         |                                 |       |    |       | <b>Interval:</b>              | 7.46 to 17.00 ft.       |
|                                                                                                                                                                                                         |                                 |       |    |       | <b>Type :</b>                 | PVC                     |
|                                                                                                                                                                                                         |                                 |       |    |       | <b>Slots:</b>                 | 0.010 inches            |
|                                                                                                                                                                                                         |                                 | 3.46  | BN | 9.90  | <b>Silt Trap Interval:</b>    | 17.00 to 17.46 ft.      |
|                                                                                                                                                                                                         |                                 |       |    |       | <b>Backfill Type :</b>        |                         |
|                                                                                                                                                                                                         |                                 | 5.46  | SP | 7.90  | <b>Interval:</b>              | 0.00 to 0.00 ft.        |
| <b>WELL DEVELOPMENT</b>                                                                                                                                                                                 |                                 |       |    |       |                               |                         |
|                                                                                                                                                                                                         |                                 | 7.46  | SC | 5.90  | <b>Date</b>                   | 12/22/94                |
|                                                                                                                                                                                                         |                                 |       |    |       | <b>Method</b>                 | Surge blocking/overpump |
|                                                                                                                                                                                                         |                                 |       |    |       | <b>Yield</b>                  | 2.5 gpm                 |
|                                                                                                                                                                                                         |                                 |       |    |       | <b>Purged Volume</b>          | 90 gal                  |
| <b>COMMENTS</b>                                                                                                                                                                                         |                                 |       |    |       |                               |                         |
|                                                                                                                                                                                                         |                                 | 17.00 | BS | -3.64 | TC = Top of Casing            | SP = Top Sand Pack      |
|                                                                                                                                                                                                         |                                 |       |    |       | GS = Ground Surface           | SC = Top Screen         |
|                                                                                                                                                                                                         |                                 |       |    |       | BN = Top Seal                 | BS = Bottom Screen      |
|                                                                                                                                                                                                         |                                 | 17.00 | TD | -3.64 | TD = Total Depth              |                         |
| <div style="display: flex; justify-content: space-between;"> <div> <p> = Grout</p> <p> = Seal</p> <p> = Sand Pack</p> <p> = Formation</p> </div> <div> <p><b>Additional Comments:</b></p> </div> </div> |                                 |       |    |       |                               |                         |

NOTE: Well Diagram not to Scale

Elevations are feet above mean sea level

# Borehole Log

Roy F. WESTON, Inc.

PROJECT : FT. MONMOUTH  
 SITE NAME : MAIN POST AREA 2  
 BORING ID : MP2-MW2  
 NORTHING : 0.0000 estimated  
 EASTING : 0.0000 estimated  
 ELEVATION : 13.360 surveyed

TOTAL DEPTH : 18.00  
 LOGGER : K. VALENTE  
 DRILLING COMPANY : J.C. ANDERSON  
 DRILLING RIG : CME-55  
 DATE STARTED : 12/13/94  
 DATE COMPLETED : 12/13/94

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION      | COLOR          | STRENGTH | MOISTURE | BLOW COUNT          | FIELD INSTRUMENT READING | COMMENTS                                                                                  |
|-----------|-------|----------|------------|---------------------|----------------|----------|----------|---------------------|--------------------------|-------------------------------------------------------------------------------------------|
|           |       |          | 75         | Sandy silt, ML      | BROWN/DK BROWN | LSE      | MST      | 7<br>13<br>15       | HNU 0.0                  | 0-1.1' topsoil/organics plant & root fragments                                            |
| 12        | 1     |          |            | Sandy silt, ML      | BROWN/DK BROWN | LSE      | MST      |                     | HNU 0.0                  | Fill. Coal fragments present.                                                             |
|           |       |          |            | No Sample Recovered |                |          |          |                     |                          |                                                                                           |
| 11        | 2     |          | 50         | Sandy silt, ML      | GREEN GRAY     | SFT      | MST      | 13<br>8<br>7        | HNU 0.0                  | Contents sharp based on color changes. Slight organic odor. Downward coarsening sequence. |
| 10        | 3     |          |            | No Sample Recovered |                |          |          |                     |                          |                                                                                           |
| 9         | 4     |          |            | No Sample Recovered |                |          |          | 13<br>unrec-        |                          |                                                                                           |
| 8         | 5     |          |            |                     |                |          |          |                     |                          |                                                                                           |
| 7         | 6     |          | 50         | Fill                | GREEN & BLACK  |          |          | 34<br>unrec         | HNU 1.1                  | Fill. Possible roof shingles, slight odor @ approx. 6.5' bgs. Sample appears saturated.   |
| 6         | 7     |          |            | No Sample Recovered |                |          |          |                     |                          |                                                                                           |
| 5         | 8     |          | 50         | Silty sand, SM      | BROWN-GRAY     | SFT      | WET      | 23<br>12<br>8<br>10 | HNU 0.0                  | Fill and debris with silty sand, wood and paper debris present.                           |
| 4         | 9     |          |            | No Sample Recovered |                |          |          |                     |                          |                                                                                           |
| 3         | 10    |          |            | No Sample Recovered |                |          | WET      | 2<br>unrec          | HNU 0.0                  | Organic odor in empty spoon. Water entering borehole at 8' 10" bgs.                       |

# Borehole Log

Roy F. WESTON, Inc.

|                              |                                  |
|------------------------------|----------------------------------|
| PROJECT : FT. MONMOUTH       | TOTAL DEPTH : 18.00              |
| SITE NAME : MAIN POST AREA 2 | LOGGER : K. VALENTE              |
| BORING ID : MP2-MW2          | DRILLING COMPANY : J.C. ANDERSON |
| NORTHING : 0.0000 estimated  | DRILLING RIG : CME-55            |
| EASTING : 0.0000 estimated   | DATE STARTED : 12/13/94          |
| ELEVATION : 13.360 surveyed  | DATE COMPLETED : 12/13/94        |

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION      | COLOR         | STRENGTH | MOISTURE | BLOW COUNT | FIELD INSTRUMENT READING | COMMENTS                                                                                           |
|-----------|-------|----------|------------|---------------------|---------------|----------|----------|------------|--------------------------|----------------------------------------------------------------------------------------------------|
|           |       |          |            | No Sample Recovered |               |          | WET      |            | HNU 0.0                  | Organic odor in empty spoon. Water entering borehole at 8'10" bgs.                                 |
| 2 - 11    |       |          |            |                     |               |          |          |            |                          |                                                                                                    |
| 1 - 12    |       |          | 50         | Elastic silt, MH    | BROWN/DK GRAY | SFT      | WET      | 5          | HNU 0.0                  | Fill/uncertain. SPS filled with water.                                                             |
| 0 - 13    |       |          |            | No Sample Recovered |               |          |          |            |                          |                                                                                                    |
| -1 - 14   |       |          | 25         | Silty sand, SM      | GRAY BROWN    | LSE      | SAT      | 8          | HNU 0.0                  | Fill. Recovery is slough.                                                                          |
| -2 - 15   |       |          |            | No Sample Recovered |               |          |          |            |                          |                                                                                                    |
| -3 - 16   |       |          | 100        | Silty sand, SM      | GRAY          | LSE      | SAT      | 4          | HNU 0.0                  | 16-17' slough.                                                                                     |
| -4 - 17   |       |          |            | Other               | TURQUOIS-GRAY | SFT      | WET      |            | HNU 0.0                  | Very soft silt clay material. Turquoise-gray in color. Well set at 17' bgs. TD of borehole 18' bgs |
| -5 - 18   |       |          |            |                     |               |          |          |            |                          |                                                                                                    |
| -6 - 19   |       |          |            |                     |               |          |          |            |                          |                                                                                                    |
| -7 - 20   |       |          |            |                     |               |          |          |            |                          |                                                                                                    |



**Borehole Location Data****Roy F. WESTON, Inc.**

BOREHOLE ID : MP2-MW3  
BEGIN DATE : 12/13/94

PROJECT NAME: FT. MONMOUTH  
END DATE : 12/13/94

LOGGER/COMPANY : K. VALENTI

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : 0

TOTAL DEPTH : 16.00

DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 12.00

INTERVAL: 0.00 ft. to 15.60 ft. BGS

METHOD : HSA FLUID : WATER

BOREHOLE DIAMETER #2: 2.00

INTERVAL: 15.60 ft. to 16.00 ft. BGS

METHOD : SPLIT SPOON FLUID :

BOREHOLE DIAMETER #3:

INTERVAL:

METHOD : FLUID :

DRILLING COMPANY : J.C. ANDERSON

DRILLER : WELLINGTON REEVES

DRILL RIG TYPE : CME-55

|                        | ESTIMATED | SURVEYED |
|------------------------|-----------|----------|
| SURFACE<br>ELEVATION : | 0.000     | 10.980   |

N. COORDINATE : 0.0000

E. COORDINATE : 0.0000

WELL PERMIT.....(Y)es (N)o: N PERMIT # : NJ 29 32586

HOLE ABANDONED... (Y)es (N)o: N

WELL INSTALLED... (Y)es (N)o: Y

WELL CLUSTER.....(Y)es (N)o: N No. OF WELLS : 0

WELL NEST.....(Y)es (N)o: N No. OF WELLS : 0

PUMPS INSTALLED.. (Y)es (N)o: N TYPE DEPTH

PURGE : 0.00

SAMPLE : 0.00

**BOREHOLE TESTING**

BOREHOLE GEOPHYSICS.....(Y)es (N)o: N

SLUG TESTS.....(Y)es (N)o: N

PACKER TESTS.....(Y)es (N)o: N

PUMPING TESTS.....(Y)es (N)o: N

**COMMENTS :**

Latitude-North: 40 deg 18' 35.5"

Longitude-West: 74 deg 03' 08.6"

| BOREHOLE | SMP | LTH | LITHOLOGY | INT.  | SAMPLING | SIZE   | GRAVEL | SIZE | SAND | SILT | CLAY | ORGANIC | ROCK |       |      |          |          | STRAT |
|----------|-----|-----|-----------|-------|----------|--------|--------|------|------|------|------|---------|------|-------|------|----------|----------|-------|
| /WELL ID | NUM | NUM | (FT BGS)  |       | METHOD   | GRAVEL | PCT.   | SAND | PCT  | PCT  | PCT  | PCT     | TYPE | PLAST | SORT | STRENGTH | MOISTURE | UNIT  |
| MP2-MW2  | 1   | 1   | 0.00      | 1.10  | SPS      |        | 0      | MF   | 30   | 60   | 2    | 8       |      | NON   | MOD  | LSE      | MST      |       |
| MP2-MW2  | 1   | 2   | 1.10      | 1.50  | SPS      | F      | 10     |      | 35   | 48   | 2    | 5       |      | NON   | POR  | LSE      | MST      |       |
| MP2-MW2  | 1   | 3   | 1.50      | 2.00  | SPS      |        | 0      |      | 0    | 0    | 0    | 0       |      |       |      |          |          |       |
| MP2-MW2  | 2   | 1   | 2.00      | 3.00  | SPS      |        | 5      |      | 25   | 60   | 10   | 0       |      | NON   | MOD  | SFT      | MST      |       |
| MP2-MW2  | 2   | 2   | 3.00      | 4.00  | SPS      |        | 0      |      | 0    | 0    | 0    | 0       |      |       |      |          |          |       |
| MP2-MW2  | 3   | 1   | 4.00      | 6.00  | SPS      |        | 0      |      | 0    | 0    | 0    | 0       |      |       |      |          |          |       |
| MP2-MW2  | 4   | 1   | 6.00      | 7.00  | SPS      |        | 0      |      | 0    | 0    | 0    | 0       |      |       |      |          |          |       |
| MP2-MW2  | 4   | 2   | 7.00      | 8.00  | SPS      |        | 0      |      | 0    | 0    | 0    | 0       |      |       |      |          |          |       |
| MP2-MW2  | 5   | 1   | 8.00      | 9.00  | SPS      |        | 0      | MF   | 60   | 40   | 0    | 0       |      | NON   | MOD  | SFT      | WET      |       |
| MP2-MW2  | 5   | 2   | 9.00      | 10.00 | SPS      |        | 0      |      | 0    | 0    | 0    | 0       |      |       |      |          |          |       |
| MP2-MW2  | 6   | 1   | 10.00     | 12.00 | SPS      |        | 0      |      | 0    | 0    | 0    | 0       |      |       |      |          | WET      |       |
| MP2-MW2  | 7   | 1   | 12.00     | 13.00 | SPS      |        | 0      | F    | 10   | 70   | 20   | 0       |      | MOD   | WEL  | SFT      | WET      |       |
| MP2-MW2  | 7   | 2   | 13.00     | 14.00 | SPS      |        | 0      |      | 0    | 0    | 0    | 0       |      |       |      |          |          |       |
| MP2-MW2  | 8   | 1   | 14.00     | 14.50 | SPS      |        | 10     |      | 60   | 20   | 8    | 2       |      | NON   | POR  | LSE      | SAT      |       |
| MP2-MW2  | 8   | 2   | 14.50     | 16.00 | SPS      |        | 0      |      | 0    | 0    | 0    | 0       |      |       |      |          |          |       |
| MP2-MW2  | 9   | 1   | 16.00     | 17.00 | SPS      |        | 10     |      | 60   | 20   | 5    | 5       |      | NON   | POR  | LSE      | SAT      |       |
| MP2-MW2  | 9   | 2   | 17.00     | 18.00 | SPS      |        | 0      |      | 20   | 20   | 60   | 0       |      | LOW   | MOD  | SFT      | WET      |       |

# Well Completion Summary

Roy F. WESTON, Inc.

**CLIENT** FT. MONMOUTH  
**SITE NAME** MAIN POST AREA 3

**DRILLING FIRM** J.C. ANDERSON  
**INSPECTOR** K. VALENTE

**WELL ID** MP2-MW3  
**START DATE** 12/13/94  
**COMPLETION DATE** 12/13/94

## WATER LEVELS

|                                                                                                                          |  | DEPTH              |    | ELEV.       | DRILLING SUMMARY      |                       |
|--------------------------------------------------------------------------------------------------------------------------|--|--------------------|----|-------------|-----------------------|-----------------------|
| Protective Casing                                                                                                        |  | 1.70               | TC | 12.63       | <b>Driller</b>        | WELLS REEVE           |
| 4.00 inch                                                                                                                |  | 0.00               | GS | 10.93       | <b>Drilling Fluid</b> | NONE                  |
|                                                                                                                          |  |                    |    |             | <b>Well Type</b>      | SINGLE CASED SCREENED |
| <b>WELL DESIGN CONSTRUCTION</b>                                                                                          |  |                    |    |             |                       |                       |
| <b>Casing #1 Diameter:</b> 4.00 inch <b>Interval:</b> 0.00 to 5.00 ft.<br><b>Type:</b> PVC SCH 40                        |  |                    |    |             |                       |                       |
| <b>Stick Up Inner Casing:</b> 1.70 ft. <b>Protective Casing:</b> 2.12 ft.                                                |  |                    |    |             |                       |                       |
| <b>Casing Grout:</b> PORTLAND CEMENT <b>Interval:</b> 2.60 to 4.60 ft.                                                   |  |                    |    |             |                       |                       |
| <b>Seal Type:</b> BENTONITE <b>Interval:</b> 2.00 to 4.00 ft.                                                            |  |                    |    |             |                       |                       |
| <b>Sand Pack Type:</b> #1 MORIE <b>Interval:</b> 4.60 to 15.60 ft.<br><b>Grain Size:</b> UNIFORM <b>Median Diameter:</b> |  |                    |    |             |                       |                       |
| <b>Screen Diameter:</b> 4.00 <b>Interval:</b> 5.00 to 15.14 ft.<br><b>Type:</b> PVC <b>Slots:</b> 0.010 inches           |  |                    |    |             |                       |                       |
| <b>Silt Trap Interval:</b> 15.14 to 15.60 ft.<br><b>Backfill Type:</b> <b>Interval:</b> 0.00 to 0.00 ft.                 |  |                    |    |             |                       |                       |
| <b>WELL DEVELOPMENT</b>                                                                                                  |  |                    |    |             |                       |                       |
| <b>Date</b> 12/22/94<br><b>Method</b> Surge blocking/overpump<br><b>Yield</b> 2-3 gpm <b>Purged Volume</b> 225 gal       |  |                    |    |             |                       |                       |
| <b>COMMENTS</b>                                                                                                          |  |                    |    |             |                       |                       |
| TC = Top of Casing                                                                                                       |  | SP = Top Sand Pack |    | = Grout     |                       |                       |
| GS = Ground Surface                                                                                                      |  | SC = Top Screen    |    | = Seal      |                       |                       |
| BN = Top Seal                                                                                                            |  | BS = Bottom Screen |    | = Sand Pack |                       |                       |
|                                                                                                                          |  | TD = Total Depth   |    | = Formation |                       |                       |
| <b>Additional Comments:</b>                                                                                              |  |                    |    |             |                       |                       |

NOTE: Well Diagram not to Scale

Elevations are feet above mean sea level

# Borehole Log

Roy F. WESTON, Inc.

PROJECT : FT. MONMOUTH  
 SITE NAME : MAIN POST AREA 3  
 BORING ID : MP2-MW3  
 NORTHING : 0.0000 estimated  
 EASTING : 0.0000 estimated  
 ELEVATION : 10.980 surveyed

TOTAL DEPTH : 16.00  
 LOGGER : K. VALENTI  
 DRILLING COMPANY : J.C. ANDERSON  
 DRILLING RIG : CME-55  
 DATE STARTED : 12/13/94  
 DATE COMPLETED : 12/13/94

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION             | COLOR         | STRENGTH | MOISTURE | BLOW COUNT     | FIELD INSTRUMENT READING | COMMENTS                                                                                                   |
|-----------|-------|----------|------------|----------------------------|---------------|----------|----------|----------------|--------------------------|------------------------------------------------------------------------------------------------------------|
|           |       |          | 75         | Poorly graded sand, SP     | LT BROWN      | LSE      | MST      | 11<br>10<br>10 | HNU 0.0                  | Fill. Medium to fine sand                                                                                  |
| 9         | 1     |          |            | Silty sand, SM             | GRAYISH BROWN | FRM      | MST      |                | HNU 0.0                  | Fill. Slight organic odor<br>Contains some organic<br>debris and fragments of<br>coal chips.               |
|           |       |          |            | No Sample Recovered        |               |          |          |                |                          |                                                                                                            |
| 8         | 2     |          | 50         | Silty sand with gravel, SM | GRAYISH GREEN | FRM      | MST      | 8<br>10<br>10  | HNU 0.0                  | Fill with some organic<br>debris, gravels and wood<br>chips. Slight organic<br>odor.                       |
| 7         | 3     |          |            | Organic soil with sand     | GRAYISH WHITE | LSE      | MST      |                | HNU 0.0                  | Fill. Organic debris &<br>trash.                                                                           |
|           |       |          |            | No Sample Recovered        |               |          |          |                |                          |                                                                                                            |
| 6         | 4     |          | 10         | FILL                       |               | NA       | NA       | 3<br>15<br>6   | HNU 0.0                  | Fill with 2" of a few<br>rock and wood, some trash                                                         |
|           |       |          |            | No Sample Recovered        |               |          |          |                |                          |                                                                                                            |
| 5         | 5     |          |            |                            |               |          |          |                |                          |                                                                                                            |
| 4         | 6     |          | 10         | FILL                       | WHITE TAN     | NA       | NA       | 3<br>2<br>2    | HNU 0.0                  | Fill includes 2" of trash<br>debris & gravels (white-<br>tan). Outside of spoon is<br>dry.                 |
|           |       |          |            | No Sample Recovered        |               |          |          |                |                          |                                                                                                            |
| 3         | 7     |          |            |                            |               |          |          |                |                          |                                                                                                            |
| 2         | 8     |          | 20         | Poorly graded sand, SP     | GRAYISH GREEN | LSE      | SAT      | 3<br>2<br>2    | HNU 0.0                  | Fill. Organic odor<br>present. Trash debris.<br>Water at 8' bgs.                                           |
|           |       |          |            | No Sample Recovered        |               |          |          |                |                          |                                                                                                            |
| 1         | 9     |          |            |                            |               |          |          |                |                          |                                                                                                            |
| 0         | 10    |          | 100        | Fat clay, CH               | DK BROWN      | FRM      | SAT      | 2<br>2<br>2    | HNU 0.0                  | Fill/uncertain. Dk brown<br>silty clay with organic<br>debris, mild organic odor<br>Recovery is saturated. |

# Borehole Log

Roy F. WESTON, Inc.

PROJECT : FT. MONMOUTH  
 SITE NAME : MAIN POST AREA 3  
 BORING ID : MP2-MW3  
 NORTHING : 0.0000 estimated  
 EASTING : 0.0000 estimated  
 ELEVATION : 10.980 surveyed

TOTAL DEPTH : 16.00  
 LOGGER : K. VALENTI  
 DRILLING COMPANY : J.C. ANDERSON  
 DRILLING RIG : CME-55  
 DATE STARTED : 12/13/94  
 DATE COMPLETED : 12/13/94

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION          | COLOR         | STRENGTH | MOISTURE | BLOW COUNT       | FIELD INSTRUMENT READING | COMMENTS                                                                                           |
|-----------|-------|----------|------------|-------------------------|---------------|----------|----------|------------------|--------------------------|----------------------------------------------------------------------------------------------------|
| -1        | 11    |          |            | Fat clay, CH            | DK BROWN      | FRM      | SAT      |                  | HNU 0.0                  | Fill/uncertain. Dk brown silty clay with organic debris, mild organic odor. Recovery is saturated. |
| -2        | 12    |          | 50         | Lean clay with sand, CL | GREENISH-GRAY | SFT      | SAT      | 1<br>1<br>1      | HNU 0.0                  | Mild organic odor. Very soft silt clay material.                                                   |
| -3        | 13    |          |            | No Sample Recovered     |               |          |          |                  |                          |                                                                                                    |
| -4        | 14    |          | 75         | Silty sand, SM          | DK GRAY       | SFT      | SAT      | 4<br>3<br>4<br>6 |                          | Soft silty sand, dk gray. Similar lithology to previous spoon - more sand.                         |
| -5        | 15    |          |            | No Sample Recovered     |               |          |          |                  |                          | TD of borehole 16' bgs.                                                                            |
| -6        | 16    |          |            |                         |               |          |          |                  |                          |                                                                                                    |
| -7        | 17    |          |            |                         |               |          |          |                  |                          |                                                                                                    |
| -8        | 18    |          |            |                         |               |          |          |                  |                          |                                                                                                    |
| -9        | 19    |          |            |                         |               |          |          |                  |                          |                                                                                                    |
| -10       | 20    |          |            |                         |               |          |          |                  |                          |                                                                                                    |

| BOREHOLE<br>/WELL ID | SMP<br>NUM | LTH<br>NUM | LITHOLOGY<br>(FT BGS) | INT.  | SAMPLING<br>METHOD | SIZE<br>GRAVEL | GRAVEL<br>PCT. | SIZE<br>SAND | SAND<br>PCT | SILT<br>PCT | CLAY<br>PCT | ORGANIC<br>PCT | ROCK<br>TYPE | PLAST | SORT | STRENGTH | MOISTURE | STRAT<br>UNIT |
|----------------------|------------|------------|-----------------------|-------|--------------------|----------------|----------------|--------------|-------------|-------------|-------------|----------------|--------------|-------|------|----------|----------|---------------|
| MP2-MW3              | 1          | 1          | 0.00                  | 1.00  | SPS                |                | 0              | MF           | 100         | 0           | 0           | 0              |              | NON   | WEL  | LSE      | MST      |               |
| MP2-MW3              | 1          | 2          | 1.00                  | 1.50  | SPS                |                | 0              | F            | 80          | 20          | 0           | 0              |              | NON   | POR  | FRM      | MST      |               |
| MP2-MW3              | 1          | 3          | 1.50                  | 2.00  | SPS                |                | 0              |              | 0           | 0           | 0           | 0              |              |       |      |          |          |               |
| MP2-MW3              | 2          | 1          | 2.00                  | 2.80  | SPS                |                | 20             |              | 60          | 15          | 5           | 0              |              | NON   | POR  | FRM      | MST      |               |
| MP2-MW3              | 2          | 2          | 2.80                  | 3.00  | SPS                |                | 0              |              | 20          | 0           | 0           | 80             |              | NON   | POR  | LSE      | MST      |               |
| MP2-MW3              | 2          | 3          | 3.00                  | 4.00  | SPS                |                | 0              |              | 0           | 0           | 0           | 0              |              |       |      |          |          |               |
| MP2-MW3              | 3          | 1          | 4.00                  | 4.20  | SPS                |                | 0              |              | 0           | 0           | 0           | 0              |              | NA    | NA   | NA       | NA       |               |
| MP2-MW3              | 3          | 2          | 4.20                  | 6.00  | SPS                |                | 0              |              | 0           | 0           | 0           | 0              |              |       |      |          |          |               |
| MP2-MW3              | 4          | 1          | 6.00                  | 6.20  | SPS                |                | 0              |              | 0           | 0           | 0           | 0              |              | NA    | NA   | NA       | NA       |               |
| MP2-MW3              | 4          | 2          | 6.20                  | 8.00  | SPS                |                | 0              |              | 0           | 0           | 0           | 0              |              |       |      |          |          |               |
| MP2-MW3              | 5          | 1          | 8.00                  | 8.40  | SPS                | C              | 5              | F            | 95          | 0           | 0           | 0              |              | NON   | MOD  | LSE      | SAT      |               |
| MP2-MW3              | 5          | 2          | 8.40                  | 10.00 | SPS                |                | 0              |              | 0           | 0           | 0           | 0              |              |       |      |          |          |               |
| MP2-MW3              | 6          | 1          | 10.00                 | 12.00 | SPS                |                | 0              |              | 5           | 10          | 70          | 15             |              | HGH   | WEL  | FRM      | SAT      |               |
| MP2-MW3              | 7          | 1          | 12.00                 | 13.00 | SPS                |                | 0              |              | 20          | 20          | 60          | 0              |              | LOW   | MOD  | SFT      | SAT      |               |
| MP2-MW3              | 7          | 2          | 13.00                 | 14.00 | SPS                |                | 0              |              | 0           | 0           | 0           | 0              |              |       |      |          |          |               |
| MP2-MW3              | 8          | 1          | 14.00                 | 15.50 | SPS                |                | 0              |              | 60          | 35          | 5           | 0              |              | NON   | POR  | SFT      | SAT      |               |
| MP2-MW3              | 8          | 2          | 15.50                 | 16.00 | SPS                |                | 0              |              | 0           | 0           | 0           | 0              |              |       |      |          |          |               |

**Borehole Location Data****Roy F. WESTON, Inc.**

BOREHOLE ID : MP3-MW4  
BEGIN DATE : 01/05/95

PROJECT NAME: FT. MONMOUTH  
END DATE : 01/05/95

LOGGER/COMPANY :

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : O

TOTAL DEPTH : 23.00

DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 12.25

INTERVAL: 0.00 ft. to 23.00 ft. BGS

METHOD : HSA

FLUID : WATER

BOREHOLE DIAMETER #2:

INTERVAL:

METHOD :

FLUID :

BOREHOLE DIAMETER #3:

INTERVAL:

METHOD :

FLUID :

DRILLING COMPANY : J.C. ANDERSON

DRILLER : STEVE BURGER

DRILL RIG TYPE : MOBILE B-57

|                                 | ESTIMATED           | SURVEYED |
|---------------------------------|---------------------|----------|
| SURFACE<br>ELEVATION :          | 0.000               | 17.340   |
| N. COORDINATE :                 | 0.0000              |          |
| E. COORDINATE :                 | 0.0000              |          |
| WELL PERMIT.....(Y)es (N)o: N   | PERMIT # : 29 32568 |          |
| HOLE ABANDONED... (Y)es (N)o: N |                     |          |
| WELL INSTALLED... (Y)es (N)o: Y |                     |          |
| WELL CLUSTER..... (Y)es (N)o: N | No. OF WELLS : 0    |          |
| WELL NEST..... (Y)es (N)o: N    | No. OF WELLS : 0    |          |
| PUMPS INSTALLED.. (Y)es (N)o: N | TYPE                | DEPTH    |
|                                 | PURGE :             | 0.00     |
|                                 | SAMPLE :            | 0.00     |

**BOREHOLE TESTING**

BOREHOLE GEOPHYSICS..... (Y)es (N)o: N

SLUG TESTS..... (Y)es (N)o: N

PACKER TESTS..... (Y)es (N)o: N

PUMPING TESTS..... (Y)es (N)o: N

**COMMENTS :**

Latitude-North: 40 deg 18' 45.2"

Longitude-West: 74 deg 03' 09.3"

# Well Completion Summary

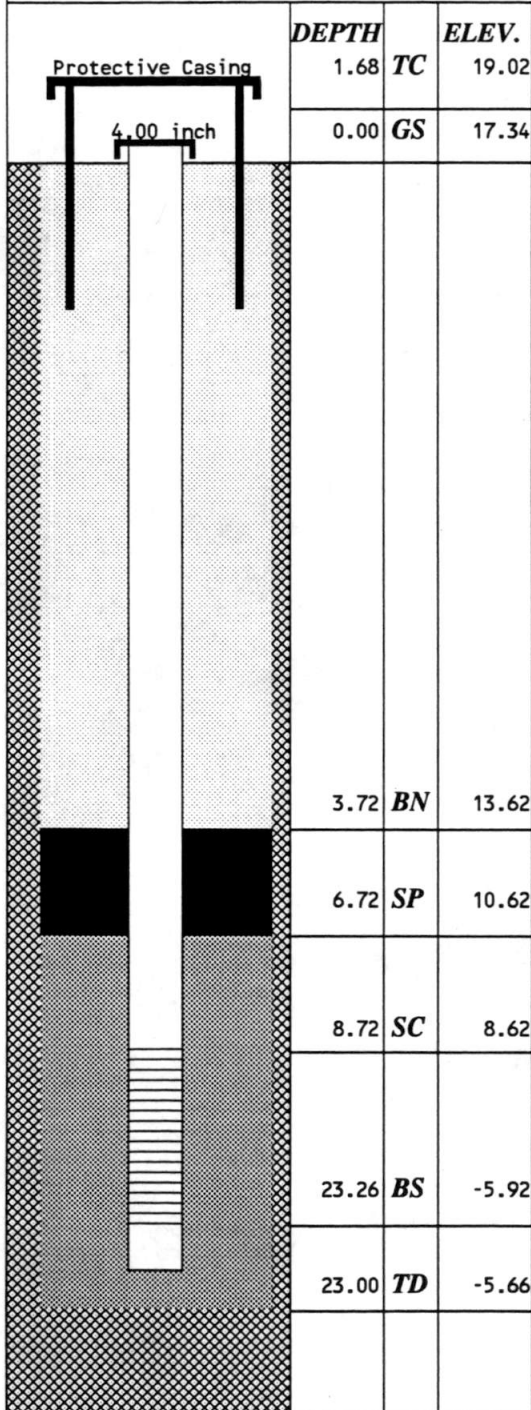
Roy F. WESTON, Inc.

**CLIENT** FT. MONMOUTH  
**SITE NAME** MAIN POST 3

**DRILLING FIRM** J.C. ANDERSON  
**INSPECTOR** P. THOMAS

**WELL ID** MP3-MW4  
**START DATE** 01/05/95  
**COMPLETION DATE** 01/05/95

## WATER LEVELS



**DRILLING SUMMARY**  
**Driller** WELLINGTON REEVE  
**Drilling Fluid** WATER  
**Well Type** SINGLE CASED SCREENED

## WELL DESIGN CONSTRUCTION

**Casing #1 Diameter:** 4.00 inch **Interval:** 0.00 to 8.00 ft.  
**Type :** PVC SCH 40

**Stick Up Inner Casing:** 1.68 ft. **Protective Casing:** 2.36 ft.

**Casing Grout:** CEMENT/BENT **Interval:** 0.00 to 3.72 ft.

**Seal Type:** BENTONITE SLURRY **Interval:** 3.72 to 6.72 ft.

**Sand Pack Type :** NO. 1 SAND MORIE **Interval:** 6.72 to 23.72 ft.  
**Grain Size :** UNIFORM **Median Diameter:**

**Screen Diameter:** 4.00 **Interval:** 8.72 to 23.26 ft.  
**Type :** PVC **Slots:** 0.010 inches

**Silt Trap Interval:** 23.26 to 23.72 ft.  
**Backfill Type :** **Interval:** 0.00 to 0.00 ft.

## WELL DEVELOPMENT

**Date** 01/12/95  
**Method** Bailing/overpumping  
**Yield** ~2 gpm **Purged Volume** 154 gal

## COMMENTS

TC = Top of Casing SP = Top Sand Pack  
GS = Ground Surface SC = Top Screen  
BN = Top Seal BS = Bottom Screen  
TD = Total Depth

Legend:  
 = Grout  
 = Seal  
 = Sand Pack  
 = Formation

## Additional Comments:

Depths are measured below ground surface.

**NOTE:** Well Diagram not to Scale

Elevations are feet above mean sea level



# Borehole Log

Roy F. WESTON, Inc.

|           |                    |                  |                 |
|-----------|--------------------|------------------|-----------------|
| PROJECT   | : FT. MONMOUTH     | TOTAL DEPTH      | : 23.00         |
| SITE NAME | : MAIN POST 3      | LOGGER           | :               |
| BORING ID | : MP3-MW4          | DRILLING COMPANY | : J.C. ANDERSON |
| NORTHING  | : 0.0000 estimated | DRILLING RIG     | : MOBILE B-57   |
| EASTING   | : 0.0000 estimated | DATE STARTED     | : 01/05/95      |
| ELEVATION | : 17.340 surveyed  | DATE COMPLETED   | : 01/05/95      |

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION      | COLOR           | STRENGTH | MOISTURE | BLOW COUNT           | FIELD INSTRUMENT READING | COMMENTS                                                                             |
|-----------|-------|----------|------------|---------------------|-----------------|----------|----------|----------------------|--------------------------|--------------------------------------------------------------------------------------|
|           |       |          |            | Silty sand, SM      | OLIVE GREEN.    | SFT      | MST      |                      | OVM 0.0                  | 0-0.2' bgs topsoil - grass and plant fragments                                       |
| 16        | 1     |          |            | No Sample Recovered |                 |          |          |                      |                          |                                                                                      |
| 15        | 2     |          | 80         | Silty sand, SM      | OLIVE GREEN     | SFT      | MST      |                      | OVM 0.0                  | Coarsens downward.                                                                   |
| 14        | 3     |          |            | No Sample Recovered |                 |          |          |                      |                          |                                                                                      |
| 13        | 4     |          | 60         | Silty sand, SM      | OLIVE GREEN     | FRM      | MST      | 16<br>19<br>38<br>51 | OVM 0.0                  | Trace clay/gravel fragments.                                                         |
| 12        | 5     |          |            | No Sample Recovered |                 |          |          |                      |                          |                                                                                      |
| 11        | 6     |          | 75         | Silty sand, SM      | OLIVE GREEN     | FRM      | MST      | 5<br>12<br>14<br>15  | OVM 0.0                  |                                                                                      |
| 10        | 7     |          |            | No Sample Recovered |                 |          |          |                      |                          |                                                                                      |
| 9         | 8     |          | 85         | Silty sand, SM      | OLIVE GREEN     | FRM      | MST      | 10<br>11<br>12<br>15 | OVM 0.0                  | Trace gravel.                                                                        |
| 8         | 9     |          |            | Silty sand, SM      | BROWN/OLIVE GRN | SFT      | MST      |                      | OVM 0.0                  | Slightly more clayey and moister than above. Dk olive green w/lt Fe color sediments. |
| 7         | 10    |          | 75         | No Sample Recovered |                 |          |          |                      |                          |                                                                                      |
|           |       |          |            | Silty sand, SM      | DK OLIVE GREEN  | SFT      | WET      | 11<br>13<br>17<br>20 | OVM 0.0                  | Sand w/clay matrix (similar to soils, found at M5 locations)                         |

# Borehole Log

Roy F. WESTON, Inc.

|             |                  |                    |               |
|-------------|------------------|--------------------|---------------|
| PROJECT :   | FT. MONMOUTH     | TOTAL DEPTH :      | 23.00         |
| SITE NAME : | MAIN POST 3      | LOGGER :           |               |
| BORING ID : | MP3-MW4          | DRILLING COMPANY : | J.C. ANDERSON |
| NORTHING :  | 0.0000 estimated | DRILLING RIG :     | MOBILE B-57   |
| EASTING :   | 0.0000 estimated | DATE STARTED :     | 01/05/95      |
| ELEVATION : | 17.340 surveyed  | DATE COMPLETED :   | 01/05/95      |

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION      | COLOR          | STRENGTH | MOISTURE | BLOW COUNT           | FIELD INSTRUMENT READING | COMMENTS                                                                |
|-----------|-------|----------|------------|---------------------|----------------|----------|----------|----------------------|--------------------------|-------------------------------------------------------------------------|
| 6 - 11    |       |          |            | Silty sand, SM      | DK OLIVE GREEN | SFT      | WET      |                      | OVM 0.0                  | Sand w/clay matrix (similar to soils, found at M5 locations)            |
|           |       |          |            | No Sample Recovered |                |          |          |                      |                          |                                                                         |
| 5 - 12    |       |          | 80         | Silty sand, SM      | DK OLIVE GREEN | LSE      | WET      | 12<br>15<br>18<br>14 | OVM 0.0                  | Sand w/clay matrix, slightly more sandy.                                |
| 4 - 13    |       |          |            | No Sample Recovered |                |          |          |                      |                          |                                                                         |
| 3 - 14    |       |          | 65         | Silty sand, SM      | DK OLIVE GREEN | LSE      | WET      | 11<br>16<br>19<br>22 | OVM 0.0                  | Water is apparant, but soil is not permeable. Sand in silt/clay matrix. |
| 2 - 15    |       |          |            | No Sample Recovered |                |          |          |                      |                          |                                                                         |
| 1 - 16    |       |          | 85         | Silty sand, SM      | DK OLIVE GREEN | LSE      | SAT      | 9<br>10<br>15<br>20  | OVM 0.0                  | Sat 16' bgs. Interval above is wet during low tide.                     |
| 0 - 17    |       |          |            | No Sample Recovered |                |          |          |                      |                          |                                                                         |
| -1 - 18   |       |          | 95         | Silty sand, SM      | DK OLIVE GREEN | LSE      | SAT      | 11<br>22<br>26<br>30 | OVM 0.0                  |                                                                         |
| -2 - 19   |       |          |            | No Sample Recovered |                |          |          |                      |                          |                                                                         |
| -3 - 20   |       |          |            | No Sample Recovered |                |          |          |                      |                          |                                                                         |

# Borehole Log

Roy F. WESTON, Inc.

|           |                    |                  |                 |
|-----------|--------------------|------------------|-----------------|
| PROJECT   | : FT. MONMOUTH     | TOTAL DEPTH      | : 23.00         |
| SITE NAME | : MAIN POST 3      | LOGGER           | :               |
| BORING ID | : MP3-MW4          | DRILLING COMPANY | : J.C. ANDERSON |
| NORTHING  | : 0.0000 estimated | DRILLING RIG     | : MOBILE B-57   |
| EASTING   | : 0.0000 estimated | DATE STARTED     | : 01/05/95      |
| ELEVATION | : 17.340 surveyed  | DATE COMPLETED   | : 01/05/95      |

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION                              | COLOR          | STRENGTH | MOISTURE | BLOW COUNT           | FIELD INSTRUMENT READING | COMMENTS                               |
|-----------|-------|----------|------------|---------------------------------------------|----------------|----------|----------|----------------------|--------------------------|----------------------------------------|
|           |       |          | 95         | Silty sand, SM                              | DK OLIVE GREEN | LSE      | SAT      | 12<br>16<br>26<br>31 | OMV 0.0                  |                                        |
| -3        | 21    |          |            |                                             |                |          |          |                      |                          |                                        |
| -4        | 22    |          |            | No Sample Recovered<br>Interval Not Sampled |                |          |          |                      |                          | Augered interval. Set well at 23' bgs. |
| -5        | 23    |          |            |                                             |                |          |          |                      |                          |                                        |
| -6        | 24    |          |            |                                             |                |          |          |                      |                          |                                        |
| -7        | 25    |          |            |                                             |                |          |          |                      |                          |                                        |
| -8        | 26    |          |            |                                             |                |          |          |                      |                          |                                        |
| -9        | 27    |          |            |                                             |                |          |          |                      |                          |                                        |
| -10       | 28    |          |            |                                             |                |          |          |                      |                          |                                        |
| -11       | 29    |          |            |                                             |                |          |          |                      |                          |                                        |
| -12       | 30    |          |            |                                             |                |          |          |                      |                          |                                        |

| BOREHOLE<br>/WELL ID | SMP<br>NUM | LTH<br>NUM | LITHOLOGY INT.<br>(FT BGS) | SAMPLING<br>METHOD | SIZE<br>GRAVEL PCT. | GRAVEL<br>SIZE<br>SAND | SAND<br>PCT | SILT<br>PCT | CLAY<br>PCT | ORGANIC<br>PCT | ROCK<br>TYPE | PLAST | SORT | STRENGTH | MOISTURE | STRAT<br>UNIT |
|----------------------|------------|------------|----------------------------|--------------------|---------------------|------------------------|-------------|-------------|-------------|----------------|--------------|-------|------|----------|----------|---------------|
| MP3-MW4              | 1          | 1          | 0.00                       | 1.00               | SPS                 | 0                      | FM          | 50          | 40          | 5              | 5            | NON   | MOD  | SFT      | MST      |               |
| MP3-MW4              | 1          | 2          | 1.00                       | 2.00               | SPS                 | 0                      |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| MP3-MW4              | 2          | 1          | 2.00                       | 3.60               | SPS                 | 0                      | MF          | 70          | 25          | 5              | 0            | NON   | MOD  | SFT      | MST      |               |
| MP3-MW4              | 2          | 2          | 3.60                       | 4.00               | SPS                 | 0                      |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| MP3-MW4              | 3          | 1          | 4.00                       | 5.20               | SPS                 | 0                      | FM          | 70          | 25          | 5              | 0            | NON   | MOD  | FRM      | MST      |               |
| MP3-MW4              | 3          | 2          | 5.20                       | 6.00               | SPS                 | 0                      |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| MP3-MW4              | 4          | 1          | 6.00                       | 7.50               | SPS                 | 0                      | FM          | 70          | 25          | 5              | 0            | NON   | MOD  | FRM      | MST      |               |
| MP3-MW4              | 4          | 2          | 7.50                       | 8.00               | SPS                 | 0                      |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| MP3-MW4              | 5          | 1          | 8.00                       | 8.60               | SPS                 | 0                      | FM          | 70          | 25          | 5              | 0            | NON   | MOD  | FRM      | MST      |               |
| MP3-MW4              | 5          | 2          | 8.60                       | 9.70               | SPS                 | 0                      | MF          | 55          | 40          | 5              | 0            | NON   | MOD  | SFT      | MST      |               |
| MP3-MW4              | 5          | 3          | 9.70                       | 10.00              | SPS                 | 0                      |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| MP3-MW4              | 6          | 1          | 10.00                      | 11.50              | SPS                 | 0                      | MF          | 55          | 35          | 10             | 0            | NON   | MOD  | SFT      | WET      |               |
| MP3-MW4              | 6          | 2          | 11.50                      | 12.00              | SPS                 | 0                      |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| MP3-MW4              | 7          | 1          | 12.00                      | 13.60              | SPS                 | 0                      | M           | 60          | 30          | 10             | 0            | NON   | MOD  | LSE      | WET      |               |
| MP3-MW4              | 7          | 2          | 13.60                      | 14.00              | SPS                 | 0                      |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| MP3-MW4              | 8          | 1          | 14.00                      | 15.30              | SPS                 | 0                      | M           | 60          | 30          | 10             | 0            | NON   | MOD  | LSE      | WET      |               |
| MP3-MW4              | 8          | 2          | 15.30                      | 16.00              | SPS                 | 0                      |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| MP3-MW4              | 9          | 1          | 16.00                      | 17.70              | SPS                 | 0                      | MF          | 60          | 30          | 10             | 0            | NON   | MOD  | LSE      | SAT      |               |
| MP3-MW4              | 9          | 2          | 17.70                      | 18.00              | SPS                 | 0                      |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| MP3-MW4              | 10         | 1          | 18.00                      | 19.90              | SPS                 | 0                      | MF          | 60          | 30          | 10             | 0            | NON   | MOD  | LSE      | SAT      |               |
| MP3-MW4              | 10         | 2          | 19.90                      | 20.00              | SPS                 | 0                      |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| MP3-MW4              | 11         | 1          | 20.00                      | 21.90              | SPS                 | 0                      |             | 60          | 30          | 10             | 0            | NON   | MOD  | LSE      | SAT      |               |
| MP3-MW4              | 11         | 2          | 21.90                      | 22.00              | SPS                 | 0                      |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| MP3-MW4              | 12         | 1          | 22.00                      | 23.00              | NS                  | 0                      |             | 0           | 0           | 0              | 0            |       |      |          |          |               |

**Borehole Location Data****Roy F. WESTON, Inc.**

BOREHOLE ID : MP3-MW5  
BEGIN DATE : 01/09/95

PROJECT NAME: FT. MONMOUTH  
END DATE : 01/09/95

LOGGER/COMPANY : K. VALENTI

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : 0

TOTAL DEPTH : 16.43

DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 12.00

INTERVAL: 0.00 ft. to 16.43 ft. BGS

METHOD : HSA

FLUID : WATER

BOREHOLE DIAMETER #2:

INTERVAL:

METHOD :

FLUID :

BOREHOLE DIAMETER #3:

INTERVAL:

METHOD :

FLUID :

DRILLING COMPANY : J.C. ANDERSON

DRILLER : WELLS REEVE

DRILL RIG TYPE : CME-55

|                        | ESTIMATED | SURVEYED |
|------------------------|-----------|----------|
| SURFACE<br>ELEVATION : | 0.000     | 11.280   |
| N. COORDINATE :        | 0.0000    |          |
| E. COORDINATE :        | 0.0000    |          |

WELL PERMIT.....(Y)es (N)o: N PERMIT # : 2932569

HOLE ABANDONED... (Y)es (N)o: N

WELL INSTALLED... (Y)es (N)o: Y

WELL CLUSTER..... (Y)es (N)o: N No. OF WELLS : 0

WELL NEST..... (Y)es (N)o: N No. OF WELLS : 0

PUMPS INSTALLED.. (Y)es (N)o: N

PURGE :

DEPTH

0.00

SAMPLE :

0.00

**BOREHOLE TESTING**

BOREHOLE GEOPHYSICS..... (Y)es (N)o: N

SLUG TESTS..... (Y)es (N)o: N

PACKER TESTS..... (Y)es (N)o: N

PUMPING TESTS..... (Y)es (N)o: N

**COMMENTS :**

Moved location due to high tension subsurface lines  
directly beneath original location. Latitude-North: 40 deg  
18' 45.8"/Longitude-West: 74 deg 03' 14.6"

# Well Completion Summary

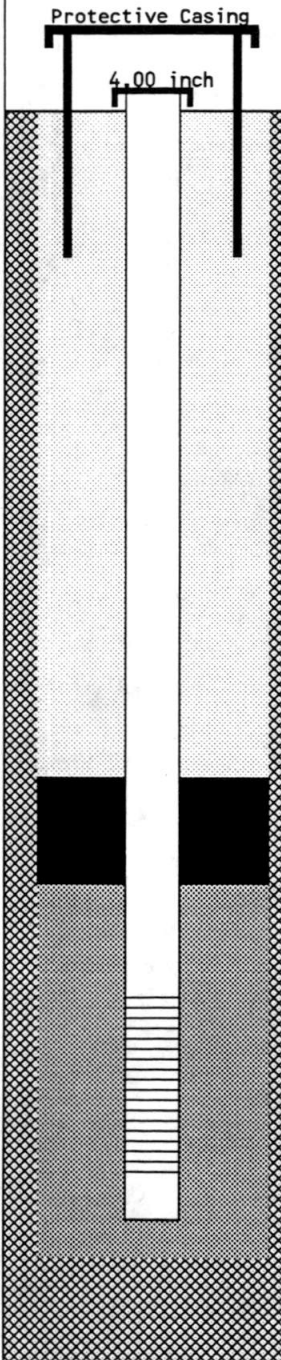
Roy F. WESTON, Inc.

**CLIENT** FT. MONMOUTH  
**SITE NAME** MAIN POST 3

**DRILLING FIRM** J.C. ANDERSON  
**INSPECTOR** K. VALENTI

**WELL ID** MP3-MW5  
**START DATE** 01/09/95  
**COMPLETION DATE** 01/09/95

## WATER LEVELS

|  | DEPTH                                                                                                                                                                                 |       | ELEV.                                      | DRILLING SUMMARY |                        |
|------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|--------------------------------------------|------------------|------------------------|
|                                                                                    | 2.02                                                                                                                                                                                  | TC    | 13.30                                      | Driller          | WELLINGTON REEVES      |
|                                                                                    | 0.00                                                                                                                                                                                  | GS    | 11.28                                      | Drilling Fluid   | WATER                  |
|                                                                                    |                                                                                                                                                                                       |       |                                            | Well Type        | SINGLE CASSED SCREENED |
|                                                                                    | WELL DESIGN CONSTRUCTION                                                                                                                                                              |       |                                            |                  |                        |
|                                                                                    | Casing #1 Diameter: 4.00 inch Interval: 0.00 to 16.00 ft.<br>Type : PVC SCH 40                                                                                                        |       |                                            |                  |                        |
|                                                                                    | Stick Up Inner Casing: 2.02 ft. Protective Casing: 2.14 ft.                                                                                                                           |       |                                            |                  |                        |
|                                                                                    | Casing Grout: PORTLAND CEMENT Interval: 0.00 to 2.43 ft.                                                                                                                              |       |                                            |                  |                        |
|                                                                                    | Seal Type: BENTONITE Interval: 2.43 to 4.43 ft.                                                                                                                                       |       |                                            |                  |                        |
|                                                                                    | Sand Pack Type : #1 MORIE Interval: 4.43 to 16.43 ft.<br>Grain Size : UNIFORM Median Diameter:<br>Screen Diameter: 4.00 Interval: 6.43 to 15.97 ft.<br>Type : PVC Slots: 0.010 inches |       |                                            |                  |                        |
| 2.43                                                                               | BN                                                                                                                                                                                    | 8.85  | Silt Trap Interval: 15.97 to 16.43 ft.     |                  |                        |
| 4.43                                                                               | SP                                                                                                                                                                                    | 6.85  | Backfill Type : Interval: 0.00 to 0.00 ft. |                  |                        |
| WELL DEVELOPMENT                                                                   |                                                                                                                                                                                       |       |                                            |                  |                        |
| 6.43                                                                               | SC                                                                                                                                                                                    | 4.85  | Date 01/12/95                              |                  |                        |
|                                                                                    |                                                                                                                                                                                       |       | Method Bailing/overpumping                 |                  |                        |
|                                                                                    |                                                                                                                                                                                       |       | Yield ~5 gpm Purged Volume 70 gal          |                  |                        |
| COMMENTS                                                                           |                                                                                                                                                                                       |       |                                            |                  |                        |
| 15.97                                                                              | BS                                                                                                                                                                                    | -4.69 | TC = Top of Casing SP = Top Sand Pack      |                  |                        |
|                                                                                    |                                                                                                                                                                                       |       | GS = Ground Surface SC = Top Screen        |                  |                        |
|                                                                                    |                                                                                                                                                                                       |       | BN = Top Seal BS = Bottom Screen           |                  |                        |
| 16.00                                                                              | TD                                                                                                                                                                                    | -4.72 | TD = Total Depth                           |                  |                        |
|                                                                                    |                                                                                                                                                                                       |       | Additional Comments:                       |                  |                        |

**NOTE:** Well Diagram not to Scale

Elevations are feet above mean sea level

# Borehole Log

Roy F. WESTON, Inc.

PROJECT : FT. MONMOUTH  
 SITE NAME : MAIN POST 3  
 BORING ID : MP3-MW5  
 NORTHING : 0.0000 estimated  
 EASTING : 0.0000 estimated  
 ELEVATION : 11.280 surveyed

TOTAL DEPTH : 16.43  
 LOGGER : K. VALENTI  
 DRILLING COMPANY : J.C. ANDERSON  
 DRILLING RIG : CME-55  
 DATE STARTED : 01/09/95  
 DATE COMPLETED : 01/09/95

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION             | COLOR | STRENGTH | MOISTURE | BLOW COUNT          | FIELD INSTRUMENT READING | COMMENTS                                                                             |
|-----------|-------|----------|------------|----------------------------|-------|----------|----------|---------------------|--------------------------|--------------------------------------------------------------------------------------|
|           |       |          | 50         | Silty sand, SM             | BROWN | SFT      | MST      | 3<br>14<br>14       | HNU 0.0                  | Top 4" bgs=topsoil. Cuttings @ 1.5' bgs black with v. slight petroleum odor (fill?). |
| 10        | 1     |          |            | No Sample Recovered        |       |          |          |                     |                          |                                                                                      |
| 9         | 2     |          | 50         | Silty sand with gravel, SM | BLACK | LSE      | MST      | 9<br>11<br>13<br>8  | HNU 0.0                  | Uncertain/Fill? Black soil - very light petroleum product odor.                      |
| 8         | 3     |          |            | No Sample Recovered        |       |          |          |                     |                          |                                                                                      |
| 7         | 4     |          |            | No Sample Recovered        |       |          |          | 9<br>11<br>12       | HNU 0.0                  | Spoon was wet upon removal from borehole.                                            |
| 6         | 5     |          |            |                            |       |          |          |                     |                          |                                                                                      |
| 5         | 6     |          |            | No Sample Recovered        |       |          |          | 3<br>4<br>3         |                          | Spoon was wet. Cuttings wet at ~7' bgs. Fill consisted of film (for camera).         |
| 4         | 7     |          |            |                            |       |          |          |                     |                          |                                                                                      |
| 3         | 8     |          | 20         | Silty sand with gravel, SM | BLACK | LSE      | SAT      | 4<br>11<br>11<br>3  | HNU 0.0                  | Fill. Film coming up as cuttings. Very slight odor of petroleum products.            |
| 2         | 9     |          |            | No Sample Recovered        |       |          |          |                     |                          |                                                                                      |
| 1         | 10    |          |            | No Sample Recovered        |       |          |          | 2<br>11<br>11<br>11 | HNU 0.0                  |                                                                                      |

# Borehole Log

Roy F. WESTON, Inc.

|                             |                                  |
|-----------------------------|----------------------------------|
| PROJECT : FT. MONMOUTH      | TOTAL DEPTH : 16.43              |
| SITE NAME : MAIN POST 3     | LOGGER : K. VALENTI              |
| BORING ID : MP3-MW5         | DRILLING COMPANY : J.C. ANDERSON |
| NORTHING : 0.0000 estimated | DRILLING RIG : CME-55            |
| EASTING : 0.0000 estimated  | DATE STARTED : 01/09/95          |
| ELEVATION : 11.280 surveyed | DATE COMPLETED : 01/09/95        |

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION             | COLOR | STRENGTH | MOISTURE | BLOW COUNT       | FIELD INSTRUMENT READING | COMMENTS                                             |
|-----------|-------|----------|------------|----------------------------|-------|----------|----------|------------------|--------------------------|------------------------------------------------------|
|           |       |          |            | No Sample Recovered        |       |          |          |                  | HNU 0.0                  |                                                      |
| 0 - 11    |       |          |            |                            |       |          |          |                  |                          |                                                      |
| -1 - 12   |       |          | 15         | Silty sand with gravel, SM | BLACK | LSE      | SAT      | 5<br>4<br>6<br>8 | HNU 0.0                  | Used 3" SPS. Same lith. as interval from 8-8.4' bgs. |
|           |       |          |            | No Sample Recovered        |       |          |          |                  |                          |                                                      |
| -2 - 13   |       |          |            |                            |       |          |          |                  |                          |                                                      |
| -3 - 14   |       |          | 15         | Elastic silt, MH           | BLACK | FRM      | SAT      | 4<br>4<br>4<br>4 | HNU 0.0                  | Used 3" sps. Set well at 16.43' bgs.                 |
|           |       |          |            | No Sample Recovered        |       |          |          |                  |                          |                                                      |
| -4 - 15   |       |          |            |                            |       |          |          |                  |                          |                                                      |
| -5 - 16   |       |          |            | Interval Not Sampled       |       |          |          |                  |                          | Augered interval TD of borehole 16.43'.              |
| -6 - 17   |       |          |            |                            |       |          |          |                  |                          |                                                      |
| -7 - 18   |       |          |            |                            |       |          |          |                  |                          |                                                      |
| -8 - 19   |       |          |            |                            |       |          |          |                  |                          |                                                      |
| -9 - 20   |       |          |            |                            |       |          |          |                  |                          |                                                      |



| BOREHOLE<br>/WELL ID | SMP<br>NUM | LTH<br>NUM | LITHOLOGY<br>(FT BGS) | INT.  | SAMPLING<br>METHOD | SIZE<br>GRAVEL PCT. | SIZE<br>SAND | SAND<br>PCT | SILT<br>PCT | CLAY<br>PCT | ORGANIC<br>PCT | ROCK<br>TYPE | PLAST | SORT | STRENGTH | MOISTURE | STRAT<br>UNIT |
|----------------------|------------|------------|-----------------------|-------|--------------------|---------------------|--------------|-------------|-------------|-------------|----------------|--------------|-------|------|----------|----------|---------------|
| MP3-MW5              | 1          | 1          | 0.00                  | 1.00  | SPS                | 0                   |              | 50          | 40          | 10          | 0              |              | LOW   | POR  | SFT      |          | MST           |
| MP3-MW5              | 1          | 2          | 1.00                  | 2.00  | SPS                | 0                   |              | 0           | 0           | 0           | 0              |              |       |      |          |          |               |
| MP3-MW5              | 2          | 1          | 2.00                  | 3.00  | SPS                | 15                  |              | 45          | 40          | 0           | 0              |              | NON   | POR  | LSE      |          | MST           |
| MP3-MW5              | 2          | 2          | 3.00                  | 4.00  | SPS                | 0                   |              | 0           | 0           | 0           | 0              |              |       |      |          |          |               |
| MP3-MW5              | 3          | 1          | 4.00                  | 6.00  | SPS                | 0                   |              | 0           | 0           | 0           | 0              |              |       |      |          |          |               |
| MP3-MW5              | 4          | 1          | 6.00                  | 8.00  | SPS                | 0                   |              | 0           | 0           | 0           | 0              |              |       |      |          |          |               |
| MP3-MW5              | 5          | 1          | 8.00                  | 8.40  | SPS                | 20                  |              | 50          | 30          | 0           | 0              |              | NON   | POR  | LSE      |          | SAT           |
| MP3-MW5              | 5          | 2          | 8.40                  | 10.00 | SPS                | 0                   |              | 0           | 0           | 0           | 0              |              |       |      |          |          |               |
| MP3-MW5              | 6          | 1          | 10.00                 | 12.00 | SPS                | 0                   |              | 0           | 0           | 0           | 0              |              |       |      |          |          |               |
| MP3-MW5              | 7          | 1          | 12.00                 | 12.30 | SPS                | 25                  |              | 40          | 30          | 5           | 0              |              | LOW   | POR  | LSE      |          | SAT           |
| MP3-MW5              | 7          | 2          | 12.30                 | 14.00 | SPS                | 0                   |              | 0           | 0           | 0           | 0              |              |       |      |          |          |               |
| MP3-MW5              | 8          | 1          | 14.00                 | 14.30 | SPS                | 0                   |              | 0           | 65          | 35          | 0              |              | HGH   | WEL  | FRM      |          | SAT           |
| MP3-MW5              | 8          | 2          | 14.30                 | 16.00 | SPS                | 0                   |              | 0           | 0           | 0           | 0              |              |       |      |          |          |               |
| MP3-MW5              | 9          | 1          | 16.00                 | 16.43 | NS                 | 0                   |              | 0           | 0           | 0           | 0              |              |       |      |          |          |               |

**Borehole Location Data****Roy F. WESTON, Inc.**

BOREHOLE ID : MP3-MW6  
BEGIN DATE : 01/11/95

PROJECT NAME: FT. MONMOUTH  
END DATE : 01/11/95

LOGGER/COMPANY : K. VALENTI

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : O

TOTAL DEPTH : 15.00

DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 12.00

INTERVAL: 0.00 ft. to 15.00 ft. BGS

METHOD : HSA

FLUID : WATER

BOREHOLE DIAMETER #2:

INTERVAL:

METHOD :

FLUID :

BOREHOLE DIAMETER #3:

INTERVAL:

METHOD :

FLUID :

DRILLING COMPANY : J.C. ANDERSON

DRILLER : WELLS REEVE

DRILL RIG TYPE : CME

|                     | ESTIMATED | SURVEYED |
|---------------------|-----------|----------|
| SURFACE ELEVATION : | 0.000     | 10.250   |
| N. COORDINATE :     | 0.0000    |          |
| E. COORDINATE :     | 0.0000    |          |

WELL PERMIT.....(Y)es (N)o: N PERMIT # : NJ 29 32570

HOLE ABANDONED... (Y)es (N)o: N

WELL INSTALLED... (Y)es (N)o: Y

WELL CLUSTER.....(Y)es (N)o: N No. OF WELLS : 0

WELL NEST.....(Y)es (N)o: N No. OF WELLS : 0

PUMPS INSTALLED..(Y)es (N)o: N TYPE

DEPTH

PURGE : 0.00

SAMPLE : 0.00

**BOREHOLE TESTING**

BOREHOLE GEOPHYSICS.....(Y)es (N)o: N

SLUG TESTS.....(Y)es (N)o: N

PACKER TESTS.....(Y)es (N)o: N

PUMPING TESTS.....(Y)es (N)o: N

**COMMENTS :**

No sampling, only installed well. Latitude-North: 40 deg 18'  
48.4"/Longitude-West: 74 deg 03' 06.9".

# Well Completion Summary

Roy F. WESTON, Inc.

**CLIENT** FT. MONMOUTH  
**SITE NAME** MAIN POST 3

**DRILLING FIRM** J.C. ANDERSON  
**INSPECTOR** K. VALENTI

**WELL ID** MP3-MW6  
**START DATE** 01/11/95  
**COMPLETION DATE** 01/11/95

## WATER LEVELS

|                                                                                                                                                                                                         |                                 | DEPTH |    | ELEV. | DRILLING SUMMARY              |                         |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------|-------|----|-------|-------------------------------|-------------------------|
| <p>Protective Casing<br/>4.00 inch</p>                                                                                                                                                                  |                                 | 2.17  | TC | 12.42 | <b>Driller</b>                | WELLS REEVE             |
|                                                                                                                                                                                                         |                                 | 0.00  | GS | 10.25 | <b>Drilling Fluid</b>         | WATER                   |
|                                                                                                                                                                                                         |                                 |       |    |       | <b>Well Type</b>              | SINGLE CASED SCREENED   |
|                                                                                                                                                                                                         | <b>WELL DESIGN CONSTRUCTION</b> |       |    |       |                               |                         |
|                                                                                                                                                                                                         |                                 |       |    |       | <b>Casing #1 Diameter:</b>    | 4.00 inch               |
|                                                                                                                                                                                                         |                                 |       |    |       | <b>Interval:</b>              | 0.00 to 15.00 ft.       |
|                                                                                                                                                                                                         |                                 |       |    |       | <b>Type :</b>                 |                         |
|                                                                                                                                                                                                         |                                 |       |    |       | <b>Stick Up Inner Casing:</b> | 2.17 ft.                |
|                                                                                                                                                                                                         |                                 |       |    |       | <b>Protective Casing:</b>     | 2.36 ft.                |
|                                                                                                                                                                                                         |                                 |       |    |       | <b>Casing Grout:</b>          | PORTLAND CEMENT         |
|                                                                                                                                                                                                         |                                 |       |    |       | <b>Interval:</b>              | 0.00 to 1.33 ft.        |
|                                                                                                                                                                                                         |                                 |       |    |       | <b>Seal Type:</b>             | BENTONITE               |
|                                                                                                                                                                                                         |                                 |       |    |       | <b>Interval:</b>              | 1.33 to 3.33 ft.        |
|                                                                                                                                                                                                         |                                 |       |    |       | <b>Sand Pack Type :</b>       | #1 MORIE                |
|                                                                                                                                                                                                         |                                 |       |    |       | <b>Grain Size :</b>           | UNIFORM                 |
|                                                                                                                                                                                                         |                                 |       |    |       | <b>Interval:</b>              | 3.33 to 15.33 ft.       |
|                                                                                                                                                                                                         |                                 |       |    |       | <b>Median Diameter:</b>       |                         |
|                                                                                                                                                                                                         |                                 |       |    |       | <b>Screen Diameter:</b>       | 4.00                    |
|                                                                                                                                                                                                         |                                 |       |    |       | <b>Interval:</b>              | 5.33 to 14.87 ft.       |
|                                                                                                                                                                                                         |                                 |       |    |       | <b>Type :</b>                 | PVC                     |
|                                                                                                                                                                                                         |                                 |       |    |       | <b>Slots:</b>                 | 0.010 inches            |
|                                                                                                                                                                                                         |                                 | 1.33  | BN | 8.92  | <b>Silt Trap Interval:</b>    | 14.87 to 15.33 ft.      |
|                                                                                                                                                                                                         |                                 |       |    |       | <b>Backfill Type :</b>        |                         |
|                                                                                                                                                                                                         |                                 | 3.33  | SP | 6.92  | <b>Interval:</b>              | 0.00 to 0.00 ft.        |
| <b>WELL DEVELOPMENT</b>                                                                                                                                                                                 |                                 |       |    |       |                               |                         |
|                                                                                                                                                                                                         |                                 | 5.33  | SC | 4.92  | <b>Date</b>                   | 01/18/95                |
|                                                                                                                                                                                                         |                                 |       |    |       | <b>Method</b>                 | Surge blocking/overpump |
|                                                                                                                                                                                                         |                                 |       |    |       | <b>Yield</b>                  | <.5 gpm                 |
|                                                                                                                                                                                                         |                                 |       |    |       | <b>Purged Volume</b>          | 45 gal                  |
| <b>COMMENTS</b>                                                                                                                                                                                         |                                 |       |    |       |                               |                         |
|                                                                                                                                                                                                         |                                 | 14.87 | BS | -4.62 | TC = Top of Casing            | SP = Top Sand Pack      |
|                                                                                                                                                                                                         |                                 |       |    |       | GS = Ground Surface           | SC = Top Screen         |
|                                                                                                                                                                                                         |                                 |       |    |       | BN = Top Seal                 | BS = Bottom Screen      |
|                                                                                                                                                                                                         |                                 | 15.00 | TD | -4.75 | TD = Total Depth              |                         |
| <div style="display: flex; justify-content: space-between;"> <div> <p> = Grout</p> <p> = Seal</p> <p> = Sand Pack</p> <p> = Formation</p> </div> <div> <p><b>Additional Comments:</b></p> </div> </div> |                                 |       |    |       |                               |                         |

NOTE: Well Diagram not to Scale

Elevations are feet above mean sea level

# Borehole Log

Roy F. WESTON, Inc.

PROJECT : FT. MONMOUTH  
 SITE NAME : MAIN POST 3  
 BORING ID : MP3-MW6  
 NORTHING : 0.0000 estimated  
 EASTING : 0.0000 estimated  
 ELEVATION : 10.250 surveyed

TOTAL DEPTH : 15.00  
 LOGGER : K. VALENTI  
 DRILLING COMPANY : J.C. ANDERSON  
 DRILLING RIG : CME  
 DATE STARTED : 01/11/95  
 DATE COMPLETED : 01/11/95

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION                   | COLOR          | STRENGTH | MOISTURE | BLOW COUNT | FIELD INSTRUMENT READING | COMMENTS                                                                                               |
|-----------|-------|----------|------------|----------------------------------|----------------|----------|----------|------------|--------------------------|--------------------------------------------------------------------------------------------------------|
|           |       |          | 20         | Not Classified - Incomplete Data | BLACK          | LSE      | NA       | UNKN       | HNU 0.0                  | Top 3" bgs consists of topsoil, organics and landfill materials.                                       |
| 9         | 1     |          |            | No Sample Recovered              |                |          |          |            |                          |                                                                                                        |
| 8         | 2     |          |            | No Sample Recovered              |                |          |          | UNKN       | HNU 0.0                  |                                                                                                        |
| 7         | 3     |          |            |                                  |                |          |          |            |                          |                                                                                                        |
| 6         | 4     |          |            | No Sample Recovered              |                |          |          | UNKN       | HNU 0.0                  | Switching to 3" dia. sps. Wood in SPS heel & spoon shoe. Cutting consists of wet blk gravelly sand ~6' |
| 5         | 5     |          |            |                                  |                |          |          |            |                          |                                                                                                        |
| 4         | 6     |          | 50         | Silty sand, SM                   | BROWN TO BLACK | FRM      | WET      | 6 UNKN     | HNU 1.0                  | Fill 3" SPS used. Some orange (lt) Fe staining. Water level at 6'4" bgs.                               |
| 3         | 7     |          |            | No Sample Recovered              |                |          |          |            |                          |                                                                                                        |
| 2         | 8     |          | 100        | Silty sand, SM                   | GREEN          | SFT      | SAT      | 2 UNKN     | HNU 0.0                  | Fill.                                                                                                  |
| 1         | 9     |          |            |                                  |                |          |          |            |                          |                                                                                                        |
| 0         | 10    |          | 30         | Silty sand, SM                   | GREEN          | LSE      | WET      | 1 UNKN     | HNU 0.0                  | Fill. Saturated sand & silt with fill material.                                                        |

# Borehole Log

Roy F. WESTON, Inc.

PROJECT : FT. MONMOUTH  
 SITE NAME : MAIN POST 3  
 BORING ID : MP3-MW6  
 NORTHING : 0.0000 estimated  
 EASTING : 0.0000 estimated  
 ELEVATION : 10.250 surveyed

TOTAL DEPTH : 15.00  
 LOGGER : K. VALENTI  
 DRILLING COMPANY : J.C. ANDERSON  
 DRILLING RIG : CME  
 DATE STARTED : 01/11/95  
 DATE COMPLETED : 01/11/95

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION       | COLOR | STRENGTH | MOISTURE | BLOW COUNT           | FIELD INSTRUMENT READING | COMMENTS                                        |
|-----------|-------|----------|------------|----------------------|-------|----------|----------|----------------------|--------------------------|-------------------------------------------------|
|           |       |          |            | Silty sand, SM       | GREEN | LSE      | WET      |                      | HNU 0.0                  | Fill. Saturated sand & silt with fill material. |
| -1        | 11    |          |            | No Sample Recovered  |       |          |          |                      |                          |                                                 |
| -2        | 12    |          | 50         | Silty sand, SM       | GREEN | FRM      | WET      | 11<br>11<br>13<br>15 | HNU 0.0                  | Auger to 15' set well.                          |
| -3        | 13    |          |            | No Sample Recovered  |       |          |          |                      |                          |                                                 |
| -4        | 14    |          |            | Interval Not Sampled |       |          |          |                      |                          | Augered interval.                               |
| -5        | 15    |          |            |                      |       |          |          |                      |                          |                                                 |
| -6        | 16    |          |            |                      |       |          |          |                      |                          |                                                 |
| -7        | 17    |          |            |                      |       |          |          |                      |                          |                                                 |
| -8        | 18    |          |            |                      |       |          |          |                      |                          |                                                 |
| -9        | 19    |          |            |                      |       |          |          |                      |                          |                                                 |
| -10       | 20    |          |            |                      |       |          |          |                      |                          |                                                 |

| BOREHOLE<br>/WELL ID | SMP<br>NUM | LTH<br>NUM | LITHOLOGY INT.<br>(FT BGS) | SAMPLING<br>METHOD | SIZE<br>GRAVEL PCT. | SIZE<br>SAND | GRAVEL<br>PCT. | SAND<br>PCT | SILT<br>PCT | CLAY<br>PCT | ORGANIC<br>PCT | ROCK<br>TYPE | PLAST | SORT | STRENGTH | MOISTURE | STRAT<br>UNIT |
|----------------------|------------|------------|----------------------------|--------------------|---------------------|--------------|----------------|-------------|-------------|-------------|----------------|--------------|-------|------|----------|----------|---------------|
| MP3-MW6              | 1          | 1          | 0.00                       | 0.40               | SPS                 |              | 90             | 10          | 0           | 0           | 0              |              | NA    | NA   | LSE      | NA       |               |
| MP3-MW6              | 1          | 2          | 0.40                       | 2.00               | SPS                 |              | 0              | 0           | 0           | 0           | 0              |              |       |      |          |          |               |
| MP3-MW6              | 2          | 1          | 2.00                       | 4.00               | SPS                 |              | 0              | 0           | 0           | 0           | 0              |              |       |      |          |          |               |
| MP3-MW6              | 3          | 1          | 4.00                       | 6.00               | SPS                 |              | 0              | 0           | 0           | 0           | 0              |              |       |      |          |          |               |
| MP3-MW6              | 4          | 1          | 6.00                       | 7.00               | SPS                 |              | 10             | 50          | 40          | 0           | 0              |              | NON   | POR  | FRM      | WET      |               |
| MP3-MW6              | 4          | 2          | 7.00                       | 8.00               | SPS                 |              | 0              | 0           | 0           | 0           | 0              |              |       |      |          |          |               |
| MP3-MW6              | 5          | 1          | 8.00                       | 10.00              | SPS                 |              | 0              | 50          | 35          | 15          | 0              |              | LOW   | MOD  | SFT      | SAT      |               |
| MP3-MW6              | 6          | 1          | 10.00                      | 10.60              | SPS                 |              | 0              | 50          | 50          | 0           | 0              |              | LOW   | MOD  | LSE      | WET      |               |
| MP3-MW6              | 6          | 2          | 10.60                      | 12.00              | SPS                 |              | 0              | 0           | 0           | 0           | 0              |              |       |      |          |          |               |
| MP3-MW6              | 7          | 1          | 12.00                      | 13.00              | SPS                 |              | 0              | MF          | 75          | 25          | 0              | 0            | LOW   | MOD  | FRM      | WET      |               |
| MP3-MW6              | 7          | 2          | 13.00                      | 14.00              | SPS                 |              | 0              | 0           | 0           | 0           | 0              |              |       |      |          |          |               |
| MP3-MW6              | 8          | 1          | 14.00                      | 15.00              | NS                  |              | 0              | 0           | 0           | 0           | 0              |              |       |      |          |          |               |

**Borehole Location Data****Roy F. WESTON, Inc.**

BOREHOLE ID : MP4-MW7 PROJECT NAME: FT. MONMOUTH  
BEGIN DATE : 12/14/94 END DATE : 12/14/94

LOGGER/COMPANY : P. THOMAS

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : 0

TOTAL DEPTH : 16.00 DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 12.25  
INTERVAL: 0.00 ft. to 16.00 ft. BGS  
METHOD : HSA FLUID : NONE

BOREHOLE DIAMETER #2:  
INTERVAL:  
METHOD : FLUID :

BOREHOLE DIAMETER #3:  
INTERVAL:  
METHOD : FLUID :

DRILLING COMPANY : J.C. ANDERSON  
DRILLER : STEVE BURGER  
DRILL RIG TYPE : CME-55

|                                 | ESTIMATED               | SURVEYED |
|---------------------------------|-------------------------|----------|
| SURFACE<br>ELEVATION :          | 0.000                   | 14.830   |
| N. COORDINATE :                 | 0.0000                  |          |
| E. COORDINATE :                 | 0.0000                  |          |
| WELL PERMIT..... (Y)es (N)o: N  | PERMIT # : NJ 029 32571 |          |
| HOLE ABANDONED... (Y)es (N)o: N |                         |          |
| WELL INSTALLED... (Y)es (N)o: Y |                         |          |
| WELL CLUSTER..... (Y)es (N)o: N | No. OF WELLS : 0        |          |
| WELL NEST..... (Y)es (N)o: N    | No. OF WELLS : 0        |          |
| PUMPS INSTALLED.. (Y)es (N)o: N | TYPE                    | DEPTH    |
|                                 | PURGE :                 | 0.00     |
|                                 | SAMPLE :                | 0.00     |

**BOREHOLE TESTING**

BOREHOLE GEOPHYSICS..... (Y)es (N)o: N  
SLUG TESTS..... (Y)es (N)o: N  
PACKER TESTS..... (Y)es (N)o: N  
PUMPING TESTS..... (Y)es (N)o: N

**COMMENTS :**

Latitude-North: 40 deg 17' 55.3"  
Longitude-West: 74 deg 04' 54.5"

# Well Completion Summary

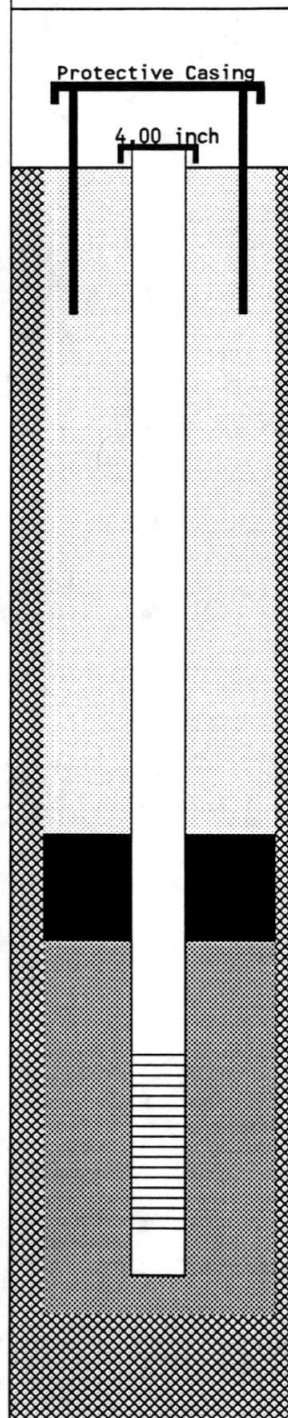
Roy F. WESTON, Inc.

**CLIENT** FT. MONMOUTH  
**SITE NAME** MAIN POST AREA 4

**DRILLING FIRM** J.C. ANDERSON  
**INSPECTOR** P. THOMAS

**WELL ID** MP4 - MW7  
**START DATE** 12/14/94  
**COMPLETION DATE** 12/14/94

## WATER LEVELS

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                   | DEPTH |    | ELEV. | DRILLING SUMMARY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                       |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-------|----|-------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Protective Casing | 1.92  | TC | 16.75 | Driller                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | STEVE BURGER          |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 4.00 inch         | 0.00  | GS | 14.83 | Drilling Fluid                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | NONE                  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                   |       |    |       | Well Type                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | SINGLE CASED SCREENED |
| <h3>WELL DESIGN CONSTRUCTION</h3> <p><b>Casing #1 Diameter:</b> 4.00 inch      <b>Interval:</b> 0.00 to 6.01 ft.<br/><b>Type :</b> PVC SCH 40</p> <p><b>Stick Up Inner Casing:</b> 1.92 ft.      <b>Protective Casing:</b> 2.33 ft.</p> <p><b>Casing Grout:</b> CEMENT/BENT      <b>Interval:</b> 0.00 to 1.00 ft.</p> <p><b>Seal Type:</b> BENTONITE SLURRY      <b>Interval:</b> 1.51 to 4.01 ft.</p> <p><b>Sand Pack Type :</b> NO. 1      <b>Interval:</b> 4.01 to 16.01 ft.<br/><b>Grain Size :</b> UNIFORM      <b>Median Diameter:</b></p> <p><b>Screen Diameter:</b> 4.00      <b>Interval:</b> 6.01 to 15.55 ft.<br/><b>Type :</b> PVC      <b>Slots:</b> 0.010 inches</p> <p><b>Silt Trap Interval:</b> 15.55 to 16.01 ft.<br/><b>Backfill Type :</b>      <b>Interval:</b> 0.00 to 0.00 ft.</p> |                   |       |    |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                   |       |    |       | <h3>WELL DEVELOPMENT</h3> <p><b>Date</b> 12/22/94<br/><b>Method</b> Surge block/overpumping<br/><b>Yield</b> ~4 gpm      <b>Purged Volume</b> 400 gal</p>                                                                                                                                                                                                                                                                                                                                                                                                                                          |                       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                   |       |    |       | <h3>COMMENTS</h3> <p>TC = Top of Casing      SP = Top Sand Pack       = Grout<br/>GS = Ground Surface      SC = Top Screen       = Seal<br/>BN = Top Seal      BS = Bottom Screen       = Sand Pack<br/>TD = Total Depth       = Formation</p> |                       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                   |       |    |       | <p><b>Additional Comments:</b><br/>Depths are measured below ground surface.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                       |

NOTE: Well Diagram not to Scale

Elevations are feet above mean sea level



# Borehole Log

Roy F. WESTON, Inc.

PROJECT : FT. MONMOUTH  
 SITE NAME : MAIN POST AREA 4  
 BORING ID : MP4-MW7  
 NORTHING : 0.0000 estimated  
 EASTING : 0.0000 estimated  
 ELEVATION : 14.830 surveyed

TOTAL DEPTH : 16.00  
 LOGGER : P. THOMAS  
 DRILLING COMPANY : J.C. ANDERSON  
 DRILLING RIG : CME-55  
 DATE STARTED : 12/14/94  
 DATE COMPLETED : 12/14/94

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION                      | COLOR           | STRENGTH | MOISTURE | BLOW COUNT | FIELD INSTRUMENT READING | COMMENTS                                                                                       |
|-----------|-------|----------|------------|-------------------------------------|-----------------|----------|----------|------------|--------------------------|------------------------------------------------------------------------------------------------|
|           |       |          | 55         | Sandy silt, ML                      | DK BROWN        | SFT      | MST      | 4          | HNU 0.0                  | Topsoil.                                                                                       |
|           |       |          |            | Poorly graded sand with silt, SP-SM | BROWN-RED       | LSE      | MST      | 5          | HNU 0.0                  | Fine gravel to 0.5 feet bgs.                                                                   |
| 13        | 1     |          |            | No Sample Recovered                 |                 |          |          |            |                          |                                                                                                |
|           |       |          | 70         | Poorly graded sand with silt, SP-SM | PALE BROWN      | LSE      | MST      | 8          | HNU 0.0                  |                                                                                                |
| 12        | 2     |          |            |                                     |                 |          |          | 10         |                          |                                                                                                |
|           |       |          |            | Silty sand, SM                      | ORANGE BROWN    | SFT      | MST      |            | HNU 0.0                  |                                                                                                |
| 11        | 3     |          |            | No Sample Recovered                 |                 |          |          |            |                          |                                                                                                |
|           |       |          | 45         | Silty sand, SM                      | OLIVE BROWN     | SFT      | MST      | 14         | HNU 0.1                  | Sand with silt/clay lamina                                                                     |
| 10        | 4     |          |            |                                     |                 |          |          | 16         |                          |                                                                                                |
|           |       |          |            | No Sample Recovered                 |                 |          |          | 18         |                          |                                                                                                |
| 9         | 5     |          |            |                                     |                 |          |          | 14         |                          |                                                                                                |
|           |       |          | 75         | Silty sand, SM                      | OLIVE & IRON BR | LSE      | WET      | 10         | HNU 0.0                  | SAT noted in cuttings ~7' bgs, sand w/silt and clay laminae, 7.1-7.3' (90% sand 10% silt) wet. |
| 8         | 6     |          |            |                                     |                 |          |          | 17         |                          |                                                                                                |
|           |       |          |            | No Sample Recovered                 |                 |          |          | 16         |                          |                                                                                                |
| 7         | 7     |          |            |                                     |                 |          |          | 12         |                          |                                                                                                |
|           |       |          | 90         | Silty sand, SM                      | OLIVE & FE BROW | SFT      | SAT      | 8          | HNU 1.0                  | Sand with silt/clay laminae.                                                                   |
| 6         | 8     |          |            |                                     |                 |          |          | 7          |                          |                                                                                                |
|           |       |          |            |                                     |                 |          |          | 6          |                          |                                                                                                |
| 5         | 9     |          |            |                                     |                 |          |          |            |                          |                                                                                                |
|           |       |          | 45         | No Sample Recovered                 |                 |          |          |            |                          |                                                                                                |
|           |       |          |            | Silty sand, SM                      | OLIVE BROWN     | SFT      | SAT      | 7          | HNU 3.0                  | Small gravel laminae ~10.4' bgs.                                                               |
| 4         | 10    |          |            |                                     |                 |          |          | 9          |                          |                                                                                                |

# Borehole Log

Roy F. WESTON, Inc.

|           |                    |                  |                 |
|-----------|--------------------|------------------|-----------------|
| PROJECT   | : FT. MONMOUTH     | TOTAL DEPTH      | : 16.00         |
| SITE NAME | : MAIN POST AREA 4 | LOGGER           | : P. THOMAS     |
| BORING ID | : MP4-MW7          | DRILLING COMPANY | : J.C. ANDERSON |
| NORTHING  | : 0.0000 estimated | DRILLING RIG     | : CME-55        |
| EASTING   | : 0.0000 estimated | DATE STARTED     | : 12/14/94      |
| ELEVATION | : 14.830 surveyed  | DATE COMPLETED   | : 12/14/94      |

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION                      | COLOR           | STRENGTH | MOISTURE | BLOW COUNT           | FIELD INSTRUMENT READING | COMMENTS                                                                                         |
|-----------|-------|----------|------------|-------------------------------------|-----------------|----------|----------|----------------------|--------------------------|--------------------------------------------------------------------------------------------------|
|           |       |          |            | Silty sand, SM                      | OLIVE BROWN     | SFT      | SAT      |                      | HNU 3.0                  | Small, gravel laminae ~10.4' bgs.                                                                |
| 3         | 11    |          |            | No Sample Recovered                 |                 |          |          |                      |                          |                                                                                                  |
| 2         | 12    |          | 100        | Silty sand, SM                      | OLIVE BROWN     | SFT      | SAT      | 11                   | HNU 1.0                  | Coarsening downward sequence into next spoon interval.                                           |
|           |       |          |            | Silty sand, SM                      | ST. BRN/OLV BRN | LSE      | SAT      | 20<br>17<br>14       | HNU 1.0                  | Sharp color change betw/ strong Fe oxide laminae (c. sand) interbedded w/ olive brown silt/clay. |
| 1         | 13    |          |            |                                     |                 |          |          |                      |                          |                                                                                                  |
| 0         | 14    |          | 50         | Poorly graded sand with silt, SP-SM | OLIVE BRN/FE BR | LSE      | SAT      | 12<br>15<br>15<br>14 | HNU 5.0                  | Set well 15.5' bgs.                                                                              |
| -1        | 15    |          |            | No Sample Recovered                 |                 |          |          |                      |                          |                                                                                                  |
| -2        | 16    |          |            |                                     |                 |          |          |                      |                          |                                                                                                  |
| -3        | 17    |          |            |                                     |                 |          |          |                      |                          |                                                                                                  |
| -4        | 18    |          |            |                                     |                 |          |          |                      |                          |                                                                                                  |
| -5        | 19    |          |            |                                     |                 |          |          |                      |                          |                                                                                                  |
| -6        | 20    |          |            |                                     |                 |          |          |                      |                          |                                                                                                  |

| BOREHOLE<br>/WELL ID | SMP<br>NUM | LTH<br>NUM | LITHOLOGY INT.<br>(FT BGS) | SAMPLING<br>METHOD | SIZE<br>GRAVEL PCT. | GRAVEL<br>PCT. | SIZE<br>SAND | SAND<br>PCT | SILT<br>PCT | CLAY<br>PCT | ORGANIC<br>PCT | ROCK<br>TYPE | PLAST | SORT | STRENGTH | MOISTURE | STRAT<br>UNIT |
|----------------------|------------|------------|----------------------------|--------------------|---------------------|----------------|--------------|-------------|-------------|-------------|----------------|--------------|-------|------|----------|----------|---------------|
| MP4-MW7              | 1          | 1          | 0.00                       | 0.45               | SPS                 |                | 0            | FM          | 40          | 35          | 5              | 20           | NON   | NA   | SFT      | MST      |               |
| MP4-MW7              | 1          | 2          | 0.45                       | 1.10               | SPS                 | F              | 2            | MF          | 85          | 13          | 0              | 0            | NA    | WEL  | LSE      | MST      |               |
| MP4-MW7              | 1          | 3          | 1.10                       | 2.00               | SPS                 |                | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| MP4-MW7              | 2          | 1          | 2.00                       | 3.00               | SPS                 | F              | 2            | MF          | 85          | 13          | 0              | 0            | NA    | WEL  | LSE      | MST      |               |
| MP4-MW7              | 2          | 2          | 3.00                       | 3.40               | SPS                 |                | 0            | MF          | 60          | 30          | 10             | 0            | NON   | WEL  | SFT      | MST      |               |
| MP4-MW7              | 2          | 3          | 3.40                       | 4.00               | SPS                 |                | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| MP4-MW7              | 3          | 1          | 4.00                       | 4.90               | SPS                 |                | 0            | MF          | 80          | 15          | 5              | 0            | NON   | MOD  | SFT      | MST      |               |
| MP4-MW7              | 3          | 2          | 4.90                       | 6.00               | SPS                 |                | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| MP4-MW7              | 4          | 1          | 6.00                       | 7.50               | SPS                 |                | 0            | MF          | 75          | 20          | 5              | 0            | NON   | MOD  | LSE      | WET      |               |
| MP4-MW7              | 4          | 2          | 7.50                       | 8.00               | SPS                 |                | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| MP4-MW7              | 5          | 1          | 8.00                       | 9.80               | SPS                 |                | 0            | MF          | 80          | 15          | 5              | 0            | NON   | MOD  | SFT      | SAT      |               |
| MP4-MW7              | 5          | 2          | 9.80                       | 10.00              | SPS                 |                | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| MP4-MW7              | 6          | 1          | 10.00                      | 10.90              | SPS                 | F              | 5            | MF          | 75          | 15          | 5              | 0            | NON   | MOD  | SFT      | SAT      |               |
| MP4-MW7              | 6          | 2          | 10.90                      | 12.00              | SPS                 |                | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| MP4-MW7              | 7          | 1          | 12.00                      | 12.50              | SPS                 |                | 0            | MF          | 80          | 15          | 5              | 0            | NON   | MOD  | SFT      | SAT      |               |
| MP4-MW7              | 7          | 2          | 12.50                      | 14.00              | SPS                 |                | 0            | MFC         | 80          | 15          | 5              | 0            | NON   | POR  | LSE      | SAT      |               |
| MP4-MW7              | 8          | 1          | 14.00                      | 15.00              | SPS                 |                | 0            | MCF         | 90          | 10          | 0              | 0            | NA    | MOD  | LSE      | SAT      |               |
| MP4-MW7              | 8          | 2          | 15.00                      | 16.00              | SPS                 |                | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |

**Borehole Location Data****Roy F. WESTON, Inc.**

BOREHOLE ID : MP4-MW8 PROJECT NAME: FT. MONMOUTH  
BEGIN DATE : 12/13/94 END DATE : 12/13/94

LOGGER/COMPANY : P. THOMAS

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : 0

TOTAL DEPTH : 19.00 DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 12.25  
INTERVAL: 0.00 ft. to 19.00 ft. BGS  
METHOD : HSA FLUID : NONE

BOREHOLE DIAMETER #2:  
INTERVAL:  
METHOD : FLUID :

BOREHOLE DIAMETER #3:  
INTERVAL:  
METHOD : FLUID :

DRILLING COMPANY : J.C. ANDERSON  
DRILLER : STEVE BURGER  
DRILL RIG TYPE : CME-55

|                        | ESTIMATED | SURVEYED |
|------------------------|-----------|----------|
| SURFACE<br>ELEVATION : | 0.000     | 9.020    |

N. COORDINATE : 0.0000

E. COORDINATE : 0.0000

WELL PERMIT.....(Y)es (N)o: N PERMIT # : NJ 29 32572

HOLE ABANDONED... (Y)es (N)o: N

WELL INSTALLED... (Y)es (N)o: Y

WELL CLUSTER.....(Y)es (N)o: N No. OF WELLS : 0

WELL NEST.....(Y)es (N)o: N No. OF WELLS : 0

| PUMPS INSTALLED.. (Y)es (N)o: N | TYPE | DEPTH |
|---------------------------------|------|-------|
| PURGE :                         |      | 0.00  |
| SAMPLE :                        |      | 0.00  |

**BOREHOLE TESTING**

BOREHOLE GEOPHYSICS..... (Y)es (N)o: N

SLUG TESTS..... (Y)es (N)o: N

PACKER TESTS..... (Y)es (N)o: N

PUMPING TESTS..... (Y)es (N)o: N

**COMMENTS :**

Latitude-North: 40 deg 18' 42.8"

Longitude-West: 74 deg 03' 02.9"

# Well Completion Summary

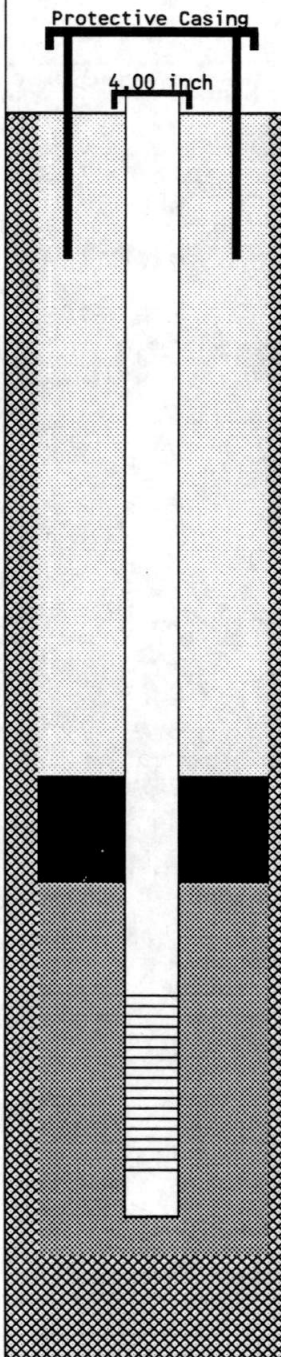
Roy F. WESTON, Inc.

**CLIENT** FT. MONMOUTH  
**SITE NAME** MAIN POST AREA 4

**DRILLING FIRM** J.C. ANDERSON  
**INSPECTOR** P. THOMAS

**WELL ID** MP4-MW8  
**START DATE** 12/13/94  
**COMPLETION DATE** 12/13/94

## WATER LEVELS

|  | DEPTH                                                                                                                                                                                    |       | ELEV.                                      | DRILLING SUMMARY        |                       |
|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|--------------------------------------------|-------------------------|-----------------------|
|                                                                                    | 1.66                                                                                                                                                                                     | TC    | 10.68                                      | Driller                 | STEVE BURGER          |
|                                                                                    | 0.00                                                                                                                                                                                     | GS    | 9.02                                       | Drilling Fluid          | NONE                  |
|                                                                                    |                                                                                                                                                                                          |       |                                            | Well Type               | SINGLE CASED SCREENED |
|                                                                                    | WELL DESIGN CONSTRUCTION                                                                                                                                                                 |       |                                            |                         |                       |
|                                                                                    | Casing #1 Diameter: 4.00 inch Interval: 0.00 to 3.64 ft.<br>Type :                                                                                                                       |       |                                            |                         |                       |
|                                                                                    | Stick Up Inner Casing: 1.66 ft. Protective Casing: 2.03 ft.                                                                                                                              |       |                                            |                         |                       |
|                                                                                    | Casing Grout: CEMENT/BENT Interval: 0.00 to 0.20 ft.                                                                                                                                     |       |                                            |                         |                       |
|                                                                                    | Seal Type: BENTONITE SLURRY Interval: 0.20 to 1.64 ft.                                                                                                                                   |       |                                            |                         |                       |
|                                                                                    | Sand Pack Type : NO. 1 MORIE Interval: 1.64 to 19.00 ft.<br>Grain Size : UNIFORM Median Diameter:<br>Screen Diameter: 4.00 Interval: 3.64 to 18.18 ft.<br>Type : PVC Slots: 0.010 inches |       |                                            |                         |                       |
| 0.20                                                                               | BN                                                                                                                                                                                       | 8.82  | Silt Trap Interval: 18.18 to 18.64 ft.     |                         |                       |
| 1.64                                                                               | SP                                                                                                                                                                                       | 7.38  | Backfill Type : Interval: 0.00 to 0.00 ft. |                         |                       |
| WELL DEVELOPMENT                                                                   |                                                                                                                                                                                          |       |                                            |                         |                       |
| 3.64                                                                               | SC                                                                                                                                                                                       | 5.38  | Date                                       | 12/20/94                |                       |
|                                                                                    |                                                                                                                                                                                          |       | Method                                     | Surge block/overpumping |                       |
|                                                                                    |                                                                                                                                                                                          |       | Yield                                      | 1 gpm                   |                       |
|                                                                                    |                                                                                                                                                                                          |       | Purged Volume                              | 90 gal                  |                       |
| COMMENTS                                                                           |                                                                                                                                                                                          |       |                                            |                         |                       |
| 18.18                                                                              | BS                                                                                                                                                                                       | -9.16 | TC = Top of Casing                         | SP = Top Sand Pack      |                       |
|                                                                                    |                                                                                                                                                                                          |       | GS = Ground Surface                        | SC = Top Screen         |                       |
|                                                                                    |                                                                                                                                                                                          |       | BN = Top Seal                              | BS = Bottom Screen      |                       |
| 19.00                                                                              | TD                                                                                                                                                                                       | -9.98 | TD = Total Depth                           |                         |                       |
| Additional Comments:                                                               |                                                                                                                                                                                          |       |                                            |                         |                       |
| Depths are measured below ground surface.                                          |                                                                                                                                                                                          |       |                                            |                         |                       |

**NOTE:** Well Diagram not to Scale

Elevations are feet above mean sea level

# Borehole Log

Roy F. WESTON, Inc.

PROJECT : FT. MONMOUTH  
 SITE NAME : MAIN POST AREA 4  
 BORING ID : MP4-MW8  
 NORTHING : 0.0000 estimated  
 EASTING : 0.0000 estimated  
 ELEVATION : 9.020 surveyed

TOTAL DEPTH : 19.00  
 LOGGER : P. THOMAS  
 DRILLING COMPANY : J.C. ANDERSON  
 DRILLING RIG : CME-55  
 DATE STARTED : 12/13/94  
 DATE COMPLETED : 12/13/94

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION                     | COLOR          | STRENGTH | MOISTURE | BLOW COUNT | FIELD INSTRUMENT READING | COMMENTS                                                              |
|-----------|-------|----------|------------|------------------------------------|----------------|----------|----------|------------|--------------------------|-----------------------------------------------------------------------|
|           |       |          | 20         | Organic soil, OL/OH                | BROWN          | SFT      | MST      | 3          | HNU 0.0                  | Topsoil grass roots/plant fragments.                                  |
| 8         | 1     |          |            | No Sample Recovered                |                |          |          | 8          |                          |                                                                       |
| 7         | 2     |          | 27         | Silt with sand, ML                 | RED BROWN      | SFT      | MST      | 8          | HNU 0.0                  | Appears to be fill - bulk fragments 2-2.5' bgs (red)- rough drilling. |
| 6         | 3     |          |            | No Sample Recovered                |                |          |          | 18         |                          |                                                                       |
| 5         | 4     |          | 32         | Silt with sand, ML                 | DK BRN/GRN BRN | SFT      | MST      | 17         | HNU 0.0                  | Appears to be fill. Plant root fragments.                             |
| 4         | 5     |          |            | Well-graded gravel, GW             | BROWN          | LSE      | DRY      | 5          | HNU 0.0                  | Fill?                                                                 |
| 3         | 6     |          | 45         | Poorly-graded gravel with sand, GP | BROWN-BEIGE    | LSE      | SAT      | 16         | HNU 0.0                  | Uncertain - fill?                                                     |
| 2         | 7     |          |            | No Sample Recovered                |                |          |          | 16         |                          |                                                                       |
| 1         | 8     |          |            | No Sample Recovered                |                |          |          | 7          |                          |                                                                       |
| 0         | 9     |          |            | No Sample Recovered                |                |          |          | 9          | HNU 0.0                  | Slough from above intervals.                                          |
| -1        | 10    |          | 95         | Silty gravel with sand, GM         | BROWN          |          |          | 4          | HNU 0.0                  |                                                                       |

# Borehole Log

Roy F. WESTON, Inc.

|             |                  |                    |               |
|-------------|------------------|--------------------|---------------|
| PROJECT :   | FT. MONMOUTH     | TOTAL DEPTH :      | 19.00         |
| SITE NAME : | MAIN POST AREA 4 | LOGGER :           | P. THOMAS     |
| BORING ID : | MP4-MW8          | DRILLING COMPANY : | J.C. ANDERSON |
| NORTHING :  | 0.0000 estimated | DRILLING RIG :     | CME-55        |
| EASTING :   | 0.0000 estimated | DATE STARTED :     | 12/13/94      |
| ELEVATION : | 9.020 surveyed   | DATE COMPLETED :   | 12/13/94      |

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION                                | COLOR    | STRENGTH | MOISTURE | BLOW COUNT | FIELD INSTRUMENT READING | COMMENTS                                                   |
|-----------|-------|----------|------------|-----------------------------------------------|----------|----------|----------|------------|--------------------------|------------------------------------------------------------|
|           |       |          |            | Silty gravel with sand, GM                    | BROWN    |          |          |            | HNU 0.0                  |                                                            |
| -1        | 11    |          |            | Organic soil, OL/OH                           | BROWN    | SFT      | MST      |            | HNU 0.0                  | Plant/grass/root fragment                                  |
| -2        | 12    |          | 70         | No Sample Recovered<br>Organic soil, OL/OH    | BROWN    | SFT      | MST      | 3          | HNU 0.0                  |                                                            |
| -3        | 13    |          |            | Sandy silt, ML                                | GRAY     | SFT      | MST      |            | HNU 0.0                  |                                                            |
|           |       |          |            | Silty sand, SM                                | LT GREEN | LSE      | WET      |            | HNU 0.0                  |                                                            |
| -4        | 14    |          | 10         | No Sample Recovered<br>Well-graded gravel, GW | GRAY     | LSE      | SAT      | 6          | HNU 0.0                  | Appears to be crushed concrete.                            |
| -5        | 15    |          |            |                                               |          |          |          |            |                          |                                                            |
| -6        | 16    |          | 50         | Silty sand, SM                                | GREEN    | SFT      | SAT      | 5          | HNU 0.0                  | Sand and gravel (sat); gravel is rounded - augered to 19'. |
| -7        | 17    |          |            | No Sample Recovered                           |          |          |          |            |                          |                                                            |
| -8        | 18    |          |            | Interval Not Sampled                          |          |          |          |            |                          | Interval not sampled - set well at 19' bgs.                |
| -9        | 19    |          |            |                                               |          |          |          |            |                          |                                                            |
| -10       | 20    |          |            |                                               |          |          |          |            |                          |                                                            |

| BOREHOLE<br>/WELL ID | SMP<br>NUM | LTH<br>NUM | LITHOLOGY INT.<br>(FT BGS) | SAMPLING<br>METHOD | SIZE<br>GRAVEL | GRAVEL<br>PCT. | SIZE<br>SAND | SAND<br>PCT | SILT<br>PCT | CLAY<br>PCT | ORGANIC<br>PCT | ROCK<br>TYPE | PLAST | SORT | STRENGTH | MOISTURE | STRAT<br>UNIT |
|----------------------|------------|------------|----------------------------|--------------------|----------------|----------------|--------------|-------------|-------------|-------------|----------------|--------------|-------|------|----------|----------|---------------|
| MP4-MW8              | 1          | 1          | 0.00                       | 0.40               | SPS            |                | 0            | F           | 10          | 35          | 5              | 50           | NON   | NA   | SFT      | MST      |               |
| MP4-MW8              | 1          | 2          | 0.40                       | 2.00               | SPS            |                | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| MP4-MW8              | 2          | 1          | 2.00                       | 2.50               | SPS            |                | 5            | F           | 15          | 55          | 20             | 5            | NON   | POR  | SFT      | MST      |               |
| MP4-MW8              | 2          | 2          | 2.50                       | 4.00               | SPS            |                | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| MP4-MW8              | 3          | 1          | 4.00                       | 4.50               | SPS            | F              | 5            |             | 15          | 70          | 10             | 0            | NON   | MOD  | SFT      | MST      |               |
| MP4-MW8              | 3          | 2          | 4.50                       | 4.65               | SPS            | MCF            | 90           | C           | 10          | 0           | 0              | 0            | NA    | POR  | LSE      | DRY      |               |
| MP4-MW8              | 3          | 3          | 4.65                       | 6.00               | SPS            |                | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| MP4-MW8              | 4          | 1          | 6.00                       | 6.90               | SPS            | MFC            | 80           | M           | 20          | 0           | 0              | 0            | NA    | MOD  | LSE      | SAT      |               |
| MP4-MW8              | 4          | 2          | 6.90                       | 8.00               | SPS            |                | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| MP4-MW8              | 5          | 1          | 8.00                       | 10.00              | SPS            |                | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| MP4-MW8              | 6          | 1          | 10.00                      | 10.50              | SPS            | MFC            | 45           | M           | 40          | 15          | 0              | 0            |       |      |          |          |               |
| MP4-MW8              | 6          | 2          | 10.50                      | 11.90              | SPS            |                | 0            | F           | 10          | 25          | 5              | 60           | NON   | POR  | SFT      | MST      |               |
| MP4-MW8              | 6          | 3          | 11.90                      | 12.00              | SPS            |                | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| MP4-MW8              | 7          | 1          | 12.00                      | 12.60              | SPS            |                | 0            | F           | 10          | 25          | 5              | 60           | NON   | POR  | SFT      | MST      |               |
| MP4-MW8              | 7          | 2          | 12.60                      | 13.10              | SPS            |                | 0            | F           | 30          | 50          | 10             | 10           | LOW   | MOD  | SFT      | MST      |               |
| MP4-MW8              | 7          | 3          | 13.10                      | 13.40              | SPS            |                | 0            | MF          | 70          | 25          | 5              | 0            | NON   | MOD  | LSE      | WET      |               |
| MP4-MW8              | 7          | 4          | 13.40                      | 14.00              | SPS            |                | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| MP4-MW8              | 8          | 1          | 14.00                      | 14.20              | SPS            | MCF            | 90           | CM          | 10          | 0           | 0              | 0            | NA    | POR  | LSE      | SAT      |               |
| MP4-MW8              | 8          | 2          | 14.20                      | 16.00              | SPS            |                | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| MP4-MW8              | 9          | 1          | 16.00                      | 17.00              | SPS            | F              | 10           | MCF         | 60          | 20          | 10             | 0            | NON   | MOD  | SFT      | SAT      |               |
| MP4-MW8              | 9          | 2          | 17.00                      | 18.00              | SPS            |                | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| MP4-MW8              | 10         | 1          | 18.00                      | 19.00              | NS             |                | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |



**Borehole Location Data****Roy F. WESTON, Inc.**

BOREHOLE ID : MP4-MW9  
BEGIN DATE : 12/13/94

PROJECT NAME: FT. MONMOUTH  
END DATE : 12/13/94

LOGGER/COMPANY : P. THOMAS

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : 0

TOTAL DEPTH : 24.00

DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 12.25

INTERVAL: 0.00 ft. to 24.00 ft. BGS

METHOD : HSA

FLUID : NONE

BOREHOLE DIAMETER #2: 2.00

INTERVAL: 22.00 ft. to 24.00 ft. BGS

METHOD : SPLIT SPOON SAMPLER

FLUID : NONE

BOREHOLE DIAMETER #3:

INTERVAL:

METHOD :

FLUID :

DRILLING COMPANY : J.C. ANDERSON

DRILLER : STEVE BURGER

DRILL RIG TYPE : CME-55

|                        | ESTIMATED | SURVEYED |
|------------------------|-----------|----------|
| SURFACE<br>ELEVATION : | 0.000     | 7.770    |

N. COORDINATE : 0.0000

E. COORDINATE : 0.0000

WELL PERMIT.....(Y)es (N)o: N PERMIT # : NJ 29 32573

HOLE ABANDONED... (Y)es (N)o: N

WELL INSTALLED... (Y)es (N)o: Y

WELL CLUSTER.....(Y)es (N)o: N No. OF WELLS : 0

WELL NEST.....(Y)es (N)o: N No. OF WELLS : 0

PUMPS INSTALLED... (Y)es (N)o: N

PURGE :

DEPTH

0.00

SAMPLE :

0.00

**BOREHOLE TESTING**

BOREHOLE GEOPHYSICS..... (Y)es (N)o: N

SLUG TESTS..... (Y)es (N)o: N

PACKER TESTS..... (Y)es (N)o: N

PUMPING TESTS..... (Y)es (N)o: N

**COMMENTS :**

Latitude-North: 40 deg 18' 44.7"

Longitude-West: 74 deg 03' 02.6"

# Well Completion Summary

Roy F. WESTON, Inc.

**CLIENT** FT. MONMOUTH  
**SITE NAME** MAIN POST AREA 4

**DRILLING FIRM** J.C. ANDERSON  
**INSPECTOR** P. THOMAS

**WELL ID** MP4 - MW9  
**START DATE** 12/13/94  
**COMPLETION DATE** 12/13/94

## WATER LEVELS

|                                                                                                     |                                 | DEPTH |                                                              | ELEV.                                                                                       | DRILLING SUMMARY                  |  |
|-----------------------------------------------------------------------------------------------------|---------------------------------|-------|--------------------------------------------------------------|---------------------------------------------------------------------------------------------|-----------------------------------|--|
| <p>Protective Casing<br/>4.00 inch</p>                                                              | 1.92                            | TC    | 9.69                                                         | <b>Driller</b>                                                                              | STEVE BURGER                      |  |
|                                                                                                     | 0.00                            | GS    | 7.77                                                         | <b>Drilling Fluid</b>                                                                       | NONE                              |  |
|                                                                                                     |                                 |       |                                                              | <b>Well Type</b>                                                                            | SINGLE CASSED SCREENED            |  |
|                                                                                                     | <b>WELL DESIGN CONSTRUCTION</b> |       |                                                              |                                                                                             |                                   |  |
|                                                                                                     |                                 |       |                                                              | <b>Casing #1 Diameter:</b> 4.00 inch<br><b>Type :</b> PVC SCH 40                            | <b>Interval:</b> 0.00 to 7.76 ft. |  |
|                                                                                                     |                                 |       | <b>Stick Up Inner Casing:</b> 1.92 ft.                       | <b>Protective Casing:</b> 2.14 ft.                                                          |                                   |  |
|                                                                                                     |                                 |       | <b>Casing Grout:</b> CEMENT/BENT                             | <b>Interval:</b> 0.00 to 3.19 ft.                                                           |                                   |  |
|                                                                                                     |                                 |       | <b>Seal Type:</b> BENTONITE SLURRY                           | <b>Interval:</b> 3.19 to 5.69 ft.                                                           |                                   |  |
|                                                                                                     |                                 |       | <b>Sand Pack Type :</b> NO. 1<br><b>Grain Size :</b> UNIFORM | <b>Interval:</b> 5.69 to 24.00 ft.                                                          |                                   |  |
|                                                                                                     |                                 |       | <b>Screen Diameter:</b> 4.00<br><b>Type :</b> PVC            | <b>Median Diameter:</b><br><b>Interval:</b> 7.69 to 22.23 ft.<br><b>Slots:</b> 0.010 inches |                                   |  |
|                                                                                                     | 3.19                            | BN    | 4.58                                                         | <b>Silt Trap Interval:</b> 22.23 to 22.69 ft.                                               |                                   |  |
|                                                                                                     | 5.69                            | SP    | 2.08                                                         | <b>Backfill Type :</b> NO. 1 SAND<br><b>Interval:</b> 22.69 to 24.00 ft.                    |                                   |  |
| <b>WELL DEVELOPMENT</b>                                                                             |                                 |       |                                                              |                                                                                             |                                   |  |
|                                                                                                     | 7.69                            | SC    | 0.08                                                         | <b>Date</b> 12/20/94                                                                        |                                   |  |
|                                                                                                     |                                 |       |                                                              | <b>Method</b> Surge block/overpumping                                                       |                                   |  |
|                                                                                                     |                                 |       |                                                              | <b>Yield</b> 5 gpm                                                                          | <b>Purged Volume</b> 550 gal      |  |
| <b>COMMENTS</b>                                                                                     |                                 |       |                                                              |                                                                                             |                                   |  |
|                                                                                                     | 22.23                           | BS    | -14.46                                                       | TC = Top of Casing                                                                          | SP = Top Sand Pack                |  |
|                                                                                                     |                                 |       |                                                              | GS = Ground Surface                                                                         | SC = Top Screen                   |  |
|                                                                                                     |                                 |       |                                                              | BN = Top Seal                                                                               | BS = Bottom Screen                |  |
|                                                                                                     | 22.00                           | TD    | -14.23                                                       | TD = Total Depth                                                                            |                                   |  |
|                                                                                                     |                                 |       |                                                              |                                                                                             |                                   |  |
| <b>Additional Comments:</b><br>Depths are measured below ground surface. Purge volume not measured. |                                 |       |                                                              |                                                                                             |                                   |  |

NOTE: Well Diagram not to Scale

Elevations are feet above mean sea level

# Borehole Log

Roy F. WESTON, Inc.

|             |                  |                    |               |
|-------------|------------------|--------------------|---------------|
| PROJECT :   | FT. MONMOUTH     | TOTAL DEPTH :      | 24.00         |
| SITE NAME : | MAIN POST AREA 4 | LOGGER :           | P. THOMAS     |
| BORING ID : | MP4-MW9          | DRILLING COMPANY : | J.C. ANDERSON |
| NORTHING :  | 0.0000 estimated | DRILLING RIG :     | CME-55        |
| EASTING :   | 0.0000 estimated | DATE STARTED :     | 12/13/94      |
| ELEVATION : | 7.770 surveyed   | DATE COMPLETED :   | 12/13/94      |

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION                   | COLOR      | STRENGTH | MOISTURE | BLOW COUNT           | FIELD INSTRUMENT READING | COMMENTS                                                                                          |
|-----------|-------|----------|------------|----------------------------------|------------|----------|----------|----------------------|--------------------------|---------------------------------------------------------------------------------------------------|
|           |       |          | 50         | Silt with sand, ML               | BROWN      | SFT      | MST      | 8<br>4<br>8          | HNU 0.0                  | 0-0.4 (topsoil), highly organic with plant/root fragments; 0.4-1.0 bgs - s. silt with tr. gravel  |
| 6         | 1     |          |            | No Sample Recovered              |            |          |          |                      |                          |                                                                                                   |
| 5         | 2     |          | 25         | Silty sand with gravel, SM       | BROWN      | LSE      | DRY      | 12<br>13<br>17<br>16 | HNU 0.0                  | 2-2.2 (same lithology as above interval).                                                         |
|           |       |          |            | No Sample Recovered              |            |          |          |                      |                          |                                                                                                   |
| 4         | 3     |          |            |                                  |            |          |          |                      |                          |                                                                                                   |
| 3         | 4     |          |            | No Sample Recovered              |            |          |          | 100<br>0<br>0<br>0   |                          | 100/5" Split spoon refusal; no recovery.                                                          |
| 2         | 5     |          |            |                                  |            |          |          |                      |                          |                                                                                                   |
| 1         | 6     |          |            | Interval Not Sampled             |            |          |          |                      |                          | Interval not sampled due to refusal, redrilled at new location; resumed samp. 8-10 bgs, aug. 6-8' |
| 0         | 7     |          |            |                                  |            |          |          |                      |                          |                                                                                                   |
| -1        | 8     |          | 100        | Sandy silt, ML                   | GREEN GRAY | LSE      | SAT      | 4<br>4<br>4          | HNU 0.0                  | Perched water (?)                                                                                 |
|           |       |          |            | Not Classified - Incomplete Data | BROWN      | SFT      | MST      | 5                    | HNU 0.0                  | Grass roots/fragments throughout interval.                                                        |
| -2        | 9     |          |            | Sandy silt, ML                   | GRAY       | SFT      | MST      |                      | HNU 0.0                  | Silt organic.                                                                                     |
| -3        | 10    |          | 30         | Silt with sand, ML               | DK GRAY    | SFT      | MST      | 6<br>4<br>5<br>6     | HNU 0.0                  |                                                                                                   |

# Borehole Log

Roy F. WESTON, Inc.

|             |                  |                    |               |
|-------------|------------------|--------------------|---------------|
| PROJECT :   | FT. MONMOUTH     | TOTAL DEPTH :      | 24.00         |
| SITE NAME : | MAIN POST AREA 4 | LOGGER :           | P. THOMAS     |
| BORING ID : | MP4-MW9          | DRILLING COMPANY : | J.C. ANDERSON |
| NORTHING :  | 0.0000 estimated | DRILLING RIG :     | CME-55        |
| EASTING :   | 0.0000 estimated | DATE STARTED :     | 12/13/94      |
| ELEVATION : | 7.770 surveyed   | DATE COMPLETED :   | 12/13/94      |

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION             | COLOR        | STRENGTH | MOISTURE | BLOW COUNT  | FIELD INSTRUMENT READING | COMMENTS                                                                                                |
|-----------|-------|----------|------------|----------------------------|--------------|----------|----------|-------------|--------------------------|---------------------------------------------------------------------------------------------------------|
|           |       |          |            | Silt with sand, ML         | DK GRAY      | SFT      | MST      |             | HNU 0.0                  |                                                                                                         |
|           |       |          |            | No Sample Recovered        |              |          |          |             |                          |                                                                                                         |
| -3        | 11    |          |            |                            |              |          |          |             |                          |                                                                                                         |
| -4        | 12    |          | 70         | Elastic silt, MH           | GRAY         | SFT      | MST      | 2<br>3<br>4 | HNU 0.0                  | Moist to wet with more clay.                                                                            |
| -5        | 13    |          |            | Silty gravel with sand, GM | GRAY         | NA       | SAT      |             | HNU 0.0                  |                                                                                                         |
|           |       |          |            | No Sample Recovered        |              |          |          |             |                          |                                                                                                         |
| -6        | 14    |          | 40         | Silty sand, SM             | GRAY         | SFT      | SAT      | 3<br>4      | HNU 0.0                  |                                                                                                         |
|           |       |          |            | Silt with sand, ML         | BROWN        | SFT      | WET      | 4           | HNU 0.0                  | 16.7-16.8 same as 16-16.4<br>The c.s. silt appears to be softer, possibly due to sat, moisture content. |
| -7        | 15    |          |            | No Sample Recovered        |              |          |          |             |                          |                                                                                                         |
| -8        | 16    |          | 15         | Silty sand, SM             | GRAY GREEN   | LSE      | MST      | 4<br>5<br>6 | HNU 4.0                  |                                                                                                         |
|           |       |          |            | No Sample Recovered        |              |          |          |             |                          |                                                                                                         |
| -9        | 17    |          |            |                            |              |          |          |             |                          |                                                                                                         |
| -10       | 18    |          |            | No Sample Recovered        |              |          |          |             | HNU 0.0                  | 2' sat slough from above intervals.                                                                     |
| -11       | 19    |          |            |                            |              |          |          |             |                          |                                                                                                         |
| -12       | 20    |          | 20         | Silty sand, SM             | FOREST GREEN | LSE      | MST      | 3<br>4      | HNU 5.0                  |                                                                                                         |

# Borehole Log

Roy F. WESTON, Inc.

|           |                    |                  |                 |
|-----------|--------------------|------------------|-----------------|
| PROJECT   | : FT. MONMOUTH     | TOTAL DEPTH      | : 24.00         |
| SITE NAME | : MAIN POST AREA 4 | LOGGER           | : P. THOMAS     |
| BORING ID | : MP4-MW9          | DRILLING COMPANY | : J.C. ANDERSON |
| NORTHING  | : 0.0000 estimated | DRILLING RIG     | : CME-55        |
| EASTING   | : 0.0000 estimated | DATE STARTED     | : 12/13/94      |
| ELEVATION | : 7.770 surveyed   | DATE COMPLETED   | : 12/13/94      |

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION      | COLOR        | STRENGTH | MOISTURE | BLOW COUNT | FIELD INSTRUMENT READING | COMMENTS                                                                      |
|-----------|-------|----------|------------|---------------------|--------------|----------|----------|------------|--------------------------|-------------------------------------------------------------------------------|
|           |       |          |            | Silty sand, SM      | FOREST GREEN | LSE      | MST      |            | HNU 5.0                  |                                                                               |
|           |       |          |            | No Sample Recovered |              |          |          |            |                          |                                                                               |
| -13       | 21    |          |            |                     |              |          |          |            |                          |                                                                               |
| -14       | 22    |          | 55         | Sandy silt, ML      | FOREST GREEN | SFT      | SAT      | 3          | HNU 4.5                  | Slt more compact; SAT in parts tight medium. Set well at 22' bgs. TD=24' bgs. |
|           |       |          |            | No Sample Recovered |              |          |          | 4          |                          |                                                                               |
| -15       | 23    |          |            |                     |              |          |          | 5          |                          |                                                                               |
| -16       | 24    |          |            |                     |              |          |          |            |                          |                                                                               |
| -17       | 25    |          |            |                     |              |          |          |            |                          |                                                                               |
| -18       | 26    |          |            |                     |              |          |          |            |                          |                                                                               |
| -19       | 27    |          |            |                     |              |          |          |            |                          |                                                                               |
| -20       | 28    |          |            |                     |              |          |          |            |                          |                                                                               |
| -21       | 29    |          |            |                     |              |          |          |            |                          |                                                                               |
| -22       | 30    |          |            |                     |              |          |          |            |                          |                                                                               |

| BOREHOLE<br>/WELL ID | SMP<br>NUM | LTH<br>NUM | LITHOLOGY INT.<br>(FT BGS) | SAMPLING<br>METHOD | SIZE<br>GRAVEL | GRAVEL<br>PCT. | SIZE<br>SAND | SAND<br>PCT | SILT<br>PCT | CLAY<br>PCT | ORGANIC<br>PCT | ROCK<br>TYPE | PLAST | SORT | STRENGTH | MOISTURE | STRAT<br>UNIT |
|----------------------|------------|------------|----------------------------|--------------------|----------------|----------------|--------------|-------------|-------------|-------------|----------------|--------------|-------|------|----------|----------|---------------|
| MP4-MW9              | 1          | 1          | 0.00                       | 1.00               | SPS            | F              | 5            | F           | 15          | 30          | 15             | 35           | NON   | MOD  | SFT      | MST      |               |
| MP4-MW9              | 1          | 2          | 1.00                       | 2.00               | SPS            |                | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| MP4-MW9              | 2          | 1          | 2.00                       | 2.50               | SPS            | FM             | 35           | MCF         | 45          | 20          | 0              | 0            | NA    | POR  | LSE      | DRY      |               |
| MP4-MW9              | 2          | 2          | 2.50                       | 4.00               | SPS            |                | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| MP4-MW9              | 3          | 1          | 4.00                       | 6.00               | SPS            |                | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| MP4-MW9              | 4          | 1          | 6.00                       | 8.00               | NS             |                | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| MP4-MW9              | 5          | 1          | 8.00                       | 8.40               | SPS            |                | 0            | FM          | 30          | 45          | 25             | 0            | LOW   | MOD  | LSE      | SAT      |               |
| MP4-MW9              | 5          | 2          | 8.40                       | 8.80               | SPS            |                | 0            | F           | 15          | 20          | 5              | 60           | NA    | POR  | SFT      | MST      |               |
| MP4-MW9              | 5          | 3          | 8.80                       | 10.00              | SPS            |                | 0            | F           | 30          | 50          | 10             | 10           | LOW   | MOD  | SFT      | MST      |               |
| MP4-MW9              | 6          | 1          | 10.00                      | 10.60              | SPS            |                | 0            | F           | 20          | 50          | 20             | 10           | LOW   | MOD  | SFT      | MST      |               |
| MP4-MW9              | 6          | 2          | 10.60                      | 12.00              | SPS            |                | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| MP4-MW9              | 7          | 1          | 12.00                      | 13.00              | SPS            |                | 0            | F           | 10          | 50          | 40             | 0            | HGH   | MOD  | SFT      | MST      |               |
| MP4-MW9              | 7          | 2          | 13.00                      | 13.40              | SPS            | MFC            | 45           | MFC         | 35          | 15          | 5              | 0            | NA    | POR  | NA       | SAT      |               |
| MP4-MW9              | 7          | 3          | 13.40                      | 14.00              | SPS            |                | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| MP4-MW9              | 8          | 1          | 14.00                      | 14.40              | SPS            | FM             | 10           | FM          | 45          | 35          | 10             | 0            | LOW   | POR  | SFT      | SAT      |               |
| MP4-MW9              | 8          | 2          | 14.40                      | 14.80              | SPS            |                | 0            | F           | 20          | 30          | 10             | 40           | LOW   | POR  | SFT      | WET      |               |
| MP4-MW9              | 8          | 3          | 14.80                      | 16.00              | SPS            |                | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| MP4-MW9              | 9          | 1          | 16.00                      | 16.30              | SPS            |                | 0            | MFC         | 75          | 20          | 5              | 0            | NON   | MOD  | LSE      | MST      |               |
| MP4-MW9              | 9          | 2          | 16.30                      | 18.00              | SPS            |                | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| MP4-MW9              | 10         | 1          | 18.00                      | 20.00              | SPS            |                | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| MP4-MW9              | 11         | 1          | 20.00                      | 20.40              | SPS            |                | 0            | MF          | 50          | 45          | 5              | 0            | NA    | WEL  | LSE      | MST      |               |
| MP4-MW9              | 11         | 2          | 20.40                      | 22.00              | SPS            |                | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| MP4-MW9              | 12         | 1          | 22.00                      | 23.10              | SPS            |                | 0            | MF          | 35          | 45          | 20             | 0            | LOW   | WEL  | SFT      | SAT      |               |
| MP4-MW9              | 12         | 2          | 23.10                      | 24.00              | SPS            |                | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |

**Borehole Location Data****Roy F. WESTON, Inc.**

BOREHOLE ID : MP5-MW10  
BEGIN DATE : 12/14/94

PROJECT NAME: FT. MONMOUTH  
END DATE : 12/14/94

LOGGER/COMPANY : P. THOMAS

BOREHOLE COMPLETED IN (<0>verburden <B>edrock) : 0

TOTAL DEPTH : 16.00

DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 12.25

INTERVAL: 0.00 ft. to 16.00 ft. BGS

METHOD : HSA

FLUID : NONE

BOREHOLE DIAMETER #2:

INTERVAL:

METHOD :

FLUID :

BOREHOLE DIAMETER #3:

INTERVAL:

METHOD :

FLUID :

DRILLING COMPANY : J.C. ANDERSON, INC.

DRILLER : STEVE BURGER

DRILL RIG TYPE : MOBILE B-57

|                                 | ESTIMATED              | SURVEYED |
|---------------------------------|------------------------|----------|
| SURFACE<br>ELEVATION :          | 0.000                  | 5.130    |
| N. COORDINATE :                 | 0.0000                 |          |
| E. COORDINATE :                 | 0.0000                 |          |
| WELL PERMIT.....(Y)es (N)o: N   | PERMIT # : NJ 29 32574 |          |
| HOLE ABANDONED... (Y)es (N)o: N |                        |          |
| WELL INSTALLED... (Y)es (N)o: Y |                        |          |
| WELL CLUSTER.....(Y)es (N)o: N  | No. OF WELLS : 0       |          |
| WELL NEST..... (Y)es (N)o: N    | No. OF WELLS : 0       |          |
| PUMPS INSTALLED.. (Y)es (N)o: N | TYPE                   | DEPTH    |
|                                 | PURGE :                | 0.00     |
|                                 | SAMPLE :               | 0.00     |

**BOREHOLE TESTING**

BOREHOLE GEOPHYSICS.....(Y)es (N)o: N

SLUG TESTS.....(Y)es (N)o: N

PACKER TESTS.....(Y)es (N)o: N

PUMPING TESTS.....(Y)es (N)o: N

**COMMENTS :**

Latitude-North: 40 deg 18' 48.6"

Longitude-West: 74 deg 03' 03.7"

# Well Completion Summary

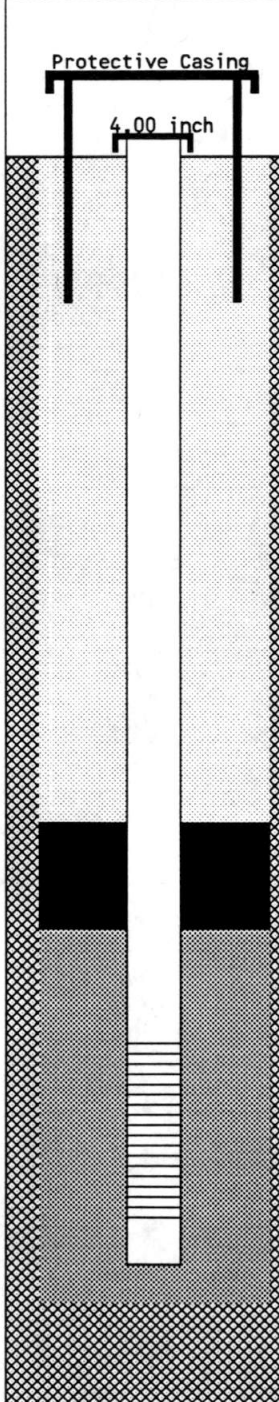
Roy F. WESTON, Inc.

**CLIENT** FT. MONMOUTH  
**SITE NAME** MAIN POST AREA 5

**DRILLING FIRM** J.C. ANDERSON  
**INSPECTOR** P. THOMAS

**WELL ID** MP5-MW10  
**START DATE** 12/14/94  
**COMPLETION DATE** 12/14/94

## WATER LEVELS

|                                                                                                                                          |                                                                                                                               |       |                                                                                                                 |                            |                       |
|------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|-------|-----------------------------------------------------------------------------------------------------------------|----------------------------|-----------------------|
|                                                        | <b>DEPTH</b>                                                                                                                  |       | <b>ELEV.</b>                                                                                                    | <b>DRILLING SUMMARY</b>    |                       |
|                                                                                                                                          | 1.78                                                                                                                          | TC    | 6.91                                                                                                            | <b>Driller</b>             | STEVE BURGER          |
|                                                                                                                                          | 0.00                                                                                                                          | GS    | 5.13                                                                                                            | <b>Drilling Fluid</b>      | NONE                  |
|                                                                                                                                          |                                                                                                                               |       |                                                                                                                 | <b>Well Type</b>           | SINGLE CASED SCREENED |
|                                                                                                                                          | <b>WELL DESIGN CONSTRUCTION</b>                                                                                               |       |                                                                                                                 |                            |                       |
|                                                                                                                                          | <b>Casing #1 Diameter:</b> 4.00 inch <b>Interval:</b> 0.00 to 5.00 ft.<br><b>Type :</b> PVC SCH 40                            |       |                                                                                                                 |                            |                       |
|                                                                                                                                          | <b>Stick Up Inner Casing:</b> 1.78 ft. <b>Protective Casing:</b> 2.40 ft.                                                     |       |                                                                                                                 |                            |                       |
|                                                                                                                                          | <b>Casing Grout:</b> CEMENT/BENT <b>Interval:</b> 0.00 to 0.80 ft.                                                            |       |                                                                                                                 |                            |                       |
|                                                                                                                                          | <b>Seal Type:</b> BENTONITE SLURRY <b>Interval:</b> 0.80 to 3.00 ft.                                                          |       |                                                                                                                 |                            |                       |
|                                                                                                                                          | <b>Sand Pack Type :</b> NO. 1 MORIE <b>Interval:</b> 3.00 to 15.00 ft.<br><b>Grain Size :</b> UNIFORM <b>Median Diameter:</b> |       |                                                                                                                 |                            |                       |
|                                                                                                                                          |                                                                                                                               |       | <b>Screen Diameter:</b> 4.00 <b>Interval:</b> 5.00 to 14.54 ft.<br><b>Type :</b> PVC <b>Slots:</b> 0.010 inches |                            |                       |
| 0.80                                                                                                                                     | BN                                                                                                                            | 4.33  | <b>Silt Trap Interval:</b> 14.54 to 15.00 ft.                                                                   |                            |                       |
| 3.00                                                                                                                                     | SP                                                                                                                            | 2.13  | <b>Backfill Type :</b> <b>Interval:</b> 0.00 to 0.00 ft.                                                        |                            |                       |
| <b>WELL DEVELOPMENT</b>                                                                                                                  |                                                                                                                               |       |                                                                                                                 |                            |                       |
| 5.00                                                                                                                                     | SC                                                                                                                            | 0.13  | <b>Date</b>                                                                                                     | 12/14/94                   |                       |
|                                                                                                                                          |                                                                                                                               |       | <b>Method</b>                                                                                                   | Surge blocking, bailing    |                       |
|                                                                                                                                          |                                                                                                                               |       | <b>Yield</b>                                                                                                    | 5 gpm <b>Purged Volume</b> |                       |
| <b>COMMENTS</b>                                                                                                                          |                                                                                                                               |       |                                                                                                                 |                            |                       |
| TC = Top of Casing      SP = Top Sand Pack  = Grout |                                                                                                                               |       |                                                                                                                 |                            |                       |
| GS = Ground Surface      SC = Top Screen  = Seal    |                                                                                                                               |       |                                                                                                                 |                            |                       |
| BN = Top Seal      BS = Bottom Screen  = Sand Pack  |                                                                                                                               |       |                                                                                                                 |                            |                       |
| TD = Total Depth  = Formation                       |                                                                                                                               |       |                                                                                                                 |                            |                       |
| 14.54                                                                                                                                    | BS                                                                                                                            | -9.41 | <b>Additional Comments:</b>                                                                                     |                            |                       |
| 15.00                                                                                                                                    | TD                                                                                                                            | -9.87 | Depths are measured below ground surface.                                                                       |                            |                       |

**NOTE:** Well Diagram not to Scale

Elevations are feet above mean sea level



# Borehole Log

Roy F. WESTON, Inc.

|           |                    |                  |                       |
|-----------|--------------------|------------------|-----------------------|
| PROJECT   | : FT. MONMOUTH     | TOTAL DEPTH      | : 16.00               |
| SITE NAME | : MAIN POST AREA 5 | LOGGER           | : P. THOMAS           |
| BORING ID | : MP5-MW10         | DRILLING COMPANY | : J.C. ANDERSON, INC. |
| NORTHING  | : 0.0000 estimated | DRILLING RIG     | : MOBILE B-57         |
| EASTING   | : 0.0000 estimated | DATE STARTED     | : 12/14/94            |
| ELEVATION | : 5.130 surveyed   | DATE COMPLETED   | : 12/14/94            |

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION             | COLOR       | STRENGTH | MOISTURE | BLOW COUNT | FIELD INSTRUMENT READING | COMMENTS                                                                                     |
|-----------|-------|----------|------------|----------------------------|-------------|----------|----------|------------|--------------------------|----------------------------------------------------------------------------------------------|
|           |       |          | 60         | Sandy silt, ML             | BROWN       | SFT      | MST      | 1          | HNU 0.0                  | Topsoil                                                                                      |
|           |       |          |            | Silty sand with gravel, SM |             |          |          | 2          | HNU 0.0                  | VAR orange-brown, black, charcoal fragments.                                                 |
| 4         | 1     |          |            | No Sample Recovered        |             |          |          | 3          |                          |                                                                                              |
| 3         | 2     |          | 30         | FILL                       |             | LSE      | MST      | 2          | HNU 0.0                  | Glass fragments/plastic cuttings, VAR orange brown-black 2-2.4 2.4-2.6 blk sand.             |
|           |       |          |            | No Sample Recovered        |             |          |          | 1          |                          |                                                                                              |
| 2         | 3     |          |            |                            |             |          |          |            |                          |                                                                                              |
| 1         | 4     |          |            | No Sample Recovered        |             |          |          |            | HNU 0.0                  | No recovery. Slough is SAT.                                                                  |
| 0         | 5     |          |            |                            |             |          |          |            |                          |                                                                                              |
| -1        | 6     |          |            | No Sample Recovered        |             |          |          | 1          | HNU 0.0                  | Spoon sunk under weight of hammer. No recovery. SAT silty clay (organic rich) in spoon shoe. |
|           |       |          |            |                            |             |          |          | 1          |                          |                                                                                              |
| -2        | 7     |          |            |                            |             |          |          | 1          |                          |                                                                                              |
|           |       |          |            |                            |             |          |          | 1          |                          |                                                                                              |
| -3        | 8     |          | 20         | Silty sand, SM             | GREEN (DKK) | LSE      | SAT      | 1          | HNU 0.1                  | Coarsens downward.                                                                           |
|           |       |          |            | No Sample Recovered        |             |          |          | 1          |                          |                                                                                              |
| -4        | 9     |          |            |                            |             |          |          | 1          |                          |                                                                                              |
|           |       |          |            |                            |             |          |          | 1          |                          |                                                                                              |
| -5        | 10    |          | 95         | Silty sand with gravel, SM | DK GREEN    | LSE      | SAT      | 1          | HNU 1.0                  | Gravel at 10.4 bgs.                                                                          |

# Borehole Log

Roy F. WESTON, Inc.

|             |                  |                    |                     |
|-------------|------------------|--------------------|---------------------|
| PROJECT :   | FT. MONMOUTH     | TOTAL DEPTH :      | 16.00               |
| SITE NAME : | MAIN POST AREA 5 | LOGGER :           | P. THOMAS           |
| BORING ID : | MP5-MW10         | DRILLING COMPANY : | J.C. ANDERSON, INC. |
| NORTHING :  | 0.0000 estimated | DRILLING RIG :     | MOBILE B-57         |
| EASTING :   | 0.0000 estimated | DATE STARTED :     | 12/14/94            |
| ELEVATION : | 5.130 surveyed   | DATE COMPLETED :   | 12/14/94            |

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION                         | COLOR         | STRENGTH | MOISTURE | BLOW COUNT       | FIELD INSTRUMENT READING | COMMENTS                                                      |
|-----------|-------|----------|------------|----------------------------------------|---------------|----------|----------|------------------|--------------------------|---------------------------------------------------------------|
|           |       |          |            | Silty sand with gravel, SM             | DK GREEN      | LSE      | SAT      |                  | HNU 1.0                  | Gravel at 10.4 bgs.                                           |
|           |       |          |            | Sandy elastic silt, MH                 | BROWN (GREEN) | SFT      | SAT      |                  | HNU 1.0                  | Interbedded sand and clayey silt lamina - trace organics.     |
| -5        | 11    |          |            | Silty sand, SM                         | DK GREEN      | LSE      | SAT      |                  | HNU 1.0                  |                                                               |
| -6        | 12    |          | 80         | No Sample Recovered<br>Clayey sand, SC | DK GREEN      | SFT      | SAT      | 2<br>1<br>1      | HNU 1.0                  | Silt/clayey sand, qtz gravel.                                 |
| -7        | 13    |          |            | No Sample Recovered                    |               |          |          |                  |                          |                                                               |
| -8        | 14    |          | 90         | Silty sand, SM                         | DK GREEN      | SFT      | SAT      | 2<br>1<br>2<br>1 | HNU 0.1                  | Silt less clayey than above interval.                         |
| -9        | 15    |          |            | Sandy silt, ML                         | BROWN-GREEN   | SFT      | SAT      |                  | HNU 0.1                  | Interbedded sand with silt/clay laminae. Set well at 15' bgs. |
| -10       | 16    |          |            | No Sample Recovered                    |               |          |          |                  |                          |                                                               |
| -11       | 17    |          |            |                                        |               |          |          |                  |                          |                                                               |
| -12       | 18    |          |            |                                        |               |          |          |                  |                          |                                                               |
| -13       | 19    |          |            |                                        |               |          |          |                  |                          |                                                               |
| -14       | 20    |          |            |                                        |               |          |          |                  |                          |                                                               |

| BOREHOLE<br>/WELL ID | SMP<br>NUM | LTH<br>NUM | LITHOLOGY INT.<br>(FT BGS) | SAMPLING<br>METHOD | SIZE<br>GRAVEL PCT. | GRAVEL<br>PCT. | SIZE<br>SAND | SAND<br>PCT | SILT<br>PCT | CLAY<br>PCT | ORGANIC<br>PCT | ROCK<br>TYPE | PLAST | SORT | STRENGTH | MOISTURE | STRAT<br>UNIT |
|----------------------|------------|------------|----------------------------|--------------------|---------------------|----------------|--------------|-------------|-------------|-------------|----------------|--------------|-------|------|----------|----------|---------------|
| MP5-MW10             | 1          | 1          | 0.00                       | SPS                |                     | 0              | F            | 35          | 40          | 5           | 20             |              | NON   | MOD  | SFT      | MST      |               |
| MP5-MW10             | 1          | 2          | 0.50                       | SPS                | F                   | 15             | MCF          | 50          | 30          | 5           | 0              |              |       | POR  |          |          |               |
| MP5-MW10             | 1          | 3          | 1.20                       | SPS                |                     | 0              |              | 0           | 0           | 0           | 0              |              |       |      |          |          |               |
| MP5-MW10             | 2          | 1          | 2.00                       | SPS                | F                   | 5              | MCF          | 55          | 35          | 5           | 0              |              | NON   | POR  | LSE      | MST      |               |
| MP5-MW10             | 2          | 2          | 2.60                       | SPS                |                     | 0              |              | 0           | 0           | 0           | 0              |              |       |      |          |          |               |
| MP5-MW10             | 3          | 1          | 4.00                       | SPS                |                     | 0              |              | 0           | 0           | 0           | 0              |              |       |      |          |          |               |
| MP5-MW10             | 4          | 1          | 6.00                       | SPS                |                     | 0              |              | 0           | 0           | 0           | 0              |              |       |      |          |          |               |
| MP5-MW10             | 5          | 1          | 8.00                       | SPS                | M                   | 5              | MCF          | 70          | 20          | 5           | 0              |              | NON   | MOD  | LSE      | SAT      |               |
| MP5-MW10             | 5          | 2          | 8.40                       | SPS                |                     | 0              |              | 0           | 0           | 0           | 0              |              |       |      |          |          |               |
| MP5-MW10             | 6          | 1          | 10.00                      | SPS                | FM                  | 15             | FCM          | 70          | 10          | 5           | 0              |              | NON   | POR  | LSE      | SAT      |               |
| MP5-MW10             | 6          | 2          | 10.50                      | SPS                |                     | 0              | MCF          | 45          | 35          | 18          | 2              |              | MOD   | POR  | SFT      | SAT      |               |
| MP5-MW10             | 6          | 3          | 11.30                      | SPS                | F                   | 5              | MCF          | 50          | 35          | 10          | 0              |              | NON   | POR  | LSE      | SAT      |               |
| MP5-MW10             | 6          | 4          | 11.90                      | SPS                |                     | 0              |              | 0           | 0           | 0           | 0              |              |       |      |          |          |               |
| MP5-MW10             | 7          | 1          | 12.00                      | SPS                | F                   | 10             | MCF          | 60          | 10          | 20          | 0              |              | LOW   | MOD  | SFT      | SAT      |               |
| MP5-MW10             | 7          | 2          | 13.60                      | SPS                |                     | 0              |              | 0           | 0           | 0           | 0              |              |       |      |          |          |               |
| MP5-MW10             | 8          | 1          | 14.00                      | SPS                | F                   | 10             | MCF          | 60          | 20          | 10          | 0              |              | LOW   | MOD  | SFT      | SAT      |               |
| MP5-MW10             | 8          | 2          | 14.95                      | SPS                | F                   | 5              | MCF          | 35          | 30          | 20          | 10             |              | LOW   | POR  | SFT      | SAT      |               |
| MP5-MW10             | 8          | 3          | 15.80                      | SPS                |                     | 0              |              | 0           | 0           | 0           | 0              |              |       |      |          |          |               |

**Borehole Location Data****Roy F. WESTON, Inc.**

BOREHOLE ID : MP5-MW11  
BEGIN DATE : 12/15/94

PROJECT NAME: FT. MONMOUTH  
END DATE : 12/15/94

LOGGER/COMPANY : P. THOMAS

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : 0

TOTAL DEPTH : 15.00

DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 12.25

INTERVAL: 0.00 ft. to 15.00 ft. BGS

METHOD : HSA

FLUID : NONE

BOREHOLE DIAMETER #2:

INTERVAL:

METHOD :

FLUID :

BOREHOLE DIAMETER #3:

INTERVAL:

METHOD :

FLUID :

DRILLING COMPANY : J.C. ANDERSON

DRILLER : STEVE BURGER

DRILL RIG TYPE : MOBILE B-57

|                        | ESTIMATED | SURVEYED |
|------------------------|-----------|----------|
| SURFACE<br>ELEVATION : | 0.000     | 9.770    |
| N. COORDINATE :        | 0.0000    |          |
| E. COORDINATE :        | 0.0000    |          |

WELL PERMIT.....(Y)es (N)o: N PERMIT # : NJ 29 32575

HOLE ABANDONED... (Y)es (N)o: N

WELL INSTALLED... (Y)es (N)o: Y

WELL CLUSTER.....(Y)es (N)o: N No. OF WELLS : 0

WELL NEST.....(Y)es (N)o: N No. OF WELLS : 0

PUMPS INSTALLED.. (Y)es (N)o: N TYPE

DEPTH

PURGE : 0.00

SAMPLE : 0.00

**BOREHOLE TESTING**

BOREHOLE GEOPHYSICS.....(Y)es (N)o: N

SLUG TESTS.....(Y)es (N)o: N

PACKER TESTS.....(Y)es (N)o: N

PUMPING TESTS.....(Y)es (N)o: N

**COMMENTS :**

Latitude-North: 40 deg 18' 50.9"

Longitude-West: 74 deg 03' 01.8"

# Well Completion Summary

Roy F. WESTON, Inc.

**CLIENT** FT. MONMOUTH  
**SITE NAME** MAIN POST AREA 5

**DRILLING FIRM** J.C. ANDERSON  
**INSPECTOR** P. THOMAS

**WELL ID** MP5-MW11  
**START DATE** 12/15/94  
**COMPLETION DATE** 12/15/94

## WATER LEVELS

|                                                                                 |                                 | DEPTH |    | ELEV. | DRILLING SUMMARY              |                              |
|---------------------------------------------------------------------------------|---------------------------------|-------|----|-------|-------------------------------|------------------------------|
| <p>Protective Casing<br/>4.00 inch</p>                                          |                                 | 1.93  | TC | 11.70 | <b>Driller</b>                | STEVE BURGER                 |
|                                                                                 |                                 | 0.00  | GS | 9.77  | <b>Drilling Fluid</b>         | NONE                         |
|                                                                                 |                                 |       |    |       | <b>Well Type</b>              | SINGLE CASED SCREENED        |
|                                                                                 | <b>WELL DESIGN CONSTRUCTION</b> |       |    |       |                               |                              |
|                                                                                 |                                 |       |    |       | <b>Casing #1 Diameter:</b>    | 4.00 inch                    |
|                                                                                 |                                 |       |    |       | <b>Interval:</b>              | 0.00 to 5.00 ft.             |
|                                                                                 |                                 |       |    |       | <b>Type :</b>                 | PVC SCH 40                   |
|                                                                                 |                                 |       |    |       | <b>Stick Up Inner Casing:</b> | 1.93 ft.                     |
|                                                                                 |                                 |       |    |       | <b>Protective Casing:</b>     | 2.44 ft.                     |
|                                                                                 |                                 |       |    |       | <b>Casing Grout:</b>          | CEMT/BENT                    |
|                                                                                 |                                 |       |    |       | <b>Interval:</b>              | 0.00 to 0.80 ft.             |
|                                                                                 |                                 |       |    |       | <b>Seal Type:</b>             | BENTONITE SLURRY             |
|                                                                                 |                                 |       |    |       | <b>Interval:</b>              | 0.80 to 3.00 ft.             |
|                                                                                 |                                 |       |    |       | <b>Sand Pack Type :</b>       | NO. 1 SLURRY MORIE           |
|                                                                                 |                                 |       |    |       | <b>Grain Size :</b>           | UNIFORM                      |
|                                                                                 |                                 |       |    |       | <b>Interval:</b>              | 3.00 to 5.00 ft.             |
|                                                                                 |                                 |       |    |       | <b>Screen Diameter:</b>       | 4.00                         |
|                                                                                 |                                 |       |    |       | <b>Interval:</b>              | 5.00 to 14.54 ft.            |
|                                                                                 |                                 |       |    |       | <b>Type :</b>                 | PVC                          |
|                                                                                 |                                 |       |    |       | <b>Slots:</b>                 | 0.010 inches                 |
|                                                                                 |                                 | 0.80  | BN | 8.97  | <b>Silt Trap Interval:</b>    | 14.85 to 15.00 ft.           |
|                                                                                 |                                 |       |    |       | <b>Backfill Type :</b>        | Interval: 14.54 to 15.00 ft. |
|                                                                                 |                                 | 3.00  | SP | 6.77  |                               |                              |
| <b>WELL DEVELOPMENT</b>                                                         |                                 |       |    |       |                               |                              |
|                                                                                 |                                 | 5.00  | SC | 4.77  | <b>Date</b>                   | 12/15/94                     |
|                                                                                 |                                 |       |    |       | <b>Method</b>                 | Surge blocking/overpump      |
|                                                                                 |                                 |       |    |       | <b>Yield</b>                  | 1.5 gpm                      |
|                                                                                 |                                 |       |    |       | <b>Purged Volume</b>          | 128 gal                      |
| <b>COMMENTS</b>                                                                 |                                 |       |    |       |                               |                              |
|                                                                                 |                                 | 14.54 | BS | -4.77 | TC = Top of Casing            | SP = Top Sand Pack           |
|                                                                                 |                                 |       |    |       | GS = Ground Surface           | SC = Top Screen              |
|                                                                                 |                                 |       |    |       | BN = Top Seal                 | BS = Bottom Screen           |
|                                                                                 |                                 | 15.00 | TD | -5.23 | TD = Total Depth              |                              |
| <p><b>Additional Comments:</b></p> <p>Depths measured below ground surface.</p> |                                 |       |    |       |                               |                              |

NOTE: Well Diagram not to Scale

Elevations are feet above mean sea level

# Borehole Log

Roy F. WESTON, Inc.

|           |                    |                  |                 |
|-----------|--------------------|------------------|-----------------|
| PROJECT   | : FT. MONMOUTH     | TOTAL DEPTH      | : 15.00         |
| SITE NAME | : MAIN POST AREA 5 | LOGGER           | : P. THOMAS     |
| BORING ID | : MP5-MW11         | DRILLING COMPANY | : J.C. ANDERSON |
| NORTHING  | : 0.0000 estimated | DRILLING RIG     | : MOBILE B-57   |
| EASTING   | : 0.0000 estimated | DATE STARTED     | : 12/15/94      |
| ELEVATION | : 9.770 surveyed   | DATE COMPLETED   | : 12/15/94      |

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION                      | COLOR           | STRENGTH | MOISTURE | BLOW COUNT | FIELD INSTRUMENT READING | COMMENTS                                                           |
|-----------|-------|----------|------------|-------------------------------------|-----------------|----------|----------|------------|--------------------------|--------------------------------------------------------------------|
|           |       |          | 70         | Silt with sand, ML                  | BROWN           | SFT      | MST      | 11         | HNU 0.0                  | Topsoil                                                            |
|           |       |          |            | Silty sand, SM                      | ORANGE          | LSE      | MST      | 10         | HNU 0.0                  |                                                                    |
| 8         | 1     |          |            | Sandy silt, ML                      | GRAY-BROWN      | SFT      | MST      |            | HNU 0.0                  | Black mottles; charcoal fragments (?); qtz gravel silt. micaceous. |
|           |       |          |            | No Sample Recovered                 |                 |          |          |            |                          |                                                                    |
| 7         | 2     |          | 50         | Poorly graded sand with silt, SP-SM | BROWN           | LSE      | MST      | 11         | HNU 0.0                  |                                                                    |
|           |       |          |            |                                     |                 |          |          | 11         |                          |                                                                    |
|           |       |          |            |                                     |                 |          |          | 11         |                          |                                                                    |
| 6         | 3     |          |            | No Sample Recovered                 |                 |          |          | 10         |                          |                                                                    |
|           |       |          |            |                                     |                 |          |          |            |                          |                                                                    |
| 5         | 4     |          | 60         | Poorly graded sand with silt, SP-SM | OLIVE BROWN     | LSE      | SAT      | 6          | HNU 0.0                  |                                                                    |
|           |       |          |            |                                     |                 |          |          | 7          |                          |                                                                    |
|           |       |          |            |                                     |                 |          |          | 10         |                          |                                                                    |
|           |       |          |            | No Sample Recovered                 |                 |          |          | 10         |                          |                                                                    |
| 4         | 5     |          |            |                                     |                 |          |          |            |                          |                                                                    |
|           |       |          |            |                                     |                 |          |          |            |                          |                                                                    |
| 3         | 6     |          | 85         | Silty sand, SM                      | OLIVE BROWN/GRN | LSE      | SAT      | 8          | HNU 0.0                  |                                                                    |
|           |       |          |            |                                     |                 |          |          | 6          |                          |                                                                    |
|           |       |          |            |                                     |                 |          |          | 10         |                          |                                                                    |
|           |       |          |            | Sandy silt, ML                      | GREEN/BROWN     | SFT      | SAT      | 17         | HNU 0.0                  |                                                                    |
| 2         | 7     |          |            |                                     |                 |          |          |            |                          |                                                                    |
|           |       |          |            | No Sample Recovered                 |                 |          |          |            |                          |                                                                    |
| 1         | 8     |          | 90         | Sandy silt, ML                      | GREEN/BROWN     | SFT      | SAT      | 10         | HNU 0.0                  | Sand lenses (mottles) SAT clay mst/wet.                            |
|           |       |          |            |                                     |                 |          |          | 15         |                          |                                                                    |
|           |       |          |            |                                     |                 |          |          | 18         |                          |                                                                    |
|           |       |          |            |                                     |                 |          |          | 20         |                          |                                                                    |
| 0         | 9     |          |            |                                     |                 |          |          |            |                          |                                                                    |
|           |       |          |            | No Sample Recovered                 |                 |          |          |            |                          |                                                                    |
| -1        | 10    |          | 80         | Silty sand, SM                      | BROWN/GREEN     | LSE      | SAT      | 10         | HNU 0.0                  | Interbedded sand - silt/clay laminae.                              |
|           |       |          |            |                                     |                 |          |          | 15         |                          |                                                                    |
|           |       |          |            |                                     |                 |          |          | 17         |                          |                                                                    |

# Borehole Log

Roy F. WESTON, Inc.

|           |                    |                  |                 |
|-----------|--------------------|------------------|-----------------|
| PROJECT   | : FT. MONMOUTH     | TOTAL DEPTH      | : 15.00         |
| SITE NAME | : MAIN POST AREA 5 | LOGGER           | : P. THOMAS     |
| BORING ID | : MP5-MW11         | DRILLING COMPANY | : J.C. ANDERSON |
| NORTHING  | : 0.0000 estimated | DRILLING RIG     | : MOBILE B-57   |
| EASTING   | : 0.0000 estimated | DATE STARTED     | : 12/15/94      |
| ELEVATION | : 9.770 surveyed   | DATE COMPLETED   | : 12/15/94      |

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION       | COLOR       | STRENGTH | MOISTURE | BLOW COUNT           | FIELD INSTRUMENT READING | COMMENTS                                   |
|-----------|-------|----------|------------|----------------------|-------------|----------|----------|----------------------|--------------------------|--------------------------------------------|
| -1        | 11    |          |            | Silty sand, SM       | BROWN/GREEN | LSE      | SAT      |                      | HNU 0.0                  | Interbedded sand - silt/clay laminae.      |
| -2        | 12    |          | 95         | No Sample Recovered  |             |          |          |                      |                          |                                            |
| -3        | 13    |          |            | Silty sand, SM       | BROWN/GREEN | LSE      | SAT      | 15<br>25<br>35<br>32 | HNU 0.0                  | Interbedded sand/silt-clay laminae.        |
| -4        | 14    |          |            | Silty sand, SM       | GREEN/BROWN | SFT      | WET      |                      | HNU 0.0                  | Sharp content - compact (set) material.    |
| -5        | 15    |          |            | No Sample Recovered  |             |          |          |                      |                          | Interval not sampled; set well at 15' bgs. |
| -6        | 16    |          |            | Interval Not Sampled |             |          |          |                      |                          |                                            |
| -7        | 17    |          |            |                      |             |          |          |                      |                          |                                            |
| -8        | 18    |          |            |                      |             |          |          |                      |                          |                                            |
| -9        | 19    |          |            |                      |             |          |          |                      |                          |                                            |
| -10       | 20    |          |            |                      |             |          |          |                      |                          |                                            |

| BOREHOLE<br>/WELL ID | SMP<br>NUM | LTH<br>NUM | LITHOLOGY INT.<br>(FT BGS) | SAMPLING<br>METHOD | SIZE<br>GRAVEL | GRAVEL<br>PCT. | SIZE<br>SAND | SAND<br>PCT | SILT<br>PCT | CLAY<br>PCT | ORGANIC<br>PCT | ROCK<br>TYPE | PLAST | SORT | STRENGTH | MOISTURE | STRAT<br>UNIT |
|----------------------|------------|------------|----------------------------|--------------------|----------------|----------------|--------------|-------------|-------------|-------------|----------------|--------------|-------|------|----------|----------|---------------|
| MP5-MW11             | 1          | 1          | 0.00                       | 0.20               | SPS            | 0              | F            | 15          | 40          | 5           | 40             |              | NON   | POR  | SFT      | MST      |               |
| MP5-MW11             | 1          | 2          | 0.20                       | 0.90               | SPS            | 0              | MFC          | 80          | 15          | 0           | 0              |              | NA    | MOD  | LSE      | MST      |               |
| MP5-MW11             | 1          | 3          | 0.90                       | 1.40               | SPS            | 5              | F            | 25          | 60          | 10          | 0              |              | LOW   | POR  | SFT      | MST      |               |
| MP5-MW11             | 1          | 4          | 1.40                       | 2.00               | SPS            | 0              |              | 0           | 0           | 0           | 0              |              |       |      |          |          |               |
| MP5-MW11             | 2          | 1          | 2.00                       | 3.00               | SPS            | 10             | MFC          | 80          | 10          | 0           | 0              |              | NA    | MOD  | LSE      | MST      |               |
| MP5-MW11             | 2          | 2          | 3.00                       | 4.00               | SPS            | 0              |              | 0           | 0           | 0           | 0              |              |       |      |          |          |               |
| MP5-MW11             | 3          | 1          | 4.00                       | 5.20               | SPS            | 5              | MFC          | 85          | 10          | 0           | 0              |              | NA    | MOD  | LSE      | SAT      |               |
| MP5-MW11             | 3          | 2          | 5.20                       | 6.00               | SPS            | 0              |              | 0           | 0           | 0           | 0              |              |       |      |          |          |               |
| MP5-MW11             | 4          | 1          | 6.00                       | 6.70               | SPS            | 5              | MFC          | 85          | 15          | 0           | 0              |              | NA    | MOD  | LSE      | SAT      |               |
| MP5-MW11             | 4          | 2          | 6.70                       | 7.70               | SPS            | 0              | F            | 40          | 35          | 25          | 0              |              | LOW   | WEL  | SFT      | SAT      |               |
| MP5-MW11             | 4          | 3          | 7.70                       | 8.00               | SPS            | 0              |              | 0           | 0           | 0           | 0              |              |       |      |          |          |               |
| MP5-MW11             | 5          | 1          | 8.00                       | 9.80               | SPS            | 0              | F            | 40          | 35          | 25          | 0              |              | LOW   | WEL  | SFT      | SAT      |               |
| MP5-MW11             | 5          | 2          | 9.80                       | 10.00              | SPS            | 0              |              | 0           | 0           | 0           | 0              |              |       |      |          |          |               |
| MP5-MW11             | 6          | 1          | 10.00                      | 11.60              | SPS            | 0              | MFC          | 50          | 35          | 15          | 0              |              | NON   | MOD  | LSE      | SAT      |               |
| MP5-MW11             | 6          | 2          | 11.60                      | 12.00              | SPS            | 0              |              | 0           | 0           | 0           | 0              |              |       |      |          |          |               |
| MP5-MW11             | 7          | 1          | 12.00                      | 13.50              | SPS            | 0              | MFC          | 65          | 25          | 10          | 0              |              | NON   | MOD  | LSE      | SAT      |               |
| MP5-MW11             | 7          | 2          | 13.50                      | 13.90              | SPS            | 0              | MF           | 55          | 30          | 15          | 0              |              | NON   | MOD  | SFT      | WET      |               |
| MP5-MW11             | 7          | 3          | 13.90                      | 14.00              | SPS            | 0              |              | 0           | 0           | 0           | 0              |              |       |      |          |          |               |
| MP5-MW11             | 8          | 1          | 14.00                      | 15.00              | NS             | 0              |              | 0           | 0           | 0           | 0              |              |       |      |          |          |               |



**Borehole Location Data****Roy F. WESTON, Inc.**

BOREHOLE ID : MP8-MW12  
BEGIN DATE : 12/20/94

PROJECT NAME: FT. MONMOUTH  
END DATE : 12/20/94

LOGGER/COMPANY : P. THOMAS

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : O

TOTAL DEPTH : 16.00

DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 12.25

INTERVAL: 0.00 ft. to 16.00 ft. BGS

METHOD : HSA

FLUID : NONE

BOREHOLE DIAMETER #2:

INTERVAL:

METHOD :

FLUID :

BOREHOLE DIAMETER #3:

INTERVAL:

METHOD :

FLUID :

DRILLING COMPANY : J.C. ANDERSON

DRILLER : STEVE BURGER

DRILL RIG TYPE : MOBILE B-57

|                        | ESTIMATED | SURVEYED |
|------------------------|-----------|----------|
| SURFACE<br>ELEVATION : | 0.000     | 13.470   |
| N. COORDINATE :        | 0.0000    |          |
| E. COORDINATE :        | 0.0000    |          |

WELL PERMIT.....(Y)es (N)o: N PERMIT # : NJ 29 32560

HOLE ABANDONED... (Y)es (N)o: N

WELL INSTALLED... (Y)es (N)o: Y

WELL CLUSTER.....(Y)es (N)o: N No. OF WELLS : 0

WELL NEST.....(Y)es (N)o: N No. OF WELLS : 0

PUMPS INSTALLED.. (Y)es (N)o: N TYPE

DEPTH

PURGE : 0.00

SAMPLE : 0.00

**BOREHOLE TESTING**

BOREHOLE GEOPHYSICS.....(Y)es (N)o: N

SLUG TESTS.....(Y)es (N)o: N

PACKER TESTS.....(Y)es (N)o: N

PUMPING TESTS.....(Y)es (N)o: N

**COMMENTS :**

Latitude-North: 40 deg 18' 52.9"

Longitude-West: 74 deg 02' 58.3"

# Well Completion Summary

Roy F. WESTON, Inc.

**CLIENT** FT. MONMOUTH  
**SITE NAME** MAIN POST 8

**DRILLING FIRM** J.C. ANDERSON  
**INSPECTOR** P. THOMAS

**WELL ID** MP8-MW12  
**START DATE** 12/20/94  
**COMPLETION DATE** 12/20/94

## WATER LEVELS

|                                                                                    |                                 | DEPTH |    | ELEV.                                                                 | DRILLING SUMMARY                                                 |                                     |
|------------------------------------------------------------------------------------|---------------------------------|-------|----|-----------------------------------------------------------------------|------------------------------------------------------------------|-------------------------------------|
| <p>Protective Casing<br/>4.00 inch</p>                                             |                                 | 1.73  | TC | 15.20                                                                 | <b>Driller</b>                                                   | STEVE BURGER                        |
|                                                                                    |                                 | 0.00  | GS | 13.47                                                                 | <b>Drilling Fluid</b>                                            | NONE                                |
|                                                                                    |                                 |       |    |                                                                       | <b>Well Type</b>                                                 | SINGLE CASED SCREENED               |
|                                                                                    | <b>WELL DESIGN CONSTRUCTION</b> |       |    |                                                                       |                                                                  |                                     |
|                                                                                    |                                 |       |    |                                                                       | <b>Casing #1 Diameter:</b> 4.00 inch<br><b>Type:</b> PVC SCH 40  | <b>Interval:</b> 0.00 to 5.00 ft.   |
|                                                                                    |                                 |       |    | <b>Stick Up Inner Casing:</b> 1.73 ft.                                | <b>Protective Casing:</b> 2.41 ft.                               |                                     |
|                                                                                    |                                 |       |    | <b>Casing Grout:</b> CEMENT/BENT                                      | <b>Interval:</b> 0.00 to 0.50 ft.                                |                                     |
|                                                                                    |                                 |       |    | <b>Seal Type:</b> BENTONITE SLURRY                                    | <b>Interval:</b> 0.50 to 3.00 ft.                                |                                     |
|                                                                                    |                                 |       |    | <b>Sand Pack Type:</b> NO. 1 SAND MORIE<br><b>Grain Size:</b> UNIFORM | <b>Interval:</b> 3.00 to 5.00 ft.                                |                                     |
|                                                                                    |                                 |       |    | <b>Screen Diameter:</b> 4.00<br><b>Type:</b>                          | <b>Interval:</b> 5.00 to 14.54 ft.<br><b>Slots:</b> 0.010 inches |                                     |
|                                                                                    |                                 | 0.50  | BN | 12.97                                                                 | <b>Silt Trap Interval:</b> 14.54 to 15.00 ft.                    |                                     |
|                                                                                    |                                 | 3.00  | SP | 10.47                                                                 | <b>Backfill Type:</b> SAND NO. 1                                 | <b>Interval:</b> 15.00 to 16.00 ft. |
| <b>WELL DEVELOPMENT</b>                                                            |                                 |       |    |                                                                       |                                                                  |                                     |
|                                                                                    |                                 | 5.00  | SC | 8.47                                                                  | <b>Date</b> 01/05/95                                             |                                     |
|                                                                                    |                                 |       |    |                                                                       | <b>Method</b> Bailing/overpumping                                |                                     |
|                                                                                    |                                 |       |    |                                                                       | <b>Yield</b> 3.5 gpm                                             | <b>Purged Volume</b> 115 gal        |
| <b>COMMENTS</b>                                                                    |                                 |       |    |                                                                       |                                                                  |                                     |
|                                                                                    |                                 | 14.54 | BS | -1.07                                                                 | TC = Top of Casing                                               | SP = Top Sand Pack                  |
|                                                                                    |                                 |       |    |                                                                       | GS = Ground Surface                                              | SC = Top Screen                     |
|                                                                                    |                                 |       |    |                                                                       | BN = Top Seal                                                    | BS = Bottom Screen                  |
|                                                                                    |                                 | 15.00 | TD | -1.53                                                                 | TD = Total Depth                                                 |                                     |
| <p><b>Additional Comments:</b></p> <p>Depths are measured below ground surface</p> |                                 |       |    |                                                                       |                                                                  |                                     |

NOTE: Well Diagram not to Scale

Elevations are feet above mean sea level

# Borehole Log

Roy F. WESTON, Inc.

PROJECT : FT. MONMOUTH  
 SITE NAME : MAIN POST 8  
 BORING ID : MP8-MW12  
 NORTHING : 0.0000 estimated  
 EASTING : 0.0000 estimated  
 ELEVATION : 13.470 surveyed

TOTAL DEPTH : 16.00  
 LOGGER : P. THOMAS  
 DRILLING COMPANY : J.C. ANDERSON  
 DRILLING RIG : MOBILE B-57  
 DATE STARTED : 12/20/94  
 DATE COMPLETED : 12/20/94

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION                      | COLOR        | STRENGTH | MOISTURE | BLOW COUNT | FIELD INSTRUMENT READING | COMMENTS                                       |
|-----------|-------|----------|------------|-------------------------------------|--------------|----------|----------|------------|--------------------------|------------------------------------------------|
|           |       |          | 30         | Silt with sand, ML                  | BROWN        | SFT      | MST      | 3          | HNU 0.0                  | Topsoil.                                       |
| 12        | 1     |          |            | No Sample Recovered                 |              |          |          |            |                          |                                                |
| 11        | 2     |          | 45         | Silty sand, SM                      | BROWN        | SFT      | MST      | 5          | HNU 0.0                  |                                                |
| 10        | 3     |          |            | Poorly graded sand, SP              | BROWN (FE)   | LSE      | DRY      | 9          | HNU 0.0                  |                                                |
|           |       |          |            | No Sample Recovered                 |              |          |          |            |                          |                                                |
| 9         | 4     |          | 55         | Poorly graded sand, SP              | ORANGE BROWN | LSE      | DRY      | 7          | HNU 0.0                  | Trace qtz. gravel 4.9-5.1                      |
| 8         | 5     |          |            | No Sample Recovered                 |              |          |          | 10         |                          |                                                |
| 7         | 6     |          | 55         | Poorly graded sand, SP              |              | LSE      | WET      | 10         | HNU 0.0                  | Wet at 7.0' bgs.                               |
| 6         | 7     |          |            | No Sample Recovered                 |              |          |          | 15         |                          |                                                |
| 5         | 8     |          | 70         | Poorly graded sand with silt, SP-SM | RED BROWN    | LSE      | SAT      | 12         | HNU 0.0                  |                                                |
|           |       |          |            | Poorly graded sand, SP              | GREEN        | LSE      | SAT      | 16         | HNU 0.0                  | Trace qtz. gravel.                             |
| 4         | 9     |          |            | Poorly graded gravel, GP            | FE BROWN     | LSE      | SAT      | 19         | HNU 0.0                  |                                                |
|           |       |          |            | No Sample Recovered                 |              |          |          |            |                          |                                                |
| 3         | 10    |          | 27         | Poorly graded sand with silt, SP-SM | FE BROWN     | LSE      | SAT      | 23         | HNU 0.0                  | Trace quartz gravel, fining downward sequence. |

# Borehole Log

Roy F. WESTON, Inc.

PROJECT : FT. MONMOUTH  
 SITE NAME : MAIN POST 8  
 BORING ID : MP8-MW12  
 NORTHING : 0.0000 estimated  
 EASTING : 0.0000 estimated  
 ELEVATION : 13.470 surveyed

TOTAL DEPTH : 16.00  
 LOGGER : P. THOMAS  
 DRILLING COMPANY : J.C. ANDERSON  
 DRILLING RIG : MOBILE B-57  
 DATE STARTED : 12/20/94  
 DATE COMPLETED : 12/20/94

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION                      | COLOR         | STRENGTH | MOISTURE | BLOW COUNT           | FIELD INSTRUMENT READING | COMMENTS                                       |
|-----------|-------|----------|------------|-------------------------------------|---------------|----------|----------|----------------------|--------------------------|------------------------------------------------|
|           |       |          |            | Poorly graded sand with silt, SP-SM | FE BROWN      | LSE      | SAT      |                      | HNU 0.0                  | Trace quartz gravel, fining downward sequence. |
|           |       |          |            | No Sample Recovered                 |               |          |          |                      |                          |                                                |
| 2         | 11    |          |            |                                     |               |          |          |                      |                          |                                                |
| 1         | 12    |          | 75         | Poorly graded sand, SP              | BROWN (OLIVE) | LSE      | SAT      | 18<br>23<br>19       | HNU 0.0                  | Note: 12.5-12.65 blk/brn var. lamina.          |
| 0         | 13    |          |            | No Sample Recovered                 |               |          |          |                      |                          |                                                |
| -1        | 14    |          | 47         | Poorly graded sand with silt, SP-SM | FE BROWN      | LSE      | SAT      | 20<br>23<br>21<br>25 | HNU 0.0                  | Trace qtz. gravel.                             |
|           |       |          |            | Elastic silt with sand, MH          | GREEN (DK)    | SFT      | WET      |                      | HNU 0.0                  | Fines downward into clay, well set at 15' bgs. |
| -2        | 15    |          |            | No Sample Recovered                 |               |          |          |                      |                          |                                                |
| -3        | 16    |          |            |                                     |               |          |          |                      |                          |                                                |
| -4        | 17    |          |            |                                     |               |          |          |                      |                          |                                                |
| -5        | 18    |          |            |                                     |               |          |          |                      |                          |                                                |
| -6        | 19    |          |            |                                     |               |          |          |                      |                          |                                                |
| -7        | 20    |          |            |                                     |               |          |          |                      |                          |                                                |

| BOREHOLE<br>/WELL ID | SMP<br>NUM | LTH<br>NUM | LITHOLOGY<br>(FT BGS) | INT.<br>METHOD | SAMPLING<br>METHOD | SIZE<br>GRAVEL PCT. | GRAVEL<br>PCT. | SIZE<br>SAND | SAND<br>PCT | SILT<br>PCT | CLAY<br>PCT | ORGANIC<br>PCT | ROCK<br>TYPE | PLAST | SORT | STRENGTH | MOISTURE | STRAT<br>UNIT |
|----------------------|------------|------------|-----------------------|----------------|--------------------|---------------------|----------------|--------------|-------------|-------------|-------------|----------------|--------------|-------|------|----------|----------|---------------|
| MP8-MW12             | 1          | 1          | 0.00                  | 0.60           | SPS                |                     | 0              | FM           | 25          | 40          | 5           | 30             |              | NON   | MOD  | SFT      | MST      |               |
| MP8-MW12             | 1          | 2          | 0.60                  | 2.00           | SPS                |                     | 0              |              | 0           | 0           | 0           | 0              |              |       |      |          |          |               |
| MP8-MW12             | 2          | 1          | 2.00                  | 2.70           | SPS                |                     | 0              | FM           | 50          | 40          | 10          | 0              |              | NON   | MOD  | SFT      | MST      |               |
| MP8-MW12             | 2          | 2          | 2.70                  | 2.90           | SPS                |                     | 0              | M            | 95          | 5           | 0           | 0              |              | NON   | WEL  | LSE      | DRY      |               |
| MP8-MW12             | 2          | 3          | 2.90                  | 4.00           | SPS                |                     | 0              |              | 0           | 0           | 0           | 0              |              |       |      |          |          |               |
| MP8-MW12             | 3          | 1          | 4.00                  | 5.10           | SPS                |                     | 5              | MF           | 90          | 5           | 0           | 0              |              | NA    | WEL  | LSE      | DRY      |               |
| MP8-MW12             | 3          | 2          | 5.10                  | 6.00           | SPS                |                     | 0              |              | 0           | 0           | 0           | 0              |              |       |      |          |          |               |
| MP8-MW12             | 4          | 1          | 6.00                  | 7.10           | SPS                |                     | 10             | MF           | 85          | 5           | 0           | 0              |              | NA    | MOD  | LSE      | WET      |               |
| MP8-MW12             | 4          | 2          | 7.10                  | 8.00           | SPS                |                     | 0              |              | 0           | 0           | 0           | 0              |              |       |      |          |          |               |
| MP8-MW12             | 5          | 1          | 8.00                  | 8.40           | SPS                |                     | 0              | MF           | 90          | 10          | 0           | 0              |              | NON   | WEL  | LSE      | SAT      |               |
| MP8-MW12             | 5          | 2          | 8.40                  | 9.30           | SPS                |                     | 0              | MF           | 95          | 5           | 0           | 0              |              | NA    | MOD  | LSE      | SAT      |               |
| MP8-MW12             | 5          | 3          | 9.30                  | 9.50           | SPS                |                     | 0              | MF           | 90          | 10          | 0           | 0              |              | NON   | MOD  | LSE      | SAT      |               |
| MP8-MW12             | 5          | 4          | 9.50                  | 10.00          | SPS                |                     | 0              |              | 0           | 0           | 0           | 0              |              |       |      |          |          |               |
| MP8-MW12             | 6          | 1          | 10.00                 | 10.55          | SPS                |                     | 0              | MF           | 90          | 10          | 0           | 0              |              | NON   | MOD  | LSE      | SAT      |               |
| MP8-MW12             | 6          | 2          | 10.55                 | 12.00          | SPS                |                     | 0              |              | 0           | 0           | 0           | 0              |              |       |      |          |          |               |
| MP8-MW12             | 7          | 1          | 12.00                 | 13.50          | SPS                |                     | 5              | MCF          | 90          | 5           | 0           | 0              |              | NA    | MOD  | LSE      | SAT      |               |
| MP8-MW12             | 7          | 2          | 13.50                 | 14.00          | SPS                |                     | 0              |              | 0           | 0           | 0           | 0              |              |       |      |          |          |               |
| MP8-MW12             | 8          | 1          | 14.00                 | 14.50          | SPS                |                     | 0              | MCF          | 90          | 10          | 0           | 0              |              | NON   | MOD  | LSE      | SAT      |               |
| MP8-MW12             | 8          | 2          | 14.50                 | 14.95          | SPS                |                     | 0              | MCF          | 25          | 45          | 30          | 0              |              | MOD   | MOD  | SFT      | WET      |               |
| MP8-MW12             | 8          | 3          | 14.95                 | 16.00          | SPS                |                     | 0              |              | 0           | 0           | 0           | 0              |              |       |      |          |          |               |

**Borehole Location Data****Roy F. WESTON, Inc.**

BOREHOLE ID : MP8-MW13  
BEGIN DATE : 01/17/95

PROJECT NAME: FT. MONMOUTH  
END DATE : 01/17/95

LOGGER/COMPANY : P. THOMAS

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : O

TOTAL DEPTH : 15.00

DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 12.25

INTERVAL: 0.00 ft. to 15.00 ft. BGS

METHOD : HSA

FLUID : WATER

BOREHOLE DIAMETER #2:

INTERVAL:

METHOD :

FLUID :

BOREHOLE DIAMETER #3:

INTERVAL:

METHOD :

FLUID :

DRILLING COMPANY : J.C. ANDERSON

DRILLER : WELLINGTON REEVES

DRILL RIG TYPE : ATV

|                        | ESTIMATED | SURVEYED |
|------------------------|-----------|----------|
| SURFACE<br>ELEVATION : | 0.000     | 6.020    |

N. COORDINATE : 0.0000

E. COORDINATE : 0.0000

WELL PERMIT.....(Y)es (N)o: N PERMIT # : NJ 29 32561

HOLE ABANDONED... (Y)es (N)o: N

WELL INSTALLED... (Y)es (N)o: Y

WELL CLUSTER.....(Y)es (N)o: N No. OF WELLS : 0

WELL NEST.....(Y)es (N)o: N No. OF WELLS : 0

PUMPS INSTALLED.. (Y)es (N)o: N

|          | TYPE | DEPTH |
|----------|------|-------|
| PURGE :  |      | 0.00  |
| SAMPLE : |      | 0.00  |

**BOREHOLE TESTING**

BOREHOLE GEOPHYSICS.....(Y)es (N)o: N

SLUG TESTS.....(Y)es (N)o: N

PACKER TESTS.....(Y)es (N)o: N

PUMPING TESTS.....(Y)es (N)o: N

**COMMENTS :**

Latitude-North: 40 deg 18' 54.0"

Longitude-West: 74 deg 03' 04.8"

# Well Completion Summary

Roy F. WESTON, Inc.

CLIENT FT. MONMOUTH  
SITE NAME MAIN POST AREA

DRILLING FIRM J.C. ANDERSON  
INSPECTOR P. THOMAS

WELL ID MP8-MW13  
START DATE 01/17/95  
COMPLETION DATE 01/17/95

## WATER LEVELS

| DEPTH                                                                                             |                    | ELEV.                                                                                | DRILLING SUMMARY |                       |
|---------------------------------------------------------------------------------------------------|--------------------|--------------------------------------------------------------------------------------|------------------|-----------------------|
| Protective Casing                                                                                 | 1.78 TC            | 7.80                                                                                 | Driller          | WELLS REEVES          |
| 4.00 inch                                                                                         | 0.00 GS            | 6.02                                                                                 | Drilling Fluid   | WATER                 |
|                                                                                                   |                    |                                                                                      | Well Type        | SINGLE CASED SCREENED |
| WELL DESIGN CONSTRUCTION                                                                          |                    |                                                                                      |                  |                       |
| Casing #1 Diameter: 4.00 inch Interval: 0.00 to 5.00 ft.<br>Type :                                |                    |                                                                                      |                  |                       |
| Stick Up Inner Casing: 1.78 ft. Protective Casing: 2.21 ft.                                       |                    |                                                                                      |                  |                       |
| Casing Grout: CEMENT/BENT Interval: 0.00 to 1.00 ft.                                              |                    |                                                                                      |                  |                       |
| Seal Type: BENTONITE SLURRY Interval: 1.00 to 3.50 ft.                                            |                    |                                                                                      |                  |                       |
| Sand Pack Type : NO. 1 MORIE Interval: 3.50 to 15.00 ft.<br>Grain Size : UNIFORM Median Diameter: |                    |                                                                                      |                  |                       |
| Screen Diameter: 4.00 Interval: 5.00 to 14.54 ft.<br>Type : PVC Slots: 0.010 inches               |                    |                                                                                      |                  |                       |
| 1.00 BN                                                                                           | 5.02               | Silt Trap Interval: 14.54 to 15.00 ft.<br>Backfill Type : Interval: 0.00 to 0.00 ft. |                  |                       |
| 3.50 SP                                                                                           | 2.52               |                                                                                      |                  |                       |
| WELL DEVELOPMENT                                                                                  |                    |                                                                                      |                  |                       |
| 5.00 SC                                                                                           | 1.02               | Date 01/25/95                                                                        |                  |                       |
|                                                                                                   |                    | Method Surge blocking, bailing                                                       |                  |                       |
|                                                                                                   |                    | Yield 4 gpm Purged Volume 250 gal                                                    |                  |                       |
| COMMENTS                                                                                          |                    |                                                                                      |                  |                       |
| TC = Top of Casing                                                                                | SP = Top Sand Pack | = Grout                                                                              |                  |                       |
| GS = Ground Surface                                                                               | SC = Top Screen    | = Seal                                                                               |                  |                       |
| BN = Top Seal                                                                                     | BS = Bottom Screen | = Sand Pack                                                                          |                  |                       |
| TD = Total Depth                                                                                  |                    | = Formation                                                                          |                  |                       |
| 14.54 BS                                                                                          | -8.52              |                                                                                      |                  |                       |
| 15.00 TD                                                                                          | -8.98              |                                                                                      |                  |                       |
| Additional Comments:                                                                              |                    |                                                                                      |                  |                       |
| Depths are measured below ground surface.                                                         |                    |                                                                                      |                  |                       |

NOTE: Well Diagram not to Scale

Elevations are feet above mean sea level

# Borehole Log

Roy F. WESTON, Inc.

PROJECT : FT. MONMOUTH  
 SITE NAME : MAIN POST AREA  
 BORING ID : MP8-MW13  
 NORTHING : 0.0000 estimated  
 EASTING : 0.0000 estimated  
 ELEVATION : 6.020 surveyed

TOTAL DEPTH : 15.00  
 LOGGER : P. THOMAS  
 DRILLING COMPANY : J.C. ANDERSON  
 DRILLING RIG : ATV  
 DATE STARTED : 01/17/95  
 DATE COMPLETED : 01/17/95

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION      | COLOR      | STRENGTH | MOISTURE | BLOW COUNT | FIELD INSTRUMENT READING | COMMENTS                                                            |
|-----------|-------|----------|------------|---------------------|------------|----------|----------|------------|--------------------------|---------------------------------------------------------------------|
|           |       |          | 40         | Silty sand, SM      | BROWN      | LSE      | WET      | 2-5-11     | OVM 0.0                  | Fill. Large wood fragments, wires in drill cutting.                 |
| 5         | 1     |          |            | No Sample Recovered |            |          |          |            |                          |                                                                     |
| 4         | 2     |          | 70         | Sandy silt, ML      | GRAY/BROWN | SFT      | SAT      | 7-7-4      | OVM 0.0                  | Fill. Coarsens downward; amber glass fragments throughout interval. |
| 3         | 3     |          |            | No Sample Recovered |            |          |          |            |                          |                                                                     |
| 2         | 4     |          |            | Sandy silt, ML      | GRAY       | SFT      | SAT      |            | OVM 0.0                  | Augered interval. Logged cuttings only - Fill.                      |
| 1         | 5     |          |            |                     |            |          |          |            |                          |                                                                     |
| 0         | 6     |          |            |                     |            |          |          |            |                          |                                                                     |
| -1        | 7     |          |            |                     |            |          |          |            |                          |                                                                     |
| -2        | 8     |          | 10         | Sandy silt, ML      | GRAY       | SFT      | SAT      | 2-2-2      | OVM 0.0                  | Fill(?) Natural(?); slightly more gravelly.                         |
|           |       |          |            | No Sample Recovered |            |          |          |            |                          |                                                                     |
| -3        | 9     |          |            |                     |            |          |          |            |                          |                                                                     |
| -4        | 10    |          |            | Sandy silt, ML      | GRAY       | SFT      | SAT      |            | OVM 0.0                  | Fill(?) Natural(?); Augered interval. Logged cuttings only.         |



# Borehole Log

Roy F. WESTON, Inc.

|             |                  |                    |               |
|-------------|------------------|--------------------|---------------|
| PROJECT :   | FT. MONMOUTH     | TOTAL DEPTH :      | 15.00         |
| SITE NAME : | MAIN POST AREA   | LOGGER :           | P. THOMAS     |
| BORING ID : | MP8-MW13         | DRILLING COMPANY : | J.C. ANDERSON |
| NORTHING :  | 0.0000 estimated | DRILLING RIG :     | ATV           |
| EASTING :   | 0.0000 estimated | DATE STARTED :     | 01/17/95      |
| ELEVATION : | 6.020 surveyed   | DATE COMPLETED :   | 01/17/95      |

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION             | COLOR         | STRENGTH | MOISTURE | BLOW COUNT | FIELD INSTRUMENT READING | COMMENTS                                                       |
|-----------|-------|----------|------------|----------------------------|---------------|----------|----------|------------|--------------------------|----------------------------------------------------------------|
| -4        | 11    |          |            | Sandy silt, ML             | GRAY          | SFT      | SAT      |            | OVN 0.0                  | Fill(?) Natural(?) Augered interval. Logged cuttings only.     |
| -5        | 12    |          |            |                            |               |          |          |            |                          |                                                                |
| -6        | 13    |          | 60         | Elastic silt with sand, MH | GRAYISH BROWN | SFT      | SAT      | 8          | OVN 0.0                  | Set well at 15' bgs. interval appeared to be natural material. |
| -7        | 14    |          |            | No Sample Recovered        |               |          |          |            |                          |                                                                |
| -8        | 15    |          |            |                            |               |          |          |            |                          |                                                                |
| -9        | 16    |          |            |                            |               |          |          |            |                          |                                                                |
| -10       | 17    |          |            |                            |               |          |          |            |                          |                                                                |
| -11       | 18    |          |            |                            |               |          |          |            |                          |                                                                |
| -12       | 19    |          |            |                            |               |          |          |            |                          |                                                                |
| -13       | 20    |          |            |                            |               |          |          |            |                          |                                                                |

| BOREHOLE<br>/WELL ID | SMP<br>NUM | LTH<br>NUM | LITHOLOGY INT.<br>(FT BGS) | SAMPLING<br>METHOD | SIZE<br>GRAVEL | GRAVEL<br>PCT. | SIZE<br>SAND | SAND<br>PCT | SILT<br>PCT | CLAY<br>PCT | ORGANIC<br>PCT | ROCK<br>TYPE | PLAST | SORT | STRENGTH | MOISTURE | STRAT<br>UNIT |
|----------------------|------------|------------|----------------------------|--------------------|----------------|----------------|--------------|-------------|-------------|-------------|----------------|--------------|-------|------|----------|----------|---------------|
| MP8-MW13             | 1          | 1          | 0.00                       | 0.80               | SPS            | M              | 10           | MF          | 50          | 15          | 5              | 20           | NON   | POR  | LSE      | WET      |               |
| MP8-MW13             | 1          | 2          | 0.80                       | 2.00               | SPS            |                | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| MP8-MW13             | 2          | 1          | 2.00                       | 3.40               | SPS            | F              | 5            | F           | 30          | 45          | 15             | 5            | LOW   | POR  | SFT      | SAT      |               |
| MP8-MW13             | 2          | 2          | 3.40                       | 4.00               | SPS            |                | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| MP8-MW13             | 3          | 1          | 4.00                       | 8.00               | CUT            | F              | 5            | F           | 30          | 45          | 15             | 5            | LOW   | POR  | SFT      | SAT      |               |
| MP8-MW13             | 4          | 1          | 8.00                       | 8.20               | SPS            | F              | 10           | F           | 25          | 45          | 15             | 5            | LOW   | POR  | SFT      | SAT      |               |
| MP8-MW13             | 4          | 2          | 8.20                       | 10.00              | SPS            |                | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| MP8-MW13             | 5          | 1          | 10.00                      | 13.00              | CUT            | F              | 10           | F           | 25          | 45          | 15             | 5            | LOW   | POR  | SFT      | SAT      |               |
| MP8-MW13             | 6          | 1          | 13.00                      | 14.20              | SPS            |                | 0            | F           | 25          | 50          | 20             | 5            | MOD   | MOD  | SFT      | SAT      |               |
| MP8-MW13             | 6          | 2          | 14.20                      | 15.00              | SPS            |                | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |

**Borehole Location Data****Roy F. WESTON, Inc.**

BOREHOLE ID : MP8-MW14  
BEGIN DATE : 01/16/95

PROJECT NAME: FT. MONMOUTH  
END DATE : 01/16/95

LOGGER/COMPANY : P. THOMAS

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : O

TOTAL DEPTH : 15.00

DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 12.25

INTERVAL: 0.00 ft. to 15.00 ft. BGS

METHOD : HSA

FLUID : WATER

BOREHOLE DIAMETER #2:

INTERVAL:

METHOD :

FLUID :

BOREHOLE DIAMETER #3:

INTERVAL:

METHOD :

FLUID :

DRILLING COMPANY : J.C. ANDERSON

DRILLER : WELLINGTON REEVES

DRILL RIG TYPE : ATV

|                        | ESTIMATED | SURVEYED |
|------------------------|-----------|----------|
| SURFACE<br>ELEVATION : | 0.000     | 12.880   |
| N. COORDINATE :        | 0.0000    |          |
| E. COORDINATE :        | 0.0000    |          |

WELL PERMIT.....(Y)es (N)o: N PERMIT # : NJ 29 32562

HOLE ABANDONED... (Y)es (N)o: N

WELL INSTALLED... (Y)es (N)o: N

WELL CLUSTER..... (Y)es (N)o: N No. OF WELLS : 0

WELL NEST..... (Y)es (N)o: N No. OF WELLS : 0

PUMPS INSTALLED.. (Y)es (N)o: N

PURGE :

DEPTH

0.00

SAMPLE :

0.00

**BOREHOLE TESTING**

BOREHOLE GEOPHYSICS..... (Y)es (N)o: N

SLUG TESTS..... (Y)es (N)o: N

PACKER TESTS..... (Y)es (N)o: N

PUMPING TESTS..... (Y)es (N)o: N

**COMMENTS :**

Latitude-North: 40 deg 18' 58.3"

Longitude-West: 74 deg 03' 02.2"

# Well Completion Summary

Roy F. WESTON, Inc.

**CLIENT** FT. MONMOUTH  
**SITE NAME** MAIN POST AREA

**DRILLING FIRM** J.C. ANDERSON  
**INSPECTOR** P. THOMAS

**WELL ID** MP8-MW14  
**START DATE** 01/16/95  
**COMPLETION DATE** 01/16/95

## WATER LEVELS

|                                                                                     |                                 | DEPTH |    | ELEV.                                                              | DRILLING SUMMARY                                                                            |                                   |
|-------------------------------------------------------------------------------------|---------------------------------|-------|----|--------------------------------------------------------------------|---------------------------------------------------------------------------------------------|-----------------------------------|
| <p>Protective Casing<br/>4.00 inch</p>                                              |                                 | 2.03  | TC | 14.91                                                              | <b>Driller</b>                                                                              | WELLS REEVES                      |
|                                                                                     |                                 | 0.00  | GS | 12.88                                                              | <b>Drilling Fluid</b>                                                                       | WATER                             |
|                                                                                     |                                 |       |    |                                                                    | <b>Well Type</b>                                                                            | SINGLE CASED SCREENED             |
|                                                                                     | <b>WELL DESIGN CONSTRUCTION</b> |       |    |                                                                    |                                                                                             |                                   |
|                                                                                     |                                 |       |    |                                                                    | <b>Casing #1 Diameter:</b> 4.00 inch<br><b>Type :</b> PVC SCH 40                            | <b>Interval:</b> 0.00 to 5.00 ft. |
|                                                                                     |                                 |       |    | <b>Stick Up Inner Casing:</b> 2.03 ft.                             | <b>Protective Casing:</b> 2.43 ft.                                                          |                                   |
|                                                                                     |                                 |       |    | <b>Casing Grout:</b> CEMENT/BENT                                   | <b>Interval:</b> 0.00 to 0.50 ft.                                                           |                                   |
|                                                                                     |                                 |       |    | <b>Seal Type:</b> BENTONITE SLURRY                                 | <b>Interval:</b> 0.50 to 3.00 ft.                                                           |                                   |
|                                                                                     |                                 |       |    | <b>Sand Pack Type :</b> NO. 1 MORIE<br><b>Grain Size :</b> UNIFORM | <b>Interval:</b> 3.00 to 15.00 ft.                                                          |                                   |
|                                                                                     |                                 |       |    | <b>Screen Diameter:</b> 4.00<br><b>Type :</b> PVC                  | <b>Median Diameter:</b><br><b>Interval:</b> 5.00 to 14.54 ft.<br><b>Slots:</b> 0.010 inches |                                   |
|                                                                                     | 0.50                            | BN    |    | 12.38                                                              | <b>Silt Trap Interval:</b> 14.54 to 15.00 ft.                                               |                                   |
|                                                                                     | 3.00                            | SP    |    | 9.88                                                               | <b>Backfill Type :</b> <b>Interval:</b> 0.00 to 0.00 ft.                                    |                                   |
| <b>WELL DEVELOPMENT</b>                                                             |                                 |       |    |                                                                    |                                                                                             |                                   |
|                                                                                     | 5.00                            | SC    |    | 7.88                                                               | <b>Date</b>                                                                                 | 01/25/95                          |
|                                                                                     |                                 |       |    |                                                                    | <b>Method</b>                                                                               | Surge Block, Bailing              |
|                                                                                     |                                 |       |    |                                                                    | <b>Yield</b>                                                                                | .5 gpm                            |
|                                                                                     |                                 |       |    |                                                                    | <b>Purged Volume</b>                                                                        | 41 gal                            |
| <b>COMMENTS</b>                                                                     |                                 |       |    |                                                                    |                                                                                             |                                   |
|                                                                                     | 14.54                           | BS    |    | -1.66                                                              | TC = Top of Casing                                                                          | SP = Top Sand Pack                |
|                                                                                     |                                 |       |    |                                                                    | GS = Ground Surface                                                                         | SC = Top Screen                   |
|                                                                                     |                                 |       |    |                                                                    | BN = Top Seal                                                                               | BS = Bottom Screen                |
|                                                                                     | 15.00                           | TD    |    | 12.88                                                              | TD = Total Depth                                                                            |                                   |
| <p><b>Additional Comments:</b></p> <p>Depths are measured below ground surface.</p> |                                 |       |    |                                                                    |                                                                                             |                                   |

NOTE: Well Diagram not to Scale

Elevations are feet above mean sea level

# Borehole Log

Roy F. WESTON, Inc.

PROJECT : FT. MONMOUTH  
 SITE NAME : MAIN POST AREA  
 BORING ID : MP8-MW14  
 NORTHING : 0.0000 estimated  
 EASTING : 0.0000 estimated  
 ELEVATION : 12.880 surveyed

TOTAL DEPTH : 15.00  
 LOGGER : P. THOMAS  
 DRILLING COMPANY : J.C. ANDERSON  
 DRILLING RIG : ATV  
 DATE STARTED : 01/16/95  
 DATE COMPLETED : 01/16/95

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION             | COLOR          | STRENGTH | MOISTURE | BLOW COUNT | FIELD INSTRUMENT READING | COMMENTS                                                           |
|-----------|-------|----------|------------|----------------------------|----------------|----------|----------|------------|--------------------------|--------------------------------------------------------------------|
| 11        | 1     |          | 75         | Silty sand, SM             | BROWN          | LSE      | MST      | 13         | OVM 0.0                  | Fill.                                                              |
|           |       |          |            |                            |                |          |          | 11         |                          |                                                                    |
|           |       |          |            |                            |                |          |          | 13         |                          |                                                                    |
|           |       |          |            |                            |                |          |          | 8          |                          |                                                                    |
| 10        | 2     |          | 55         | Sandy silt, ML             | GRAY           | SFT      | MST      |            | OVM 0.0                  | Fill. Large wood chip fragments.                                   |
|           |       |          |            | No Sample Recovered        |                |          |          |            |                          |                                                                    |
| 9         | 3     |          |            | Sandy silt, ML             | GRAY/OLIVE GRN | SFT      | MST      | 8          | OVM 0.0                  | Fill. Strong odor.                                                 |
|           |       |          |            |                            |                |          |          | 8          |                          |                                                                    |
|           |       |          |            |                            |                |          |          | 6          |                          |                                                                    |
| 8         | 4     |          |            | No Sample Recovered        |                |          |          |            |                          |                                                                    |
|           |       |          |            |                            |                |          |          | 4          |                          |                                                                    |
|           |       |          |            |                            |                |          |          | 1          |                          |                                                                    |
|           |       |          |            |                            |                |          |          | 2          |                          |                                                                    |
| 7         | 5     |          |            |                            |                |          |          |            |                          |                                                                    |
| 6         | 6     |          | 40         | Sandy silt, ML             | GRAY           | SFT      | SAT      | 4          | OVM 0.0                  | Fill. Large fragments of glass and wood found throughout interval. |
|           |       |          |            |                            |                |          |          | 5          |                          |                                                                    |
|           |       |          |            |                            |                |          |          | 6          |                          |                                                                    |
| 5         | 7     |          |            | Interval Not Sampled       |                |          |          |            |                          |                                                                    |
|           |       |          |            |                            |                |          |          |            |                          |                                                                    |
| 4         | 8     |          | 90         | Sandy silt, ML             | GRAY           | SFT      | SAT      | 4          | OVM 0.0                  |                                                                    |
|           |       |          |            | Elastic silt with sand, MH | BROWN          | SFT      | SAT      | 3          | OVM 0.0                  |                                                                    |
|           |       |          |            |                            |                |          |          | 4          |                          |                                                                    |
|           |       |          |            |                            |                |          |          | 2          |                          |                                                                    |
| 3         | 9     |          |            | Silty sand, SM             | FOREST GREEN   | LSE      | SAT      |            | OVM 0.0                  |                                                                    |
|           |       |          |            |                            |                |          |          |            |                          |                                                                    |
|           |       |          |            | Silt with sand, ML         | BROWN          | SFT      | SAT      |            | OVM 0.0                  |                                                                    |
|           |       |          |            |                            |                |          |          |            |                          |                                                                    |
| 2         | 10    |          | 50         | No Sample Recovered        |                |          |          |            |                          |                                                                    |
|           |       |          |            | Sandy silt, ML             | GREY           | SFT      | SAT      |            | OVM 0.0                  |                                                                    |

# Borehole Log

Roy F. WESTON, Inc.

|           |                    |                  |                 |
|-----------|--------------------|------------------|-----------------|
| PROJECT   | : FT. MONMOUTH     | TOTAL DEPTH      | : 15.00         |
| SITE NAME | : MAIN POST AREA   | LOGGER           | : P. THOMAS     |
| BORING ID | : MP8-MW14         | DRILLING COMPANY | : J.C. ANDERSON |
| NORTHING  | : 0.0000 estimated | DRILLING RIG     | : ATV           |
| EASTING   | : 0.0000 estimated | DATE STARTED     | : 01/16/95      |
| ELEVATION | : 12.880 surveyed  | DATE COMPLETED   | : 01/16/95      |

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION       | COLOR | STRENGTH | MOISTURE | BLOW COUNT | FIELD INSTRUMENT READING | COMMENTS                                                                |
|-----------|-------|----------|------------|----------------------|-------|----------|----------|------------|--------------------------|-------------------------------------------------------------------------|
|           |       |          |            | Sandy silt, ML       | GREY  | SFT      | SAT      |            | OVM 0.0                  |                                                                         |
| 1         | 11    |          |            | Interval Not Sampled |       |          |          |            |                          |                                                                         |
| 0         | 12    |          | 95         | Silt with sand, ML   | BROWN | SFT      | SAT      | 4          | OVM 0.0                  |                                                                         |
| -1        | 13    |          |            | Silty sand, SM       | GREEN | LSE      | SAT      |            | OVM 0.0                  | Backfill?                                                               |
| -2        | 14    |          |            | Interval Not Sampled |       |          |          |            |                          | Augered interval.<br>Set well at 15' bgs. TD<br>of borehole is 15' bgs. |
|           |       |          |            | Interval Not Sampled |       |          |          |            |                          |                                                                         |
| -3        | 15    |          |            |                      |       |          |          |            |                          |                                                                         |
| -4        | 16    |          |            |                      |       |          |          |            |                          |                                                                         |
| -5        | 17    |          |            |                      |       |          |          |            |                          |                                                                         |
| -6        | 18    |          |            |                      |       |          |          |            |                          |                                                                         |
| -7        | 19    |          |            |                      |       |          |          |            |                          |                                                                         |
| -8        | 20    |          |            |                      |       |          |          |            |                          |                                                                         |

| BOREHOLE<br>/WELL ID | SMP<br>NUM | LTH<br>NUM | LITHOLOGY INT.<br>(FT BGS) | SAMPLING<br>METHOD | SIZE<br>GRAVEL PCT. | GRAVEL<br>PCT. | SIZE<br>SAND | SAND<br>PCT | SILT<br>PCT | CLAY<br>PCT | ORGANIC<br>PCT | ROCK<br>TYPE | PLAST | SORT | STRENGTH | MOISTURE | STRAT<br>UNIT |
|----------------------|------------|------------|----------------------------|--------------------|---------------------|----------------|--------------|-------------|-------------|-------------|----------------|--------------|-------|------|----------|----------|---------------|
| MP8-MW14             | 1          | 1          | 0.00                       | 1.20               | SPS                 | M              | 5            | MF          | 65          | 25          | 0              | 5            | NA    | MOD  | LSE      | MST      |               |
| MP8-MW14             | 1          | 2          | 1.20                       | 1.50               | SPS                 | M              | 5            | FM          | 25          | 40          | 10             | 20           | NON   | MOD  | SFT      | MST      |               |
| MP8-MW14             | 1          | 3          | 1.50                       | 2.00               | SPS                 |                | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| MP8-MW14             | 2          | 1          | 2.00                       | 3.10               | SPS                 |                | 0            | FM          | 40          | 45          | 15             | 0            | NON   | MOD  | SFT      | MST      |               |
| MP8-MW14             | 2          | 2          | 3.10                       | 4.00               | SPS                 |                | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| MP8-MW14             | 3          | 1          | 4.00                       | 6.00               | SPS                 |                | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| MP8-MW14             | 4          | 1          | 6.00                       | 6.80               | SPS                 |                | 0            | FM          | 30          | 45          | 15             | 10           | LOW   | POR  | SFT      | SAT      |               |
| MP8-MW14             | 4          | 2          | 6.80                       | 8.00               | NS                  |                | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| MP8-MW14             | 5          | 1          | 8.00                       | 8.40               | SPS                 |                | 0            |             | 30          | 45          | 15             | 10           | NON   | POR  | SFT      | SAT      |               |
| MP8-MW14             | 5          | 2          | 8.40                       | 8.70               | SPS                 |                | 0            | F           | 20          | 50          | 20             | 10           | MOD   | MOD  | SFT      | SAT      |               |
| MP8-MW14             | 5          | 3          | 8.70                       | 9.30               | SPS                 | M              | 5            | MFC         | 80          | 15          | 0              | 0            | NA    | POR  | LSE      | SAT      |               |
| MP8-MW14             | 5          | 4          | 9.30                       | 9.80               | SPS                 |                | 0            | F           | 20          | 50          | 20             | 10           | LOW   | MOD  | SFT      | SAT      |               |
| MP8-MW14             | 5          | 5          | 9.80                       | 10.00              | SPS                 |                | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| MP8-MW14             | 6          | 1          | 10.00                      | 11.00              | SPS                 |                | 0            | FM          | 30          | 50          | 15             | 5            | LOW   | MOD  | SFT      | SAT      |               |
| MP8-MW14             | 6          | 2          | 11.00                      | 12.00              | NS                  |                | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| MP8-MW14             | 7          | 1          | 12.00                      | 13.20              | SPS                 |                | 0            | MF          | 25          | 50          | 20             | 5            | LOW   | MOD  | SFT      | SAT      |               |
| MP8-MW14             | 7          | 2          | 13.20                      | 13.90              | SPS                 | M              | 5            | MFC         | 60          | 30          | 5              | 5            | NON   | MOD  | LSE      | SAT      |               |
| MP8-MW14             | 7          | 3          | 13.90                      | 14.00              | NS                  |                | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| MP8-MW14             | 8          | 1          | 14.00                      | 15.00              | NS                  |                | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |

**Borehole Location Data****Roy F. WESTON, Inc.**

BOREHOLE ID : MP8-MW15  
BEGIN DATE : 01/17/95

PROJECT NAME: FT. MONMOUTH  
END DATE : 01/17/95

LOGGER/COMPANY : P. THOMAS

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : 0

TOTAL DEPTH : 18.00

DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 12.25

INTERVAL: 0.00 ft. to 15.00 ft. BGS

METHOD : HSA

FLUID : WATER

BOREHOLE DIAMETER #2:

INTERVAL:

METHOD :

FLUID :

BOREHOLE DIAMETER #3:

INTERVAL:

METHOD :

FLUID :

DRILLING COMPANY : J.C. ANDERSON

DRILLER : WELLS REEVES

DRILL RIG TYPE : ATV

|                        | ESTIMATED | SURVEYED |
|------------------------|-----------|----------|
| SURFACE<br>ELEVATION : | 0.000     | 5.010    |
| N. COORDINATE :        | 0.0000    |          |
| E. COORDINATE :        | 0.0000    |          |

WELL PERMIT.....(Y)es (N)o: N PERMIT # : NJ 29 32563

HOLE ABANDONED... (Y)es (N)o: N

WELL INSTALLED... (Y)es (N)o: Y

WELL CLUSTER.....(Y)es (N)o: N No. OF WELLS : 0

WELL NEST.....(Y)es (N)o: N No. OF WELLS : 0

PUMPS INSTALLED.. (Y)es (N)o: N TYPE

DEPTH

PURGE :

0.00

SAMPLE :

0.00

**BOREHOLE TESTING**

BOREHOLE GEOPHYSICS.....(Y)es (N)o: N

SLUG TESTS.....(Y)es (N)o: N

PACKER TESTS.....(Y)es (N)o: N

PUMPING TESTS.....(Y)es (N)o: N

**COMMENTS :**

Latitude-North: 40 deg 18' 57.9"

Longitude-West: 74 deg 02' 56.7"



# Well Completion Summary

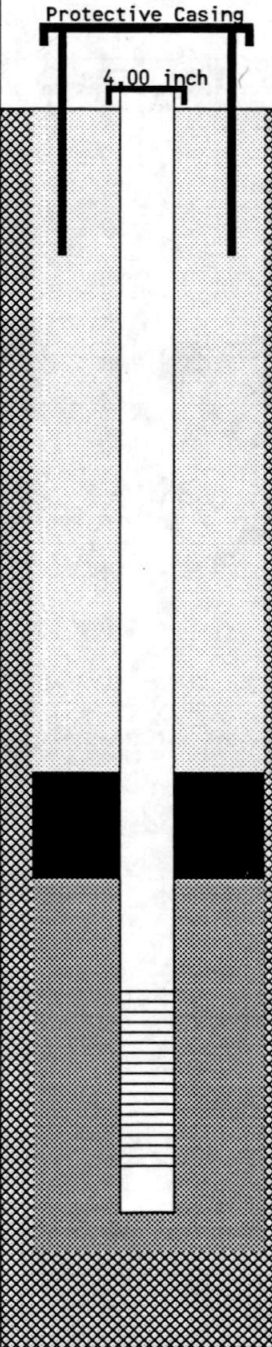
Roy F. WESTON, Inc.

**CLIENT** FT. MONMOUTH  
**SITE NAME** MAIN POST AREA

**DRILLING FIRM** J.C. ANDERSON  
**INSPECTOR** P. THOMAS

**WELL ID** MP8-MW15  
**START DATE** 01/17/95  
**COMPLETION DATE** 01/17/95

## WATER LEVELS

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  | DEPTH |    | ELEV. | DRILLING SUMMARY      |                       |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-------|----|-------|-----------------------|-----------------------|
|  <p>Protective Casing<br/>4.00 inch</p>                                                                                                                                                                                                                                                                                                                                                                                                                          |  | 2.00  | TC | 7.01  | <b>Driller</b>        | WELLS REEVE           |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  | 0.00  | GS | 5.01  | <b>Drilling Fluid</b> | WATER                 |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |       |    |       | <b>Well Type</b>      | SINGLE CASED SCREENED |
| <b>WELL DESIGN CONSTRUCTION</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |       |    |       |                       |                       |
| <b>Casing #1 Diameter:</b> 4.00 inch <b>Interval:</b> 0.00 to 5.00 ft.<br><b>Type :</b> PVC SCH 40                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |       |    |       |                       |                       |
| <b>Stick Up Inner Casing:</b> 2.00 ft. <b>Protective Casing:</b> 2.34 ft.                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  |       |    |       |                       |                       |
| <b>Casing Grout:</b> CEMENT/BENT <b>Interval:</b> 0.00 to 1.00 ft.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |       |    |       |                       |                       |
| <b>Seal Type:</b> BENTONITE SLURRY <b>Interval:</b> 1.00 to 3.50 ft.                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |       |    |       |                       |                       |
| <b>Sand Pack Type :</b> NO. 1 MORIE <b>Interval:</b> 3.50 to 15.00 ft.<br><b>Grain Size :</b> UNIFORM <b>Median Diameter:</b>                                                                                                                                                                                                                                                                                                                                                                                                                      |  |       |    |       |                       |                       |
| <b>Screen Diameter:</b> 4.00 <b>Interval:</b> 5.00 to 14.54 ft.<br><b>Type :</b> PVC <b>Slots:</b> 0.010 inches                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |       |    |       |                       |                       |
| <b>Silt Trap Interval:</b> 14.54 to 15.00 ft.<br><b>Backfill Type :</b> <b>Interval:</b> 0.00 to 0.00 ft.                                                                                                                                                                                                                                                                                                                                                                                                                                          |  |       |    |       |                       |                       |
| <b>WELL DEVELOPMENT</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |       |    |       |                       |                       |
| <b>Date</b> 01/25/95<br><b>Method</b> Surge Blocking Overpump<br><b>Yield</b> 2 gpm <b>Purged Volume</b> 120 gal                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |       |    |       |                       |                       |
| <b>COMMENTS</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |       |    |       |                       |                       |
| TC = Top of Casing      SP = Top Sand Pack  = Grout<br>GS = Ground Surface      SC = Top Screen  = Seal<br>BN = Top Seal      BS = Bottom Screen  = Sand Pack<br>TD = Total Depth  = Formation |  |       |    |       |                       |                       |
| <b>Additional Comments:</b><br>Depths are measured below ground surface.                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  |       |    |       |                       |                       |

**NOTE:** Well Diagram not to Scale

Elevations are feet above mean sea level

# Borehole Log

Roy F. WESTON, Inc.

|             |                  |                    |               |
|-------------|------------------|--------------------|---------------|
| PROJECT :   | FT. MONMOUTH     | TOTAL DEPTH :      | 18.00         |
| SITE NAME : | MAIN POST AREA   | LOGGER :           | P. THOMAS     |
| BORING ID : | MP8-MW15         | DRILLING COMPANY : | J.C. ANDERSON |
| NORTHING :  | 0.0000 estimated | DRILLING RIG :     | ATV           |
| EASTING :   | 0.0000 estimated | DATE STARTED :     | 01/17/95      |
| ELEVATION : | 5.010 surveyed   | DATE COMPLETED :   | 01/17/95      |

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION                   | COLOR       | STRENGTH | MOISTURE | BLOW COUNT    | FIELD INSTRUMENT READING | COMMENTS                                                                                    |
|-----------|-------|----------|------------|----------------------------------|-------------|----------|----------|---------------|--------------------------|---------------------------------------------------------------------------------------------|
|           |       |          | 30         | Silty sand, SM                   | BROWN/BLACK | LSE      | MST      | 7<br>18<br>11 | OVM 0.0                  | Fill. Black mottles, concrete rubble bottom of spoon.                                       |
| 4         | 1     |          |            | No Sample Recovered              |             |          |          |               |                          |                                                                                             |
| 3         | 2     |          |            | Interval Not Sampled             |             |          |          |               | OVM 0.0                  | Auger refusal at 2' bgs. Moved location up 5' from original hole; Began spooning at 3' bgs. |
| 2         | 3     |          | 30         | Silty sand, SM                   | GRAY/BROWN  | SFT      | WET      | 7<br>5<br>0   | OVM 0.0                  | Fill. Sat ~3.5-4' bgs, spoon refusal at 3.6' bgs. Large wood fragments in bottom of spoon.  |
| 1         | 4     |          | 30         | Not Classified - Incomplete Data |             |          |          |               |                          | Interval not sampled - Augered to 5' bgs.                                                   |
| 0         | 5     |          |            | No Sample Recovered              |             |          |          | 18<br>3<br>1  |                          | Spoon is saturated.                                                                         |
| -1        | 6     |          |            |                                  |             |          |          |               |                          |                                                                                             |
| -2        | 7     |          | 15         | Silty sand, SM                   | GRAY        | SFT      | SAT      | 1<br>2<br>0   | OVM 0.0                  | Fill(?) Gray sand with silt/clay and organics.                                              |
| -3        | 8     |          |            | No Sample Recovered              |             |          |          |               |                          |                                                                                             |
| -4        | 9     |          |            | Silty sand, SM                   | GRAY        | SFT      | SAT      |               | OVM 0.0                  | Fill. Logged cuttings only. Silty/clayey sand with trace gravel and organics.               |
| -5        | 10    |          |            |                                  |             |          |          |               |                          |                                                                                             |

# Borehole Log

Roy F. WESTON, Inc.

|             |                  |                    |               |
|-------------|------------------|--------------------|---------------|
| PROJECT :   | FT. MONMOUTH     | TOTAL DEPTH :      | 18.00         |
| SITE NAME : | MAIN POST AREA   | LOGGER :           | P. THOMAS     |
| BORING ID : | MP8-MW15         | DRILLING COMPANY : | J.C. ANDERSON |
| NORTHING :  | 0.0000 estimated | DRILLING RIG :     | ATV           |
| EASTING :   | 0.0000 estimated | DATE STARTED :     | 01/17/95      |
| ELEVATION : | 5.010 surveyed   | DATE COMPLETED :   | 01/17/95      |

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION      | COLOR    | STRENGTH | MOISTURE | BLOW COUNT | FIELD INSTRUMENT READING | COMMENTS                                                                      |
|-----------|-------|----------|------------|---------------------|----------|----------|----------|------------|--------------------------|-------------------------------------------------------------------------------|
| -5        | 11    |          |            | Silty sand, SM      | GRAY     | SFT      | SAT      |            | OVM 0.0                  | Fill. Logged cuttings only. Silty/clayey sand with trace gravel and organics. |
| -6        | 12    |          |            |                     |          |          |          |            |                          |                                                                               |
| -7        | 13    |          | 50         | Silty sand, SM      | DK GREEN | LSE      | SAT      | 2          | OVM 0.0                  | Set well at 15' bgs.                                                          |
| -8        | 14    |          |            | No Sample Recovered |          |          |          |            |                          | TD of hole 15' bgs.                                                           |
| -9        | 15    |          |            |                     |          |          |          |            |                          |                                                                               |
| -10       | 16    |          |            |                     |          |          |          |            |                          |                                                                               |
| -11       | 17    |          |            |                     |          |          |          |            |                          |                                                                               |
| -12       | 18    |          |            |                     |          |          |          |            |                          |                                                                               |
| -13       | 19    |          |            |                     |          |          |          |            |                          |                                                                               |
| -14       | 20    |          |            |                     |          |          |          |            |                          |                                                                               |

| BOREHOLE<br>/WELL ID | SMP<br>NUM | LTH<br>NUM | LITHOLOGY INT.<br>(FT BGS) | SAMPLING<br>METHOD | SIZE<br>GRAVEL PCT. | GRAVEL<br>PCT. | SIZE<br>SAND | SAND<br>PCT | SILT<br>PCT | CLAY<br>PCT | ORGANIC<br>PCT | ROCK<br>TYPE | PLAST | SORT | STRENGTH | MOISTURE | STRAT<br>UNIT |
|----------------------|------------|------------|----------------------------|--------------------|---------------------|----------------|--------------|-------------|-------------|-------------|----------------|--------------|-------|------|----------|----------|---------------|
| MP8-MW15             | 1          | 1          | 0.00                       | 0.60               | SPS                 | F              | 10           | MF          | 55          | 20          | 5              | 10           | NON   | POR  | LSE      | MST      |               |
| MP8-MW15             | 1          | 2          | 0.60                       | 2.00               | SPS                 |                | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| MP8-MW15             | 2          | 1          | 2.00                       | 3.00               | NS                  |                | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| MP8-MW15             | 3          | 1          | 3.00                       | 3.60               | SPS                 | F              | 10           | FM          | 50          | 25          | 10             | 5            | NON   | POR  | SFT      | WET      |               |
| MP8-MW15             | 4          | 1          | 3.60                       | 5.00               | SPS                 |                | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| MP8-MW15             | 5          | 1          | 5.00                       | 7.00               | SPS                 |                | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| MP8-MW15             | 5          | 1          | 7.00                       | 7.30               | SPS                 | F              | 5            | MF          | 50          | 25          | 10             | 10           | NON   | POR  | SFT      | SAT      |               |
| MP8-MW15             | 5          | 2          | 7.30                       | 9.00               | SPS                 |                | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| MP8-MW15             | 6          | 1          | 9.00                       | 13.00              | CUT                 | F              | 5            | FM          | 55          | 25          | 10             | 5            | NON   | POR  | SFT      | SAT      |               |
| MP8-MW15             | 7          | 1          | 13.00                      | 14.00              | SPS                 |                | 10           | MF          | 70          | 20          | 0              | 0            | NA    | MOD  | LSE      | SAT      |               |
| MP8-MW15             | 7          | 2          | 14.00                      | 15.00              | SPS                 |                | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |

**Borehole Location Data****Roy F. WESTON, Inc.**

BOREHOLE ID : MP12MW16  
BEGIN DATE : 01/04/95

PROJECT NAME: FT. MONMOUTH  
END DATE : 01/04/95

LOGGER/COMPANY : P. THOMAS

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : O

TOTAL DEPTH : 14.50

DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 12.25

INTERVAL: 0.00 ft. to 14.50 ft. BGS

METHOD : HSA

FLUID : WATER

BOREHOLE DIAMETER #2:

INTERVAL:

METHOD :

FLUID :

BOREHOLE DIAMETER #3:

INTERVAL:

METHOD :

FLUID :

DRILLING COMPANY : J.C. ANDERSON

DRILLER : STEVE BURGER

DRILL RIG TYPE : MOBILE B-57

|                        | ESTIMATED | SURVEYED |
|------------------------|-----------|----------|
| SURFACE<br>ELEVATION : | 0.000     | 6.330    |

N. COORDINATE : 0.0000

E. COORDINATE : 0.0000

WELL PERMIT.....(Y)es (N)o: N PERMIT # : NJ 29 32576

HOLE ABANDONED... (Y)es (N)o: N

WELL INSTALLED... (Y)es (N)o: Y

WELL CLUSTER..... (Y)es (N)o: N No. OF WELLS : 0

WELL NEST..... (Y)es (N)o: N No. OF WELLS : 0

PUMPS INSTALLED.. (Y)es (N)o: N TYPE

DEPTH

PURGE : 0.00

SAMPLE : 0.00

**BOREHOLE TESTING**

BOREHOLE GEOPHYSICS..... (Y)es (N)o: N

SLUG TESTS..... (Y)es (N)o: N

PACKER TESTS..... (Y)es (N)o: N

PUMPING TESTS..... (Y)es (N)o: N

**COMMENTS :**

Latitude-North: 40 deg 18' 48.7"

Longitude-West: 74 deg 02' 15.6"

# Well Completion Summary

Roy F. WESTON, Inc.

**CLIENT** FT. MONMOUTH  
**SITE NAME** MAIN POST 12

**DRILLING FIRM** J.C. ANDERSON  
**INSPECTOR** P. THOMAS

**WELL ID** MP12MW16  
**START DATE** 01/04/95  
**COMPLETION DATE** 01/04/95

## WATER LEVELS

|                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | DEPTH |                                                                                                                                           | ELEV.                 | DRILLING SUMMARY      |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|-------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|-----------------------|--|
| <p>Protective Casing<br/>4.00 inch</p>                                                                                                                                                                                                | 2.02                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | TC    | 8.35                                                                                                                                      | <b>Driller</b>        | STEVE BURGER          |  |
|                                                                                                                                                                                                                                       | 0.00                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | GS    | 6.33                                                                                                                                      | <b>Drilling Fluid</b> | WATER                 |  |
|                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |       |                                                                                                                                           | <b>Well Type</b>      | SINGLE CASED SCREENED |  |
|                                                                                                                                                                                                                                       | <b>WELL DESIGN CONSTRUCTION</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |       |                                                                                                                                           |                       |                       |  |
|                                                                                                                                                                                                                                       | <p><b>Casing #1 Diameter:</b> 4.00 inch      <b>Interval:</b> 0.00 to 4.50 ft.<br/><b>Type :</b></p> <p><b>Stick Up Inner Casing:</b> 2.02 ft.      <b>Protective Casing:</b> 2.41 ft.</p> <p><b>Casing Grout:</b> CEMENT/BENT      <b>Interval:</b> 0.00 to 0.50 ft.</p> <p><b>Seal Type:</b> BENTONITE SLURRY      <b>Interval:</b> 0.50 to 3.00 ft.</p> <p><b>Sand Pack Type :</b> NO. 1 SAND MORIE      <b>Interval:</b> 3.00 to 14.50 ft.<br/><b>Grain Size :</b> UNIFORM      <b>Median Diameter:</b></p> <p><b>Screen Diameter:</b> 4.00      <b>Interval:</b> 4.50 to 14.01 ft.<br/><b>Type :</b> PVC      <b>Slots:</b> 0.010 inches</p> <p><b>Silt Trap Interval:</b> 14.01 to 14.50 ft.<br/><b>Backfill Type :</b>      <b>Interval:</b> 0.00 to 0.00 ft.</p> |       |                                                                                                                                           |                       |                       |  |
| 0.50                                                                                                                                                                                                                                  | BN                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 5.83  | <b>WELL DEVELOPMENT</b><br><b>Date</b> 01/16/95<br><b>Method</b> Bailing, overpumping<br><b>Yield</b> 0.5 gpm <b>Purged Volume</b> 59 gal |                       |                       |  |
| 3.00                                                                                                                                                                                                                                  | SP                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 3.33  |                                                                                                                                           |                       |                       |  |
| 4.50                                                                                                                                                                                                                                  | SC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 1.83  |                                                                                                                                           |                       |                       |  |
| 14.01                                                                                                                                                                                                                                 | BS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | -7.68 |                                                                                                                                           |                       |                       |  |
| 14.50                                                                                                                                                                                                                                 | TD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | -8.17 |                                                                                                                                           |                       |                       |  |
| <b>COMMENTS</b><br>TC = Top of Casing      SP = Top Sand Pack       = Grout<br>GS = Ground Surface      SC = Top Screen       = Seal<br>BN = Top Seal      BS = Bottom Screen       = Sand Pack<br>TD = Total Depth       = Formation |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |       |                                                                                                                                           |                       |                       |  |
| <b>Additional Comments:</b><br>Depths are measured below ground surface.                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |       |                                                                                                                                           |                       |                       |  |

NOTE: Well Diagram not to Scale

Elevations are feet above mean sea level

# Borehole Log

Roy F. WESTON, Inc.

PROJECT : FT. MONMOUTH  
 SITE NAME : MAIN POST 12  
 BORING ID : MP12MW16  
 NORTHING : 0.0000 estimated  
 EASTING : 0.0000 estimated  
 ELEVATION : 6.330 surveyed

TOTAL DEPTH : 14.50  
 LOGGER : P. THOMAS  
 DRILLING COMPANY : J.C. ANDERSON  
 DRILLING RIG : MOBILE B-57  
 DATE STARTED : 01/04/95  
 DATE COMPLETED : 01/04/95

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION                      | COLOR           | STRENGTH | MOISTURE | BLOW COUNT | FIELD INSTRUMENT READING | COMMENTS                                                                       |
|-----------|-------|----------|------------|-------------------------------------|-----------------|----------|----------|------------|--------------------------|--------------------------------------------------------------------------------|
|           |       |          | 90         | Silty sand, SM                      | OLIVE BROWN     | LSE      | WET      | 3          | HNU 0.0                  | Fill 0-0.2 topsoil, 0.2-0.3' dk brown charcoal gravel; sat. observed 1.5' bgs. |
| 5         | 1     |          |            |                                     |                 |          |          |            |                          |                                                                                |
|           |       |          |            | No Sample Recovered                 |                 |          |          |            |                          |                                                                                |
| 4         | 2     |          | 90         | Silty sand, SM                      | OLIVE BROWN/BRN | LSE      | SAT      | 3          | HNU 0.0                  |                                                                                |
| 3         | 3     |          |            |                                     |                 |          |          |            |                          |                                                                                |
|           |       |          |            | No Sample Recovered                 |                 |          |          |            |                          |                                                                                |
| 2         | 4     |          | 100        | Silty sand, SM                      | BROWN           | SFT      | SAT      | 4          | HNU 0.0                  | Interbedded sand with silt/and organics. differing % compositions.             |
| 1         | 5     |          |            |                                     |                 |          |          |            |                          |                                                                                |
|           |       |          |            | Poorly graded sand with silt, SP-SM | STRONG PALE GRE | LSE      | SAT      |            | HNU 0.0                  |                                                                                |
| 0         | 6     |          | 65         | Poorly graded sand with silt, SP-SM | GREEN           | LSE      | SAT      | 4          | HNU 0.0                  |                                                                                |
| -1        | 7     |          |            |                                     |                 |          |          |            |                          |                                                                                |
|           |       |          |            | No Sample Recovered                 |                 |          |          |            |                          |                                                                                |
| -2        | 8     |          | 50         | Silty sand, SM                      | GREEN/BROWN/OLV | LSE      | SAT      | 2          | HNU 0.0                  | (fill?) Iron stained with olive gray/green sand; 8-8.5 silt and organic zone.  |
| -3        | 9     |          |            |                                     |                 |          |          |            |                          |                                                                                |
|           |       |          |            | No Sample Recovered                 |                 |          |          |            |                          |                                                                                |
| -4        | 10    |          | 60         | Silty sand, SM                      | ORNG/FE DK BRN  | SFT      | SAT      | 5          | HNU 0.0                  | Uncertain (fill?)                                                              |

# Borehole Log

Roy F. WESTON, Inc.

PROJECT : FT. MONMOUTH  
 SITE NAME : MAIN POST 12  
 BORING ID : MP12MW16  
 NORTHING : 0.0000 estimated  
 EASTING : 0.0000 estimated  
 ELEVATION : 6.330 surveyed

TOTAL DEPTH : 14.50  
 LOGGER : P. THOMAS  
 DRILLING COMPANY : J.C. ANDERSON  
 DRILLING RIG : MOBILE B-57  
 DATE STARTED : 01/04/95  
 DATE COMPLETED : 01/04/95

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION       | COLOR          | STRENGTH | MOISTURE | BLOW COUNT | FIELD INSTRUMENT READING | COMMENTS                                                           |
|-----------|-------|----------|------------|----------------------|----------------|----------|----------|------------|--------------------------|--------------------------------------------------------------------|
| -4        | 11    |          |            | Silty sand, SM       | ORNG/FE DK BRN | SFT      | SAT      |            | HNU 0.0                  | Uncertain (fill?)                                                  |
|           |       |          |            | No Sample Recovered  |                |          |          |            |                          |                                                                    |
| -5        | 12    |          | 85         | Silty sand, SM       | ORG/FE DK BRN  | SFT      | SAT      | 6<br>6-8   | HNU 0.0                  | Fining downward interval. (Uncertain/fill).                        |
| -6        | 13    |          |            | Silty sand, SM       | DK BROWN       | SFT      | WET      |            | HNU 0.0                  | Fill?                                                              |
|           |       |          |            | No Sample Recovered  |                |          |          |            |                          |                                                                    |
| -7        | 14    |          |            | Interval Not Sampled |                |          |          |            |                          | Augered interval. Set well at 14.5' bgs. TD of borehole 14.5' bgs. |
| -8        | 15    |          |            |                      |                |          |          |            |                          |                                                                    |
| -9        | 16    |          |            |                      |                |          |          |            |                          |                                                                    |
| -10       | 17    |          |            |                      |                |          |          |            |                          |                                                                    |
| -11       | 18    |          |            |                      |                |          |          |            |                          |                                                                    |
| -12       | 19    |          |            |                      |                |          |          |            |                          |                                                                    |
| -13       | 20    |          |            |                      |                |          |          |            |                          |                                                                    |



| BOREHOLE<br>/WELL ID | SMP<br>NUM | LTH<br>NUM | LITHOLOGY INT.<br>(FT BGS) | SAMPLING<br>METHOD | SIZE<br>GRAVEL PCT. | GRAVEL<br>SIZE<br>SAND | SAND<br>PCT | SILT<br>PCT | CLAY<br>PCT | ORGANIC<br>PCT | ROCK<br>TYPE | PLAST | SORT | STRENGTH | MOISTURE | STRAT<br>UNIT |
|----------------------|------------|------------|----------------------------|--------------------|---------------------|------------------------|-------------|-------------|-------------|----------------|--------------|-------|------|----------|----------|---------------|
| MP12MW16             | 1          | 1          | 0.00                       | 1.80               | SPS                 | 0                      | MFC         | 85          | 15          | 0              | 0            | NA    | MOD  | LSE      | WET      |               |
| MP12MW16             | 1          | 2          | 1.80                       | 2.00               | SPS                 | 0                      |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| MP12MW16             | 2          | 1          | 2.00                       | 3.80               | SPS                 | 0                      | MFC         | 85          | 15          | 0              | 0            | NA    | MOD  | LSE      | SAT      |               |
| MP12MW16             | 2          | 2          | 3.80                       | 4.00               | SPS                 | 0                      |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| MP12MW16             | 3          | 1          | 4.00                       | 5.50               | SPS                 | 0                      | MFC         | 80          | 20          | 0              | 0            | NA    | MOD  | SFT      | SAT      |               |
| MP12MW16             | 3          | 2          | 5.50                       | 6.00               | SPS                 | 0                      | MFC         | 90          | 10          | 0              | 0            | NA    | MOD  | LSE      | SAT      |               |
| MP12MW16             | 4          | 1          | 6.00                       | 7.30               | SPS                 | 0                      | MFC         | 90          | 10          | 0              | 0            | NA    | MOD  | LSE      | SAT      |               |
| MP12MW16             | 4          | 2          | 7.30                       | 8.00               | SPS                 | 0                      |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| MP12MW16             | 5          | 1          | 8.00                       | 9.00               | SPS                 | 5                      | MFC         | 75          | 20          | 0              | 0            | NA    | MOD  | LSE      | SAT      |               |
| MP12MW16             | 5          | 2          | 9.00                       | 10.00              | SPS                 | 0                      |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| MP12MW16             | 6          | 1          | 10.00                      | 11.20              | SPS                 | 0                      | MFC         | 78          | 20          | 2              | 0            | NON   | MOD  | SFT      | SAT      |               |
| MP12MW16             | 6          | 2          | 11.20                      | 12.00              | SPS                 | 0                      |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| MP12MW16             | 7          | 1          | 12.00                      | 13.10              | SPS                 | 0                      | MF          | 70          | 25          | 5              | 0            | NON   | MOD  | SFT      | SAT      |               |
| MP12MW16             | 7          | 2          | 13.10                      | 13.70              | SPS                 | 0                      | MF          | 60          | 30          | 10             | 0            | NON   | MOD  | SFT      | WET      |               |
| MP12MW16             | 7          | 3          | 13.70                      | 14.00              | SPS                 | 0                      |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| MP12MW16             | 8          | 1          | 14.00                      | 14.50              | NS                  | 0                      |             | 0           | 0           | 0              | 0            |       |      |          |          |               |

**Borehole Location Data****Roy F. WESTON, Inc.**

BOREHOLE ID : MP12MW17  
BEGIN DATE : 01/11/95

PROJECT NAME: FT. MONMOUTH  
END DATE : 01/11/95

LOGGER/COMPANY : P. THOMAS

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : O

TOTAL DEPTH : 14.50

DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 12.25

INTERVAL: 0.00 ft. to 14.50 ft. BGS

METHOD : HSA

FLUID : WATER

BOREHOLE DIAMETER #2:

INTERVAL:

METHOD :

FLUID :

BOREHOLE DIAMETER #3:

INTERVAL:

METHOD :.

FLUID :

DRILLING COMPANY : J.C. ANDERSON

DRILLER : STEVE BURGER

DRILL RIG TYPE : MOBILE B-57

|                        | ESTIMATED | SURVEYED |
|------------------------|-----------|----------|
| SURFACE<br>ELEVATION : | 0.000     | 5.900    |
| N. COORDINATE :        | 0.0000    |          |
| E. COORDINATE :        | 0.0000    |          |

WELL PERMIT.....(Y)es (N)o: N PERMIT # : NJ 29 32577

HOLE ABANDONED... (Y)es (N)o: N

WELL INSTALLED... (Y)es (N)o: Y

WELL CLUSTER.....(Y)es (N)o: N No. OF WELLS : 0

WELL NEST.....(Y)es (N)o: N No. OF WELLS : 0

PUMPS INSTALLED.. (Y)es (N)o: N

PURGE :

DEPTH

0.00

SAMPLE :

0.00

**BOREHOLE TESTING**

BOREHOLE GEOPHYSICS.....(Y)es (N)o: N

SLUG TESTS.....(Y)es (N)o: N

PACKER TESTS.....(Y)es (N)o: N

PUMPING TESTS.....(Y)es (N)o: N

**COMMENTS :**

Latitude-North: 40 deg 18' 47.4"

Longitude-West: 74 deg 02' 19.2"

# Well Completion Summary

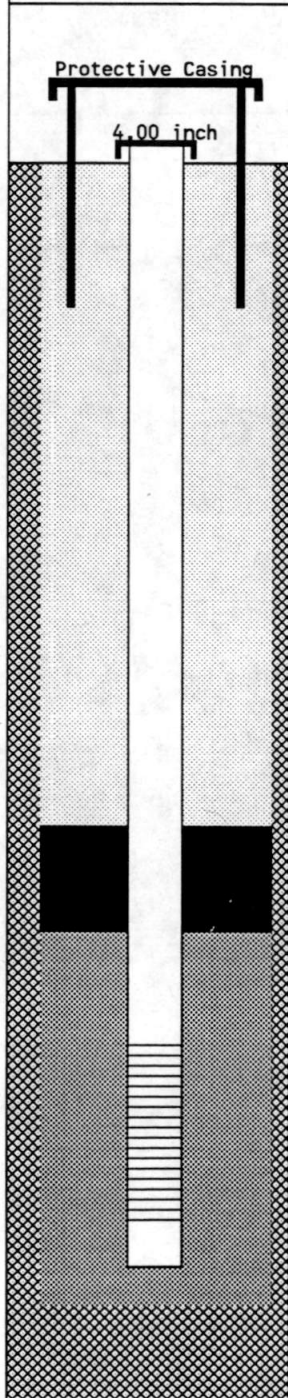
Roy F. WESTON, Inc.

**CLIENT** FT. MONMOUTH  
**SITE NAME** MAIN POST 12

**DRILLING FIRM** J.C. ANDERSON  
**INSPECTOR** P. THOMAS

**WELL ID** MP12MW17  
**START DATE** 01/11/95  
**COMPLETION DATE** 01/11/95

## WATER LEVELS

|  | DEPTH                                                                                                                                                                                    |       | ELEV.                                                                                                                               | DRILLING SUMMARY |                       |
|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|-------------------------------------------------------------------------------------------------------------------------------------|------------------|-----------------------|
|                                                                                    | 1.97                                                                                                                                                                                     | TC    | 7.87                                                                                                                                | Driller          | WELLINGTON REEVE      |
|                                                                                    | 0.00                                                                                                                                                                                     | GS    | 5.90                                                                                                                                | Drilling Fluid   | WATER                 |
|                                                                                    |                                                                                                                                                                                          |       |                                                                                                                                     | Well Type        | SINGLE CASED SCREENED |
|                                                                                    | WELL DESIGN CONSTRUCTION                                                                                                                                                                 |       |                                                                                                                                     |                  |                       |
|                                                                                    | Casing #1 Diameter: 4.00 inch Interval: 0.00 to 4.50 ft.<br>Type : PVC SCH 40                                                                                                            |       |                                                                                                                                     |                  |                       |
|                                                                                    | Stick Up Inner Casing: 1.97 ft. Protective Casing: 2.34 ft.                                                                                                                              |       |                                                                                                                                     |                  |                       |
|                                                                                    | Casing Grout: CEMENT/BENT Interval: 0.00 to 0.50 ft.                                                                                                                                     |       |                                                                                                                                     |                  |                       |
|                                                                                    | Seal Type: BENTONITE SLURRY Interval: 0.50 to 3.00 ft.                                                                                                                                   |       |                                                                                                                                     |                  |                       |
|                                                                                    | Sand Pack Type : NO. 1 MORIE Interval: 3.00 to 14.50 ft.<br>Grain Size : UNIFORM Median Diameter:<br>Screen Diameter: 4.00 Interval: 4.50 to 14.35 ft.<br>Type : PVC Slots: 0.010 inches |       |                                                                                                                                     |                  |                       |
| 0.50                                                                               | BN                                                                                                                                                                                       | 5.40  | Silt Trap Interval: 14.35 to 14.50 ft.                                                                                              |                  |                       |
| 3.00                                                                               | SP                                                                                                                                                                                       | 2.90  | Backfill Type : Interval: 0.00 to 0.00 ft.                                                                                          |                  |                       |
| WELL DEVELOPMENT                                                                   |                                                                                                                                                                                          |       |                                                                                                                                     |                  |                       |
| 4.50                                                                               | SC                                                                                                                                                                                       | 1.40  | Date 01/17/95                                                                                                                       |                  |                       |
|                                                                                    |                                                                                                                                                                                          |       | Method Bailing, overpumping                                                                                                         |                  |                       |
|                                                                                    |                                                                                                                                                                                          |       | Yield 1.5 gpm Purged Volume 120 gal                                                                                                 |                  |                       |
| COMMENTS                                                                           |                                                                                                                                                                                          |       |                                                                                                                                     |                  |                       |
| 14.35                                                                              | BS                                                                                                                                                                                       | -8.45 | TC = Top of Casing SP = Top Sand Pack  = Grout |                  |                       |
|                                                                                    |                                                                                                                                                                                          |       | GS = Ground Surface SC = Top Screen  = Seal    |                  |                       |
|                                                                                    |                                                                                                                                                                                          |       | BN = Top Seal BS = Bottom Screen  = Sand Pack  |                  |                       |
| 14.50                                                                              | TD                                                                                                                                                                                       | -8.60 | TD = Total Depth  = Formation                  |                  |                       |
| Additional Comments:                                                               |                                                                                                                                                                                          |       |                                                                                                                                     |                  |                       |
| Depths are measured below ground surface.                                          |                                                                                                                                                                                          |       |                                                                                                                                     |                  |                       |

**NOTE:** Well Diagram not to Scale

Elevations are feet above mean sea level

# Borehole Log

Roy F. WESTON, Inc.

PROJECT : FT. MONMOUTH  
 SITE NAME : MAIN POST 12  
 BORING ID : MP12MW17  
 NORTHING : 0.0000 estimated  
 EASTING : 0.0000 estimated  
 ELEVATION : 5.900 surveyed

TOTAL DEPTH : 14.50  
 LOGGER : P. THOMAS  
 DRILLING COMPANY : J.C. ANDERSON  
 DRILLING RIG : MOBILE B-57  
 DATE STARTED : 01/11/95  
 DATE COMPLETED : 01/11/95

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION      | COLOR         | STRENGTH | MOISTURE | BLOW COUNT | FIELD INSTRUMENT READING | COMMENTS                                                                       |
|-----------|-------|----------|------------|---------------------|---------------|----------|----------|------------|--------------------------|--------------------------------------------------------------------------------|
|           |       |          | 10         | Sandy silt, ML      | DK BRN/FE BRN | SFT      | MST      | 2          | OVM 0.0                  | Poor recovery - appears to be fill.                                            |
|           |       |          |            | No Sample Recovered |               |          |          | 2          |                          |                                                                                |
| 4         | 1     |          |            |                     |               |          |          |            |                          |                                                                                |
|           |       |          |            |                     |               |          |          |            |                          |                                                                                |
| 3         | 2     |          |            | No Sample Recovered |               |          | SAT      | 2          | OVM 0.0                  | Spoon was wet - possible fill recovered wood in drive shoe.                    |
|           |       |          |            |                     |               |          |          | 1          |                          |                                                                                |
|           |       |          |            |                     |               |          |          | 1          |                          |                                                                                |
| 2         | 3     |          |            |                     |               |          |          |            |                          |                                                                                |
|           |       |          |            |                     |               |          |          |            |                          |                                                                                |
| 1         | 4     |          |            | No Sample Recovered |               |          |          | 3          |                          | Recovered slough in spoon. Possible saturated fill with fill gray roots (sat). |
|           |       |          |            |                     |               |          |          | 3          |                          |                                                                                |
|           |       |          |            |                     |               |          |          | 4          |                          |                                                                                |
| 0         | 5     |          |            |                     |               |          |          | 7          |                          |                                                                                |
|           |       |          |            |                     |               |          |          |            |                          |                                                                                |
| -1        | 6     |          | 15         | Sandy silt, ML      | GREEN/BROWN   | SFT      | SAT      | 3          | OVM 0.0                  | Slough (?). Sand with grass/tree roots.                                        |
|           |       |          |            | No Sample Recovered |               |          |          | 4          |                          |                                                                                |
|           |       |          |            |                     |               |          |          | 4          |                          |                                                                                |
| -2        | 7     |          |            |                     |               |          |          |            |                          |                                                                                |
|           |       |          |            |                     |               |          |          |            |                          |                                                                                |
| -3        | 8     |          | 25         | Silty sand, SM      | GRAY          | SFT      | SAT      | 8          | OVM 0.0                  | Fill - grass roots etc. Poor recovery, slough.                                 |
|           |       |          |            | No Sample Recovered |               |          |          | 10         |                          |                                                                                |
|           |       |          |            |                     |               |          |          | 4          |                          |                                                                                |
|           |       |          |            |                     |               |          |          | 3          |                          |                                                                                |
| -4        | 9     |          |            |                     |               |          |          |            |                          |                                                                                |
|           |       |          |            |                     |               |          |          |            |                          |                                                                                |
| -5        | 10    |          | 20         | Silty sand, SM      | GRAY          | SFT      | SAT      | 2          |                          | Fill/slough?                                                                   |
|           |       |          |            |                     |               |          |          | 2          |                          |                                                                                |
|           |       |          |            |                     |               |          |          | 4          |                          |                                                                                |
|           |       |          |            |                     |               |          |          | 4          |                          |                                                                                |

# Borehole Log

Roy F. WESTON, Inc.

PROJECT : FT. MONMOUTH  
 SITE NAME : MAIN POST 12  
 BORING ID : MP12MW17  
 NORTHING : 0.0000 estimated  
 EASTING : 0.0000 estimated  
 ELEVATION : 5.900 surveyed

TOTAL DEPTH : 14.50  
 LOGGER : P. THOMAS  
 DRILLING COMPANY : J.C. ANDERSON  
 DRILLING RIG : MOBILE B-57  
 DATE STARTED : 01/11/95  
 DATE COMPLETED : 01/11/95

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION       | COLOR | STRENGTH | MOISTURE | BLOW COUNT | FIELD INSTRUMENT READING | COMMENTS                                      |
|-----------|-------|----------|------------|----------------------|-------|----------|----------|------------|--------------------------|-----------------------------------------------|
|           |       |          |            | Silty sand, SM       | GRAY  | SFT      | SAT      |            |                          | Fill/slough?                                  |
|           |       |          |            | No Sample Recovered  |       |          |          |            |                          |                                               |
| -5        | 11    |          |            |                      |       |          |          |            |                          |                                               |
| -6        | 12    |          | 100        | Clayey sand, SC      | GRAY  | SFT      | SAT      | 4          |                          | Sand with beds of clay/silt organics.         |
| -7        | 13    |          |            |                      |       |          |          | 4          |                          |                                               |
| -8        | 14    |          |            | Interval Not Sampled |       |          |          | 3          |                          | Augered interval - TD and set well 14.5' bgs. |
| -9        | 15    |          |            |                      |       |          |          |            |                          |                                               |
| -10       | 16    |          |            |                      |       |          |          |            |                          |                                               |
| -11       | 17    |          |            |                      |       |          |          |            |                          |                                               |
| -12       | 18    |          |            |                      |       |          |          |            |                          |                                               |
| -13       | 19    |          |            |                      |       |          |          |            |                          |                                               |
| -14       | 20    |          |            |                      |       |          |          |            |                          |                                               |

| BOREHOLE<br>/WELL ID | SMP<br>NUM | LTH<br>NUM | LITHOLOGY<br>(FT BGS) | INT.  | SAMPLING<br>METHOD | SIZE<br>GRAVEL PCT. | SIZE<br>SAND | SAND<br>PCT | SILT<br>PCT | CLAY<br>PCT | ORGANIC<br>PCT | ROCK<br>TYPE | PLAST | SORT | STRENGTH | MOISTURE | STRAT<br>UNIT |
|----------------------|------------|------------|-----------------------|-------|--------------------|---------------------|--------------|-------------|-------------|-------------|----------------|--------------|-------|------|----------|----------|---------------|
| MP12MW17             | 1          | 1          | 0.00                  | 0.20  | SPS                | 10                  | FM           | 30          | 40          | 10          | 10             |              | NON   | POR  | SFT      | MST      |               |
| MP12MW17             | 1          | 2          | 0.20                  | 2.00  | SPS                | 0                   |              | 0           | 0           | 0           | 0              |              |       |      |          |          |               |
| MP12MW17             | 2          | 1          | 2.00                  | 4.00  | SPS                | 0                   |              | 0           | 0           | 0           | 0              |              |       |      |          | SAT      |               |
| MP12MW17             | 3          | 1          | 4.00                  | 6.00  | SPS                | 0                   |              | 0           | 0           | 0           | 0              |              |       |      |          |          |               |
| MP12MW17             | 4          | 1          | 6.00                  | 6.30  | SPS                | 10                  | MF           | 20          | 25          | 5           | 10             |              | NON   | POR  | SFT      | SAT      |               |
| MP12MW17             | 4          | 2          | 6.30                  | 8.00  | SPS                | 0                   |              | 0           | 0           | 0           | 0              |              |       |      |          |          |               |
| MP12MW17             | 5          | 1          | 8.00                  | 8.50  | SPS                | 0                   | MF           | 50          | 20          | 20          | 10             |              | LOW   | POR  | SFT      | SAT      |               |
| MP12MW17             | 5          | 2          | 8.50                  | 10.00 | SPS                | 0                   |              | 0           | 0           | 0           | 0              |              |       |      |          |          |               |
| MP12MW17             | 6          | 1          | 10.00                 | 10.40 | SPS                | 0                   | MF           | 50          | 20          | 20          | 10             |              | NON   | POR  | SFT      | SAT      |               |
| MP12MW17             | 6          | 2          | 10.40                 | 12.00 | SPS                | 0                   |              | 0           | 0           | 0           | 0              |              |       |      |          |          |               |
| MP12MW17             | 7          | 1          | 12.00                 | 14.00 | SPS                | 0                   | MF           | 50          | 15          | 30          | 5              |              | MOD   | MOD  | SFT      | SAT      |               |
| MP12MW17             | 8          | 1          | 14.00                 | 14.50 | NS                 | 0                   |              | 0           | 0           | 0           | 0              |              |       |      |          |          |               |

**Borehole Location Data****Roy F. WESTON, Inc.**

BOREHOLE ID : MP12MW18  
BEGIN DATE : 01/11/95

PROJECT NAME: FT. MONMOUTH  
END DATE : 01/11/95

LOGGER/COMPANY : P. THOMAS

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : 0

TOTAL DEPTH : 14.50

DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 12.25

INTERVAL: 0.00 ft. to 14.50 ft. BGS

METHOD : HSA

FLUID : WATER

BOREHOLE DIAMETER #2:

INTERVAL:

METHOD :

FLUID :

BOREHOLE DIAMETER #3:

INTERVAL:

METHOD :

FLUID :

DRILLING COMPANY : J.C. ANDERSON

DRILLER : STEVE BURGER

DRILL RIG TYPE : MOBILE B-57

|                        | ESTIMATED | SURVEYED |
|------------------------|-----------|----------|
| SURFACE<br>ELEVATION : | 0.000     | 4.780    |
| N. COORDINATE :        | 0.0000    |          |
| E. COORDINATE :        | 0.0000    |          |

WELL PERMIT.....(Y)es (N)o: N PERMIT # : NJ 29 32578

HOLE ABANDONED... (Y)es (N)o: N

WELL INSTALLED... (Y)es (N)o: Y

WELL CLUSTER..... (Y)es (N)o: N No. OF WELLS : 0

WELL NEST..... (Y)es (N)o: N No. OF WELLS : 0

PUMPS INSTALLED.. (Y)es (N)o: N

PURGE :

DEPTH

0.00

SAMPLE :

0.00

**BOREHOLE TESTING**

BOREHOLE GEOPHYSICS..... (Y)es (N)o: N

SLUG TESTS..... (Y)es (N)o: N

PACKER TESTS..... (Y)es (N)o: N

PUMPING TESTS..... (Y)es (N)o: N

**COMMENTS :**

Latitude-North: 40 deg 18' 49.7"

Longitude-West: 74 deg 02' 14.5"

# Well Completion Summary

Roy F. WESTON, Inc.

**CLIENT** FT. MONMOUTH  
**SITE NAME** MAIN POST 12

**DRILLING FIRM** J.C. ANDERSON  
**INSPECTOR** P. THOMAS

**WELL ID** MP12MW18  
**START DATE** 01/11/95  
**COMPLETION DATE** 01/11/95

## WATER LEVELS

|                                                                                     |                                 | DEPTH |    | ELEV. | DRILLING SUMMARY              |                        |
|-------------------------------------------------------------------------------------|---------------------------------|-------|----|-------|-------------------------------|------------------------|
| <p>Protective Casing<br/>4.00 inch</p>                                              |                                 | 1.84  | TC | 6.62  | <b>Driller</b>                | WELLINGTON REEVE       |
|                                                                                     |                                 | 0.00  | GS | 4.78  | <b>Drilling Fluid</b>         | WATER                  |
|                                                                                     |                                 |       |    |       | <b>Well Type</b>              | SINGLE CASED SCREENED  |
|                                                                                     | <b>WELL DESIGN CONSTRUCTION</b> |       |    |       |                               |                        |
|                                                                                     |                                 |       |    |       | <b>Casing #1 Diameter:</b>    | 4.00 inch              |
|                                                                                     |                                 |       |    |       | <b>Interval:</b>              | 0.00 to 4.50 ft.       |
|                                                                                     |                                 |       |    |       | <b>Type :</b>                 |                        |
|                                                                                     |                                 |       |    |       | <b>Stick Up Inner Casing:</b> | 1.84 ft.               |
|                                                                                     |                                 |       |    |       | <b>Protective Casing:</b>     | 2.26 ft.               |
|                                                                                     |                                 |       |    |       | <b>Casing Grout:</b>          | CEMT/BENT              |
|                                                                                     |                                 |       |    |       | <b>Interval:</b>              | 0.00 to 0.50 ft.       |
|                                                                                     |                                 |       |    |       | <b>Seal Type:</b>             | BENTONITE SLURRY       |
|                                                                                     |                                 |       |    |       | <b>Interval:</b>              | 0.50 to 3.00 ft.       |
|                                                                                     |                                 |       |    |       | <b>Sand Pack Type :</b>       | NO. 1 MORIE            |
|                                                                                     |                                 |       |    |       | <b>Interval:</b>              | 3.00 to 14.50 ft.      |
|                                                                                     |                                 |       |    |       | <b>Grain Size :</b>           | UNIFORM                |
|                                                                                     |                                 |       |    |       | <b>Median Diameter:</b>       |                        |
|                                                                                     |                                 |       |    |       | <b>Screen Diameter:</b>       | 4.00                   |
|                                                                                     |                                 |       |    |       | <b>Interval:</b>              | 4.50 to 14.04 ft.      |
|                                                                                     |                                 |       |    |       | <b>Type :</b>                 | PVC                    |
|                                                                                     |                                 |       |    |       | <b>Slots:</b>                 | 0.010 inches           |
|                                                                                     |                                 | 0.50  | BN | 4.28  | <b>Silt Trap Interval:</b>    | 14.04 to 14.50 ft.     |
|                                                                                     |                                 |       |    |       | <b>Backfill Type :</b>        |                        |
|                                                                                     |                                 | 3.00  | SP | 1.78  | <b>Interval:</b>              | 0.00 to 0.00 ft.       |
| <b>WELL DEVELOPMENT</b>                                                             |                                 |       |    |       |                               |                        |
|                                                                                     |                                 | 4.50  | SC | 0.28  | <b>Date</b>                   | 01/17/95               |
|                                                                                     |                                 |       |    |       | <b>Method</b>                 | Surge blocking/bailing |
|                                                                                     |                                 |       |    |       | <b>Yield</b>                  | 0.5 gpm                |
|                                                                                     |                                 |       |    |       | <b>Purged Volume</b>          | 45 gal                 |
| <b>COMMENTS</b>                                                                     |                                 |       |    |       |                               |                        |
|                                                                                     |                                 | 14.04 | BS | -9.26 | TC = Top of Casing            | SP = Top Sand Pack     |
|                                                                                     |                                 |       |    |       | GS = Ground Surface           | SC = Top Screen        |
|                                                                                     |                                 |       |    |       | BN = Top Seal                 | BS = Bottom Screen     |
|                                                                                     |                                 | 14.50 | TD | -9.72 | TD = Total Depth              |                        |
| <p><b>Additional Comments:</b></p> <p>Depths are measured below ground surface.</p> |                                 |       |    |       |                               |                        |

NOTE: Well Diagram not to Scale

Elevations are feet above mean sea level



# Borehole Log

Roy F. WESTON, Inc.

|           |                    |                  |                 |
|-----------|--------------------|------------------|-----------------|
| PROJECT   | : FT. MONMOUTH     | TOTAL DEPTH      | : 14.50         |
| SITE NAME | : MAIN POST 12     | LOGGER           | : P. THOMAS     |
| BORING ID | : MP12MW18         | DRILLING COMPANY | : J.C. ANDERSON |
| NORTHING  | : 0.0000 estimated | DRILLING RIG     | : MOBILE B-57   |
| EASTING   | : 0.0000 estimated | DATE STARTED     | : 01/11/95      |
| ELEVATION | : 4.780 surveyed   | DATE COMPLETED   | : 01/11/95      |

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION      | COLOR          | STRENGTH | MOISTURE | BLOW COUNT  | FIELD INSTRUMENT READING | COMMENTS                                                                           |
|-----------|-------|----------|------------|---------------------|----------------|----------|----------|-------------|--------------------------|------------------------------------------------------------------------------------|
|           |       |          | 45         | Sandy silt, ML      | FE BROWN/GRAY  | SFT      | MST      | 3<br>4<br>5 | OVM 1.0                  | Fill. Note: 0-0.2 topsoil                                                          |
| 3         | 1     |          |            | No Sample Recovered |                |          |          |             |                          |                                                                                    |
| 2         | 2     |          | 30         | Silty sand, SM      | GRAY/OLIVE GRN | LSE      | SAT      | 3<br>4<br>5 | OVM 0.0                  | Fill. Top 0-3' same lithology as noted above. Sheen observed in spoon.             |
| 1         | 3     |          |            | No Sample Recovered |                |          |          |             |                          |                                                                                    |
| 0         | 4     |          | 50         | Silty sand, SM      | OLIVE GREEN    | SFT      | SAT      | 1<br>2<br>3 | OVM 0.0                  | Sharp color change. Trace roots and plant fragments Sheen observed.                |
| -1        | 5     |          |            | No Sample Recovered |                |          |          |             |                          |                                                                                    |
| -2        | 6     |          | 60         | Silty sand, SM      | OLIVE GREEN    | LSE      | SAT      | 1<br>2<br>3 | OVM 0.0                  |                                                                                    |
| -3        | 7     |          |            | Silty sand, SM      | FE BROWN/GRAY  | SFT      | SAT      |             | OVM 0.0                  | Iron (Fe) brown/gray interbedded laminae.                                          |
|           |       |          |            | No Sample Recovered |                |          |          |             |                          |                                                                                    |
| -4        | 8     |          | 70         | Silty sand, SM      | FE BROWN/GRAY  | SFT      | SAT      | 4<br>5<br>6 | OVM 0.0                  | Iron (Fe) brown/gray interbedded laminae.                                          |
| -5        | 9     |          |            | No Sample Recovered |                |          |          |             |                          |                                                                                    |
| -6        | 10    |          | 80         | Silty sand, SM      | FE BROWN/GRAY  | SFT      | SAT      | 7<br>8<br>9 | OVM 0.0                  | Slightly more clayey than above lithology. Clay pockets found throughout interval. |

# Borehole Log

Roy F. WESTON, Inc.

|           |                    |                  |                 |
|-----------|--------------------|------------------|-----------------|
| PROJECT   | : FT. MONMOUTH     | TOTAL DEPTH      | : 14.50         |
| SITE NAME | : MAIN POST 12     | LOGGER           | : P. THOMAS     |
| BORING ID | : MP12MW18         | DRILLING COMPANY | : J.C. ANDERSON |
| NORTHING  | : 0.0000 estimated | DRILLING RIG     | : MOBILE B-57   |
| EASTING   | : 0.0000 estimated | DATE STARTED     | : 01/11/95      |
| ELEVATION | : 4.780 surveyed   | DATE COMPLETED   | : 01/11/95      |

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION       | COLOR         | STRENGTH | MOISTURE | BLOW COUNT | FIELD INSTRUMENT READING | COMMENTS                                                                           |
|-----------|-------|----------|------------|----------------------|---------------|----------|----------|------------|--------------------------|------------------------------------------------------------------------------------|
| -6        | 11    |          |            | Silty sand, SM       | FE BROWN/GRAY | SFT      | SAT      |            | OVM 0.0                  | Slightly more clayey than above lithology. Clay pockets found throughout interval. |
| -7        | 12    |          | 85         | No Sample Recovered  |               |          |          |            |                          |                                                                                    |
| -8        | 13    |          |            | Silty sand, SM       | FE BROWN/GRAY | SFT      | SAT      | 5          | OVM 0.0                  |                                                                                    |
| -9        | 14    |          |            | No Sample Recovered  |               |          |          |            |                          |                                                                                    |
| -10       | 15    |          |            | Interval Not Sampled |               |          |          |            |                          | Augered interval. Set well at 14.5' bgs.                                           |
| -11       | 16    |          |            |                      |               |          |          |            |                          |                                                                                    |
| -12       | 17    |          |            |                      |               |          |          |            |                          |                                                                                    |
| -13       | 18    |          |            |                      |               |          |          |            |                          |                                                                                    |
| -14       | 19    |          |            |                      |               |          |          |            |                          |                                                                                    |
| -15       | 20    |          |            |                      |               |          |          |            |                          |                                                                                    |

| BOREHOLE | SMP | LTH | LITHOLOGY | INT.  | SAMPLING | SIZE   | GRAVEL | SIZE | SAND | SILT | CLAY | ORGANIC | ROCK |       |      |          |          | STRAT |
|----------|-----|-----|-----------|-------|----------|--------|--------|------|------|------|------|---------|------|-------|------|----------|----------|-------|
| /WELL ID | NUM | NUM | (FT BGS)  |       | METHOD   | GRAVEL | PCT.   | SAND | PCT  | PCT  | PCT  | PCT     | TYPE | PLAST | SORT | STRENGTH | MOISTURE | UNIT  |
| MP12MW18 | 1   | 1   | 0.00      | 0.90  | SPS      |        | 5      | FM   | 25   | 50   | 10   | 10      |      | NON   | POR  | SFT      | MST      |       |
| MP12MW18 | 1   | 2   | 0.90      | 2.00  | SPS      |        | 0      |      | 0    | 0    | 0    | 0       |      |       |      |          |          |       |
| MP12MW18 | 2   | 1   | 2.00      | 2.60  | SPS      |        | 0      | MF   | 85   | 15   | 0    | 0       |      | NA    | MOD  | LSE      | SAT      |       |
| MP12MW18 | 2   | 2   | 2.60      | 4.00  | SPS      |        | 0      |      | 0    | 0    | 0    | 0       |      |       |      |          |          |       |
| MP12MW18 | 3   | 1   | 4.00      | 5.00  | SPS      |        | 5      | MF   | 70   | 20   | 0    | 5       |      | NA    | MOD  | SFT      | SAT      |       |
| MP12MW18 | 3   | 2   | 5.00      | 6.00  | SPS      |        | 0      |      | 0    | 0    | 0    | 0       |      |       |      |          |          |       |
| MP12MW18 | 4   | 1   | 6.00      | 6.70  | SPS      |        | 5      | MF   | 70   | 20   | 0    | 5       |      | NA    | MOD  | LSE      | SAT      |       |
| MP12MW18 | 4   | 2   | 6.70      | 7.20  | SPS      |        | 0      | MF   | 70   | 25   | 5    | 0       |      | NON   | WEL  | SFT      | SAT      |       |
| MP12MW18 | 4   | 3   | 7.20      | 8.00  | SPS      |        | 0      |      | 0    | 0    | 0    | 0       |      |       |      |          |          |       |
| MP12MW18 | 5   | 1   | 8.00      | 9.40  | SPS      |        | 0      | MF   | 70   | 25   | 5    | 0       |      | NON   | MOD  | SFT      | SAT      |       |
| MP12MW18 | 5   | 2   | 9.40      | 10.00 | SPS      |        | 0      |      | 0    | 0    | 0    | 0       |      |       |      |          |          |       |
| MP12MW18 | 6   | 1   | 10.00     | 11.60 | SPS      |        | 0      | MF   | 70   | 20   | 10   | 0       |      | NON   | MOD  | SFT      | SAT      |       |
| MP12MW18 | 6   | 2   | 11.60     | 12.00 | SPS      |        | 0      |      | 0    | 0    | 0    | 0       |      |       |      |          |          |       |
| MP12MW18 | 7   | 1   | 12.00     | 13.70 | SPS      |        | 0      | MF   | 70   | 20   | 10   | 0       |      | NON   | MOD  | SFT      | SAT      |       |
| MP12MW18 | 7   | 2   | 13.70     | 14.00 | SPS      |        | 0      |      | 0    | 0    | 0    | 0       |      |       |      |          |          |       |
| MP12MW18 | 8   | 1   | 14.00     | 14.50 | NS       |        | 0      |      | 0    | 0    | 0    | 0       |      |       |      |          |          |       |

**Borehole Location Data****Roy F. WESTON, Inc.**

BOREHOLE ID : MP14MW19  
BEGIN DATE : 01/04/95

PROJECT NAME: FT. MONMOUTH  
END DATE : 01/04/95

LOGGER/COMPANY : P. THOMAS

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : 0

TOTAL DEPTH : 16.00

DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 12.25

INTERVAL: 0.00 ft. to 15.00 ft. BGS

METHOD : HSA

FLUID : WATER

BOREHOLE DIAMETER #2: 2.00

INTERVAL: 15.00 ft. to 16.00 ft. BGS

METHOD : SPLIT SPOON

FLUID : NONE

BOREHOLE DIAMETER #3:

INTERVAL:

METHOD :

FLUID :

DRILLING COMPANY : J.C. ANDERSON

DRILLER : STEVE BURGER

DRILL RIG TYPE : MOBILE B-57

|                        | ESTIMATED | SURVEYED |
|------------------------|-----------|----------|
| SURFACE<br>ELEVATION : | 0.000     | 7.980    |
| N. COORDINATE :        | 0.0000    |          |
| E. COORDINATE :        | 0.0000    |          |

WELL PERMIT.....(Y)es (N)o: N PERMIT # : NJ 29 32579

HOLE ABANDONED... (Y)es (N)o: N

WELL INSTALLED... (Y)es (N)o: Y

WELL CLUSTER.....(Y)es (N)o: N No. OF WELLS : 0

WELL NEST.....(Y)es (N)o: N No. OF WELLS : 0

PUMPS INSTALLED.. (Y)es (N)o: N

PURGE :

DEPTH

0.00

SAMPLE :

0.00

**BOREHOLE TESTING**

BOREHOLE GEOPHYSICS.....(Y)es (N)o: N

SLUG TESTS.....(Y)es (N)o: N

PACKER TESTS.....(Y)es (N)o: N

PUMPING TESTS.....(Y)es (N)o: N

**COMMENTS :**

Latitude North: 40 deg 18' 47.3"

Longitude West: 74 deg 02' 20.7"

# Well Completion Summary

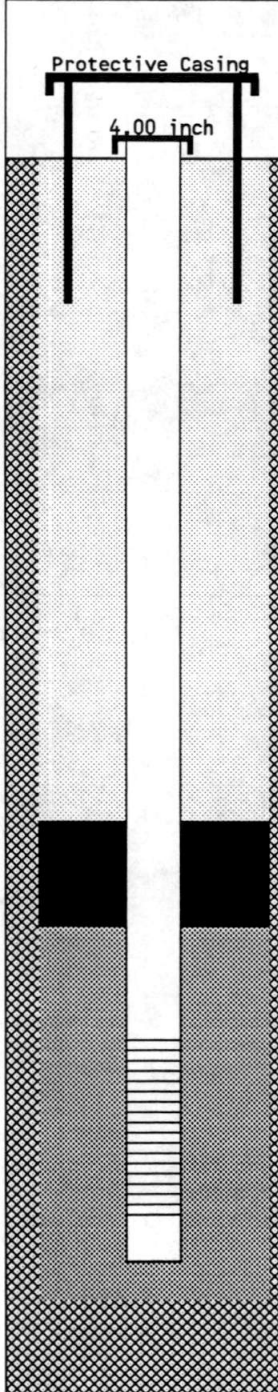
Roy F. WESTON, Inc.

**CLIENT** FT. MONMOUTH  
**SITE NAME** MAIN POST 14

**DRILLING FIRM** J.C. ANDERSON  
**INSPECTOR** P. THOMAS

**WELL ID** MP14MW19  
**START DATE** 01/04/95  
**COMPLETION DATE** 01/04/95

## WATER LEVELS

|  | DEPTH                                                                                                                                                                                         |                    | ELEV.                                                                                 | DRILLING SUMMARY      |                        |
|------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|---------------------------------------------------------------------------------------|-----------------------|------------------------|
|                                                                                    | 1.70                                                                                                                                                                                          | TC                 | 9.68                                                                                  | Driller               | STEVE BURGER           |
|                                                                                    |                                                                                                                                                                                               |                    |                                                                                       | Drilling Fluid        | WATER                  |
|                                                                                    | 0.00                                                                                                                                                                                          | GS                 | 7.98                                                                                  | Well Type             | SINGLE CASSED SCREENED |
|                                                                                    | WELL DESIGN CONSTRUCTION                                                                                                                                                                      |                    |                                                                                       |                       |                        |
|                                                                                    | Casing #1 Diameter: 4.00 inch Interval: 0.00 to 5.00 ft.<br>Type : PVC SCH 40                                                                                                                 |                    |                                                                                       |                       |                        |
|                                                                                    | Stick Up Inner Casing: 1.70 ft. Protective Casing: 2.49 ft.                                                                                                                                   |                    |                                                                                       |                       |                        |
|                                                                                    | Casing Grout: CEMENT/BENT Interval: 0.00 to 0.50 ft.                                                                                                                                          |                    |                                                                                       |                       |                        |
|                                                                                    | Seal Type: BENTONITE SLURRY Interval: 0.50 to 3.50 ft.                                                                                                                                        |                    |                                                                                       |                       |                        |
|                                                                                    | Sand Pack Type : NO. 1 SAND MORIE Interval: 3.50 to 15.00 ft.<br>Grain Size : UNIFORM Median Diameter:<br>Screen Diameter: 4.00 Interval: 5.00 to 14.54 ft.<br>Type : PVC Slots: 0.010 inches |                    |                                                                                       |                       |                        |
| 0.50                                                                               | BN                                                                                                                                                                                            | 7.48               | Silt Trap Interval: 14.54 to 15.00 ft.                                                |                       |                        |
| 3.50                                                                               | SP                                                                                                                                                                                            | 4.48               | Backfill Type : Interval: 0.00 to 0.00 ft.                                            |                       |                        |
| WELL DEVELOPMENT                                                                   |                                                                                                                                                                                               |                    |                                                                                       |                       |                        |
| 5.00                                                                               | SC                                                                                                                                                                                            | 2.98               | Date                                                                                  | 01/16/95              |                        |
|                                                                                    |                                                                                                                                                                                               |                    | Method                                                                                | Bailing, overpumping  |                        |
|                                                                                    |                                                                                                                                                                                               |                    | Yield                                                                                 | 7 gpm                 |                        |
|                                                                                    |                                                                                                                                                                                               |                    |                                                                                       | Purged Volume 345 gal |                        |
| COMMENTS                                                                           |                                                                                                                                                                                               |                    |                                                                                       |                       |                        |
|                                                                                    | TC = Top of Casing                                                                                                                                                                            | SP = Top Sand Pack |  | = Grout               |                        |
|                                                                                    | GS = Ground Surface                                                                                                                                                                           | SC = Top Screen    |  | = Seal                |                        |
|                                                                                    | BN = Top Seal                                                                                                                                                                                 | BS = Bottom Screen |  | = Sand Pack           |                        |
|                                                                                    |                                                                                                                                                                                               | TD = Total Depth   |  | = Formation           |                        |
| 14.54                                                                              | BS                                                                                                                                                                                            | -6.56              | Additional Comments:<br>Depths are measured below ground surface.                     |                       |                        |
| 15.00                                                                              | TD                                                                                                                                                                                            | -7.02              |                                                                                       |                       |                        |

**NOTE:** Well Diagram not to Scale

Elevations are feet above mean sea level

# Borehole Log

Roy F. WESTON, Inc.

PROJECT : FT. MONMOUTH  
 SITE NAME : MAIN POST 14  
 BORING ID : MP14MW19  
 NORTHING : 0.0000 estimated  
 EASTING : 0.0000 estimated  
 ELEVATION : 7.980 surveyed

TOTAL DEPTH : 16.00  
 LOGGER : P. THOMAS  
 DRILLING COMPANY : J.C. ANDERSON  
 DRILLING RIG : MOBILE B-57  
 DATE STARTED : 01/04/95  
 DATE COMPLETED : 01/04/95

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION      | COLOR       | STRENGTH | MOISTURE | BLOW COUNT | FIELD INSTRUMENT READING | COMMENTS                      |
|-----------|-------|----------|------------|---------------------|-------------|----------|----------|------------|--------------------------|-------------------------------|
|           |       |          | 70         | Silty sand, SM      | OLIVE BROWN | LSE      | MST      | 4          | HNU 0.0                  | Fill. 0-0.4 topsoil.          |
| 6         | 1     |          |            | No Sample Recovered |             |          |          |            |                          |                               |
| 5         | 2     |          | 30         | Fill                | GRAY        |          | WET      | 10         |                          | Broken charcoal fragments (?) |
|           |       |          |            | No Sample Recovered |             |          |          |            |                          |                               |
| 4         | 3     |          |            |                     |             |          |          |            |                          |                               |
| 3         | 4     |          | 10         | Silty sand, SM      | GRAY        | SFT      | SAT      | 3          | HNU 0.0                  | Slough (?)                    |
|           |       |          |            | No Sample Recovered |             |          |          |            |                          |                               |
| 2         | 5     |          |            |                     |             |          |          |            |                          |                               |
| 1         | 6     |          | 25         | Fill                | GRAY/WHITE  |          |          | 5          | HNU 0.0                  | Fill with glass fragments     |
|           |       |          |            | No Sample Recovered |             |          |          |            |                          |                               |
| 0         | 7     |          |            |                     |             |          |          |            |                          |                               |
| -1        | 8     |          |            | No Sample Recovered |             |          |          |            |                          | No recovery. Spoon sat.       |
| -2        | 9     |          |            |                     |             |          |          |            |                          |                               |
| -3        | 10    |          | 100        | Silty sand, SM      | GRAY        |          | SAT      | 2          | HNU 0.0                  | Uncertain/fill?               |

# Borehole Log

Roy F. WESTON, Inc.

PROJECT : FT. MONMOUTH  
 SITE NAME : MAIN POST 14  
 BORING ID : MP14MW19  
 NORTHING : 0.0000 estimated  
 EASTING : 0.0000 estimated  
 ELEVATION : 7.980 surveyed

TOTAL DEPTH : 16.00  
 LOGGER : P. THOMAS  
 DRILLING COMPANY : J.C. ANDERSON  
 DRILLING RIG : MOBILE B-57  
 DATE STARTED : 01/04/95  
 DATE COMPLETED : 01/04/95

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION | COLOR | STRENGTH | MOISTURE | BLOW COUNT | FIELD INSTRUMENT READING | COMMENTS                                                                |
|-----------|-------|----------|------------|----------------|-------|----------|----------|------------|--------------------------|-------------------------------------------------------------------------|
| -3        | 11    |          |            | Silty sand, SM | GRAY  |          | SAT      |            | HNU 0.0                  | Uncertain/fill?                                                         |
| -4        | 12    |          | 100        | Silty sand, SM | GRAY  | SFT      | SAT      | 1          | HNU 0.0                  | Probably fill.                                                          |
| -5        | 13    |          |            |                |       |          |          |            |                          |                                                                         |
| -6        | 14    |          | 100        | Silty sand, SM | GRAY  | SFT      | SAT      |            | HNU 0.0                  | Probably fill. Set well at 15' bgs. wood fragments found in drive shoe. |
| -7        | 15    |          |            |                |       |          |          |            |                          |                                                                         |
| -8        | 16    |          |            |                |       |          |          |            |                          |                                                                         |
| -9        | 17    |          |            |                |       |          |          |            |                          |                                                                         |
| -10       | 18    |          |            |                |       |          |          |            |                          |                                                                         |
| -11       | 19    |          |            |                |       |          |          |            |                          |                                                                         |
| -12       | 20    |          |            |                |       |          |          |            |                          |                                                                         |

| BOREHOLE | SMP | LTH | LITHOLOGY | INT.  | SAMPLING | SIZE   | GRAVEL | SIZE | SAND | SILT | CLAY | ORGANIC | ROCK |       |      |          |          | STRAT |
|----------|-----|-----|-----------|-------|----------|--------|--------|------|------|------|------|---------|------|-------|------|----------|----------|-------|
| /WELL ID | NUM | NUM | (FT BGS)  |       | METHOD   | GRAVEL | PCT.   | SAND | PCT  | PCT  | PCT  | PCT     | TYPE | PLAST | SORT | STRENGTH | MOISTURE | UNIT  |
| MP14MW19 | 1   | 1   | 0.00      | 1.40  | SPS      |        | 0      | MF   | 60   | 30   | 0    | 10      |      | NA    | POR  | LSE      | MST      |       |
| MP14MW19 | 1   | 2   | 1.40      | 2.00  | SPS      |        | 0      |      | 0    | 0    | 0    | 0       |      |       |      |          |          |       |
| MP14MW19 | 2   | 1   | 2.00      | 2.60  | SPS      |        | 0      |      | 0    | 0    | 0    | 0       |      |       |      |          | WET      |       |
| MP14MW19 | 2   | 2   | 2.60      | 4.00  | SPS      |        | 0      |      | 0    | 0    | 0    | 0       |      |       |      |          |          |       |
| MP14MW19 | 3   | 1   | 4.00      | 4.20  | SPS      |        | 5      | MF   | 55   | 30   | 10   | 0       |      | NON   | POR  | SFT      | SAT      |       |
| MP14MW19 | 3   | 2   | 4.20      | 6.00  | SPS      |        | 0      |      | 0    | 0    | 0    | 0       |      |       |      |          |          |       |
| MP14MW19 | 4   | 1   | 6.00      | 6.50  | SPS      |        | 0      |      | 0    | 0    | 0    | 0       |      |       |      |          |          |       |
| MP14MW19 | 4   | 2   | 6.50      | 8.00  | SPS      |        | 0      |      | 0    | 0    | 0    | 0       |      |       |      |          |          |       |
| MP14MW19 | 5   | 1   | 8.00      | 10.00 | SPS      |        | 0      |      | 0    | 0    | 0    | 0       |      |       |      |          |          |       |
| MP14MW19 | 6   | 1   | 10.00     | 12.00 | SPS      |        | 0      | MFC  | 60   | 30   | 10   | 0       |      |       |      |          | SAT      |       |
| MP14MW19 | 7   | 1   | 12.00     | 14.00 | SPS      |        | 0      | MFC  | 60   | 30   | 10   | 0       |      | NON   | MOD  | SFT      | SAT      |       |
| MP14MW19 | 8   | 1   | 14.00     | 16.00 | SPS      |        | 0      | MFC  | 60   | 30   | 10   | 0       |      | NON   | MOD  | SFT      | SAT      |       |



**Borehole Location Data****Roy F. WESTON, Inc.**

BOREHOLE ID : MP14MW20  
BEGIN DATE : 01/04/94

PROJECT NAME: FT. MONMOUTH  
END DATE : 01/04/95

LOGGER/COMPANY : K. VALENTI

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) :

TOTAL DEPTH : 14.00

DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 12.00

INTERVAL: 0.00 ft. to 14.50 ft. BGS

METHOD : HSA

FLUID : WATER

BOREHOLE DIAMETER #2:

INTERVAL:

METHOD :

FLUID :

BOREHOLE DIAMETER #3:

INTERVAL:

METHOD :

FLUID :

DRILLING COMPANY : J.C. ANDERSON

DRILLER : WELLS REEVE

DRILL RIG TYPE : CME-55

|                        | ESTIMATED | SURVEYED |
|------------------------|-----------|----------|
| SURFACE<br>ELEVATION : | 0.000     | 7.430    |

N. COORDINATE : 0.0000

E. COORDINATE : 0.0000

WELL PERMIT.....(Y)es (N)o: N PERMIT # : NJ 29 32580

HOLE ABANDONED... (Y)es (N)o: N

WELL INSTALLED... (Y)es (N)o: Y

WELL CLUSTER..... (Y)es (N)o: N No. OF WELLS : 0

WELL NEST..... (Y)es (N)o: N No. OF WELLS : 0

PUMPS INSTALLED.. (Y)es (N)o: N

PURGE :

DEPTH

0.00

SAMPLE :

0.00

**BOREHOLE TESTING**

BOREHOLE GEOPHYSICS..... (Y)es (N)o: N

SLUG TESTS..... (Y)es (N)o: N

PACKER TESTS..... (Y)es (N)o: N

PUMPING TESTS..... (Y)es (N)o: N

**COMMENTS :**

Latitude-North: 40 deg 18' 50.2"

Longitude-West: 74 deg 02' 19.8"

# Well Completion Summary

Roy F. WESTON, Inc.

CLIENT FT. MONMOUTH  
SITE NAME MAIN POST 14

DRILLING FIRM J.C. ANDERSON  
INSPECTOR K. VALENTI

WELL ID MP14MW20  
START DATE 01/04/95  
COMPLETION DATE 01/04/95

## WATER LEVELS

|                                        |                                 | DEPTH |       | ELEV. | DRILLING SUMMARY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                       |
|----------------------------------------|---------------------------------|-------|-------|-------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| <p>Protective Casing<br/>4.00 inch</p> |                                 | 1.86  | TC    | 9.29  | Driller                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | WELLS REEVE           |
|                                        |                                 | 0.00  | GS    | 7.43  | Drilling Fluid                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | NONE                  |
|                                        |                                 |       |       |       | Well Type                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | SINGLE CASED SCREENED |
|                                        | <b>WELL DESIGN CONSTRUCTION</b> |       |       |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                       |
|                                        |                                 |       |       |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                       |
|                                        |                                 |       |       |       | <p>Casing #1 Diameter: 4.00 inch Interval: 0.00 to 14.50 ft.<br/>Type : PVC SCH 40</p> <p>Stick Up Inner Casing: 1.86 ft. Protective Casing: 2.34 ft.</p> <p>Casing Grout: PORTLAND CEMENT Interval: 0.00 to 1.00 ft.</p> <p>Seal Type: BENTONITE Interval: 1.00 to 3.00 ft.</p> <p>Sand Pack Type : #1 MORIE Interval: 3.00 to 14.50 ft.<br/>Grain Size : UNIFORM Median Diameter:</p> <p>Screen Diameter: 4.00 Interval: 4.50 to 14.04 ft.<br/>Type : PVC Slots: 0.010 inches</p> <p>Silt Trap Interval: 14.05 to 14.50 ft.<br/>Backfill Type : Interval: 0.00 to 0.00 ft.</p> |                       |
|                                        | 1.00                            | BN    | 6.43  |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                       |
|                                        | 3.00                            | SP    | 4.43  |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                       |
|                                        | 4.50                            | SC    | 2.93  |       | <b>WELL DEVELOPMENT</b><br>Date 01/13/95<br>Method Surge blocking/bailing<br>Yield .5 gpm Purged Volume 61 gal                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                       |
|                                        | 14.04                           | BS    | -6.61 |       | <b>COMMENTS</b><br>TC = Top of Casing SP = Top Sand Pack<br>GS = Ground Surface SC = Top Screen<br>BN = Top Seal BS = Bottom Screen<br>TD = Total Depth                                                                                                                                                                                                                                                                                                                                                                                                                          |                       |
|                                        | 14.50                           | TD    | -7.07 |       | Additional Comments:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                       |

NOTE: Well Diagram not to Scale

Elevations are feet above mean sea level

# Borehole Log

Roy F. WESTON, Inc.

|                             |                                  |
|-----------------------------|----------------------------------|
| PROJECT : FT. MONMOUTH      | TOTAL DEPTH : 14.00              |
| SITE NAME : MAIN POST 14    | LOGGER : K. VALENTI              |
| BORING ID : MP14MW20        | DRILLING COMPANY : J.C. ANDERSON |
| NORTHING : 0.0000 estimated | DRILLING RIG : CME-55            |
| EASTING : 0.0000 estimated  | DATE STARTED : 01/04/94          |
| ELEVATION : 7.430 surveyed  | DATE COMPLETED : 01/04/95        |

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION             | COLOR    | STRENGTH | MOISTURE | BLOW COUNT | FIELD INSTRUMENT READING | COMMENTS                                                                   |
|-----------|-------|----------|------------|----------------------------|----------|----------|----------|------------|--------------------------|----------------------------------------------------------------------------|
|           |       |          | 50         | Sandy silt, ML             | DK BROWN | SFT      | DRY      | 3          | HNU 2.0                  | Dk brown to black sandy silt. 1st 3" topsoil.                              |
| 6         | 1     |          |            | No Sample Recovered        |          |          |          |            |                          |                                                                            |
| 5         | 2     |          | 40         | Silty sand with gravel, SM | BLACK    | LSE      | DRY      | 3          | HNU 0.0                  | Sand & gravel, little silt.                                                |
| 4         | 3     |          |            | No Sample Recovered        |          |          |          |            |                          |                                                                            |
| 3         | 4     |          | 100        | Elastic silt, MH           | BLACK    | FRM      | WET      | 1          | HNU 0.0                  | Uncertain, Wet outside of spoon at 4.5' bgs. Clayey silt containing roots. |
| 2         | 5     |          |            |                            |          |          |          |            |                          |                                                                            |
| 1         | 6     |          | 100        | Elastic silt, MH           | GREEN    | FRM      | SAT      |            | HNU 0.0                  | Uncertain.                                                                 |
| 0         | 7     |          |            |                            |          |          |          |            |                          |                                                                            |
| -1        | 8     |          | 30         | Elastic silt, MH           | GREEN    | SFT      | SAT      | 1          | HNU 0.0                  | Uncertain                                                                  |
| -2        | 9     |          |            | No Sample Recovered        |          |          |          |            |                          |                                                                            |
| -3        | 10    |          | 100        | Elastic silt with sand, MH | GREEN    | SFT      | SAT      | 1          | HNU 0.0                  | Uncertain                                                                  |

# Borehole Log

Roy F. WESTON, Inc.

|                             |                                  |
|-----------------------------|----------------------------------|
| PROJECT : FT. MONMOUTH      | TOTAL DEPTH : 14.00              |
| SITE NAME : MAIN POST 14    | LOGGER : K. VALENTI              |
| BORING ID : MP14MW20        | DRILLING COMPANY : J.C. ANDERSON |
| NORTHING : 0.0000 estimated | DRILLING RIG : CME-55            |
| EASTING : 0.0000 estimated  | DATE STARTED : 01/04/94          |
| ELEVATION : 7.430 surveyed  | DATE COMPLETED : 01/04/95        |

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION             | COLOR        | STRENGTH | MOISTURE | BLOW COUNT  | FIELD INSTRUMENT READING | COMMENTS                                             |
|-----------|-------|----------|------------|----------------------------|--------------|----------|----------|-------------|--------------------------|------------------------------------------------------|
| -3        | 11    |          |            | Elastic silt with sand, MH | GREEN        | SFT      | SAT      |             | HNU 0.0                  | Uncertain                                            |
| -4        | 12    |          | 100        | Silt with sand, ML         | DK GREEN BLK | FRM      | SAT      | 3<br>6<br>7 | HNU 0.0                  | Possible confining layer.<br>TD of borehole 14' bgs. |
| -5        | 13    |          |            |                            |              |          |          |             |                          |                                                      |
| -6        | 14    |          |            |                            |              |          |          |             |                          |                                                      |
| -7        | 15    |          |            |                            |              |          |          |             |                          |                                                      |
| -8        | 16    |          |            |                            |              |          |          |             |                          |                                                      |
| -9        | 17    |          |            |                            |              |          |          |             |                          |                                                      |
| -10       | 18    |          |            |                            |              |          |          |             |                          |                                                      |
| -11       | 19    |          |            |                            |              |          |          |             |                          |                                                      |
| -12       | 20    |          |            |                            |              |          |          |             |                          |                                                      |

| BOREHOLE | SMP | LTH | LITHOLOGY | INT.  | SAMPLING | SIZE   | GRAVEL | SIZE | SAND | SILT | CLAY | ORGANIC | ROCK | STRAT |      |          |               |
|----------|-----|-----|-----------|-------|----------|--------|--------|------|------|------|------|---------|------|-------|------|----------|---------------|
| /WELL ID | NUM | NUM | (FT BGS)  |       | METHOD   | GRAVEL | PCT.   | SAND | PCT  | PCT  | PCT  | PCT     | TYPE | PLAST | SORT | STRENGTH | MOISTURE UNIT |
| MP14MW20 | 1   | 1   | 0.00      | 1.00  | SPS      |        | 0      |      | 40   | 60   | 0    | 0       |      | NON   | POR  | SFT      | DRY           |
| MP14MW20 | 1   | 2   | 1.00      | 2.00  | SPS      |        | 0      |      | 0    | 0    | 0    | 0       |      |       |      |          |               |
| MP14MW20 | 2   | 1   | 2.00      | 2.80  | SPS      |        | 40     |      | 40   | 20   | 0    | 0       |      | NA    | POR  | LSE      | DRY           |
| MP14MW20 | 2   | 2   | 2.80      | 4.00  | SPS      |        | 0      |      | 0    | 0    | 0    | 0       |      |       |      |          |               |
| MP14MW20 | 3   | 1   | 4.00      | 6.00  | SPS      |        | 0      |      | 0    | 50   | 20   | 30      |      | HGH   | NA   | FRM      | WET           |
| MP14MW20 | 4   | 1   | 6.00      | 8.00  | SPS      |        | 0      |      | 0    | 40   | 30   | 30      |      | HGH   | NA   | FRM      | SAT           |
| MP14MW20 | 5   | 1   | 8.00      | 8.60  | SPS      |        | 0      |      | 10   | 75   | 15   | 0       |      | MOD   | NA   | SFT      | SAT           |
| MP14MW20 | 5   | 2   | 8.60      | 10.00 | SPS      |        | 0      |      | 0    | 0    | 0    | 0       |      |       |      |          |               |
| MP14MW20 | 6   | 1   | 10.00     | 12.00 | SPS      |        | 0      |      | 25   | 60   | 15   | 0       |      | HGH   | NA   | SFT      | SAT           |
| MP14MW20 | 7   | 1   | 12.00     | 14.00 | SPS      |        | 0      |      | 20   | 80   | 0    | 0       |      | NON   | POR  | FRM      | SAT           |

**Borehole Location Data****Roy F. WESTON, Inc.**

BOREHOLE ID : MP14MW21  
BEGIN DATE : 01/04/95

PROJECT NAME: FT. MONMOUTH  
END DATE : 01/04/95

LOGGER/COMPANY : P. THOMAS

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : 0

TOTAL DEPTH : 18.00

DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 12.25

INTERVAL: 0.00 ft. to 16.00 ft. BGS

METHOD : HSA FLUID : WATER

BOREHOLE DIAMETER #2: 2.00

INTERVAL: 16.00 ft. to 18.00 ft. BGS

METHOD : SPLIT SPOON FLUID : NONE

BOREHOLE DIAMETER #3:

INTERVAL:

METHOD :

FLUID :

DRILLING COMPANY : J.C. ANDERSON

DRILLER : STEVE BURGER

DRILL RIG TYPE : MOBILE B-57

|                        | ESTIMATED | SURVEYED |
|------------------------|-----------|----------|
| SURFACE<br>ELEVATION : | 0.000     | 7.500    |

N. COORDINATE : 0.0000

E. COORDINATE : 0.0000

WELL PERMIT.....(Y)es (N)o: N PERMIT # : NJ 29 32581

HOLE ABANDONED... (Y)es (N)o: N

WELL INSTALLED... (Y)es (N)o: Y

WELL CLUSTER.....(Y)es (N)o: N No. OF WELLS : 0

WELL NEST.....(Y)es (N)o: N No. OF WELLS : 0

PUMPS INSTALLED.. (Y)es (N)o: N TYPE

DEPTH

PURGE : 0.00

SAMPLE : 0.00

**BOREHOLE TESTING**

BOREHOLE GEOPHYSICS.....(Y)es (N)o: N

SLUG TESTS.....(Y)es (N)o: N

PACKER TESTS.....(Y)es (N)o: N

PUMPING TESTS.....(Y)es (N)o: N

**COMMENTS :**

Latitude-North: 40 deg 18' 50.6"

Longitude-West: 74 deg 02' 14.0"

## Well Completion Summary

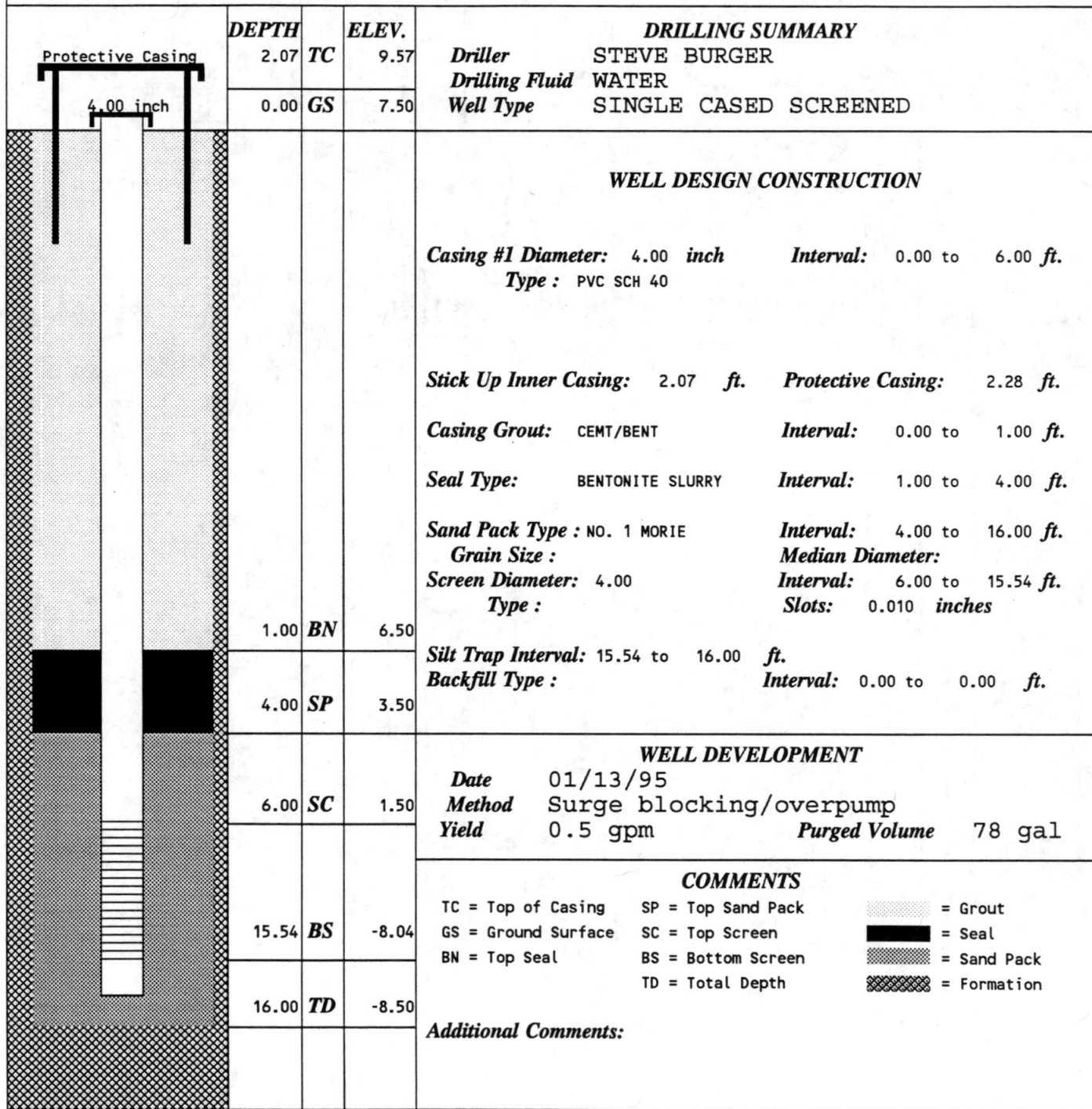
**Roy F. WESTON, Inc.**

**CLIENT** FT. MONMOUTH  
**SITE NAME** MAIN POST 14

**DRILLING FIRM** J.C. ANDERSON  
**INSPECTOR** P. THOMAS

|                        |          |
|------------------------|----------|
| <b>WELL ID</b>         | MP14MW21 |
| <b>START DATE</b>      | 01/04/95 |
| <b>COMPLETION DATE</b> | 01/04/95 |

## WATER LEVELS



**NOTE: Well Diagram not to Scale**

*Elevations are feet above mean sea level*

# Borehole Log

Roy F. WESTON, Inc.

PROJECT : FT. MONMOUTH  
 SITE NAME : MAIN POST 14  
 BORING ID : MP14MW21  
 NORTHING : 0.0000 estimated  
 EASTING : 0.0000 estimated  
 ELEVATION : 7.500 surveyed

TOTAL DEPTH : 18.00  
 LOGGER : P. THOMAS  
 DRILLING COMPANY : J.C. ANDERSON  
 DRILLING RIG : MOBILE B-57  
 DATE STARTED : 01/04/95  
 DATE COMPLETED : 01/04/95

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION         | COLOR | STRENGTH | MOISTURE | BLOW COUNT     | FIELD INSTRUMENT READING | COMMENTS                                                                                                 |
|-----------|-------|----------|------------|------------------------|-------|----------|----------|----------------|--------------------------|----------------------------------------------------------------------------------------------------------|
|           | 6-1   |          | 65         | Silty sand, SM         | BROWN | SFT      | MST      | 3<br>120<br>20 | HNU 0.0                  | Fill, 0-0.4' bgs. consists of grass root fragments.                                                      |
|           |       |          |            | No Sample Recovered    |       |          |          |                |                          |                                                                                                          |
|           | 5-2   |          | 45         | Silty sand, SM         | BROWN | SFT      | MST      | 12             | HNU 0.0                  | Concrete rubble at 2.2' bgs.                                                                             |
|           |       |          |            | Fill                   | BROWN |          |          | 100<br>00<br>0 | HNU 0.0                  |                                                                                                          |
|           | 4-3   |          | 45         | Interval Not Sampled   |       |          |          |                |                          | Augered interval.                                                                                        |
|           | 3-4   |          |            | Interval Not Sampled   |       |          |          |                |                          | Augered interval, Out of concrete interval, 2-8-9' bgs, next spoon 10-12' bgs Sat. observed 6' bgs ctngs |
|           | 2-5   |          |            |                        |       |          |          |                |                          |                                                                                                          |
|           | 1-6   |          |            |                        |       |          |          |                |                          |                                                                                                          |
|           | 0-7   |          |            |                        |       |          |          |                |                          |                                                                                                          |
|           | -1-8  |          |            |                        |       |          |          |                |                          |                                                                                                          |
|           | -2-9  |          |            |                        |       |          |          |                |                          |                                                                                                          |
|           | -3-10 |          | 70         | Poorly graded sand, SP | GREY  | SFT      | SAT      | 2<br>400<br>4  | HNU 0.0                  | Uncertain/fill?                                                                                          |



# Borehole Log

Roy F. WESTON, Inc.

PROJECT : FT. MONMOUTH  
 SITE NAME : MAIN POST 14  
 BORING ID : MP14MW21  
 NORTHING : 0.0000 estimated  
 EASTING : 0.0000 estimated  
 ELEVATION : 7.500 surveyed

TOTAL DEPTH : 18.00  
 LOGGER : P. THOMAS  
 DRILLING COMPANY : J.C. ANDERSON  
 DRILLING RIG : MOBILE B-57  
 DATE STARTED : 01/04/95  
 DATE COMPLETED : 01/04/95

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION         | COLOR | STRENGTH | MOISTURE | BLOW COUNT | FIELD INSTRUMENT READING | COMMENTS                                                                                |
|-----------|-------|----------|------------|------------------------|-------|----------|----------|------------|--------------------------|-----------------------------------------------------------------------------------------|
|           |       |          |            | Poorly graded sand, SP | GREY  | SFT      | SAT      |            | HNU 0.0                  | Uncertain/fill?                                                                         |
| -3        | 11    |          |            | Sandy elastic silt, MH | GRAY  | SFT      | WET      |            | HNU 0.0                  | Fill? Trace plant/root fragments.                                                       |
|           |       |          |            | No Sample Recovered    |       |          |          |            |                          |                                                                                         |
| -4        | 12    |          | 80         | Silty sand, SM         | GRAY  | SFT      | SAT      | 6-1-1      | HNU 0.0                  | Uncertain/fill?                                                                         |
| -5        | 13    |          |            | No Sample Recovered    |       |          |          |            |                          |                                                                                         |
| -6        | 14    |          | 60         | Silty sand, SM         | GRAY  | SFT      | SAT      | 2-1-1      | HNU 0.0                  | Uncertain/fill?                                                                         |
| -7        | 15    |          |            | No Sample Recovered    |       |          |          |            |                          |                                                                                         |
| -8        | 16    |          | 90         | Silty sand, SM         | GRAY  | SFT      | SAT      | 2-1-2      | HNU 0.0                  | Uncertain/fill? Note: 16.4-16.6 wet silt layer well set at 16' bgs. TD of borehole 18'. |
| -9        | 17    |          |            | No Sample Recovered    |       |          |          |            |                          |                                                                                         |
| -10       | 18    |          |            | No Sample Recovered    |       |          |          |            |                          |                                                                                         |
| -11       | 19    |          |            |                        |       |          |          |            |                          |                                                                                         |
| -12       | 20    |          |            |                        |       |          |          |            |                          |                                                                                         |

| BOREHOLE<br>/WELL ID | SMP<br>NUM | LTH<br>NUM | LITHOLOGY INT.<br>(FT BGS) | SAMPLING<br>METHOD | SIZE<br>GRAVEL PCT. | GRAVEL<br>SIZE<br>SAND | SAND<br>PCT | SILT<br>PCT | CLAY<br>PCT | ORGANIC<br>PCT | ROCK<br>TYPE | PLAST | SORT | STRENGTH | MOISTURE | STRAT.<br>UNIT |
|----------------------|------------|------------|----------------------------|--------------------|---------------------|------------------------|-------------|-------------|-------------|----------------|--------------|-------|------|----------|----------|----------------|
| MP14MW21             | 1          | 1          | 0.00                       | 1.30               | SPS                 | 5                      | M           | 60          | 25          | 0              | 10           | NA    | MOD  | SFT      | MST      |                |
| MP14MW21             | 1          | 2          | 1.30                       | 2.00               | SPS                 | 0                      |             | 0           | 0           | 0              | 0            |       |      |          |          |                |
| MP14MW21             | 2          | 1          | 2.00                       | 2.20               | SPS                 | 5                      | MF          | 60          | 25          | 0              | 10           | NA    | MOD  | SFT      | MST      |                |
| MP14MW21             | 2          | 2          | 2.20                       | 2.90               | SPS                 | 0                      |             | 0           | 0           | 0              | 0            |       |      |          |          |                |
| MP14MW21             | 3          | 1          | 2.90                       | 4.00               | NS                  | 0                      |             | 0           | 0           | 0              | 0            |       |      |          |          |                |
| MP14MW21             | 4          | 1          | 4.00                       | 10.00              | NS                  | 0                      |             | 0           | 0           | 0              | 0            |       |      |          |          |                |
| MP14MW21             | 5          | 1          | 10.00                      | 10.80              | SPS                 | 0                      |             | 0           | 0           | 0              | 0            | NON   | MOD  | SFT      | SAT      |                |
| MP14MW21             | 5          | 2          | 10.80                      | 11.40              | SPS                 | 0                      | F           | 30          | 50          | 20             | 0            | MOD   | WEL  | SFT      | WET      |                |
| MP14MW21             | 5          | 3          | 11.40                      | 12.00              | SPS                 | 0                      |             | 0           | 0           | 0              | 0            |       |      |          |          |                |
| MP14MW21             | 6          | 1          | 12.00                      | 13.40              | SPS                 | 0                      | MF          | 60          | 30          | 10             | 0            | NON   | MOD  | SFT      | SAT      |                |
| MP14MW21             | 6          | 2          | 13.40                      | 14.00              | SPS                 | 0                      |             | 0           | 0           | 0              | 0            |       |      |          |          |                |
| MP14MW21             | 7          | 1          | 14.00                      | 15.20              | SPS                 | 0                      | MF          | 60          | 30          | 10             | 0            | NON   | MOD  | SFT      | SAT      |                |
| MP14MW21             | 7          | 2          | 15.20                      | 16.00              | SPS                 | 0                      |             | 0           | 0           | 0              | 0            |       |      |          |          |                |
| MP14MW21             | 8          | 1          | 16.00                      | 17.80              | SPS                 | 0                      |             | 60          | 30          | 10             | 0            | NON   | MOD  | SFT      | SAT      |                |
| MP14MW21             | 8          | 2          | 17.80                      | 18.00              | SPS                 | 0                      |             | 0           | 0           | 0              | 0            |       |      |          |          |                |

**Borehole Location Data****Roy F. WESTON, Inc.**

BOREHOLE ID : MP16MW22 PROJECT NAME: FT. MONMOUTH  
BEGIN DATE : 12/15/94 END DATE : 12/15/94

LOGGER/COMPANY : K. VALENTI

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : O

TOTAL DEPTH : 14.50 DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 12.00  
INTERVAL: 0.00 ft. to 14.50 ft. BGS  
METHOD : HSA FLUID : WATER  
BOREHOLE DIAMETER #2: 2.00  
INTERVAL: 0.00 ft. to 14.50 ft. BGS  
METHOD : SPS FLUID : NONE  
BOREHOLE DIAMETER #3:  
INTERVAL:  
METHOD : FLUID :

DRILLING COMPANY : J.C. ANDERSON  
DRILLER : WELLS REEVE  
DRILL RIG TYPE : CME-55

|                                 | ESTIMATED              | SURVEYED |
|---------------------------------|------------------------|----------|
| SURFACE<br>ELEVATION :          | 0.000                  | 5.500    |
| N. COORDINATE :                 | 0.0000                 |          |
| E. COORDINATE :                 | 0.0000                 |          |
| WELL PERMIT.....(Y)es (N)o: N   | PERMIT # : NJ 29 32582 |          |
| HOLE ABANDONED... (Y)es (N)o: N |                        |          |
| WELL INSTALLED... (Y)es (N)o: Y |                        |          |
| WELL CLUSTER.....(Y)es (N)o: N  | No. OF WELLS : 0       |          |
| WELL NEST.....(Y)es (N)o: N     | No. OF WELLS : 0       |          |
| PUMPS INSTALLED..(Y)es (N)o: N  | TYPE                   | DEPTH    |
|                                 | PURGE :                | 0.00     |
|                                 | SAMPLE :               | 0.00     |

**BOREHOLE TESTING**

BOREHOLE GEOPHYSICS.....(Y)es (N)o: N  
SLUG TESTS.....(Y)es (N)o: N  
PACKER TESTS.....(Y)es (N)o: N  
PUMPING TESTS.....(Y)es (N)o: N

**COMMENTS :**

0-2' sampled @1425 for VOC,BNA,TCL,Pest/PCB,Tal metals. VOC  
@approx. 6-12" bgs. 2"-10' int. same for parameters. VOC  
taken from 2-4'. Lat. 40 deg 18' 56.1"/Long. 74 deg 01'52.3"

# Well Completion Summary

Roy F. WESTON, Inc.

**CLIENT** FT. MONMOUTH  
**SITE NAME** MAIN POST 16

**DRILLING FIRM** J.C. ANDERSON  
**INSPECTOR** K. VALENTI

**WELL ID** MP16MW22  
**START DATE** 12/15/94  
**COMPLETION DATE** 12/15/94

## WATER LEVELS

|                                        |                                 | DEPTH |       | ELEV.                                                           | DRILLING SUMMARY                                                                            |                                   |
|----------------------------------------|---------------------------------|-------|-------|-----------------------------------------------------------------|---------------------------------------------------------------------------------------------|-----------------------------------|
| <p>Protective Casing<br/>4.00 inch</p> |                                 | 1.75  | TC    | 7.25                                                            | <b>Driller</b>                                                                              | WELLS REEVE                       |
|                                        |                                 | 0.00  | GS    | 5.50                                                            | <b>Drilling Fluid</b>                                                                       | WATER                             |
|                                        |                                 |       |       |                                                                 | <b>Well Type</b>                                                                            | SINGLE CASED SCREENED             |
|                                        | <b>WELL DESIGN CONSTRUCTION</b> |       |       |                                                                 |                                                                                             |                                   |
|                                        |                                 |       |       |                                                                 | <b>Casing #1 Diameter:</b> 4.00 inch<br><b>Type :</b> PVC SCH 40                            | <b>Interval:</b> 0.00 to 4.50 ft. |
|                                        |                                 |       |       | <b>Stick Up Inner Casing:</b> 1.75 ft.                          | <b>Protective Casing:</b> 2.04 ft.                                                          |                                   |
|                                        |                                 |       |       | <b>Casing Grout:</b> PORTLAND CEMENT                            | <b>Interval:</b> 0.00 to 1.00 ft.                                                           |                                   |
|                                        |                                 |       |       | <b>Seal Type:</b> BENTONITE                                     | <b>Interval:</b> 1.00 to 3.00 ft.                                                           |                                   |
|                                        |                                 |       |       | <b>Sand Pack Type :</b> MORIE #1<br><b>Grain Size :</b> UNIFORM | <b>Interval:</b> 3.00 to 14.50 ft.                                                          |                                   |
|                                        |                                 |       |       | <b>Screen Diameter:</b> 4.00<br><b>Type :</b> PVC               | <b>Median Diameter:</b><br><b>Interval:</b> 4.50 to 14.04 ft.<br><b>Slots:</b> 0.010 inches |                                   |
|                                        | 1.00                            | BN    | 4.50  | <b>Silt Trap Interval:</b> 14.04 to 14.50 ft.                   |                                                                                             |                                   |
|                                        | 3.00                            | SP    | 2.50  | <b>Backfill Type :</b> <b>Interval:</b> 0.00 to 0.00 ft.        |                                                                                             |                                   |
| <b>WELL DEVELOPMENT</b>                |                                 |       |       |                                                                 |                                                                                             |                                   |
|                                        | 4.50                            | SC    | 1.00  | <b>Date</b>                                                     | 01/05/95                                                                                    |                                   |
|                                        |                                 |       |       | <b>Method</b>                                                   | Bailing, surge blocking                                                                     |                                   |
|                                        |                                 |       |       | <b>Yield</b>                                                    | 1 gpm                                                                                       | <b>Purged Volume</b> 31 gal       |
| <b>COMMENTS</b>                        |                                 |       |       |                                                                 |                                                                                             |                                   |
|                                        | 14.04                           | BS    | -8.54 | TC = Top of Casing                                              | SP = Top Sand Pack                                                                          | = Grout                           |
|                                        |                                 |       |       | GS = Ground Surface                                             | SC = Top Screen                                                                             | = Seal                            |
|                                        |                                 |       |       | BN = Top Seal                                                   | BS = Bottom Screen                                                                          | = Sand Pack                       |
|                                        | 14.50                           | TD    | -9.00 | TD = Total Depth                                                | = Formation                                                                                 |                                   |
| <b>Additional Comments:</b>            |                                 |       |       |                                                                 |                                                                                             |                                   |

**NOTE:** Well Diagram not to Scale

Elevations are feet above mean sea level

# Borehole Log

Roy F. WESTON, Inc.

PROJECT : FT. MONMOUTH  
 SITE NAME : MAIN POST 16  
 BORING ID : MP16MW22  
 NORTHING : 0.0000 estimated  
 EASTING : 0.0000 estimated  
 ELEVATION : 5.500 surveyed

TOTAL DEPTH : 14.50  
 LOGGER : K. VALENTI  
 DRILLING COMPANY : J.C. ANDERSON  
 DRILLING RIG : CME-55  
 DATE STARTED : 12/15/94  
 DATE COMPLETED : 12/15/94

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION                  | COLOR           | STRENGTH | MOISTURE | BLOW COUNT | FIELD INSTRUMENT READING | COMMENTS                                                                           |
|-----------|-------|----------|------------|---------------------------------|-----------------|----------|----------|------------|--------------------------|------------------------------------------------------------------------------------|
|           |       |          | 50         | Other                           | BROWN           | LSE      | MST      | 13         | HNU 0.0                  | Top 3" topsoil. Matrix contains a few subrounded small stones.                     |
|           |       |          |            | Other                           | BLACK           | LSE      | NA       | 11         | HNU 0.0                  | Asphalt gravel.                                                                    |
| 4         | 1     |          |            | No Sample Recovered             |                 |          |          | 7          |                          |                                                                                    |
| 3         | 2     |          | 100        | Lean clay with sand, CL         | GREEN-DK GRAY   | FRM      | SAT      | 3          | HNU 0.0                  | Water in the hole at 1' bgs. SPS saturated. Sandy saturated clay.                  |
| 2         | 3     |          |            |                                 |                 |          |          |            |                          |                                                                                    |
| 1         | 4     |          | 75         | Sandy lean clay with gravel, CL | DK GREEN-DK GRY | SFT      | SAT      | 2          | HNU 0.0                  | 5.5-6 no recovery. Saturated.                                                      |
| 0         | 5     |          |            | No Sample Recovered             |                 |          |          | 2          |                          |                                                                                    |
| -1        | 6     |          | 50         | Clayey sand, SC                 | GREENISH BROWN  | SFT      | SAT      | 5          | HNU 0.0                  | Saturated sample. Mostly sands some semi-rounded cobbles.                          |
| -2        | 7     |          |            | No Sample Recovered             |                 |          |          | 8          |                          |                                                                                    |
| -3        | 8     |          | 100        | Poorly graded sand, SP          | GREENISH-BROWN  | SFT      | SAT      | 5          | HNU 0.0                  | Sands get finer w/depth all fine sands towards bottom of spoon. Few small cobbles. |
| -4        | 9     |          |            |                                 |                 |          |          | 2          |                          |                                                                                    |
| -5        | 10    |          | 100        | Poorly graded sand, SP          | GREENISH-BROWN  | LSE      | SAT      | 1          | HNU 0.0                  | Same lithology as previous interval.                                               |
|           |       |          |            |                                 |                 |          |          | 2          |                          |                                                                                    |

# Borehole Log

Roy F. WESTON, Inc.

PROJECT : FT. MONMOUTH  
 SITE NAME : MAIN POST 16  
 BORING ID : MP16MW22  
 NORTHING : 0.0000 estimated  
 EASTING : 0.0000 estimated  
 ELEVATION : 5.500 surveyed

TOTAL DEPTH : 14.50  
 LOGGER : K. VALENTI  
 DRILLING COMPANY : J.C. ANDERSON  
 DRILLING RIG : CME-55  
 DATE STARTED : 12/15/94  
 DATE COMPLETED : 12/15/94

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION         | COLOR          | STRENGTH | MOISTURE | BLOW COUNT  | FIELD INSTRUMENT READING | COMMENTS                                                       |
|-----------|-------|----------|------------|------------------------|----------------|----------|----------|-------------|--------------------------|----------------------------------------------------------------|
| -5        | 11    |          |            | Poorly graded sand, SP | GREENISH-BROWN | LSE      | SAT      |             | HNU 0.0                  | Same lithology as previous interval.                           |
| -6        | 12    |          | 100        | Fat clay, CH           | GREENISH-GRAY  | SFT      | SAT      |             | HNU 0.0                  | Some slight yellow staining observed.                          |
| -7        | 13    |          |            | Fat clay, CH           | GREENISH-GRAY  | SFT      | SAT      | 2<br>1<br>5 | HNU 0.0                  | Some yellow staining. Same lithology as previous interval.     |
| -8        | 14    |          | 100        | Poorly graded sand, SP | GREENISH-WHITE | LSE      | SAT      |             | HNU 0.0                  | 3" layer-sharp contact.                                        |
|           |       |          |            | Lean clay, CL          | DK BROWN       | FRM      | MST      |             | HNU 0.0                  |                                                                |
|           |       |          |            | Fat clay, CH           | DK BROWN       | FRM      | MST      |             | HNU 0.0                  | Same lithology as previous interval. TD of borehole 14.5' bgs. |
| -9        | 15    |          |            |                        |                |          |          |             |                          |                                                                |
| -10       | 16    |          |            |                        |                |          |          |             |                          |                                                                |
| -11       | 17    |          |            |                        |                |          |          |             |                          |                                                                |
| -12       | 18    |          |            |                        |                |          |          |             |                          |                                                                |
| -13       | 19    |          |            |                        |                |          |          |             |                          |                                                                |
| -14       | 20    |          |            |                        |                |          |          |             |                          |                                                                |

| BOREHOLE<br>/WELL ID | SMP<br>NUM | LTH<br>NUM | LITHOLOGY INT.<br>(FT BGS) | SAMPLING<br>METHOD | SIZE<br>GRAVEL | GRAVEL<br>PCT. | SIZE<br>SAND | SAND<br>PCT | SILT<br>PCT | CLAY<br>PCT | ORGANIC<br>PCT | ROCK<br>TYPE | PLAST | SORT | STRENGTH | MOISTURE | STRAT<br>UNIT |
|----------------------|------------|------------|----------------------------|--------------------|----------------|----------------|--------------|-------------|-------------|-------------|----------------|--------------|-------|------|----------|----------|---------------|
| MP16MW22             | 1          | 1          | 0.00                       | 0.50               | SPS            | MC             | 20           | FM          | 50          | 30          | 0              | 0            | LOW   | MOD  | LSE      | MST      |               |
| MP16MW22             | 1          | 2          | 0.50                       | 1.00               | SPS            | C              | 100          |             | 0           | 0           | 0              | 0            | NON   | NA   | LSE      | NA       |               |
| MP16MW22             | 1          | 3          | 1.00                       | 2.00               | SPS            |                | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| MP16MW22             | 2          | 1          | 2.00                       | 4.00               | SPS            |                | 0            | M           | 25          | 0           | 75             | 0            | MOD   | MOD  | FRM      | SAT      |               |
| MP16MW22             | 3          | 1          | 4.00                       | 5.50               | SPS            |                | 15           |             | 30          | 10          | 45             | 0            | MOD   | POR  | SFT      | SAT      |               |
| MP16MW22             | 3          | 2          | 5.50                       | 6.00               | SPS            |                | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| MP16MW22             | 4          | 1          | 6.00                       | 7.00               | SPS            | C              | 10           | CF          | 75          | 0           | 15             | 0            | LOW   | POR  | SFT      | SAT      |               |
| MP16MW22             | 4          | 2          | 7.00                       | 8.00               | SPS            |                | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| MP16MW22             | 5          | 1          | 8.00                       | 10.00              | SPS            |                | 5            | MF          | 95          | 0           | 0              | 0            | NON   | MOD  | SFT      | SAT      |               |
| MP16MW22             | 6          | 1          | 10.00                      | 11.50              | SPS            |                | 5            |             | 95          | 0           | 0              | 0            | NON   | MOD  | LSE      | SAT      |               |
| MP16MW22             | 6          | 2          | 11.50                      | 12.00              | SPS            |                | 0            |             | 0           | 15          | 85             | 0            | HGH   | WEL  | SFT      | SAT      |               |
| MP16MW22             | 7          | 1          | 12.00                      | 13.20              | SPS            |                | 0            |             | 0           | 10          | 90             | 0            | HGH   | WEL  | SFT      | SAT      |               |
| MP16MW22             | 7          | 2          | 13.20                      | 13.50              | SPS            |                | 0            | F           | 100         | 0           | 0              | 0            | NON   | WEL  | LSE      | SAT      |               |
| MP16MW22             | 7          | 3          | 13.50                      | 14.00              | SPS            |                | 0            |             | 0           | 40          | 60             | 0            | MOD   | WEL  | FRM      | MST      |               |
| MP16MW22             | 8          | 1          | 14.00                      | 14.50              | SPS            |                | 0            |             | 0           | 40          | 60             | 0            | HGH   | WEL  | FRM      | MST      |               |

**Borehole Location Data****Roy F. WESTON, Inc.**

BOREHOLE ID : MP18MW24  
BEGIN DATE : 01/12/95

PROJECT NAME: FT. MONMOUTH  
END DATE : 01/12/95

LOGGER/COMPANY : P. THOMAS

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : 0

TOTAL DEPTH : 15.00

DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 12.25

INTERVAL: 0.00 ft. to 15.00 ft. BGS

METHOD : HSA

FLUID : WATER

BOREHOLE DIAMETER #2:

INTERVAL:

METHOD :

FLUID :

BOREHOLE DIAMETER #3:

INTERVAL:

METHOD :

FLUID :

DRILLING COMPANY : J.C. ANDERSON

DRILLER : WELLINGTON REEVES

DRILL RIG TYPE : MOBILE B-57

|                     | ESTIMATED | SURVEYED |
|---------------------|-----------|----------|
| SURFACE ELEVATION : | 0.000     | 6.780    |
| N. COORDINATE :     | 0.0000    |          |
| E. COORDINATE :     | 0.0000    |          |

WELL PERMIT.....(Y)es (N)o: N PERMIT # : NJ 29 32565

HOLE ABANDONED... (Y)es (N)o: N

WELL INSTALLED... (Y)es (N)o: Y

WELL CLUSTER.....(Y)es (N)o: N No. OF WELLS : 0

WELL NEST.....(Y)es (N)o: N No. OF WELLS : 0

PUMPS INSTALLED.. (Y)es (N)o: N

PURGE :

DEPTH

0.00

SAMPLE :

0.00

**BOREHOLE TESTING**

BOREHOLE GEOPHYSICS.....(Y)es (N)o: N

SLUG TESTS.....(Y)es (N)o: N

PACKER TESTS.....(Y)es (N)o: N

PUMPING TESTS.....(Y)es (N)o: N

**COMMENTS :**

Latitude-North: 40 deg 19' 00.2"

Longitude-West: 74 deg 02' 49.7"



# Well Completion Summary

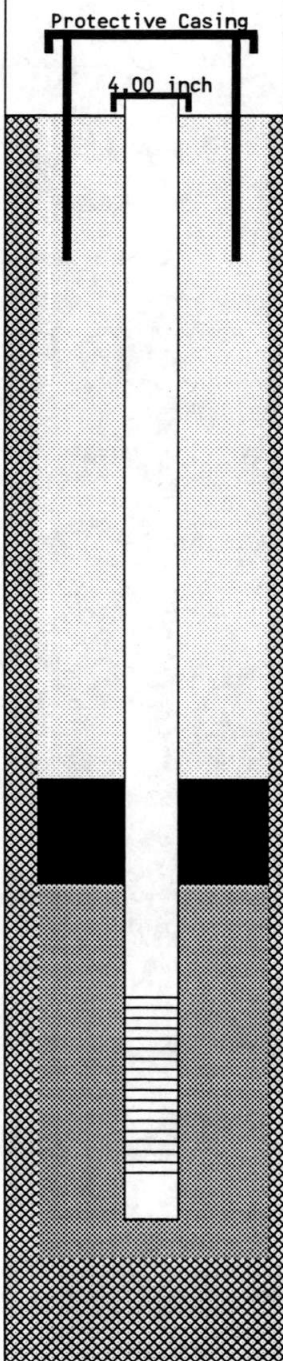
Roy F. WESTON, Inc.

**CLIENT** FT. MONMOUTH  
**SITE NAME** MAIN POST 18

**DRILLING FIRM** J.C. ANDERSON  
**INSPECTOR** P. THOMAS

**WELL ID** MP18MW24  
**START DATE** 01/12/95  
**COMPLETION DATE** 01/13/95

## WATER LEVELS

|  | DEPTH                                                                                                                                                                                         |       | ELEV.                                      |                         | DRILLING SUMMARY                                                                                  |  |
|------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|--------------------------------------------|-------------------------|---------------------------------------------------------------------------------------------------|--|
|                                                                                    | 1.38                                                                                                                                                                                          | TC    | 8.16                                       | Driller                 | WELLS REEVE                                                                                       |  |
|                                                                                    | 0.00                                                                                                                                                                                          | GS    | 6.78                                       | Drilling Fluid          | WATER                                                                                             |  |
|                                                                                    |                                                                                                                                                                                               |       |                                            | Well Type               | SINGLE CASED SCREENED                                                                             |  |
|                                                                                    | WELL DESIGN CONSTRUCTION                                                                                                                                                                      |       |                                            |                         |                                                                                                   |  |
|                                                                                    | Casing #1 Diameter: 4.00 inch Interval: 0.00 to 5.00 ft.<br>Type : PVC SCH 40                                                                                                                 |       |                                            |                         |                                                                                                   |  |
|                                                                                    | Stick Up Inner Casing: 1.38 ft. Protective Casing: 2.26 ft.                                                                                                                                   |       |                                            |                         |                                                                                                   |  |
|                                                                                    | Casing Grout: CEMENT/BENT Interval: 0.00 to 1.00 ft.                                                                                                                                          |       |                                            |                         |                                                                                                   |  |
|                                                                                    | Seal Type: BENTONITE SLURRY Interval: 1.00 to 3.50 ft.                                                                                                                                        |       |                                            |                         |                                                                                                   |  |
|                                                                                    | Sand Pack Type : NO. 1 SAND MORIE Interval: 3.50 to 15.00 ft.<br>Grain Size : UNIFORM Median Diameter:<br>Screen Diameter: 4.00 Interval: 5.00 to 14.54 ft.<br>Type : PVC Slots: 0.010 inches |       |                                            |                         |                                                                                                   |  |
| 1.00                                                                               | BN                                                                                                                                                                                            | 5.78  | Silt Trap Interval: 14.54 to 15.00 ft.     |                         |                                                                                                   |  |
| 3.50                                                                               | SP                                                                                                                                                                                            | 3.28  | Backfill Type : Interval: 0.00 to 0.00 ft. |                         |                                                                                                   |  |
| WELL DEVELOPMENT                                                                   |                                                                                                                                                                                               |       |                                            |                         |                                                                                                   |  |
| 5.00                                                                               | SC                                                                                                                                                                                            | 1.78  | Date                                       | 01/18/95                |                                                                                                   |  |
|                                                                                    |                                                                                                                                                                                               |       | Method                                     | surge blocking/overpump |                                                                                                   |  |
|                                                                                    |                                                                                                                                                                                               |       | Yield                                      | .25 gpm                 | Purged Volume 20 gal                                                                              |  |
| COMMENTS                                                                           |                                                                                                                                                                                               |       |                                            |                         |                                                                                                   |  |
| 14.54                                                                              | BS                                                                                                                                                                                            | -7.76 | TC = Top of Casing                         | SP = Top Sand Pack      |  = Grout     |  |
|                                                                                    |                                                                                                                                                                                               |       | GS = Ground Surface                        | SC = Top Screen         |  = Seal      |  |
|                                                                                    |                                                                                                                                                                                               |       | BN = Top Seal                              | BS = Bottom Screen      |  = Sand Pack |  |
| 15.00                                                                              | TD                                                                                                                                                                                            | -8.22 |                                            | TD = Total Depth        |  = Formation |  |
| Additional Comments:                                                               |                                                                                                                                                                                               |       |                                            |                         |                                                                                                   |  |
| Depths are measured below ground surface.                                          |                                                                                                                                                                                               |       |                                            |                         |                                                                                                   |  |

**NOTE:** Well Diagram not to Scale

Elevations are feet above mean sea level

# Borehole Log

Roy F. WESTON, Inc.

|           |                    |                  |                 |
|-----------|--------------------|------------------|-----------------|
| PROJECT   | : FT. MONMOUTH     | TOTAL DEPTH      | : 15.00         |
| SITE NAME | : MAIN POST 18     | LOGGER           | : P. THOMAS     |
| BORING ID | : MP18MW24         | DRILLING COMPANY | : J.C. ANDERSON |
| NORTHING  | : 0.0000 estimated | DRILLING RIG     | : MOBILE B-57   |
| EASTING   | : 0.0000 estimated | DATE STARTED     | : 01/12/95      |
| ELEVATION | : 6.780 surveyed   | DATE COMPLETED   | : 01/12/95      |

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION             | COLOR   | STRENGTH | MOISTURE | BLOW COUNT | FIELD INSTRUMENT READING | COMMENTS                                                                 |
|-----------|-------|----------|------------|----------------------------|---------|----------|----------|------------|--------------------------|--------------------------------------------------------------------------|
|           |       |          | 70         | Silty gravel with sand, GM | ORANGE  | LSE      | MST      | 7          | OVM 0.0                  | Fill.                                                                    |
|           |       |          |            | Silty sand, SM             | BROWN   | LSE      | MST      | 5          | OVM 0.0                  | Sampled interval, MP18-SB24-A01. VOA collected soil sample MP18-SB24-A01 |
| 5         | 1     |          |            | No Sample Recovered        |         |          |          | 8          |                          |                                                                          |
| 4         | 2     |          | 100        | Silty sand, SM             | BROWN   | LSE      | MST      | 5          | OVM 0.0                  | Fill.                                                                    |
| 3         | 3     |          |            | Fill                       | BLACK   |          | WET      | 6          | OVM 0.0                  | Fill. Shingles.                                                          |
| 2         | 4     |          | 45         | Silty sand, SM             | DK GRAY | LSE      | SAT      | 2          | OVM 0.0                  | Fill. Collected soil sample. MP18-SB24-A02.                              |
| 1         | 5     |          |            | No Sample Recovered        |         |          |          | 4          |                          |                                                                          |
| 0         | 6     |          | 20         | Silty sand, SM             | GRAY    | SFT      | SAT      | 9          | OVM 0.0                  | Offset hole 3'; augered to 7' bgs resume SPS; more clay in interval.     |
| -1        | 7     |          | 50         | Silty sand, SM             | GRAY    | SFT      | SAT      | 10         | OVM 0.0                  |                                                                          |
| -2        | 8     |          |            | No Sample Recovered        |         |          |          | 15         |                          |                                                                          |
| -3        | 9     |          | 60         | Silty sand, SM             | GRAY    | SFT      | SAT      | 20         | OVM 0.0                  | Fill. Refusal -10.5-11' bgs. Offset hole again, 5' to east.              |
| -4        | 10    |          |            |                            |         |          |          | 15         |                          |                                                                          |
|           |       |          |            |                            |         |          |          | 14         |                          |                                                                          |
|           |       |          |            |                            |         |          |          | 100        |                          |                                                                          |

# Borehole Log

Roy F. WESTON, Inc.

PROJECT : FT. MONMOUTH  
 SITE NAME : MAIN POST 18  
 BORING ID : MP18MW24  
 NORTHING : 0.0000 estimated  
 EASTING : 0.0000 estimated  
 ELEVATION : 6.780 surveyed

TOTAL DEPTH : 15.00  
 LOGGER : P. THOMAS  
 DRILLING COMPANY : J.C. ANDERSON  
 DRILLING RIG : MOBILE B-57  
 DATE STARTED : 01/12/95  
 DATE COMPLETED : 01/12/95

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION       | COLOR | STRENGTH | MOISTURE | BLOW COUNT | FIELD INSTRUMENT READING | COMMENTS                                                                       |
|-----------|-------|----------|------------|----------------------|-------|----------|----------|------------|--------------------------|--------------------------------------------------------------------------------|
|           |       |          |            | Silty sand, SM       | GRAY  | SFT      | SAT      |            | OVN 0.0                  | Fill. Refusal ~10.5-11' bgs. Offset hole again, 5' to east.                    |
|           |       |          |            | No Sample Recovered  |       |          |          |            |                          |                                                                                |
| -4        | 11    |          |            | Interval Not Sampled |       |          |          |            |                          | Augered interval in new borehole locations.                                    |
| -5        | 12    |          |            | Silty sand, SM       | GRAY  | SFT      | SAT      |            | OVN 0.0                  | Fill. Augered to 15' bgs; sanded cuttings. Same as above, set well at 15' bgs. |
| -6        | 13    |          |            |                      |       |          |          |            |                          |                                                                                |
| -7        | 14    |          |            |                      |       |          |          |            |                          |                                                                                |
| -8        | 15    |          |            |                      |       |          |          |            |                          |                                                                                |
| -9        | 16    |          |            |                      |       |          |          |            |                          |                                                                                |
| -10       | 17    |          |            |                      |       |          |          |            |                          |                                                                                |
| -11       | 18    |          |            |                      |       |          |          |            |                          |                                                                                |
| -12       | 19    |          |            |                      |       |          |          |            |                          |                                                                                |
| -13       | 20    |          |            |                      |       |          |          |            |                          |                                                                                |

| BOREHOLE<br>/WELL ID | SMP<br>NUM | LTH<br>NUM | LITHOLOGY INT.<br>(FT BGS) | SAMPLING<br>METHOD | SIZE<br>GRAVEL | GRAVEL<br>PCT. | SIZE<br>SAND | SAND<br>PCT | SILT<br>PCT | CLAY<br>PCT | ORGANIC<br>PCT | ROCK<br>TYPE | PLAST | SORT | STRENGTH | MOISTURE | STRAT<br>UNIT |
|----------------------|------------|------------|----------------------------|--------------------|----------------|----------------|--------------|-------------|-------------|-------------|----------------|--------------|-------|------|----------|----------|---------------|
| MP18MW24             | 1          | 1          | 0.00                       | 0.20               | SPS            | MF             | 40           | M           | 35          | 20          | 5              | 0            | NON   | POR  | LSE      | MST      |               |
| MP18MW24             | 1          | 2          | 0.20                       | 1.40               | SPS            |                | 10           | MF          | 50          | 20          | 0              | 20           | NA    | POR  | LSE      | MST      |               |
| MP18MW24             | 1          | 3          | 1.40                       | 2.00               | SPS            |                | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| MP18MW24             | 2          | 1          | 2.00                       | 2.90               | SPS            |                | 10           | MF          | 50          | 20          | 0              | 20           | NA    | POR  | LSE      | MST      |               |
| MP18MW24             | 2          | 2          | 2.90                       | 4.00               | SPS            |                | 0            |             | 0           | 0           | 0              | 0            |       |      |          | WET      |               |
| MP18MW24             | 3          | 1          | 4.00                       | 4.90               | SPS            |                | 10           | MF          | 50          | 25          | 5              | 10           | NON   | POR  | LSE      | SAT      |               |
| MP18MW24             | 3          | 2          | 4.90                       | 6.00               | SPS            |                | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| MP18MW24             | 4          | 1          | 6.00                       | 6.40               | SPS            |                | 5            | MF          | 45          | 25          | 15             | 10           | LOW   | POR  | SFT      | SAT      |               |
| MP18MW24             | 4          | 2          | 6.40                       | 7.00               | SPS            |                | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| MP18MW24             | 5          | 1          | 7.00                       | 8.00               | SPS            | M              | 10           | MF          | 50          | 30          | 10             | 0            | NON   | POR  | SFT      | SAT      |               |
| MP18MW24             | 5          | 2          | 8.00                       | 9.00               | SPS            |                | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| MP18MW24             | 6          | 1          | 9.00                       | 10.20              | SPS            |                | 10           |             | 50          | 30          | 10             | 0            | NON   | POR  | SFT      | SAT      |               |
| MP18MW24             | 6          | 2          | 10.20                      | 11.00              | SPS            |                | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| MP18MW24             | 7          | 1          | 11.00                      | 12.00              | NS             |                | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| MP18MW24             | 8          | 1          | 12.00                      | 15.00              | CUT            |                | 10           | MF          | 50          | 30          | 10             | 0            | NON   | POR  | SFT      | SAT      |               |

**Borehole Location Data****Roy F. WESTON, Inc.**

BOREHOLE ID : MP18MW25  
BEGIN DATE : 01/13/95

PROJECT NAME: FT. MONMOUTH  
END DATE : 01/13/95

LOGGER/COMPANY : P. THOMAS

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : O

TOTAL DEPTH : 15.00

DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 12.25

INTERVAL: 0.00 ft. to 15.00 ft. BGS

METHOD : HSA

FLUID : WATER

BOREHOLE DIAMETER #2:

INTERVAL:

METHOD :

FLUID :

BOREHOLE DIAMETER #3:

INTERVAL:

METHOD :

FLUID :

DRILLING COMPANY : J.C. ANDERSON

DRILLER : WELL REEVE

DRILL RIG TYPE : MOBILE B-57

|                        | ESTIMATED | SURVEYED |
|------------------------|-----------|----------|
| SURFACE<br>ELEVATION : | 0.000     | 6.350    |
| N. COORDINATE :        | 0.0000    |          |
| E. COORDINATE :        | 0.0000    |          |

WELL PERMIT.....(Y)es (N)o: N PERMIT # : NJ 29 32566

HOLE ABANDONED... (Y)es (N)o: N

WELL INSTALLED... (Y)es (N)o: Y

WELL CLUSTER..... (Y)es (N)o: N No. OF WELLS : 0

WELL NEST..... (Y)es (N)o: N No. OF WELLS : 0

PUMPS INSTALLED.. (Y)es (N)o: N

PURGE :

DEPTH

0.00

SAMPLE :

0.00

**BOREHOLE TESTING**

BOREHOLE GEOPHYSICS..... (Y)es (N)o: N

SLUG TESTS..... (Y)es (N)o: N

PACKER TESTS..... (Y)es (N)o: N

PUMPING TESTS..... (Y)es (N)o: N

**COMMENTS :**

Latitude-North: 40 deg 19' 00.2"

Longitude-West: 74 deg 02' 48.1"

# Well Completion Summary

Roy F. WESTON, Inc.

**CLIENT** FT. MONMOUTH  
**SITE NAME** MAIN POST 18

**DRILLING FIRM** J.C. ANDERSON  
**INSPECTOR** P. THOMAS

**WELL ID** MP18MW25  
**START DATE** 01/13/95  
**COMPLETION DATE** 01/13/95

## WATER LEVELS

|                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | DEPTH |       | ELEV.                | DRILLING SUMMARY       |                       |
|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|-------|----------------------|------------------------|-----------------------|
| <p>Protective Casing<br/>4.00 inch</p>                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 1.93  | TC    | 8.28                 | <b>Driller</b>         | WELLS REEVE           |
|                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 0.00  | GS    | 6.35                 | <b>Drilling Fluid</b>  | WATER                 |
|                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |       |       |                      | <b>Well Type</b>       | SINGLE CASED SCREENED |
|                                                                                     | <b>WELL DESIGN CONSTRUCTION</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |       |       |                      |                        |                       |
|                                                                                     | <p><b>Casing #1 Diameter:</b> 4.00 inch      <b>Interval:</b> 0.00 to 5.00 ft.<br/><b>Type :</b></p> <p><b>Stick Up Inner Casing:</b> 1.93 ft.      <b>Protective Casing:</b> 2.29 ft.</p> <p><b>Casing Grout:</b> CEMENT/BENT      <b>Interval:</b> 0.00 to 0.50 ft.</p> <p><b>Seal Type:</b> BENTONITE SLURRY      <b>Interval:</b> 0.50 to 30.00 ft.</p> <p><b>Sand Pack Type :</b> NO 1 MORIE SAND      <b>Interval:</b> 3.00 to 15.00 ft.<br/><b>Grain Size :</b> UNIFORM      <b>Median Diameter:</b></p> <p><b>Screen Diameter:</b> 4.00      <b>Interval:</b> 5.00 to 14.54 ft.<br/><b>Type :</b> PVC      <b>Slots:</b> 0.010 inches</p> <p><b>Silt Trap Interval:</b> 14.54 to 15.00 ft.<br/><b>Backfill Type :</b>      <b>Interval:</b> 0.00 to 0.00 ft.</p> |       |       |                      |                        |                       |
|                                                                                     | 0.50                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | BN    | 5.85  |                      |                        |                       |
|                                                                                     | 3.00                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | SP    | 3.35  |                      |                        |                       |
| <b>WELL DEVELOPMENT</b>                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |       |       |                      |                        |                       |
|                                                                                     | 5.00                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | SC    | 1.35  | <b>Date</b>          | 01/19/95               |                       |
|                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |       |       | <b>Method</b>        | Surge Blocking/Bailing |                       |
|                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |       |       | <b>Yield</b>         | ~5 gpm                 |                       |
|                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |       |       | <b>Purged Volume</b> | 18 gal                 |                       |
| <b>COMMENTS</b>                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |       |       |                      |                        |                       |
|                                                                                     | 14.54                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | BS    | -8.19 | TC = Top of Casing   | SP = Top Sand Pack     |                       |
|                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |       |       | GS = Ground Surface  | SC = Top Screen        |                       |
|                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |       |       | BN = Top Seal        | BS = Bottom Screen     |                       |
|                                                                                     | 15.00                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | TD    | -8.65 | TD = Total Depth     |                        |                       |
| <p><b>Additional Comments:</b></p> <p>Depths are measured below ground surface.</p> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |       |       |                      |                        |                       |

**NOTE:** Well Diagram not to Scale

Elevations are feet above mean sea level

# Borehole Log

Roy F. WESTON, Inc.

PROJECT : FT. MONMOUTH  
 SITE NAME : MAIN POST 18  
 BORING ID : MP18MW25  
 NORTHING : 0.0000 estimated  
 EASTING : 0.0000 estimated  
 ELEVATION : 6.350 surveyed

TOTAL DEPTH : 15.00  
 LOGGER : P. THOMAS  
 DRILLING COMPANY : J.C. ANDERSON  
 DRILLING RIG : MOBILE B-57  
 DATE STARTED : 01/13/95  
 DATE COMPLETED : 01/13/95

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION             | COLOR           | STRENGTH | MOISTURE | BLOW COUNT | FIELD INSTRUMENT READING | COMMENTS                                                                          |
|-----------|-------|----------|------------|----------------------------|-----------------|----------|----------|------------|--------------------------|-----------------------------------------------------------------------------------|
|           |       |          | 90         | Silty sand, SM             | BROWN           | SFT      | MST      | 4          | OVM 0.0                  | Fill. Collected sample MP18-SB25-A01                                              |
| 5         | 1     |          |            |                            |                 |          |          |            |                          |                                                                                   |
| 4         | 2     |          | 50         | No Sample Recovered        |                 |          |          |            |                          |                                                                                   |
|           |       |          |            | Silty sand with gravel, SM | BROWN           | SFT      | WET      | 7          | OVM 0.0                  | Fill. Collected sample MP18-SB25-A02. Slightly more gravelly than above interval. |
| 3         | 3     |          |            | No Sample Recovered        |                 |          |          | 11         |                          |                                                                                   |
| 2         | 4     |          | 50         | Silty sand, SM             | OLIVE GREEN/GRY | SFT      | SAT      |            | OVM 0.0                  | Fill. Sat ~4.5' bgs, large wood fragments ~4.5 ft. bgs.                           |
| 1         | 5     |          |            | No Sample Recovered        |                 |          |          |            |                          |                                                                                   |
| 0         | 6     |          |            | Silty sand, SM             | GRAY            | SFT      | SAT      |            | OVM 0.0                  | Fill. Logged drill cuttings.                                                      |
| -1        | 7     |          |            |                            |                 |          |          |            |                          |                                                                                   |
| -2        | 8     |          |            |                            |                 |          |          |            |                          |                                                                                   |
| -3        | 9     |          |            |                            |                 |          |          |            |                          |                                                                                   |
| -4        | 10    |          |            |                            |                 |          |          |            |                          |                                                                                   |

**Borehole Log****Roy F. WESTON, Inc.**

|           |                    |                  |                 |
|-----------|--------------------|------------------|-----------------|
| PROJECT   | : FT. MONMOUTH     | TOTAL DEPTH      | : 15.00         |
| SITE NAME | : MAIN POST 18     | LOGGER           | : P. THOMAS     |
| BORING ID | : MP18MW25         | DRILLING COMPANY | : J.C. ANDERSON |
| NORTHING  | : 0.0000 estimated | DRILLING RIG     | : MOBILE B-57   |
| EASTING   | : 0.0000 estimated | DATE STARTED     | : 01/13/95      |
| ELEVATION | : 6.350 surveyed   | DATE COMPLETED   | : 01/13/95      |

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION | COLOR | STRENGTH | MOISTURE | BLOW COUNT | FIELD INSTRUMENT READING | COMMENTS                     |
|-----------|-------|----------|------------|----------------|-------|----------|----------|------------|--------------------------|------------------------------|
| -4        | 11    |          |            | Silty sand, SM | GRAY  | SFT      | SAT      |            | OVM 0.0                  | Fill, Logged drill cuttings. |
| -5        | 12    |          |            |                |       |          |          |            |                          |                              |
| -6        | 13    |          |            |                |       |          |          |            |                          |                              |
| -7        | 14    |          |            |                |       |          |          |            |                          |                              |
| -8        | 15    |          |            |                |       |          |          |            |                          |                              |
| -9        | 16    |          |            |                |       |          |          |            |                          |                              |
| -10       | 17    |          |            |                |       |          |          |            |                          |                              |
| -11       | 18    |          |            |                |       |          |          |            |                          |                              |
| -12       | 19    |          |            |                |       |          |          |            |                          |                              |
| -13       | 20    |          |            |                |       |          |          |            |                          |                              |



DATE: 06/20/95 \*\*\*\*\* Roy F. WESTON, Inc. LITHOLOGICAL DATA FOR - CLIENT ID: USAC2 \*\*\* PAGE: 46

| BOREHOLE<br>/WELL ID | SMP<br>NUM | LTH<br>NUM | LITHOLOGY INT.<br>(FT BGS) | SAMPLING<br>METHOD | SIZE<br>GRAVEL | GRAVEL<br>PCT. | SIZE<br>SAND | SAND<br>PCT | SILT<br>PCT | CLAY<br>PCT | ORGANIC<br>PCT | ROCK<br>TYPE | PLAST | SORT | STRENGTH | MOISTURE | STRAT<br>UNIT |
|----------------------|------------|------------|----------------------------|--------------------|----------------|----------------|--------------|-------------|-------------|-------------|----------------|--------------|-------|------|----------|----------|---------------|
| MP18MW25             | 1          | 1          | 0.00                       | SPS                | M              | 10             | MF           | 50          | 25          | 5           | 10             |              | NON   | POR  | SFT      | MST      |               |
| MP18MW25             | 1          | 2          | 1.80                       | SPS                |                | 0              |              | 0           | 0           | 0           | 0              |              |       |      |          |          |               |
| MP18MW25             | 2          | 1          | 2.00                       | SPS                | M              | 20             | MF           | 40          | 25          | 5           | 10             |              | NON   | POR  | SFT      | WET      |               |
| MP18MW25             | 2          | 2          | 3.00                       | SPS                |                | 0              |              | 0           | 0           | 0           | 0              |              |       |      |          |          |               |
| MP18MW25             | 3          | 1          | 4.00                       | SPS                | M              | 10             | MF           | 50          | 25          | 5           | 10             |              | NON   | POR  | SFT      | SAT      |               |
| MP18MW25             | 3          | 2          | 5.00                       | SPS                |                | 0              |              | 0           | 0           | 0           | 0              |              |       |      |          |          |               |
| MP18MW25             | 4          | 1          | 6.00                       | CUT                | M              | 10             | MF           | 50          | 25          | 5           | 10             |              | NON   | POR  | SFT      | SAT      |               |

**Borehole Location Data****Roy F. WESTON, Inc.**

BOREHOLE ID : B1-MW1B  
BEGIN DATE : 01/09/95

PROJECT NAME: FT. MONMOUTH  
END DATE : 01/09/95

LOGGER/COMPANY : P. THOMAS

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : 0

TOTAL DEPTH : 14.50

DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 12.25

INTERVAL: 0.00 ft. to 14.50 ft. BGS

METHOD : HSA

FLUID : WATER

BOREHOLE DIAMETER #2:

INTERVAL:

METHOD :

FLUID :

BOREHOLE DIAMETER #3:

INTERVAL:

METHOD :

FLUID :

DRILLING COMPANY : J.C. ANDERSON

DRILLER : STEVE BURGER

DRILL RIG TYPE : MOBILE B-57

|                        | ESTIMATED | SURVEYED |
|------------------------|-----------|----------|
| SURFACE<br>ELEVATION : | 0.000     | 22.480   |

N. COORDINATE : 0.0000

E. COORDINATE : 0.0000

WELL PERMIT.....(Y)es (N)o: N PERMIT # : NJ 29 32587

HOLE ABANDONED... (Y)es (N)o: N

WELL INSTALLED... (Y)es (N)o: Y

WELL CLUSTER.....(Y)es (N)o: N No. OF WELLS : 0

WELL NEST.....(Y)es (N)o: N No. OF WELLS : 0

PUMPS INSTALLED..(Y)es (N)o: N

PURGE :

DEPTH

0.00

SAMPLE :

0.00

**BOREHOLE TESTING**

BOREHOLE GEOPHYSICS.....(Y)es (N)o: N

SLUG TESTS.....(Y)es (N)o: N

PACKER TESTS.....(Y)es (N)o: N

PUMPING TESTS.....(Y)es (N)o: N

**COMMENTS :**

Longitude-West: 74 deg 02' 43.3"

Latitude-North: 40 deg 18' 24.1"

Well developed on 1/19/95.

# Well Completion Summary

Roy F. WESTON, Inc.

**CLIENT** FT. MONMOUTH  
**SITE NAME** BACKGROUND 1

**DRILLING FIRM** J.C. ANDERSON  
**INSPECTOR** P. THOMAS

**WELL ID** B1-MW1B  
**START DATE** 01/01/95  
**COMPLETION DATE** 01/09/95

## WATER LEVELS

|                                        |                                                                                         | DEPTH |       | ELEV.                                         | DRILLING SUMMARY                   |  |
|----------------------------------------|-----------------------------------------------------------------------------------------|-------|-------|-----------------------------------------------|------------------------------------|--|
| <p>Protective Casing<br/>4.00 inch</p> | 2.11                                                                                    | TC    | 24.59 | <b>Driller</b>                                | STEVE BURGER                       |  |
|                                        | 0.00                                                                                    | GS    | 22.48 | <b>Drilling Fluid</b>                         | WATER                              |  |
|                                        |                                                                                         |       |       | <b>Well Type</b>                              | SINGLE CASED SCREENED              |  |
|                                        | <b>WELL DESIGN CONSTRUCTION</b>                                                         |       |       |                                               |                                    |  |
|                                        | <b>Casing #1 Diameter:</b> 4.00 inch <b>Interval:</b> 0.00 to 4.00 ft.<br><b>Type :</b> |       |       |                                               |                                    |  |
|                                        | <b>Stick Up Inner Casing:</b> 2.11 ft. <b>Protective Casing:</b> 2.68 ft.               |       |       |                                               |                                    |  |
|                                        |                                                                                         |       |       | <b>Casing Grout:</b> CEMENT/BENT              | <b>Interval:</b> 0.00 to 0.50 ft.  |  |
|                                        |                                                                                         |       |       | <b>Seal Type:</b> BENTONITE SLURRY            | <b>Interval:</b> 0.50 to 3.00 ft.  |  |
|                                        |                                                                                         |       |       | <b>Sand Pack Type :</b> NO #1 MORIE           | <b>Interval:</b> 3.00 to 14.00 ft. |  |
|                                        |                                                                                         |       |       | <b>Grain Size :</b> UNIFORM                   | <b>Median Diameter:</b>            |  |
|                                        |                                                                                         |       |       | <b>Screen Diameter:</b> 4.00                  | <b>Interval:</b> 4.00 to 13.54 ft. |  |
|                                        |                                                                                         |       |       | <b>Type :</b> PVC                             | <b>Slots:</b> 0.010 inches         |  |
| 0.50                                   | BN                                                                                      | 21.98 |       | <b>Silt Trap Interval:</b> 13.54 to 14.00 ft. |                                    |  |
| 3.00                                   | SP                                                                                      | 19.48 |       | <b>Backfill Type :</b>                        | <b>Interval:</b> 0.00 to 0.00 ft.  |  |
| <b>WELL DEVELOPMENT</b>                |                                                                                         |       |       |                                               |                                    |  |
|                                        |                                                                                         |       |       | <b>Date</b>                                   | 01/19/95                           |  |
|                                        |                                                                                         |       |       | <b>Method</b>                                 | Surge blocking/overpump            |  |
|                                        |                                                                                         |       |       | <b>Yield</b>                                  | 1.5 gpm                            |  |
|                                        |                                                                                         |       |       | <b>Purged Volume</b>                          | 85 gal                             |  |
| <b>COMMENTS</b>                        |                                                                                         |       |       |                                               |                                    |  |
|                                        |                                                                                         |       |       | TC = Top of Casing                            | SP = Top Sand Pack                 |  |
|                                        |                                                                                         |       |       | GS = Ground Surface                           | SC = Top Screen                    |  |
|                                        |                                                                                         |       |       | BN = Top Seal                                 | BS = Bottom Screen                 |  |
|                                        |                                                                                         |       |       | TD = Total Depth                              |                                    |  |
| 13.54                                  | BS                                                                                      | 8.94  |       | = Grout                                       |                                    |  |
|                                        |                                                                                         |       |       | = Seal                                        |                                    |  |
|                                        |                                                                                         |       |       | = Sand Pack                                   |                                    |  |
|                                        |                                                                                         |       |       | = Formation                                   |                                    |  |
| 14.00                                  | TD                                                                                      | 8.48  |       | <b>Additional Comments:</b>                   |                                    |  |
|                                        |                                                                                         |       |       | Depths are measured below ground surface.     |                                    |  |

NOTE: Well Diagram not to Scale

Elevations are feet above mean sea level

# Borehole Log

Roy F. WESTON, Inc.

PROJECT : FT. MONMOUTH  
 SITE NAME : BACKGROUND 1  
 BORING ID : B1-MW1B  
 NORTHING : 0.0000 estimated  
 EASTING : 0.0000 estimated  
 ELEVATION : 22.480 surveyed

TOTAL DEPTH : 14.50  
 LOGGER : P. THOMAS  
 DRILLING COMPANY : J.C. ANDERSON  
 DRILLING RIG : MOBILE B-57  
 DATE STARTED : 01/09/95  
 DATE COMPLETED : 01/09/95

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION                      | COLOR           | STRENGTH | MOISTURE | BLOW COUNT           | FIELD INSTRUMENT READING | COMMENTS                                                                                 |
|-----------|-------|----------|------------|-------------------------------------|-----------------|----------|----------|----------------------|--------------------------|------------------------------------------------------------------------------------------|
|           |       |          | 75         | Silty sand, SM                      | BROWN           | SFT      | WET      | 5                    | OVM 0.0                  | Topsoil                                                                                  |
|           |       |          |            | Poorly graded sand, SP              | YELLOW BROWN    | LSE      | WET      | 15<br>13             | OVM 0.0                  | Soil sample from 1-2' bgs B1-SB01-A01                                                    |
| 21        | 1     |          |            | No Sample Recovered                 |                 |          |          |                      |                          |                                                                                          |
|           |       |          | 100        | Poorly graded sand, SP              | OLIVE YLW BROWN | LSE      | SAT      | 13<br>13<br>16<br>14 | OVM 0.0                  | Sharp color change to org brn -3.9' bgs. Sat -2.5' bgs. Composite sand sample collected. |
| 20        | 2     |          |            |                                     |                 |          |          |                      |                          |                                                                                          |
| 19        | 3     |          |            |                                     |                 |          |          |                      |                          |                                                                                          |
|           |       |          | 100        | Poorly graded sand, SP              | ORANGE-BROWN    | LSE      | SAT      | 9<br>9<br>11<br>12   | OVM 0.0                  | Iron stained (orange brown color), dark heavy minerals throughout.                       |
| 18        | 4     |          |            |                                     |                 |          |          |                      |                          |                                                                                          |
| 17        | 5     |          |            |                                     |                 |          |          |                      |                          |                                                                                          |
|           |       |          | 50         | Poorly graded sand with silt, SP-SM | FE BROWN (ORG)  | LSE      | SAT      | 10<br>11<br>11<br>12 | OVM 0.0                  | Black heavy minerals throughout matrix.                                                  |
| 16        | 6     |          |            |                                     |                 |          |          |                      |                          |                                                                                          |
| 15        | 7     |          |            | No Sample Recovered                 |                 |          |          |                      |                          |                                                                                          |
|           |       |          | 65         | Poorly graded sand with silt, SP-SM | FE BROWN/ORANGE | LSE      | SAT      | 6<br>12<br>14<br>18  | OVM 0.0                  | Str. presence of black heavy minerals.                                                   |
| 14        | 8     |          |            |                                     |                 |          |          |                      |                          |                                                                                          |
| 13        | 9     |          |            | No Sample Recovered                 |                 |          |          |                      |                          |                                                                                          |
|           |       |          | 60         | Poorly graded sand with silt, SP-SM | FE BROWN        | LSE      | SAT      | 6<br>12<br>12        | OVM 0.0                  | Dk heavy mineral throughout.                                                             |
| 12        | 10    |          |            |                                     |                 |          |          |                      |                          |                                                                                          |

# Borehole Log

Roy F. WESTON, Inc.

|           |                    |                  |                 |
|-----------|--------------------|------------------|-----------------|
| PROJECT   | : FT. MONMOUTH     | TOTAL DEPTH      | : 14.50         |
| SITE NAME | : BACKGROUND 1     | LOGGER           | : P. THOMAS     |
| BORING ID | : B1-MW1B          | DRILLING COMPANY | : J.C. ANDERSON |
| NORTHING  | : 0.0000 estimated | DRILLING RIG     | : MOBILE B-57   |
| EASTING   | : 0.0000 estimated | DATE STARTED     | : 01/09/95      |
| ELEVATION | : 22.480 surveyed  | DATE COMPLETED   | : 01/09/95      |

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION                      | COLOR           | STRENGTH | MOISTURE | BLOW COUNT          | FIELD INSTRUMENT READING | COMMENTS                                                                                      |
|-----------|-------|----------|------------|-------------------------------------|-----------------|----------|----------|---------------------|--------------------------|-----------------------------------------------------------------------------------------------|
| 11        | 11    |          |            | Poorly graded sand with silt, SP-SM | FE BROWN        | LSE      | SAT      |                     | OVM 0.0                  | Dk heavy mineral throughout.                                                                  |
|           |       |          |            | No Sample Recovered                 |                 |          |          |                     |                          |                                                                                               |
| 10        | 12    |          | 45         | Silty sand, SM                      | STRONG FE BROWN | LSE      | SAT      | 8<br>11<br>17<br>14 | OVM 0.0                  |                                                                                               |
| 9         | 13    |          |            | No Sample Recovered                 |                 |          |          |                     |                          |                                                                                               |
| 8         | 14    |          |            | Interval Not Sampled                |                 |          |          |                     |                          | Interval not sampled, set well at 14.5' bgs; Note: Well set at 14' bgs. due to running sands. |
| 7         | 15    |          |            |                                     |                 |          |          |                     |                          |                                                                                               |
| 6         | 16    |          |            |                                     |                 |          |          |                     |                          |                                                                                               |
| 5         | 17    |          |            |                                     |                 |          |          |                     |                          |                                                                                               |
| 4         | 18    |          |            |                                     |                 |          |          |                     |                          |                                                                                               |
| 3         | 19    |          |            |                                     |                 |          |          |                     |                          |                                                                                               |
| 2         | 20    |          |            |                                     |                 |          |          |                     |                          |                                                                                               |

| BOREHOLE<br>/WELL ID | SMP<br>NUM | LTH<br>NUM | LITHOLOGY INT.<br>(FT BGS) | SAMPLING<br>METHOD | SIZE<br>GRAVEL PCT. | GRAVEL<br>SIZE<br>SAND | SAND<br>PCT | SILT<br>PCT | CLAY<br>PCT | ORGANIC<br>PCT | ROCK<br>TYPE | PLAST | SORT | STRENGTH | MOISTURE | STRAT<br>UNIT |
|----------------------|------------|------------|----------------------------|--------------------|---------------------|------------------------|-------------|-------------|-------------|----------------|--------------|-------|------|----------|----------|---------------|
| B1-MW1B              | 1          | 1          | 0.00                       | 0.40               | SPS                 | 5                      | MF          | 50          | 25          | 0              | 20           | NA    | MOD  | SFT      | WET      |               |
| B1-MW1B              | 1          | 2          | 0.40                       | 1.50               | SPS                 | 0                      | MF          | 95          | 5           | 0              | 0            | NON   | WEL  | LSE      | WET      |               |
| B1-MW1B              | 1          | 3          | 1.50                       | 2.00               | SPS                 | 0                      |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| B1-MW1B              | 2          | 1          | 2.00                       | 4.00               | SPS                 | 0                      | MF          | 95          | 5           | 0              | 0            | NA    | WEL  | LSE      | SAT      |               |
| B1-MW1B              | 3          | 1          | 4.00                       | 6.00               | SPS                 | 0                      | MF          | 95          | 5           | 0              | 0            | NA    | WEL  | LSE      | SAT      |               |
| B1-MW1B              | 4          | 1          | 6.00                       | 7.00               | SPS                 | 0                      | MF          | 90          | 10          | 0              | 0            | NA    | MOD  | LSE      | SAT      |               |
| B1-MW1B              | 4          | 2          | 7.00                       | 8.00               | SPS                 | 0                      |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| B1-MW1B              | 5          | 1          | 8.00                       | 9.30               | SPS                 | 0                      | MF          | 90          | 10          | 0              | 0            | NA    | MOD  | LSE      | SAT      |               |
| B1-MW1B              | 5          | 2          | 9.30                       | 10.00              | SPS                 | 0                      |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| B1-MW1B              | 6          | 1          | 10.00                      | 11.20              | SPS                 | 0                      | MF          | 90          | 10          | 0              | 0            | NA    | MOD  | LSE      | SAT      |               |
| B1-MW1B              | 6          | 2          | 11.20                      | 12.00              | SPS                 | 0                      |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| B1-MW1B              | 7          | 1          | 12.00                      | 12.90              | SPS                 | 0                      | MF          | 85          | 15          | 0              | 0            | NA    | MOD  | LSE      | SAT      |               |
| B1-MW1B              | 7          | 2          | 12.90                      | 14.00              | SPS                 | 0                      |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| B1-MW1B              | 8          | 1          | 14.00                      | 14.50              | NS                  | 0                      |             | 0           | 0           | 0              | 0            |       |      |          |          |               |

**Borehole Location Data****Roy F. WESTON, Inc.**

BOREHOLE ID : B2-MW2B  
BEGIN DATE : 01/05/95

PROJECT NAME: FT. MONMOUTH  
END DATE : 01/06/95

LOGGER/COMPANY : P. THOMAS

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : O

TOTAL DEPTH : 0.00

DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 12.25

INTERVAL: 0.00 ft. to 20.00 ft. BGS

METHOD : HSA

FLUID : WATER

BOREHOLE DIAMETER #2:

INTERVAL:

METHOD :

FLUID :

BOREHOLE DIAMETER #3:

INTERVAL:

METHOD :

FLUID :

DRILLING COMPANY : J.C. ANDERSON

DRILLER : STEVE BURGER

DRILL RIG TYPE : VINCE BORELLI

|                        | ESTIMATED | SURVEYED |
|------------------------|-----------|----------|
| SURFACE<br>ELEVATION : | 0.000     | 19.440   |
| N. COORDINATE :        | 0.0000    |          |
| E. COORDINATE :        | 0.0000    |          |

WELL PERMIT.....(Y)es (N)o: N PERMIT # : NJ 29 32588

HOLE ABANDONED... (Y)es (N)o: N

WELL INSTALLED... (Y)es (N)o: Y

WELL CLUSTER.....(Y)es (N)o: N No. OF WELLS : 0

WELL NEST.....(Y)es (N)o: N No. OF WELLS : 0

PUMPS INSTALLED.. (Y)es (N)o: N TYPE

DEPTH

PURGE :

0.00

SAMPLE :

0.00

**BOREHOLE TESTING**

BOREHOLE GEOPHYSICS..... (Y)es (N)o: N

SLUG TESTS..... (Y)es (N)o: N

PACKER TESTS..... (Y)es (N)o: N

PUMPING TESTS..... (Y)es (N)o: N

**COMMENTS :**

Latitude-North: 40 deg 18' 42.7"

Longitude-West: 74 deg 03' 45.5"

# Well Completion Summary

Roy F. WESTON, Inc.

CLIENT FT. MONMOUTH  
SITE NAME BACKGROUND 1

DRILLING FIRM J.C. ANDERSON  
INSPECTOR P. THOMAS

WELL ID B2-MW2B  
START DATE 01/06/95  
COMPLETION DATE 01/06/95

## WATER LEVELS

|                                                                                    |                                 | DEPTH | ELEV.               | DRILLING SUMMARY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                        |
|------------------------------------------------------------------------------------|---------------------------------|-------|---------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
| <p>Protective Casing<br/>4.00 inch</p>                                             | 0.79                            | TC    | 20.23               | Driller                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | STEVE BURGER           |
|                                                                                    | 0.00                            | GS    | 19.44               | Drilling Fluid                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | WATER                  |
|                                                                                    |                                 |       |                     | Well Type                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | SINGLE CASSED SCREENED |
|                                                                                    | <b>WELL DESIGN CONSTRUCTION</b> |       |                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                        |
|                                                                                    |                                 |       |                     | <p>Casing #1 Diameter: 4.00 inch Interval: 0.00 to 8.00 ft.<br/>Type : PVC SCH 40</p> <p>Stick Up Inner Casing: 0.79 ft. Protective Casing: 1.01 ft.</p> <p>Casing Grout: CEMENT/BENT Interval: 0.00 to 5.00 ft.</p> <p>Seal Type: BENTONITE SLURRY Interval: 5.00 to 8.00 ft.</p> <p>Sand Pack Type : NO. 1 SAND MORIE Interval: 8.00 to 20.00 ft.<br/>Grain Size : UNIFORM Median Diameter:</p> <p>Screen Diameter: 4.00 Interval: 10.00 to 19.54 ft.<br/>Type : PVC Slots: 0.010 inches</p> <p>Silt Trap Interval: 19.54 to 20.00 ft.<br/>Backfill Type : Interval: 0.00 to 0.00 ft.</p> |                        |
| 5.00                                                                               | BN                              | 14.44 |                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                        |
| 8.00                                                                               | SP                              | 11.44 |                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                        |
| 10.00                                                                              | SC                              | 9.44  |                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                        |
| <b>WELL DEVELOPMENT</b>                                                            |                                 |       |                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                        |
|                                                                                    |                                 |       | Date                | 01/19/95                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                        |
|                                                                                    |                                 |       | Method              | Surge blocking/bailing                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                        |
|                                                                                    |                                 |       | Yield               | 2.5 gpm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                        |
|                                                                                    |                                 |       | Purged Volume       | 250 gal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                        |
| <b>COMMENTS</b>                                                                    |                                 |       |                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                        |
|                                                                                    |                                 |       | TC = Top of Casing  | SP = Top Sand Pack                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                        |
|                                                                                    |                                 |       | GS = Ground Surface | SC = Top Screen                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                        |
|                                                                                    |                                 |       | BN = Top Seal       | BS = Bottom Screen                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                        |
|                                                                                    |                                 |       | TD = Total Depth    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                        |
|                                                                                    |                                 |       |                     | <div style="display: flex; justify-content: space-between;"> <div> <p> = Grout</p> <p> = Seal</p> <p> = Sand Pack</p> <p> = Formation</p> </div> <div> <p> = Grout</p> <p> = Seal</p> <p> = Sand Pack</p> <p> = Formation</p> </div> </div>                                                                                                                                                                                                                                                                                                                                                 |                        |
| 19.54                                                                              | BS                              | -0.10 |                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                        |
| 20.00                                                                              | TD                              | -0.56 |                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                        |
| <p><b>Additional Comments:</b></p> <p>Depths are measured below ground surface</p> |                                 |       |                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                        |

NOTE: Well Diagram not to Scale

Elevations are feet above mean sea level



# Borehole Log

Roy F. WESTON, Inc.

PROJECT : FT. MONMOUTH  
 SITE NAME : BACKGROUND 1  
 BORING ID : B2-MW2B  
 NORTHING : 0.0000 estimated  
 EASTING : 0.0000 estimated  
 ELEVATION : 19.440 surveyed

TOTAL DEPTH : 0.00  
 LOGGER : P. THOMAS  
 DRILLING COMPANY : J.C. ANDERSON  
 DRILLING RIG : VINCE BORELLI  
 DATE STARTED : 01/05/95  
 DATE COMPLETED : 01/06/95

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION             | COLOR          | STRENGTH | MOISTURE | BLOW COUNT           | FIELD INSTRUMENT READING | COMMENTS                                                                                           |
|-----------|-------|----------|------------|----------------------------|----------------|----------|----------|----------------------|--------------------------|----------------------------------------------------------------------------------------------------|
|           |       |          | 50         | Sandy silt, ML             | BROWN          | FRM      | MST      | 5<br>10<br>10        | OVM 0.0                  | Possible backfill material sampled 1-2' bgs B1-SB01-A01.                                           |
| 18        | 1     |          |            | No Sample Recovered        |                |          |          |                      |                          |                                                                                                    |
| 17        | 2     |          | 60         | Sandy elastic silt, MH     | BROWN          | SFT      | MST      | 10<br>15<br>16<br>14 | OVM 0.0                  | Progressively getting more clay.                                                                   |
| 16        | 3     |          |            | No Sample Recovered        |                |          |          |                      |                          |                                                                                                    |
| 15        | 4     |          | 50         | Fat clay with sand, CH     | BROWN/OLIVE    | SFT      | MST      | 12<br>12<br>20       | OVM 0.0                  | Backfilled material; grass roots & fragments.                                                      |
| 14        | 5     |          |            | No Sample Recovered        |                |          |          |                      |                          |                                                                                                    |
| 13        | 6     |          | 100        | Fat clay with sand, CH     | GREEN/GREY BRN | SFT      | MST      | 4<br>5<br>7          | OVM 0.0                  | Backfilled material - sat observed in coarser intervals, grass roots, fragments.                   |
| 12        | 7     |          |            |                            |                |          |          |                      |                          |                                                                                                    |
| 11        | 8     |          | 70         | Elastic silt with sand, MH | FE BRN/OLV BRN | SFT      | SAT      | 2<br>2<br>5          | OVM 0.0                  | Sat, observed in coarse intervals, backfill mat. graded into gray clayey silt. Micaceous @ 9' bgs. |
| 10        | 9     |          |            | No Sample Recovered        |                |          |          |                      |                          |                                                                                                    |
| 9         | 10    |          | 90         | Silty sand, SM             | GRAY           | FRM      | MST      | 4<br>4<br>7          | OVM 0.0                  | Very micaceous.                                                                                    |

# Borehole Log

Roy F. WESTON, Inc.

PROJECT : FT. MONMOUTH  
 SITE NAME : BACKGROUND 1  
 BORING ID : B2-MW2B  
 NORTHING : 0.0000 estimated  
 EASTING : 0.0000 estimated  
 ELEVATION : 19.440 surveyed

TOTAL DEPTH : 0.00  
 LOGGER : P. THOMAS  
 DRILLING COMPANY : J.C. ANDERSON  
 DRILLING RIG : VINCE BORELLI  
 DATE STARTED : 01/05/95  
 DATE COMPLETED : 01/06/95

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION      | COLOR  | STRENGTH | MOISTURE | BLOW COUNT | FIELD INSTRUMENT READING | COMMENTS                                                                        |
|-----------|-------|----------|------------|---------------------|--------|----------|----------|------------|--------------------------|---------------------------------------------------------------------------------|
| 8         | 11    |          |            | Silty sand, SM      | GRAY   | FRM      | MST      |            | OVM 0.0                  | Very micaceous.                                                                 |
| 7         | 12    |          | 70         | No Sample Recovered |        |          |          |            |                          |                                                                                 |
|           |       |          |            | Silty sand, SM      | GRAY   | SFT      | MST      | 5          | OVM 0.0                  | V. micaceous.                                                                   |
| 6         | 13    |          |            | No Sample Recovered |        |          |          |            |                          |                                                                                 |
| 5         | 14    |          | 90         | Silty sand, SM      | GRAY   | LSE      | SAT      | 6          | OVM 0.0                  | V. micaceous - green elongated, reflective "mineral" found throughout interval. |
| 4         | 15    |          |            | No Sample Recovered |        |          |          |            |                          |                                                                                 |
| 3         | 16    |          | 75         | Silty sand, SM      | GRAY   | SFT      | SAT      | 6          | OVM 0.0                  | V. micaceous very high; green mineral throughout interval.                      |
| 2         | 17    |          |            | No Sample Recovered |        |          |          |            |                          |                                                                                 |
| 1         | 18    |          | 100        | Silty sand, SM      | GRAY - | SFT      | SAT      | 10         | OVM 0.0                  | V. micaceous, set well 20' bgs.                                                 |
| 0         | 19    |          |            |                     |        |          |          |            |                          |                                                                                 |
| -1        | 20    |          |            |                     |        |          |          |            |                          |                                                                                 |

DATE: 06/27/95 \*\*\*\* Roy F. WESTON, Inc. LITHOLOGICAL DATA FOR - CLIENT ID: USAC2 \*\*\* PAGE: 1.

| BOREHOLE<br>/WELL ID | SMP<br>NUM | LTH<br>NUM | LITHOLOGY INT.<br>(FT BGS) | SAMPLING<br>METHOD | SIZE<br>GRAVEL | GRAVEL<br>PCT. | SIZE<br>SAND | SAND<br>PCT | SILT<br>PCT | CLAY<br>PCT | ORGANIC<br>PCT | ROCK<br>TYPE | PLAST | SORT | STRENGTH | MOISTURE | STRAT<br>UNIT |
|----------------------|------------|------------|----------------------------|--------------------|----------------|----------------|--------------|-------------|-------------|-------------|----------------|--------------|-------|------|----------|----------|---------------|
| B2-MW2B              | 1          | 1          | 0.00                       | 1.00               | SPS            | F              | 5            | FM          | 40          | 35          | 15             | 5            | NON   | MOD  | FRM      | MST      |               |
| B2-MW2B              | 1          | 2          | 1.00                       | 2.00               | SPS            |                | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| B2-MW2B              | 2          | 1          | 2.00                       | 3.20               | SPS            | F              | 5            | FM          | 30          | 35          | 30             | 0            | HGH   | MOD  | SFT      | MST      |               |
| B2-MW2B              | 2          | 2          | 3.20                       | 4.00               | SPS            |                | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| B2-MW2B              | 3          | 1          | 4.00                       | 5.00               | SPS            | F              | 5            | FM          | 20          | 30          | 35             | 10           | HGH   | MOD  | SFT      | MST      |               |
| B2-MW2B              | 3          | 2          | 5.00                       | 6.00               | SPS            |                | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| B2-MW2B              | 4          | 1          | 6.00                       | 8.00               | SPS            |                | 5            | FM          | 20          | 30          | 35             | 10           | HGH   | MOD  | SFT      | MST      |               |
| B2-MW2B              | 5          | 1          | 8.00                       | 9.40               | SPS            |                | 5            | F           | 20          | 40          | 30             | 5            | MOD   | MOD  | SFT      | SAT      |               |
| B2-MW2B              | 5          | 2          | 9.40                       | 10.00              | SPS            |                | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| B2-MW2B              | 6          | 1          | 10.00                      | 11.80              | SPS            |                | 0            | F           | 50          | 40          | 10             | 0            | NON   | MOD  | FRM      | MST      |               |
| B2-MW2B              | 6          | 2          | 11.80                      | 12.00              | SPS            |                | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| B2-MW2B              | 7          | 1          | 12.00                      | 13.40              | SPS            |                | 0            | FM          | 50          | 40          | 10             | 0            | NON   | MOD  | SFT      | MST      |               |
| B2-MW2B              | 7          | 2          | 13.40                      | 14.00              | SPS            |                | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| B2-MW2B              | 8          | 1          | 14.00                      | 15.80              | SPS            |                | 0            | FM          | 50          | 40          | 10             | 0            | NON   | MOD  | LSE      | SAT      |               |
| B2-MW2B              | 8          | 2          | 15.80                      | 16.00              | SPS            |                | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| B2-MW2B              | 9          | 1          | 16.00                      | 17.50              | SPS            |                | 0            | F           | 50          | 40          | 10             | 0            | NON   | MOD  | SFT      | SAT      |               |
| B2-MW2B              | 9          | 2          | 17.50                      | 18.00              | SPS            |                | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| B2-MW2B              | 10         | 1          | 18.00                      | 20.00              | SPS            |                | 0            | F           | 50          | 40          | 10             | 0            | NON   | MOD  | SFT      | SAT      |               |

**Borehole Location Data****Roy F. WESTON, Inc.**

BOREHOLE ID : B3-MW3B  
BEGIN DATE : 01/06/95

PROJECT NAME: FT. MONMOUTH  
END DATE : 01/09/95

LOGGER/COMPANY : P. THOMAS

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : 0

TOTAL DEPTH : 26.00

DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 12.25

INTERVAL: 0.00 ft. to 26.00 ft. BGS

METHOD : HSA

FLUID : WATER

BOREHOLE DIAMETER #2:

INTERVAL:

METHOD :

FLUID :

BOREHOLE DIAMETER #3:

INTERVAL:

METHOD :

FLUID :

DRILLING COMPANY : J.C. ANDERSON

DRILLER : STEVE BURGER

DRILL RIG TYPE : MOBILE B-57

|                        | ESTIMATED | SURVEYED |
|------------------------|-----------|----------|
| SURFACE<br>ELEVATION : | 0.000     | 19.200   |
| N. COORDINATE :        | 0.0000    |          |
| E. COORDINATE :        | 0.0000    |          |

WELL PERMIT.....(Y)es (N)o: N PERMIT # : NJ 29 32589

HOLE ABANDONED... (Y)es (N)o: N

WELL INSTALLED... (Y)es (N)o: Y

WELL CLUSTER.....(Y)es (N)o: N No. OF WELLS : 0

WELL NEST.....(Y)es (N)o: N No. OF WELLS : 0

PUMPS INSTALLED..(Y)es (N)o: N

PURGE :

DEPTH

0.00

SAMPLE :

0.00

**BOREHOLE TESTING**

BOREHOLE GEOPHYSICS.....(Y)es (N)o: N

SLUG TESTS.....(Y)es (N)o: N

PACKER TESTS.....(Y)es (N)o: N

PUMPING TESTS.....(Y)es (N)o: N

**COMMENTS :**

Latitude-North: 40 deg 18' 32.4"

Longitude-West: 74 deg 03' 27.7"

# Well Completion Summary

Roy F. WESTON, Inc.

**CLIENT** FT. MONMOUTH  
**SITE NAME** MAIN POST AREA

**DRILLING FIRM** J.C. ANDERSON  
**INSPECTOR** P. THOMAS

**WELL ID** B3-MW3B  
**START DATE** 01/06/95  
**COMPLETION DATE** 01/09/95

## WATER LEVELS

|                                                                                                                     |                                 | DEPTH |  | ELEV. | DRILLING SUMMARY              |                        |
|---------------------------------------------------------------------------------------------------------------------|---------------------------------|-------|--|-------|-------------------------------|------------------------|
| <p>Protective Casing<br/>4.00 inch</p>                                                                              | 1.89                            | TC    |  | 21.18 | <b>Driller</b>                | STEVE BURGER           |
|                                                                                                                     | 0.00                            | GS    |  | 19.29 | <b>Drilling Fluid</b>         | WATER                  |
|                                                                                                                     |                                 |       |  |       | <b>Well Type</b>              | SINGLE CASED SCREENED  |
|                                                                                                                     | <b>WELL DESIGN CONSTRUCTION</b> |       |  |       |                               |                        |
|                                                                                                                     |                                 |       |  |       | <b>Casing #1 Diameter:</b>    | 4.00 inch              |
|                                                                                                                     |                                 |       |  |       | <b>Interval:</b>              | 0.00 to 16.00 ft.      |
|                                                                                                                     |                                 |       |  |       | <b>Type :</b>                 |                        |
|                                                                                                                     |                                 |       |  |       | <b>Stick Up Inner Casing:</b> | 1.89 ft.               |
|                                                                                                                     |                                 |       |  |       | <b>Protective Casing:</b>     | 2.33 ft.               |
|                                                                                                                     |                                 |       |  |       | <b>Casing Grout:</b>          | CEMT/BENT              |
|                                                                                                                     |                                 |       |  |       | <b>Interval:</b>              | 0.00 to 11.00 ft.      |
|                                                                                                                     |                                 |       |  |       | <b>Seal Type:</b>             | BENTONITE SLURRY       |
|                                                                                                                     |                                 |       |  |       | <b>Interval:</b>              | 11.00 to 14.00 ft.     |
|                                                                                                                     |                                 |       |  |       | <b>Sand Pack Type :</b>       | NO. 1 MORIE            |
|                                                                                                                     |                                 |       |  |       | <b>Grain Size :</b>           | UNIFORM                |
|                                                                                                                     |                                 |       |  |       | <b>Interval:</b>              | 14.00 to 26.00 ft.     |
|                                                                                                                     |                                 |       |  |       | <b>Median Diameter:</b>       |                        |
|                                                                                                                     |                                 |       |  |       | <b>Screen Diameter:</b>       | 4.00                   |
|                                                                                                                     |                                 |       |  |       | <b>Interval:</b>              | 16.00 to 25.54 ft.     |
|                                                                                                                     |                                 |       |  |       | <b>Type :</b>                 | PVC                    |
|                                                                                                                     |                                 |       |  |       | <b>Slots:</b>                 | 0.010 inches           |
| 11.00                                                                                                               | BN                              |       |  | 8.29  | <b>Silt Trap Interval:</b>    | 25.54 to 26.00 ft.     |
| 14.00                                                                                                               | SP                              |       |  | 5.29  | <b>Backfill Type :</b>        |                        |
|                                                                                                                     |                                 |       |  |       | <b>Interval:</b>              | 0.00 to 0.00 ft.       |
| <b>WELL DEVELOPMENT</b>                                                                                             |                                 |       |  |       |                               |                        |
|                                                                                                                     |                                 |       |  |       | <b>Date</b>                   | 01/19/95               |
|                                                                                                                     |                                 |       |  |       | <b>Method</b>                 | Surge Blocking/Bailing |
|                                                                                                                     |                                 |       |  |       | <b>Yield</b>                  | <1 gpm                 |
|                                                                                                                     |                                 |       |  |       | <b>Purged Volume</b>          | 192 gal                |
| <b>COMMENTS</b>                                                                                                     |                                 |       |  |       |                               |                        |
|                                                                                                                     |                                 |       |  |       | TC = Top of Casing            | SP = Top Sand Pack     |
|                                                                                                                     |                                 |       |  |       | GS = Ground Surface           | SC = Top Screen        |
|                                                                                                                     |                                 |       |  |       | BN = Top Seal                 | BS = Bottom Screen     |
|                                                                                                                     |                                 |       |  |       | TD = Total Depth              |                        |
|                                                                                                                     |                                 |       |  |       |                               | = Grout                |
|                                                                                                                     |                                 |       |  |       |                               | = Seal                 |
|                                                                                                                     |                                 |       |  |       |                               | = Sand Pack            |
|                                                                                                                     |                                 |       |  |       |                               | = Formation            |
| 25.54                                                                                                               | BS                              |       |  | -6.25 |                               |                        |
| 26.00                                                                                                               | TD                              |       |  | -6.71 |                               |                        |
| <b>Additional Comments:</b>                                                                                         |                                 |       |  |       |                               |                        |
| Depths are measured below ground surface. High turbidity at end of well development. Well is very slow to recharge. |                                 |       |  |       |                               |                        |

**NOTE:** Well Diagram not to Scale

Elevations are feet above mean sea level

# Borehole Log

Roy F. WESTON, Inc.

PROJECT : FT. MONMOUTH  
SITE NAME : MAIN POST AREA  
BORING ID : B3-MW3B  
NORTHING : 0.0000 estimated  
EASTING : 0.0000 estimated  
ELEVATION : 19.200 surveyed

TOTAL DEPTH : 26.00  
LOGGER : P. THOMAS  
DRILLING COMPANY : J.C. ANDERSON  
DRILLING RIG : MOBILE B-57  
DATE STARTED : 01/06/95  
DATE COMPLETED : 01/09/95

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION      | COLOR           | STRENGTH | MOISTURE | BLOW COUNT           | FIELD INSTRUMENT READING | COMMENTS                                                                  |
|-----------|-------|----------|------------|---------------------|-----------------|----------|----------|----------------------|--------------------------|---------------------------------------------------------------------------|
| 18        | 1     |          | 70         | Silty sand, SM      | BROWN           | SFT      | MST      | 11<br>15<br>21<br>17 | OVM 0.0                  | Lt med Fe stained mottles sampled (B3-SB1-A01) for respective parameters. |
|           |       |          |            | No Sample Recovered |                 |          |          |                      |                          |                                                                           |
| 17        | 2     |          | 70         | Silty sand, SM      | BRN-YELLOW FE   | SFT      | MST      | 5<br>7<br>10<br>14   | OVM 0.0                  | Fill?                                                                     |
| 16        | 3     |          |            | No Sample Recovered |                 |          |          |                      |                          |                                                                           |
| 15        | 4     |          | 80         | Silty sand, SM      | OLIVE YELLOW BR | SFT      | WET      | 6<br>7<br>10<br>13   | OVM 0.0                  | Fill? Fe stained mottles irregular cohesion. Gravel layer ~5' bgs.        |
| 14        | 5     |          |            | No Sample Recovered |                 |          |          |                      |                          |                                                                           |
| 13        | 6     |          | 100        | Silty sand, SM      | ORG BRN/GRN GRY | SFT      | WET      | 10<br>10<br>20<br>15 | OVM 0.0                  | Fill, Fe, green/gray mottles; clay stringers.                             |
| 12        | 7     |          |            |                     |                 |          |          |                      |                          |                                                                           |
| 11        | 8     |          | 100        | Silty sand, SM      | FE BRN/GRN GRY  | SFT      | WET      | 12<br>15<br>19<br>22 | OVM 0.0                  | Very tight matrix.                                                        |
| 10        | 9     |          |            |                     |                 |          |          |                      |                          |                                                                           |
| 9         | 10    |          | 100        | Silty sand, SM      | FE BRN/GRN GRY  | SFT      | WET      | 10<br>12<br>15<br>12 | OVM 0.0                  | Sampled B3-SB1-A03                                                        |

# Borehole Log

Roy F. WESTON, Inc.

PROJECT : FT. MONMOUTH  
 SITE NAME : MAIN POST AREA  
 BORING ID : B3-MW3B  
 NORTHING : 0.0000 estimated  
 EASTING : 0.0000 estimated  
 ELEVATION : 19.200 surveyed

TOTAL DEPTH : 26.00  
 LOGGER : P. THOMAS  
 DRILLING COMPANY : J.C. ANDERSON  
 DRILLING RIG : MOBILE B-57  
 DATE STARTED : 01/06/95  
 DATE COMPLETED : 01/09/95

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION      | COLOR          | STRENGTH | MOISTURE | BLOW COUNT     | FIELD INSTRUMENT READING | COMMENTS                                                          |
|-----------|-------|----------|------------|---------------------|----------------|----------|----------|----------------|--------------------------|-------------------------------------------------------------------|
| 8 - 11    |       |          |            | Silty sand, SM      | FE BRN/GRN GRY | SFT      | WET      |                | OVM 0.0                  | Sampled B3-SB1-A03                                                |
| 7 - 12    |       |          | 75         | Silty sand, SM      | GRAY           | SFT      | MST      | 4<br>96<br>12  | OVM 0.0                  |                                                                   |
| 6 - 13    |       |          |            | No Sample Recovered |                |          |          |                |                          |                                                                   |
| 5 - 14    |       |          | 90         | Silty sand, SM      | GRAY           | SFT      | WET      | 12<br>12<br>11 | OVM 0.0                  | Quartz sand with silt/<br>clay matrix, wet at<br>bottom of spoon. |
| 4 - 15    |       |          |            | No Sample Recovered |                |          |          |                |                          |                                                                   |
| 3 - 16    |       |          | 60         | Silty sand, SM      | GRAY           | LSE      | WET      | 3<br>50<br>9   | OVM 0.0                  | Coarser than above int.                                           |
| 2 - 17    |       |          |            | No Sample Recovered |                |          |          |                |                          |                                                                   |
| 1 - 18    |       |          | 90         | Silty sand, SM      | GRAY           | SFT      | SAT      | 8<br>30<br>9   | OVM 0.0                  |                                                                   |
| 0 - 19    |       |          |            | No Sample Recovered |                |          |          |                |                          |                                                                   |
| -1 - 20   |       |          | 75         | Silty sand, SM      | GRAY           | SFT      | SAT      | 5<br>40<br>5   | OVM 0.0                  |                                                                   |

# Borehole Log

Roy F. WESTON, Inc.

|                             |                                  |
|-----------------------------|----------------------------------|
| PROJECT : FT. MONMOUTH      | TOTAL DEPTH : 26.00              |
| SITE NAME : MAIN POST AREA  | LOGGER : P. THOMAS               |
| BORING ID : B3-MW3B         | DRILLING COMPANY : J.C. ANDERSON |
| NORTHING : 0.0000 estimated | DRILLING RIG : MOBILE B-57       |
| EASTING : 0.0000 estimated  | DATE STARTED : 01/06/95          |
| ELEVATION : 19.200 surveyed | DATE COMPLETED : 01/09/95        |

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION       | COLOR | STRENGTH | MOISTURE | BLOW COUNT | FIELD INSTRUMENT READING | COMMENTS          |
|-----------|-------|----------|------------|----------------------|-------|----------|----------|------------|--------------------------|-------------------|
| -1        | 21    |          |            | Silty sand, SM       | GRAY  | SFT      | SAT      |            | OVM 0.0                  | Augered interval. |
|           |       |          |            | No Sample Recovered  |       |          |          |            |                          |                   |
| -2        | 22    |          |            | Interval Not Sampled |       |          |          |            |                          |                   |
| -3        | 23    |          |            |                      |       |          |          |            |                          |                   |
| -4        | 24    |          | 100        | Silty sand, SM       | GRAY  | SFT      | SAT      |            | OVM 0.0                  |                   |
| -5        | 25    |          |            |                      |       |          |          |            |                          |                   |
| -6        | 26    |          |            |                      |       |          |          |            |                          |                   |
| -7        | 27    |          |            |                      |       |          |          |            |                          |                   |
| -8        | 28    |          |            |                      |       |          |          |            |                          |                   |
| -9        | 29    |          |            |                      |       |          |          |            |                          |                   |
| -10       | 30    |          |            |                      |       |          |          |            |                          |                   |



| BOREHOLE | SMP | LTH | LITHOLOGY | INT.  | SAMPLING | SIZE   | GRAVEL | SIZE | SAND | SILT | CLAY | ORGANIC | ROCK | STRAT |      |          |               |
|----------|-----|-----|-----------|-------|----------|--------|--------|------|------|------|------|---------|------|-------|------|----------|---------------|
| /WELL ID | NUM | NUM | (FT BGS)  |       | METHOD   | GRAVEL | PCT.   | SAND | PCT  | PCT  | PCT  | PCT     | TYPE | PLAST | SORT | STRENGTH | MOISTURE UNIT |
| B3-MW3B  | 1   | 1   | 0.00      | 1.40  | SPS      | F      | 5      | FM   | 50   | 35   | 5    | 5       |      | NON   | MOD  | SFT      | MST           |
| B3-MW3B  | 1   | 2   | 1.40      | 2.00  | SPS      |        | 0      |      | 0    | 0    | 0    | 0       |      |       |      |          |               |
| B3-MW3B  | 2   | 1   | 2.00      | 3.40  | SPS      | F      | 5      |      | 50   | 35   | 10   | 0       |      | NON   | MOD  | SFT      | MST           |
| B3-MW3B  | 2   | 2   | 3.40      | 4.00  | SPS      |        | 0      |      | 0    | 0    | 0    | 0       |      |       |      |          |               |
| B3-MW3B  | 3   | 1   | 4.00      | 5.60  | SPS      | F      | 10     | MFC  | 40   | 30   | 20   | 0       |      | MOD   | MOD  | SFT      | WET           |
| B3-MW3B  | 3   | 2   | 5.60      | 6.00  | SPS      |        | 0      |      | 0    | 0    | 0    | 0       |      |       |      |          |               |
| B3-MW3B  | 4   | 1   | 6.00      | 8.00  | SPS      |        | 5      | MF   | 45   | 35   | 15   | 0       |      | LOW   | MOD  | SFT      | WET           |
| B3-MW3B  | 5   | 1   | 8.00      | 10.00 | SPS      |        | 5      | FM   | 45   | 35   | 15   | 0       |      | LOW   | MOD  | SFT      | WET           |
| B3-MW3B  | 6   | 1   | 10.00     | 12.00 | SPS      | F      | 5      | FM   | 45   | 35   | 15   | 0       |      | LOW   | MOD  | SFT      | WET           |
| B3-MW3B  | 7   | 1   | 12.00     | 13.50 | SPS      |        | 0      | FM   | 50   | 40   | 10   | 0       |      | NON   | MOD  | SFT      | MST           |
| B3-MW3B  | 7   | 2   | 13.50     | 14.00 | SPS      |        | 0      |      | 0    | 0    | 0    | 0       |      |       |      |          |               |
| B3-MW3B  | 8   | 1   | 14.00     | 15.80 | SPS      |        | 0      | FM   | 50   | 40   | 10   | 0       |      | NON   | MOD  | SFT      | WET           |
| B3-MW3B  | 8   | 2   | 15.80     | 16.00 | SPS      |        | 0      |      | 0    | 0    | 0    | 0       |      |       |      |          |               |
| B3-MW3B  | 9   | 1   | 16.00     | 17.20 | SPS      |        | 0      | MF   | 60   | 30   | 10   | 0       |      | NON   | MOD  | LSE      | WET           |
| B3-MW3B  | 9   | 2   | 17.20     | 18.00 | SPS      |        | 0      |      | 0    | 0    | 0    | 0       |      |       |      |          |               |
| B3-MW3B  | 10  | 1   | 18.00     | 19.80 | SPS      |        | 0      | MF   | 55   | 35   | 10   | 0       |      | NON   | MOD  | SFT      | SAT           |
| B3-MW3B  | 10  | 2   | 19.80     | 20.00 | SPS      |        | 0      |      | 0    | 0    | 0    | 0       |      |       |      |          |               |
| B3-MW3B  | 11  | 1   | 20.00     | 21.50 | SPS      |        | 0      | MF   | 55   | 35   | 10   | 0       |      | NON   | MOD  | SFT      | SAT           |
| B3-MW3B  | 11  | 2   | 21.50     | 22.00 | SPS      |        | 0      |      | 0    | 0    | 0    | 0       |      |       |      |          |               |
| B3-MW3B  | 12  | 1   | 22.00     | 24.00 | NS       |        | 0      |      | 0    | 0    | 0    | 0       |      |       |      |          |               |
| B3-MW3B  | 13  | 1   | 24.00     | 26.00 | SPS      |        | 0      | FM   | 50   | 40   | 10   | 0       |      | NON   | MOD  | SFT      | SAT           |

**Borehole Location Data****Roy F. WESTON, Inc.**

BOREHOLE ID : B4-MW4B  
BEGIN DATE : 01/09/95

PROJECT NAME: FT. MONMOUTH  
END DATE : 01/09/95

LOGGER/COMPANY : K. VALENTI

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : 0

TOTAL DEPTH : 15.00

DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 12.00

INTERVAL: 0.00 ft. to 16.00 ft. BGS

METHOD : HSA

FLUID : WATER

BOREHOLE DIAMETER #2:

INTERVAL:

METHOD :

FLUID :

BOREHOLE DIAMETER #3:

INTERVAL:

METHOD :

FLUID :

DRILLING COMPANY : J.C. ANDERSON

DRILLER : WELLS REEVE

DRILL RIG TYPE : CME-55

|                        | ESTIMATED | SURVEYED |
|------------------------|-----------|----------|
| SURFACE<br>ELEVATION : | 0.000     | 9.780    |

N. COORDINATE : 0.0000

E. COORDINATE : 0.0000

WELL PERMIT.....(Y)es (N)o: N PERMIT # : NJ 29 32567

HOLE ABANDONED... (Y)es (N)o: N

WELL INSTALLED... (Y)es (N)o: Y

WELL CLUSTER.....(Y)es (N)o: N No. OF WELLS : 0

WELL NEST.....(Y)es (N)o: N No. OF WELLS : 0

PUMPS INSTALLED..(Y)es (N)o: N

|          | TYPE | DEPTH |
|----------|------|-------|
| PURGE :  |      | 0.00  |
| SAMPLE : |      | 0.00  |

**BOREHOLE TESTING**

BOREHOLE GEOPHYSICS.....(Y)es (N)o: N

SLUG TESTS.....(Y)es (N)o: N

PACKER TESTS.....(Y)es (N)o: N

PUMPING TESTS.....(Y)es (N)o: N

**COMMENTS :**

Sample I.D. 1-2' B4-SB01-A01 Dup. B4-SB4-001 Sample I.D. 6'-  
6" to 7'-2" B4SB01-A02. All parameters: TCL+30 VOA, BNA, PEST  
/PCB, TAL met., Cn. Lat: 40 deg 19' 0"/Long: 74 deg 02' 40.3"

# Well Completion Summary

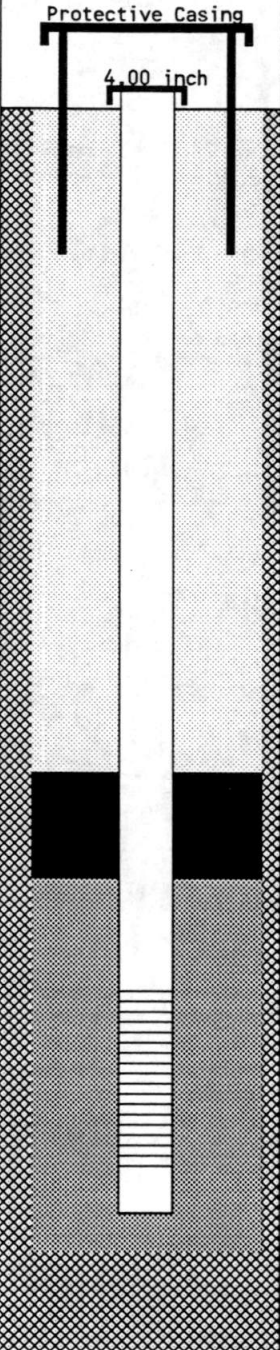
Roy F. WESTON, Inc.

**CLIENT** FT. MONMOUTH  
**SITE NAME** BACKGROUND 4

**DRILLING FIRM** J.C. ANDERSON  
**INSPECTOR** K. VALENTI

**WELL ID** B4-MW4B  
**START DATE** 01/09/95  
**COMPLETION DATE** 01/09/95

## WATER LEVELS

|  | DEPTH |    | ELEV. | <b>DRILLING SUMMARY</b>       |                         |
|------------------------------------------------------------------------------------|-------|----|-------|-------------------------------|-------------------------|
|                                                                                    | 2.30  | TC | 12.08 | <b>Driller</b>                | WELLS REEVE             |
|                                                                                    | 0.00  | GS | 9.78  | <b>Drilling Fluid</b>         | WATER                   |
|                                                                                    |       |    |       | <b>Well Type</b>              | SINGLE CASED SCREENED   |
| <b>WELL DESIGN CONSTRUCTION</b>                                                    |       |    |       |                               |                         |
|                                                                                    |       |    |       | <b>Casing #1 Diameter:</b>    | 4.00 inch               |
|                                                                                    |       |    |       | <b>Interval:</b>              | 0.00 to 15.00 ft.       |
|                                                                                    |       |    |       | <b>Type :</b>                 |                         |
|                                                                                    |       |    |       | <b>Stick Up Inner Casing:</b> | 2.30 ft.                |
|                                                                                    |       |    |       | <b>Protective Casing:</b>     | 2.66 ft.                |
|                                                                                    |       |    |       | <b>Casing Grout:</b>          | PORTLAND CEMENT         |
|                                                                                    |       |    |       | <b>Interval:</b>              | 0.00 to 1.00 ft.        |
|                                                                                    |       |    |       | <b>Seal Type:</b>             | BENTONITE               |
|                                                                                    |       |    |       | <b>Interval:</b>              | 1.00 to 3.00 ft.        |
|                                                                                    |       |    |       | <b>Sand Pack Type :</b>       | #1 MORIE                |
|                                                                                    |       |    |       | <b>Grain Size :</b>           | UNIFORM                 |
|                                                                                    |       |    |       | <b>Median Diameter:</b>       |                         |
|                                                                                    |       |    |       | <b>Screen Diameter:</b>       | 4.00                    |
|                                                                                    |       |    |       | <b>Interval:</b>              | 5.00 to 14.54 ft.       |
|                                                                                    |       |    |       | <b>Type :</b>                 | PVC                     |
|                                                                                    |       |    |       | <b>Slots:</b>                 | 0.010 inches            |
|                                                                                    | 1.00  | BN | 8.78  | <b>Silt Trap Interval:</b>    | 14.54 to 15.00 ft.      |
|                                                                                    | 3.00  | SP | 6.78  | <b>Backfill Type :</b>        |                         |
|                                                                                    |       |    |       | <b>Interval:</b>              | 0.00 to 0.00 ft.        |
| <b>WELL DEVELOPMENT</b>                                                            |       |    |       |                               |                         |
|                                                                                    | 5.00  | SC | 4.78  | <b>Date</b>                   | 01/19/95                |
|                                                                                    |       |    |       | <b>Method</b>                 | Surge Blocking/Overpump |
|                                                                                    |       |    |       | <b>Yield</b>                  | ~.5 gpm                 |
|                                                                                    |       |    |       | <b>Purged Volume</b>          | 45 gal                  |
| <b>COMMENTS</b>                                                                    |       |    |       |                               |                         |
|                                                                                    | 14.54 | BS | -4.76 | TC = Top of Casing            | SP = Top Sand Pack      |
|                                                                                    |       |    |       | GS = Ground Surface           | SC = Top Screen         |
|                                                                                    |       |    |       | BN = Top Seal                 | BS = Bottom Screen      |
|                                                                                    | 15.00 | TD | -5.22 | TD = Total Depth              |                         |
|                                                                                    |       |    |       | <b>Additional Comments:</b>   |                         |

NOTE: Well Diagram not to Scale

Elevations are feet above mean sea level

# Borehole Log

Roy F. WESTON, Inc.

PROJECT : FT. MONMOUTH  
 SITE NAME : BACKGROUND 4  
 BORING ID : B4-MW4B  
 NORTHING : 0.0000 estimated  
 EASTING : 0.0000 estimated  
 ELEVATION : 9.780 surveyed

TOTAL DEPTH : 15.00  
 LOGGER : K. VALENTI  
 DRILLING COMPANY : J.C. ANDERSON  
 DRILLING RIG : CME-55  
 DATE STARTED : 01/09/95  
 DATE COMPLETED : 01/09/95

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION                      | COLOR          | STRENGTH | MOISTURE | BLOW COUNT | FIELD INSTRUMENT READING | COMMENTS                                                                                        |
|-----------|-------|----------|------------|-------------------------------------|----------------|----------|----------|------------|--------------------------|-------------------------------------------------------------------------------------------------|
|           |       |          | 100        | Silty sand, SM                      | BROWN          | NA       | MST      | 4          | HNU 0.0                  | Used 3" spoon.                                                                                  |
|           |       |          |            | Silty sand, SM                      | BROWN          |          |          | 4          |                          |                                                                                                 |
|           |       |          |            | Silty sand, SM                      | OLIVE BROWN    |          |          | 5          |                          | Fill/uncertain. Gradual change to drive brn color w/more sand & little silt.                    |
| 8         | 1     |          |            |                                     |                |          |          | 8          |                          | Fill/uncertain. Used 3" split spoon for sample collection.                                      |
|           |       |          | 100        | Poorly graded sand with silt, SP-SM | OLIVE          | LSE      | MST      | 6          | HNU 0.0                  | 3" sps used.                                                                                    |
|           |       |          |            |                                     |                |          |          | 7          |                          |                                                                                                 |
|           |       |          |            |                                     |                |          |          | 8          |                          |                                                                                                 |
| 7         | 2     |          |            |                                     |                |          |          | 9          |                          |                                                                                                 |
|           |       |          |            | Sandy silt, ML                      | OLIVE          | FRM      | MST      |            | HNU 0.0                  | Fill/uncertain with orange staining - mod. gray mottling noted from 3-4' (3" sps used).         |
| 6         | 3     |          |            |                                     |                |          |          |            |                          |                                                                                                 |
|           |       |          | 100        | Silty sand, SM                      | OLIVE          | FRM      | WET      | 10         | HNU 0.0                  | V. firm, moist to wet (tightly packed), heavy orange (lt.) staining, gray mottling (3" sps)     |
|           |       |          |            |                                     |                |          |          | 11         |                          |                                                                                                 |
|           |       |          |            |                                     |                |          |          | 11         |                          |                                                                                                 |
|           |       |          |            |                                     |                |          |          | 14         |                          |                                                                                                 |
| 5         | 4     |          |            |                                     |                |          |          |            |                          |                                                                                                 |
|           |       |          | 100        | Silty sand, SM                      | OLIVE          | SFT      | WET      | 4          | HNU 0.0                  | Heavy dk. orange and gray staining. Wet at 7.2' bgs. Sampled B4-SB01-A02.                       |
|           |       |          |            |                                     |                |          |          | 7          |                          |                                                                                                 |
|           |       |          |            |                                     |                |          |          | 7          |                          |                                                                                                 |
|           |       |          |            |                                     |                |          |          | 11         |                          |                                                                                                 |
| 3         | 6     |          |            |                                     |                |          |          |            |                          |                                                                                                 |
|           |       |          | 100        | Silty sand, SM                      | OLIVE GREEN    | SFT      | SAT      | 8          | HNU 0.0                  | Outside of sps sat. Rod wet to 6' bgs. 1st water at 7'-2" bgs. 3" sps used.                     |
|           |       |          |            |                                     |                |          |          | 10         |                          |                                                                                                 |
|           |       |          |            |                                     |                |          |          | 11         |                          |                                                                                                 |
|           |       |          |            |                                     |                |          |          | 11         |                          |                                                                                                 |
| 2         | 7     |          |            |                                     |                |          |          |            |                          |                                                                                                 |
|           |       |          | 100        | Silty sand, SM                      | GREEN (FOREST) | LSE      | SAT      | 4          | HNU 0.0                  | 2" sps used hereafter to td. Thin bands of pale orange to orange color throughout. sps sat-wet. |
|           |       |          |            |                                     |                |          |          | 5          |                          |                                                                                                 |
|           |       |          |            |                                     |                |          |          | 6          |                          |                                                                                                 |
|           |       |          |            |                                     |                |          |          | 6          |                          |                                                                                                 |
| 0         | 9     |          |            |                                     |                |          |          |            |                          |                                                                                                 |
|           |       |          | 100        | Silty sand, SM                      |                |          |          |            |                          |                                                                                                 |
|           |       |          |            |                                     |                |          |          |            |                          |                                                                                                 |
| -1        | 10    |          |            |                                     |                |          |          |            |                          |                                                                                                 |

# Borehole Log

Roy F. WESTON, Inc.

PROJECT : FT. MONMOUTH  
 SITE NAME : BACKGROUND 4  
 BORING ID : B4-MW4B  
 NORTHING : 0.0000 estimated  
 EASTING : 0.0000 estimated  
 ELEVATION : 9.780 surveyed

TOTAL DEPTH : 15.00  
 LOGGER : K. VALENTI  
 DRILLING COMPANY : J.C. ANDERSON  
 DRILLING RIG : CME-55  
 DATE STARTED : 01/09/95  
 DATE COMPLETED : 01/09/95

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION                      | COLOR          | STRENGTH | MOISTURE | BLOW COUNT         | FIELD INSTRUMENT READING | COMMENTS                                                                                        |
|-----------|-------|----------|------------|-------------------------------------|----------------|----------|----------|--------------------|--------------------------|-------------------------------------------------------------------------------------------------|
| -1        | 11    |          |            | Silty sand, SM                      | GREEN (FOREST) | LSE      | SAT      |                    | HNU 0.0                  | 2" sps used hereafter to td. Thin bands of pale orange to orange color throughout. sps sat-wet. |
| -2        | 12    |          | 100        | Poorly graded sand with silt, SP-SM | GREEN-FOREST   | LSE      | SAT      | 3<br>4<br>8<br>9   | HNU 0.0                  |                                                                                                 |
| -3        | 13    |          |            |                                     |                |          |          |                    |                          |                                                                                                 |
| -4        | 14    |          | 100        | Poorly graded sand, SP              | DK GREEN       | LSE      | SAT      | 4<br>8<br>16<br>15 | HNU 0.0                  | End of borehole.                                                                                |
| -5        | 15    |          |            |                                     |                |          |          |                    |                          |                                                                                                 |
| -6        | 16    |          |            |                                     |                |          |          |                    |                          |                                                                                                 |
| -7        | 17    |          |            |                                     |                |          |          |                    |                          |                                                                                                 |
| -8        | 18    |          |            |                                     |                |          |          |                    |                          |                                                                                                 |
| -9        | 19    |          |            |                                     |                |          |          |                    |                          |                                                                                                 |
| -10       | 20    |          |            |                                     |                |          |          |                    |                          |                                                                                                 |

| BOREHOLE<br>/WELL ID | SMP<br>NUM | LTH<br>NUM | LITHOLOGY INT.<br>(FT BGS) | SAMPLING<br>METHOD | SIZE<br>GRAVEL | GRAVEL<br>PCT. | SIZE<br>SAND | SAND<br>PCT | SILT<br>PCT | CLAY<br>PCT | ORGANIC<br>PCT | ROCK<br>TYPE | PLAST | SORT | STRENGTH | MOISTURE | STRAT<br>UNIT |
|----------------------|------------|------------|----------------------------|--------------------|----------------|----------------|--------------|-------------|-------------|-------------|----------------|--------------|-------|------|----------|----------|---------------|
| B4-MW4B              | 1          | 1          | 0.00                       | 0.20               | SPS            | 0              | M            | 85          | 15          | 0           | 0              |              | NON   | MOD  | NA       | MST      |               |
| B4-MW4B              | 1          | 2          | 0.20                       | 0.50               | SPS            | 0              | M            | 85          | 15          | 0           | 0              |              |       |      |          |          |               |
| B4-MW4B              | 1          | 3          | 0.50                       | 2.00               | SPS            | 0              | M            | 85          | 15          | 0           | 0              |              |       |      |          |          |               |
| B4-MW4B              | 2          | 1          | 2.00                       | 3.00               | SPS            | 0              | MF           | 90          | 10          | 0           | 0              |              | NON.  | MOD  | LSE      | MST      |               |
| B4-MW4B              | 2          | 2          | 3.00                       | 4.00               | SPS            | 0              |              | 30          | 60          | 10          | 0              |              | LOW   | MOD  | FRM      | MST      |               |
| B4-MW4B              | 3          | 1          | 4.00                       | 6.00               | SPS            | 0              |              | 55          | 25          | 20          | 0              |              | MOD   | POR  | FRM      | WET      |               |
| B4-MW4B              | 4          | 1          | 6.00                       | 8.00               | SPS            | 0              |              | 60          | 25          | 15          | 0              |              | LOW   | POR  | SFT      | WET      |               |
| B4-MW4B              | 5          | 1          | 8.00                       | 10.00              | SPS            | 0              |              | 85          | 10          | 5           | 0              |              | LOW   | MOD  | SFT      | SAT      |               |
| B4-MW4B              | 6          | 1          | 10.00                      | 12.00              | SPS            | 0              | F            | 85          | 10          | 5           | 0              |              | NON   | MOD  | LSE      | SAT      |               |
| B4-MW4B              | 7          | 1          | 12.00                      | 14.00              | SPS            | 0              | F            | 90          | 10          | 0           | 0              |              | LOW   | MOD  | LSE      | SAT      |               |
| B4-MW4B              | 8          | 1          | 14.00                      | 16.00              | SPS            | 0              | F            | 95          | 5           | 0           | 0              |              | NON   | WEL  | LSE      | SAT      |               |

**Borehole Location Data****Roy F. WESTON, Inc.**

BOREHOLE ID : B5-MW5B  
BEGIN DATE : 01/11/95

PROJECT NAME: FT. MONMOUTH  
END DATE : 01/11/95

LOGGER/COMPANY : K. VALENTI

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : O

TOTAL DEPTH : 0.00

DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 12.00

INTERVAL: 0.00 ft. to 0.00 ft. BGS

METHOD : HSA

FLUID : WATER

BOREHOLE DIAMETER #2:

INTERVAL:

METHOD :

FLUID :

BOREHOLE DIAMETER #3:

INTERVAL:

METHOD :

FLUID :

DRILLING COMPANY : J.C. ANDERSON

DRILLER : WELLS REEVE

DRILL RIG TYPE : CME-55

|                        | ESTIMATED | SURVEYED |
|------------------------|-----------|----------|
| SURFACE<br>ELEVATION : | 0.000     | 13.400   |

N. COORDINATE : 0.0000

E. COORDINATE : 0.0000

WELL PERMIT.....(Y)es (N)o: N PERMIT # : NJ 29 32583

HOLE ABANDONED... (Y)es (N)o: N

WELL INSTALLED... (Y)es (N)o: Y

WELL CLUSTER.....(Y)es (N)o: N No. OF WELLS : 0

WELL NEST.....(Y)es (N)o: N No. OF WELLS : 0

PUMPS INSTALLED.. (Y)es (N)o: N TYPE

DEPTH

PURGE : 0.00

SAMPLE : 0.00

**BOREHOLE TESTING**

BOREHOLE GEOPHYSICS.....(Y)es (N)o: N

SLUG TESTS.....(Y)es (N)o: N

PACKER TESTS.....(Y)es (N)o: N

PUMPING TESTS.....(Y)es (N)o: N

**COMMENTS :**

Latitude-North: 40 deg 19' 04.7"

Longitude-West: 74 deg 02' 07.6"

# Well Completion Summary

Roy F. WESTON, Inc.

**CLIENT** FT. MONMOUTH  
**SITE NAME** MAIN POST AREA

**DRILLING FIRM** J.C. ANDERSON  
**INSPECTOR** K. VALENTI

**WELL ID** B5-MW5B  
**START DATE** 01/11/95  
**COMPLETION DATE** 01/11/95

## WATER LEVELS

|                                          |                                 | DEPTH |    | ELEV.         | DRILLING SUMMARY                              |                                    |
|------------------------------------------|---------------------------------|-------|----|---------------|-----------------------------------------------|------------------------------------|
| <p>Protective Casing<br/>4.00 inch</p>   |                                 | 2.00  | TC | 15.40         | <b>Driller</b>                                | WELLS REEVE                        |
|                                          |                                 | 0.00  | GS | 13.40         | <b>Drilling Fluid</b>                         | WATER                              |
|                                          |                                 |       |    |               | <b>Well Type</b>                              | SINGLE CASED SCREENED              |
|                                          | <b>WELL DESIGN CONSTRUCTION</b> |       |    |               |                                               |                                    |
|                                          |                                 |       |    |               | <b>Casing #1 Diameter:</b> 4.00 inch          | <b>Interval:</b> 0.00 to 14.80 ft. |
|                                          |                                 |       |    | <b>Type :</b> |                                               |                                    |
|                                          |                                 |       |    |               | <b>Stick Up Inner Casing:</b> 2.00 ft.        | <b>Protective Casing:</b> 2.14 ft. |
|                                          |                                 |       |    |               | <b>Casing Grout:</b> PORTLAND CEMENT          | <b>Interval:</b> 0.00 to 1.00 ft.  |
|                                          |                                 |       |    |               | <b>Seal Type:</b> BENTONITE                   | <b>Interval:</b> 1.00 to 3.00 ft.  |
|                                          |                                 |       |    |               | <b>Sand Pack Type :</b> #1 MORIE              | <b>Interval:</b> 3.00 to 14.50 ft. |
|                                          |                                 |       |    |               | <b>Grain Size :</b> UNIFORM                   | <b>Median Diameter:</b>            |
|                                          |                                 |       |    |               | <b>Screen Diameter:</b> 4.00                  | <b>Interval:</b> 4.50 to 14.04 ft. |
|                                          |                                 |       |    |               | <b>Type :</b> PVC                             | <b>Slots:</b> 0.010 inches         |
|                                          | 1.00                            | BN    |    | 12.40         | <b>Silt Trap Interval:</b> 14.04 to 14.50 ft. |                                    |
|                                          |                                 |       |    |               | <b>Backfill Type :</b>                        |                                    |
|                                          | 3.00                            | SP    |    | 10.40         | <b>Interval:</b> 0.00 to 0.00 ft.             |                                    |
| <b>WELL DEVELOPMENT</b>                  |                                 |       |    |               |                                               |                                    |
|                                          | 4.50                            | SC    |    | 8.90          | <b>Date</b>                                   | 01/19/95                           |
|                                          |                                 |       |    |               | <b>Method</b>                                 | Bailing                            |
|                                          |                                 |       |    |               | <b>Yield</b>                                  | 1 gpm                              |
|                                          |                                 |       |    |               | <b>Purged Volume</b>                          | 18 gal                             |
| <b>COMMENTS</b>                          |                                 |       |    |               |                                               |                                    |
|                                          | 14.04                           | BS    |    | -0.64         | TC = Top of Casing                            | SP = Top Sand Pack                 |
|                                          |                                 |       |    |               | GS = Ground Surface                           | SC = Top Screen                    |
|                                          |                                 |       |    |               | BN = Top Seal                                 | BS = Bottom Screen                 |
|                                          | 14.50                           | TD    |    | -1.10         | TD = Total Depth                              |                                    |
|                                          |                                 |       |    |               | = Grout                                       | = Seal                             |
|                                          |                                 |       |    |               | = Sand Pack                                   | = Formation                        |
| <b>Additional Comments:</b>              |                                 |       |    |               |                                               |                                    |
| Well during development remained turbid. |                                 |       |    |               |                                               |                                    |

NOTE: Well Diagram not to Scale

Elevations are feet above mean sea level



# Borehole Log

Roy F. WESTON, Inc.

PROJECT : FT. MONMOUTH  
 SITE NAME : MAIN POST AREA  
 BORING ID : B5-MW5B  
 NORTHING : 0.0000 estimated  
 EASTING : 0.0000 estimated  
 ELEVATION : 13.400 surveyed

TOTAL DEPTH : 0.00  
 LOGGER : K. VALENTI  
 DRILLING COMPANY : J.C. ANDERSON  
 DRILLING RIG : CME-55  
 DATE STARTED : 01/11/95  
 DATE COMPLETED : 01/11/95

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION         | COLOR           | STRENGTH | MOISTURE | BLOW COUNT                                                               | FIELD INSTRUMENT READING | COMMENTS                                                                                            |
|-----------|-------|----------|------------|------------------------|-----------------|----------|----------|--------------------------------------------------------------------------|--------------------------|-----------------------------------------------------------------------------------------------------|
| 12.1      | 1     |          | 100        | Sandy silt, ML         | BROWN           | LSE      | DRY      | 7<br>8                                                                   | HNU 0.0                  | 3" SPS used. Uncertain fill or natural. Sample collected B5-SB01-A01. Topsoil at 0-0.3' bgs.        |
| 11.2      | 2     |          | 100        | Sandy elastic silt, MH | OLIVE BROWN     | STF      | MST      | 9<br>10<br>11<br>12<br>13<br>14<br>15                                    | HNU 0.0                  | Fill. 2" SPS used. Mottle orange Fe stains. More sand towards spoon bottom. Sample col. B5-SB01-A02 |
| 10.3      | 3     |          |            |                        |                 |          |          |                                                                          |                          |                                                                                                     |
| 9.4       | 4     |          | 100        | FILL                   | OLIVE BROWN     | LSE      | SAT      | 9<br>10<br>11<br>12<br>13<br>14<br>15                                    | HNU 0.0                  | Fill. 2" SPS used. Wet at 4' bgs. Few gray bands at ~5' bgs. Heavy Fe staining at 5.8'              |
| 8.5       | 5     |          |            |                        |                 |          |          |                                                                          |                          |                                                                                                     |
| 7.6       | 6     |          | 50         | Silty sand, SM         | OLIVE BROWN     | LSE      | SAT      | 4<br>5<br>6<br>7<br>8<br>9<br>10<br>11<br>12<br>13<br>14<br>15           | HNU 0.0                  | 2" sps used here to T.D.                                                                            |
| 6.7       | 7     |          |            | No Sample Recovered    |                 |          |          |                                                                          |                          |                                                                                                     |
| 5.8       | 8     |          | 50         | Silty sand, SM         | OLIVE BROWN     | SFT      | SAT      | 2<br>3<br>4<br>5<br>6<br>7<br>8<br>9<br>10<br>11<br>12<br>13<br>14<br>15 | HNU 0.0                  | Mild gray and lt. orange staining in SPS.                                                           |
| 4.9       | 9     |          |            | No Sample Recovered    |                 |          |          |                                                                          |                          |                                                                                                     |
| 3.10      | 10    |          | 100        | Silt with sand, ML     | DK BROWN TO BLK | SFT      | SAT      | 2<br>3<br>4<br>5<br>6<br>7<br>8<br>9<br>10<br>11<br>12<br>13<br>14<br>15 | HNU 0.0                  | SPS is wet to saturated.                                                                            |

# Borehole Log

Roy F. WESTON, Inc.

PROJECT : FT. MONMOUTH  
 SITE NAME : MAIN POST AREA  
 BORING ID : B5-MW5B  
 NORTHING : 0.0000 estimated  
 EASTING : 0.0000 estimated  
 ELEVATION : 13.400 surveyed

TOTAL DEPTH : 0.00  
 LOGGER : K. VALENTI  
 DRILLING COMPANY : J.C. ANDERSON  
 DRILLING RIG : CME-55  
 DATE STARTED : 01/11/95  
 DATE COMPLETED : 01/11/95

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION             | COLOR           | STRENGTH | MOISTURE | BLOW COUNT       | FIELD INSTRUMENT READING | COMMENTS                                                          |
|-----------|-------|----------|------------|----------------------------|-----------------|----------|----------|------------------|--------------------------|-------------------------------------------------------------------|
|           |       |          |            | Silt with sand, ML         | DK BROWN TO BLK | SFT      | SAT      |                  | HNU 0.0                  | SPS is wet to saturated.                                          |
| 2         | 11    |          |            |                            |                 |          |          |                  |                          |                                                                   |
| 1         | 12    |          | 100        | Elastic silt with sand, MH | BLACK           | FRM      | SAT      | 5<br>4<br>8<br>9 | HNU 0.0                  | Sps gets sandier towards bottom (20%). Auger to 14.5 to set well. |
| 0         | 13    |          |            |                            |                 |          |          |                  |                          |                                                                   |
| -1        | 14    |          |            | Interval Not Sampled       |                 |          |          |                  |                          |                                                                   |
| -2        | 15    |          |            |                            |                 |          |          |                  |                          |                                                                   |
| -3        | 16    |          |            |                            |                 |          |          |                  |                          |                                                                   |
| -4        | 17    |          |            |                            |                 |          |          |                  |                          |                                                                   |
| -5        | 18    |          |            |                            |                 |          |          |                  |                          |                                                                   |
| -6        | 19    |          |            |                            |                 |          |          |                  |                          |                                                                   |
| -7        | 20    |          |            |                            |                 |          |          |                  |                          |                                                                   |

DATE: 06/20/95 \*\*\*\* Roy F. WESTON, Inc. LITHOLOGICAL DATA FOR - CLIENT ID: USAC2 \*\*\* PAGE: 3

| BOREHOLE | SMP | LTH | LITHOLOGY | INT.  | SAMPLING | SIZE   | GRAVEL | SIZE | SAND | SILT | CLAY | ORGANIC | ROCK | STRAT |      |          |               |
|----------|-----|-----|-----------|-------|----------|--------|--------|------|------|------|------|---------|------|-------|------|----------|---------------|
| /WELL ID | NUM | NUM | (FT BGS)  |       | METHOD   | GRAVEL | PCT.   | SAND | PCT  | PCT  | PCT  | PCT     | TYPE | PLAST | SORT | STRENGTH | MOISTURE UNIT |
| B5-MW5B  | 1   | 1   | 0.00      | 2.00  | SPS      |        | 0      |      | 35   | 65   | 0    | 0       |      | NON   | POR  | LSE      | DRY           |
| B5-MW5B  | 2   | 1   | 2.00      | 4.00  | SPS      |        | 0      |      | 30   | 55   | 15   | 0       |      | MOD   | POR  | STF      | MST           |
| B5-MW5B  | 3   | 1   | 4.00      | 6.00  | SPS      |        | 0      | MF   | 95   | 5    | 0    | 0       |      | NA    | WEL  | LSE      | SAT           |
| B5-MW5B  | 4   | 1   | 6.00      | 7.00  | SPS      |        | 0      | MF   | 85   | 15   | 0    | 0       |      | NON   | WEL  | LSE      | SAT           |
| B5-MW5B  | 4   | 2   | 7.00      | 8.00  | SPS      |        | 0      |      | 0    | 0    | 0    | 0       |      |       |      |          |               |
| B5-MW5B  | 5   | 1   | 8.00      | 9.00  | SPS      |        | 0      | F    | 75   | 20   | 5    | 0       |      | LOW   | WEL  | SFT      | SAT           |
| B5-MW5B  | 5   | 2   | 9.00      | 10.00 | SPS      |        | 0      |      | 0    | 0    | 0    | 0       |      |       |      |          |               |
| B5-MW5B  | 6   | 1   | 10.00     | 12.00 | SPS      |        | 0      |      | 20   | 75   | 5    | 0       |      | LOW   | MOD  | SFT      | SAT           |
| B5-MW5B  | 7   | 1   | 12.00     | 14.00 | SPS      |        | 0      |      | 15   | 75   | 10   | 0       |      | MOD   | WEL  | FRM      | SAT           |
| B5-MW5B  | 8   | 1   | 14.00     | 14.50 | NS       |        | 0      |      | 0    | 0    | 0    | 0       |      |       |      |          |               |

**MAIN POST  
SOIL BORING LOGS**

**Borehole Location Data****Roy F. WESTON, Inc.**

BOREHOLE ID : MP18-SB1  
BEGIN DATE : 01/12/95

PROJECT NAME: FT. MONMOUTH  
END DATE : 01/12/95

LOGGER/COMPANY : K. VALENTI/P. THOMAS

BOREHOLE COMPLETED IN (<0>verburden <B>edrock) : 0

TOTAL DEPTH : 8.00

DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 3.00

INTERVAL: 0.00 ft. to 8.00 ft. BGS

METHOD : HSA

FLUID : NONE

BOREHOLE DIAMETER #2:

INTERVAL:

METHOD :

FLUID :

BOREHOLE DIAMETER #3:

INTERVAL:

METHOD :

FLUID :

DRILLING COMPANY : J.C. ANDERSON

DRILLER : WELLS REEVE

DRILL RIG TYPE : CME-55 MOBILE B-57

|                        | ESTIMATED | SURVEYED |
|------------------------|-----------|----------|
| SURFACE<br>ELEVATION : | 0.000     |          |

|                 |        |
|-----------------|--------|
| N. COORDINATE : | 0.0000 |
|-----------------|--------|

|                 |        |
|-----------------|--------|
| E. COORDINATE : | 0.0000 |
|-----------------|--------|

WELL PERMIT.....(Y)es (N)o: N PERMIT # :

HOLE ABANDONED... (Y)es (N)o: Y

WELL INSTALLED... (Y)es (N)o: N

WELL CLUSTER..... (Y)es (N)o: N No. OF WELLS : 0

WELL NEST..... (Y)es (N)o: N No. OF WELLS : 0

PUMPS INSTALLED.. (Y)es (N)o: N

PURGE :

DEPTH

0.00

SAMPLE :

0.00

**BOREHOLE TESTING**

BOREHOLE GEOPHYSICS..... (Y)es (N)o: N

SLUG TESTS..... (Y)es (N)o: N

PACKER TESTS..... (Y)es (N)o: N

PUMPING TESTS..... (Y)es (N)o: N

**COMMENTS :**

Boreholes were grouted with cement/bentonite mixture from bottom to ground surface.

# Borehole Log

Roy F. WESTON, Inc.

|                             |                                   |
|-----------------------------|-----------------------------------|
| PROJECT : FT. MONMOUTH      | TOTAL DEPTH : 8.00                |
| SITE NAME : MAIN POST 18    | LOGGER : K. VALENTI/P. THOMAS     |
| BORING ID : MP18-SB1        | DRILLING COMPANY : J.C. ANDERSON  |
| NORTHING : 0.0000 estimated | DRILLING RIG : CME-55 MOBILE B-57 |
| EASTING : 0.0000 estimated  | DATE STARTED : 01/12/95           |
| ELEVATION : 0.000 estimated | DATE COMPLETED : 01/12/95         |

| ELEVATION | DEPTH | MATERIAL | RECOVERY % | CLASSIFICATION             | COLOR           | STRENGTH | MOISTURE | BLOW COUNT                                         | FIELD INSTRUMENT READING | COMMENTS                                                    |
|-----------|-------|----------|------------|----------------------------|-----------------|----------|----------|----------------------------------------------------|--------------------------|-------------------------------------------------------------|
|           |       |          | 85         | Silty gravel with sand, GM | ORANGE          | LSE      | MST      | 13<br>14<br>15<br>16<br>17<br>18<br>19<br>20<br>21 | HNU 0.0<br>CGI 100.0     | Fill.                                                       |
| -1        | 1     |          |            | Silty sand, SM             | OLIVE GREEN/GRY | SFT      | MST      |                                                    | HNU 0.0                  | Fill. Collected sample MP18-SB01-A01.                       |
|           |       |          |            | No Sample Recovered        |                 |          |          |                                                    |                          |                                                             |
| -2        | 2     |          | 70         | Silty sand, SM             | GRAY            | SFT      | MST      | 15<br>16<br>17<br>18<br>19                         | HNU 0.0                  | Fill with gray shingles                                     |
| -3        | 3     |          |            | No Sample Recovered        |                 |          |          |                                                    |                          |                                                             |
| -4        | 4     |          | 60         | Silty sand, SM             | GRAY            | SFT      | WET      | 12<br>14<br>14<br>13                               | OVM 0.0                  | Fill. Collected sample MP18-SB01-A02. Soils wet at ~4' bgs. |
| -5        | 5     |          |            | No Sample Recovered        |                 |          |          |                                                    |                          |                                                             |
| -6        | 6     |          | 100        | Silty sand, SM             | GRAY            | SFT      | SAT      | 12<br>14<br>12<br>13                               | OVM 0.0                  | Fill. Soils saturated at 6' bgs.                            |
| -7        | 7     |          |            |                            |                 |          |          |                                                    |                          |                                                             |
| -8        | 8     |          |            |                            |                 |          |          |                                                    |                          |                                                             |
| -9        | 9     |          |            |                            |                 |          |          |                                                    |                          |                                                             |
| -10       | 10    |          |            |                            |                 |          |          |                                                    |                          |                                                             |

| BOREHOLE<br>/WELL ID | SMP<br>NUM | LTH<br>NUM | LITHOLOGY INT.<br>(FT BGS) | SAMPLING<br>METHOD | SIZE<br>GRAVEL | GRAVEL<br>PCT. | SIZE<br>SAND | SAND<br>PCT | SILT<br>PCT | CLAY<br>PCT | ORGANIC<br>PCT | ROCK<br>TYPE | PLAST | SORT | STRENGTH | MOISTURE | STRAT<br>UNIT |
|----------------------|------------|------------|----------------------------|--------------------|----------------|----------------|--------------|-------------|-------------|-------------|----------------|--------------|-------|------|----------|----------|---------------|
| MP18-SB1             | 1          | 1          | 0.00                       | 0.90               | SPS            | MF             | 45           | 40          | 15          | 0           | 0              |              | NON   | POR  | LSE      | MST      |               |
| MP18-SB1             | 1          | 2          | 0.90                       | 1.70               | SPS            |                | 10           | MF          | 50          | 25          | 5              | 10           | NON   | POR  | SFT      | MST      |               |
| MP18-SB1             | 1          | 3          | 1.70                       | 2.00               | SPS            |                | 0            | 0           | 0           | 0           | 0              |              |       |      |          |          |               |
| MP18-SB1             | 2          | 1          | 2.00                       | 3.40               | SPS            | MF             | 10           | MF          | 50          | 25          | 5              | 10           | NON   | POR  | SFT      | MST      |               |
| MP18-SB1             | 2          | 2          | 3.40                       | 4.00               | SPS            |                | 0            | 0           | 0           | 0           | 0              |              |       |      |          |          |               |
| MP18-SB1             | 3          | 1          | 4.00                       | 5.20               | SPS            | MF             | 10           | MF          | 50          | 25          | 5              | 10           | NON   | POR  | SFT      | WET      |               |
| MP18-SB1             | 3          | 2          | 5.20                       | 6.00               | SPS            |                | 0            | 0           | 0           | 0           | 0              |              |       |      |          |          |               |
| MP18-SB1             | 4          | 1          | 6.00                       | 8.00               | SPS            |                | 10           | MF          | 50          | 25          | 5              | 10           | NON   | POR  | SFT      | SAT      |               |

**Borehole Location Data****Roy F. WESTON, Inc.**

BOREHOLE ID : MP18-SB2  
BEGIN DATE : 01/12/95

PROJECT NAME: FT. MONMOUTH  
END DATE : 01/12/95

LOGGER/COMPANY : K. VALENTI/P. THOMAS

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : 0

TOTAL DEPTH : 0.00

DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 6.00

INTERVAL: 0.00 ft. to 6.00 ft. BGS

METHOD : HSA

FLUID : AIR

BOREHOLE DIAMETER #2:

INTERVAL:

METHOD :

FLUID :

BOREHOLE DIAMETER #3:

INTERVAL:

METHOD :

FLUID :

DRILLING COMPANY : J.C. ANDERSON

DRILLER : WELLS REEVE

DRILL RIG TYPE : CME-55 MOBILE B-57

|                        | ESTIMATED | SURVEYED |
|------------------------|-----------|----------|
| SURFACE<br>ELEVATION : | 0.000     |          |

N. COORDINATE : 0.0000

E. COORDINATE : 0.0000

WELL PERMIT.....(Y)es (N)o: N PERMIT # :

HOLE ABANDONED... (Y)es (N)o: Y

WELL INSTALLED... (Y)es (N)o: N

WELL CLUSTER.....(Y)es (N)o: N No. OF WELLS : 0

WELL NEST.....(Y)es (N)o: N No. OF WELLS : 0

PUMPS INSTALLED.. (Y)es (N)o: N TYPE

DEPTH

PURGE : 0.00

SAMPLE : 0.00

**BOREHOLE TESTING**

BOREHOLE GEOPHYSICS.....(Y)es (N)o: N

SLUG TESTS.....(Y)es (N)o: N

PACKER TESTS.....(Y)es (N)o: N

PUMPING TESTS.....(Y)es (N)o: N

COMMENTS :



# Borehole Log

Roy F. WESTON, Inc.

|             |                  |                    |                      |
|-------------|------------------|--------------------|----------------------|
| PROJECT :   | FT. MONMOUTH     | TOTAL DEPTH :      | 0.00                 |
| SITE NAME : | MAIN POST 18     | LOGGER :           | K. VALENTI/P. THOMAS |
| BORING ID : | MP18-SB2         | DRILLING COMPANY : | J.C. ANDERSON        |
| NORTHING :  | 0.0000 estimated | DRILLING RIG :     | CME-55 MOBILE B-57   |
| EASTING :   | 0.0000 estimated | DATE STARTED :     | 01/12/95             |
| ELEVATION : | 0.000 estimated  | DATE COMPLETED :   | 01/12/95             |

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION             | COLOR           | STRENGTH | MOISTURE | BLOW COUNT | FIELD INSTRUMENT READING | COMMENTS                                                                                           |
|-----------|-------|----------|------------|----------------------------|-----------------|----------|----------|------------|--------------------------|----------------------------------------------------------------------------------------------------|
|           |       |          | 60         | Silty gravel with sand, GM | ORANGE          | LSE      | MST      | 9          | OVM 0.0                  | Fill.                                                                                              |
| -1        | 1     |          |            | Silty sand, SM             | OLIVE GREEN/GRY | SFT      | MST      | 10         | OVM 0.0                  | Fill.                                                                                              |
|           |       |          |            | No Sample Recovered        |                 |          |          | 11         |                          |                                                                                                    |
| -2        | 2     |          | 70         | Silty sand, SM             | GRAY            | SFT      | WET      | 10         | OVM 0.0                  | Soils are finer than previous interval.                                                            |
|           |       |          |            |                            |                 |          |          | 11         |                          |                                                                                                    |
| -3        | 3     |          |            | No Sample Recovered        |                 |          |          | 12         |                          |                                                                                                    |
|           |       |          |            |                            |                 |          |          | 13         |                          |                                                                                                    |
| -4        | 4     |          | 90         | Silty sand, SM             | GRAY            | SFT      | WET      | 10         | OVM 0.0                  | Fill. Saturated at bottom of spoon. Collected sample MP18-SB02-A02 from 4-6' bgs. Water @ 6-7' bgs |
|           |       |          |            |                            |                 |          |          | 11         |                          |                                                                                                    |
| -5        | 5     |          |            |                            |                 |          |          | 15         |                          |                                                                                                    |
| -6        | 6     |          |            | No Sample Recovered        |                 |          |          | 14         |                          |                                                                                                    |
| -7        | 7     |          |            |                            |                 |          |          |            |                          |                                                                                                    |
| -8        | 8     |          |            |                            |                 |          |          |            |                          |                                                                                                    |
| -9        | 9     |          |            |                            |                 |          |          |            |                          |                                                                                                    |
| -10       | 10    |          |            |                            |                 |          |          |            |                          |                                                                                                    |

DATE: 06/20/95 \*\*\*\* Roy F. WESTON, Inc. LITHOLOGICAL DATA FOR - CLIENT ID: USAC2 \*\*\* PAGE: 38

| BOREHOLE<br>/WELL ID | SMP<br>NUM | LTH<br>NUM | LITHOLOGY INT.<br>(FT BGS) | SAMPLING<br>METHOD | SIZE<br>GRAVEL | GRAVEL<br>PCT. | SIZE<br>SAND | SAND<br>PCT | SILT<br>PCT | CLAY<br>PCT | ORGANIC<br>PCT | ROCK<br>TYPE | PLAST | SORT | STRENGTH | MOISTURE | STRAT<br>UNIT |
|----------------------|------------|------------|----------------------------|--------------------|----------------|----------------|--------------|-------------|-------------|-------------|----------------|--------------|-------|------|----------|----------|---------------|
| MP18-SB2             | 1          | 1          | 0.00                       | 0.90               | SPS            | FM             | 45           | MF          | 40          | 15          | 0              | 0            | NON   | POR  | LSE      | MST      |               |
| MP18-SB2             | 1          | 2          | 0.90                       | 1.20               | SPS            | FM             | 10           | MF          | 50          | 25          | 5              | 10           | NON   | POR  | SFT      | MST      |               |
| MP18-SB2             | 1          | 3          | 1.20                       | 2.00               | SPS            |                | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| MP18-SB2             | 2          | 1          | 2.00                       | 3.40               | SPS            |                | 10           | FM          | 50          | 20          | 10             | 10           | NON   | POR  | SFT      | WET      |               |
| MP18-SB2             | 2          | 2          | 3.40                       | 4.00               | SPS            |                | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| MP18-SB2             | 3          | 1          | 4.00                       | 5.80               | SPS            | MF             | 10           | FM          | 50          | 20          | 10             | 10           | NON   | POR  | SFT      | WET      |               |
| MP18-SB2             | 3          | 2          | 5.80                       | 6.00               | SPS            |                | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |

**Borehole Location Data****Roy F. WESTON, Inc.**

BOREHOLE ID : MP18-SB3  
BEGIN DATE : 01/12/95

PROJECT NAME: FT. MONMOUTH  
END DATE : 01/12/95

LOGGER/COMPANY : P. THOMAS

BOREHOLE COMPLETED IN (<0>verburden <B>edrock) : 0

TOTAL DEPTH : 8.00

DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 3.00

INTERVAL: 0.00 ft. to 8.00 ft. BGS

METHOD : HSA

FLUID : NONE

BOREHOLE DIAMETER #2:

INTERVAL:

METHOD :

FLUID :

BOREHOLE DIAMETER #3:

INTERVAL:

METHOD :

FLUID :

DRILLING COMPANY : J.C. ANDERSON

DRILLER : WELL REEVES

DRILL RIG TYPE : MOBILE B57

|                        | ESTIMATED | SURVEYED |
|------------------------|-----------|----------|
| SURFACE<br>ELEVATION : | 0.000     |          |

|                 |        |
|-----------------|--------|
| N. COORDINATE : | 0.0000 |
|-----------------|--------|

|                 |        |
|-----------------|--------|
| E. COORDINATE : | 0.0000 |
|-----------------|--------|

WELL PERMIT.....(Y)es (N)o: N PERMIT # :

HOLE ABANDONED... (Y)es (N)o: Y

WELL INSTALLED... (Y)es (N)o: N

WELL CLUSTER..... (Y)es (N)o: N No. OF WELLS : 0

WELL NEST..... (Y)es (N)o: N No. OF WELLS : 0

PUMPS INSTALLED.. (Y)es (N)o: N

PURGE :

DEPTH

0.00

SAMPLE :

0.00

**BOREHOLE TESTING**

BOREHOLE GEOPHYSICS..... (Y)es (N)o: N

SLUG TESTS..... (Y)es (N)o: N

PACKER TESTS..... (Y)es (N)o: N

PUMPING TESTS..... (Y)es (N)o: N

**COMMENTS :**

Boreholes were backfilled with cement/bentonite mixture from bottom to ground surface.

# Borehole Log

Roy F. WESTON, Inc.

|                             |                                  |
|-----------------------------|----------------------------------|
| PROJECT : FT. MONMOUTH      | TOTAL DEPTH : 8.00               |
| SITE NAME : MAIN POST 18    | LOGGER : P. THOMAS               |
| BORING ID : MP18-SB3        | DRILLING COMPANY : J.C. ANDERSON |
| NORTHING : 0.0000 estimated | DRILLING RIG : MOBILE B57        |
| EASTING : 0.0000 estimated  | DATE STARTED : 01/12/95          |
| ELEVATION : 0.000 estimated | DATE COMPLETED : 01/12/95        |

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION             | COLOR  | STRENGTH | MOISTURE | BLOW COUNT | FIELD INSTRUMENT READING | COMMENTS                                              |
|-----------|-------|----------|------------|----------------------------|--------|----------|----------|------------|--------------------------|-------------------------------------------------------|
|           |       |          | 60         | Silty gravel with sand, GM | ORANGE | LSE      | MST      | 6          | OVM 0.0                  | Fill                                                  |
| -1        | 1     |          |            | Silty sand, SM             | GRAY   | SFT      | MST      | 9          | OVM 0.0                  | Fill. Collected sample MP18-SB03-A01                  |
|           |       |          |            | No Sample Recovered        |        |          |          |            |                          |                                                       |
| -2        | 2     |          | 80         | Silty sand, SM             | GRAY   | SFT      | MST      | 2          | OVM 0.0                  | Fill. Wood fragments (large) ~3' bgs.                 |
| -3        | 3     |          |            | No Sample Recovered        |        |          |          | 10         |                          |                                                       |
| -4        | 4     |          | 55         | Silty sand, SM             | GRAY   | SFT      | WET      | 18         | OVM 0.0                  | Fill. Large wood fragments; wet throughout interval.  |
| -5        | 5     |          |            | No Sample Recovered        |        |          |          | 23         |                          |                                                       |
| -6        | 6     |          | 82         | Silty sand, SM             | GRAY   | SFT      | WET      | 13         | OVM 0.0                  | Fill. Large wood fragments. TD of borehole 8 ft. bgs. |
| -7        | 7     |          |            | No Sample Recovered        |        |          |          | 11         |                          |                                                       |
| -8        | 8     |          |            |                            |        |          |          | 11         |                          |                                                       |
| -9        | 9     |          |            |                            |        |          |          | 9          |                          |                                                       |
| -10       | 10    |          |            |                            |        |          |          |            |                          |                                                       |

| BOREHOLE<br>/WELL ID | SMP<br>NUM | LTH<br>NUM | LITHOLOGY INT.<br>(FT BGS) | SAMPLING<br>METHOD | SIZE<br>GRAVEL | GRAVEL<br>PCT. | SIZE<br>SAND | SAND<br>PCT | SILT<br>PCT | CLAY<br>PCT | ORGANIC<br>PCT | ROCK<br>TYPE | PLAST | SORT | STRENGTH | MOISTURE | STRAT<br>UNIT |
|----------------------|------------|------------|----------------------------|--------------------|----------------|----------------|--------------|-------------|-------------|-------------|----------------|--------------|-------|------|----------|----------|---------------|
| MP18-SB3             | 1          | 1          | 0.00                       | 0.50               | SPS            | FM             | 45           | MF          | 40          | 15          | 0              | 0            | NON   | POR  | LSE      | MST      |               |
| MP18-SB3             | 1          | 2          | 0.50                       | 1.20               | SPS            | F              | 10           | MF          | 50          | 25          | 5              | 10           | NON   | POR  | SFT      | MST      |               |
| MP18-SB3             | 1          | 3          | 1.20                       | 2.00               | SPS            |                | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| MP18-SB3             | 2          | 1          | 2.00                       | 3.60               | SPS            | M              | 10           | FM          | 45          | 25          | 10             | 10           | NON   | POR  | SFT      | MST      |               |
| MP18-SB3             | 2          | 2          | 3.60                       | 4.00               | SPS            |                | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| MP18-SB3             | 3          | 1          | 4.00                       | 5.40               | SPS            |                | 10           |             | 40          | 25          | 5              | 20           | NON   | POR  | SFT      | WET      |               |
| MP18-SB3             | 3          | 2          | 5.40                       | 6.00               | SPS            |                | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| MP18-SB3             | 4          | 1          | 6.00                       | 7.50               | SPS            | M              | 10           | FM          | 40          | 25          | 5              | 20           | NON   | POR  | SFT      | WET      |               |
| MP18-SB3             | 4          | 2          | 7.50                       | 8.00               | SPS            |                | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |

**Borehole Location Data****Roy F. WESTON, Inc.**

BOREHOLE ID : MP18-SB4  
BEGIN DATE : 01/11/95

PROJECT NAME: FT. MONMOUTH  
END DATE : 01/11/95

LOGGER/COMPANY : K. VALENTI

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : 0

TOTAL DEPTH : 6.00

DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 8.00

INTERVAL: 0.00 ft. to 6.00 ft. BGS

METHOD : HSA

FLUID :

BOREHOLE DIAMETER #2:

INTERVAL:

METHOD :

FLUID :

BOREHOLE DIAMETER #3:

INTERVAL:

METHOD :

FLUID :

DRILLING COMPANY : J.C. ANDERSON

DRILLER : WELLS REEVE

DRILL RIG TYPE : CME-55

|                        | ESTIMATED | SURVEYED |
|------------------------|-----------|----------|
| SURFACE<br>ELEVATION : | 0.000     |          |

|                 |        |
|-----------------|--------|
| N. COORDINATE : | 0.0000 |
|-----------------|--------|

|                 |        |
|-----------------|--------|
| E. COORDINATE : | 0.0000 |
|-----------------|--------|

WELL PERMIT.....(Y)es (N)o: N PERMIT # :

HOLE ABANDONED... (Y)es (N)o: Y

WELL INSTALLED... (Y)es (N)o: N

WELL CLUSTER.....(Y)es (N)o: N No. OF WELLS : 0

WELL NEST.....(Y)es (N)o: N No. OF WELLS : 0

PUMPS INSTALLED.. (Y)es (N)o: N TYPE

DEPTH

PURGE :

0.00

SAMPLE :

0.00

**BOREHOLE TESTING**

BOREHOLE GEOPHYSICS.....(Y)es (N)o: N

SLUG TESTS.....(Y)es (N)o: N

PACKER TESTS.....(Y)es (N)o: N

PUMPING TESTS.....(Y)es (N)o: N

**COMMENTS :**

Sampled I.D. boring SB04-A01/A02 5'-6" 1st water T.D.=6'

# Borehole Log

Roy F. WESTON, Inc.

PROJECT : FT. MONMOUTH  
 SITE NAME : MAIN POST 18  
 BORING ID : MP18-SB4  
 NORTHING : 0.0000 estimated  
 EASTING : 0.0000 estimated  
 ELEVATION : 0.000 estimated

TOTAL DEPTH : 6.00  
 LOGGER : K. VALENTI  
 DRILLING COMPANY : J.C. ANDERSON  
 DRILLING RIG : CME-55  
 DATE STARTED : 01/11/95  
 DATE COMPLETED : 01/11/95

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION                   | COLOR         | STRENGTH | MOISTURE | BLOW COUNT           | FIELD INSTRUMENT READING | COMMENTS                                                                                         |
|-----------|-------|----------|------------|----------------------------------|---------------|----------|----------|----------------------|--------------------------|--------------------------------------------------------------------------------------------------|
| -1        | 1     |          | 100        | Poorly graded sand, SP           | ORANGE-BROWN  | LSE      | DRY      | 7<br>9<br>11         | OVM 0.0                  | Fill. Sample M18-SB04-A01 collected. 3" SPS used. Top 2" were asphalt.                           |
| -2        | 2     |          | 100        | Well-graded sand with gravel, SW | ORANGE-BROWN  | LSE      | DRY      | 15<br>17<br>21<br>25 | OVM 0.0                  | Sand & gravel, 8" from 3/8" to 3/4" int. (2/8"-3/4") of sand & gravels (subang) (small cobbles). |
| -3        | 3     |          |            |                                  |               |          |          |                      |                          |                                                                                                  |
| -4        | 4     |          | 100        | Well-graded sand, SW             | REDDISH BROWN | LSE      | WET      | 27<br>23<br>25<br>29 | OVM 0.0                  | 3" sps used. Sample M18-SB04-A02 collected water at 5.5' bgs.                                    |
| -5        | 5     |          |            |                                  |               |          |          |                      |                          |                                                                                                  |
| -6        | 6     |          |            |                                  |               |          |          |                      |                          |                                                                                                  |
| -7        | 7     |          |            |                                  |               |          |          |                      |                          |                                                                                                  |
| -8        | 8     |          |            |                                  |               |          |          |                      |                          |                                                                                                  |
| -9        | 9     |          |            |                                  |               |          |          |                      |                          |                                                                                                  |
| -10       | 10    |          |            |                                  |               |          |          |                      |                          |                                                                                                  |

DATE: 06/20/95 \*\*\*\* Roy F. WESTON, Inc. LITHOLOGICAL DATA FOR - CLIENT ID: USAC2 \*\*\* PAGE: 40

| BOREHOLE<br>/WELL ID | SMP<br>NUM | LTH<br>NUM | LITHOLOGY INT.<br>(FT BGS) | SAMPLING<br>METHOD | SIZE<br>GRAVEL PCT. | GRAVEL<br>PCT. | SIZE<br>SAND | SAND<br>PCT | SILT<br>PCT | CLAY<br>PCT | ORGANIC<br>PCT | ROCK<br>TYPE | PLAST | SORT | STRENGTH | MOISTURE | STRAT<br>UNIT |
|----------------------|------------|------------|----------------------------|--------------------|---------------------|----------------|--------------|-------------|-------------|-------------|----------------|--------------|-------|------|----------|----------|---------------|
| MP18-SB4             | 1          | 1          | 0.00                       | SPS                |                     | 0              |              | 100         | 0           | 0           | 0              |              | NA    | MOD  | LSE      | DRY      |               |
| MP18-SB4             | 2          | 1          | 2.00                       | SPS                |                     | 20             |              | 80          | 0           | 0           | 0              |              | NA    | POR  | LSE      | DRY      |               |
| MP18-SB4             | 3          | 1          | 4.00                       | SPS                |                     | 5              |              | 95          | 0           | 0           | 0              |              | NA    | POR  | LSE      | WET      |               |



**Borehole Location Data****Roy F. WESTON, Inc.**

BOREHOLE ID : MP18-SB5 PROJECT NAME: FT. MONMOUTH  
BEGIN DATE : 01/11/95 END DATE : 01/11/95

LOGGER/COMPANY : K. VALENTI

BOREHOLE COMPLETED IN (<0>verburden <B>edrock) : 0

TOTAL DEPTH : 4.00 DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 8.00  
INTERVAL: 0.00 ft. to 4.00 ft. BGS  
METHOD : HSA FLUID :

BOREHOLE DIAMETER #2:  
INTERVAL:  
METHOD : FLUID :

BOREHOLE DIAMETER #3:  
INTERVAL:  
METHOD : FLUID :

DRILLING COMPANY : J.C. ANDERSON  
DRILLER : WELLS REEVE  
DRILL RIG TYPE : CME-55

|                                 | ESTIMATED        | SURVEYED |
|---------------------------------|------------------|----------|
| SURFACE<br>ELEVATION :          | 0.000            |          |
| N. COORDINATE :                 | 0.0000           |          |
| E. COORDINATE :                 | 0.0000           |          |
| WELL PERMIT..... (Y)es (N)o: N  | PERMIT # :       |          |
| HOLE ABANDONED... (Y)es (N)o: Y |                  |          |
| WELL INSTALLED... (Y)es (N)o: N |                  |          |
| WELL CLUSTER..... (Y)es (N)o: N | No. OF WELLS : 0 |          |
| WELL NEST..... (Y)es (N)o: N    | No. OF WELLS : 0 |          |
| PUMPS INSTALLED.. (Y)es (N)o: N | TYPE             | DEPTH    |
|                                 | PURGE :          | 0.00     |
|                                 | SAMPLE :         | 0.00     |

**BOREHOLE TESTING**

BOREHOLE GEOPHYSICS..... (Y)es (N)o: N  
SLUG TESTS..... (Y)es (N)o: N  
PACKER TESTS..... (Y)es (N)o: N  
PUMPING TESTS..... (Y)es (N)o: N

**COMMENTS :**

Sampled I.D. boring SB05-A01/A02 3'-8" 1st water T.D.=4'

# Borehole Log

Roy F. WESTON, Inc.

PROJECT : FT. MONMOUTH  
 SITE NAME : MAIN POST 18  
 BORING ID : MP18-SB5  
 NORTHING : 0.0000 estimated  
 EASTING : 0.0000 estimated  
 ELEVATION : 0.000 estimated

TOTAL DEPTH : 4.00  
 LOGGER : K. VALENTI  
 DRILLING COMPANY : J.C. ANDERSON  
 DRILLING RIG : CME-55  
 DATE STARTED : 01/11/95  
 DATE COMPLETED : 01/11/95

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION         | COLOR | STRENGTH | MOISTURE | BLOW COUNT | FIELD INSTRUMENT READING | COMMENTS                                                                                             |
|-----------|-------|----------|------------|------------------------|-------|----------|----------|------------|--------------------------|------------------------------------------------------------------------------------------------------|
| -1        | 1     |          | 100        | Well-graded sand, SW   | BROWN | LSE      | DRY      | 3          | OVN 0.0                  | Fill, Top 3" asphalt. Sands mild Fe staining. Sample M18-SB04-A01 collected.                         |
| -2        | 2     |          | 100        | Poorly graded sand, SP | BROWN | LSE      | SAT      | 8          | OVN 0.0                  | Fill iron (Fe) staining present. Water at 3.75' bgs. TD of borehole 4' bgs. Sample M18SB05-A02 coll. |
| -3        | 3     |          |            |                        |       |          |          |            |                          |                                                                                                      |
| -4        | 4     |          |            |                        |       |          |          |            |                          |                                                                                                      |
| -5        | 5     |          |            |                        |       |          |          |            |                          |                                                                                                      |
| -6        | 6     |          |            |                        |       |          |          |            |                          |                                                                                                      |
| -7        | 7     |          |            |                        |       |          |          |            |                          |                                                                                                      |
| -8        | 8     |          |            |                        |       |          |          |            |                          |                                                                                                      |
| -9        | 9     |          |            |                        |       |          |          |            |                          |                                                                                                      |
| -10       | 10    |          |            |                        |       |          |          |            |                          |                                                                                                      |

DATE: 06/20/95 \*\*\*\* Roy F. WESTON, Inc. LITHOLOGICAL DATA FOR - CLIENT ID: USAC2 \*\*\* PAGE: 41

| BOREHOLE | SMP | LTH | LITHOLOGY | INT. | SAMPLING | SIZE   | GRAVEL | SIZE | SAND | SILT | CLAY | ORGANIC | ROCK |       |      |          | STRAT         |
|----------|-----|-----|-----------|------|----------|--------|--------|------|------|------|------|---------|------|-------|------|----------|---------------|
| /WELL ID | NUM | NUM | (FT BGS)  |      | METHOD   | GRAVEL | PCT.   | SAND | PCT  | PCT  | PCT  | PCT     | TYPE | PLAST | SORT | STRENGTH | MOISTURE UNIT |
| MP18-SB5 | 1   | 1   | 0.00      | 2.00 | SPS      |        | 5      |      | 95   | 0    | 0    | 0       |      | NA    | POR  | LSE      | DRY           |
| MP18-SB5 | 2   | 1   | 2.00      | 4.00 | SPS      |        | 0      |      | 100  | 0    | 0    | 0       |      | NA    | MOD  | LSE      | SAT           |

**Borehole Location Data****Roy F. WESTON, Inc.**

BOREHOLE ID : MP18-SB6  
BEGIN DATE : 01/11/95

PROJECT NAME: FT. MONMOUTH  
END DATE : 01/11/95

LOGGER/COMPANY : K. VALENTI

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : 0

TOTAL DEPTH : 6.00

DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 8.00

INTERVAL: 0.00 ft. to 6.00 ft. BGS

METHOD : HSA

FLUID : NONE

BOREHOLE DIAMETER #2:

INTERVAL:

METHOD :

FLUID :

BOREHOLE DIAMETER #3:

INTERVAL:

METHOD :

FLUID :

DRILLING COMPANY : J.C. ANDERSON

DRILLER : WELLS REEVE

DRILL RIG TYPE : CME-55

|                                       | ESTIMATED        | SURVEYED |
|---------------------------------------|------------------|----------|
| SURFACE<br>ELEVATION :                | 0.000            |          |
| N. COORDINATE :                       | 0.0000           |          |
| E. COORDINATE :                       | 0.0000           |          |
| WELL PERMIT.....(Y)es (N)o: N         | PERMIT # :       |          |
| HOLE ABANDONED...(Y)es (N)o: Y        |                  |          |
| WELL INSTALLED...(Y)es (N)o: N        |                  |          |
| WELL CLUSTER.....(Y)es (N)o: N        | No. OF WELLS : 0 |          |
| WELL NEST.....(Y)es (N)o: N           | No. OF WELLS : 0 |          |
| PUMPS INSTALLED..(Y)es (N)o: N        | TYPE             | DEPTH    |
|                                       | PURGE :          | 0.00     |
|                                       | SAMPLE :         | 0.00     |
| BOREHOLE TESTING                      |                  |          |
| BOREHOLE GEOPHYSICS.....(Y)es (N)o: N |                  |          |
| SLUG TESTS.....(Y)es (N)o: N          |                  |          |
| PACKER TESTS.....(Y)es (N)o: N        |                  |          |
| PUMPING TESTS.....(Y)es (N)o: N       |                  |          |

**COMMENTS :**

Sampled I.D. Borings SB06-A01/A02 4' 2st water TD=6'

# Borehole Log

Roy F. WESTON, Inc.

|           |                    |                  |                 |
|-----------|--------------------|------------------|-----------------|
| PROJECT   | : FT. MONMOUTH     | TOTAL DEPTH      | : 6.00          |
| SITE NAME | : MAIN POST 18     | LOGGER           | : K. VALENTI    |
| BORING ID | : MP18-SB6         | DRILLING COMPANY | : J.C. ANDERSON |
| NORTHING  | : 0.0000 estimated | DRILLING RIG     | : CME-55        |
| EASTING   | : 0.0000 estimated | DATE STARTED     | : 01/11/95      |
| ELEVATION | : 0.000 estimated  | DATE COMPLETED   | : 01/11/95      |

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION             | COLOR           | STRENGTH | MOISTURE | BLOW COUNT | FIELD INSTRUMENT READING | COMMENTS                                                                                                |
|-----------|-------|----------|------------|----------------------------|-----------------|----------|----------|------------|--------------------------|---------------------------------------------------------------------------------------------------------|
| -1        | 1     |          | 50         | Silty sand with gravel, SM | GRAY-BROWN      | LSE      | MST      | 17         | OVM 0.0                  | Fill. Top 2" are topsoil (orange/yellow). Used 3" spoon. Cement present. Sample M18-SB06-A01 collected. |
|           |       |          |            | Silty sand with gravel, SM | LT YELLOW BROWN | LSE      | MST      | 21         | OVM 0.0                  |                                                                                                         |
|           |       |          |            | Silty sand, SM             | DK GRAY         | LSE      | MST      | 25         | OVM 0.0                  |                                                                                                         |
|           |       |          |            | No Sample Recovered        |                 |          |          |            | OVM 0.0                  |                                                                                                         |
| -2        | 2     |          | 50         | Silty sand with gravel, SM | BLACK           | LSE      | WET      | 9          | OVM 0.0                  | Fill. 4" broken concrete in top SPS. Sharp change to little silty sand and gravel. Fuel oil staining    |
|           |       |          |            | No Sample Recovered        |                 |          |          | 13         |                          |                                                                                                         |
| -3        | 3     |          |            |                            |                 |          |          | 17         |                          |                                                                                                         |
| -4        | 4     |          |            | Sandy silt, ML             | BLACK           | FRM      | SAT      | 6          |                          | Fill. Sheen/odor of fuel present. TD of borehole 8.                                                     |
|           |       |          |            |                            |                 |          |          | 6          |                          |                                                                                                         |
| -5        | 5     |          |            |                            |                 |          |          | 5          |                          |                                                                                                         |
| -6        | 6     |          |            |                            |                 |          |          | 4          |                          |                                                                                                         |
| -7        | 7     |          |            |                            |                 |          |          |            |                          |                                                                                                         |
| -8        | 8     |          |            |                            |                 |          |          |            |                          |                                                                                                         |
| -9        | 9     |          |            |                            |                 |          |          |            |                          |                                                                                                         |
| -10       | 10    |          |            |                            |                 |          |          |            |                          |                                                                                                         |

DATE: 06/20/95 \*\*\*\* Roy F. WESTON, Inc. LITHOLOGICAL DATA FOR - CLIENT ID: USAC2 \*\*\* PAGE: 43

| BOREHOLE<br>/WELL ID | SMP<br>NUM | LTH<br>NUM | LITHOLOGY<br>(FT BGS) | INT.<br>METHOD | SAMPLING<br>METHOD | SIZE<br>GRAVEL PCT. | GRAVEL<br>SIZE<br>SAND | SAND<br>PCT | SILT<br>PCT | CLAY<br>PCT | ORGANIC<br>PCT | ROCK<br>TYPE | PLAST | SORT | STRENGTH | MOISTURE | STRAT<br>UNIT |
|----------------------|------------|------------|-----------------------|----------------|--------------------|---------------------|------------------------|-------------|-------------|-------------|----------------|--------------|-------|------|----------|----------|---------------|
| MP18-SB6             | 1          | 1          | 0.00                  | 0.40           | SPS                | 15                  |                        | 70          | 15          | 0           | 0              |              | NA    | POR  | LSE      | MST      |               |
| MP18-SB6             | 1          | 2          | 0.40                  | 0.80           | SPS                | 15                  |                        | 70          | 15          | 0           | 0              |              | NA    | POR  | LSE      | MST      |               |
| MP18-SB6             | 1          | 3          | 0.80                  | 1.00           | SPS                | 5                   |                        | 80          | 15          | 0           | 0              |              | NON   | POR  | LSE      | MST      |               |
| MP18-SB6             | 1          | 4          | 1.00                  | 2.00           | SPS                | 0                   |                        | 0           | 0           | 0           | 0              |              |       |      |          |          |               |
| MP18-SB6             | 2          | 1          | 2.00                  | 3.00           | SPS                | 20                  |                        | 60          | 20          | 0           | 0              |              | NON   | POR  | LSE      | WET      |               |
| MP18-SB6             | 2          | 2          | 3.00                  | 4.00           | SPS                | 0                   |                        | 0           | 0           | 0           | 0              |              |       |      |          |          |               |
| MP18-SB6             | 3          | 1          | 4.00                  | 6.00           | SPS                | 10                  |                        | 25          | 65          | 0           | 0              |              | LOW   | MOD  | FRM      | SAT      |               |

**Borehole Location Data****Roy F. WESTON, Inc.**

BOREHOLE ID : MP18-SB7  
BEGIN DATE : 01/12/95

PROJECT NAME: FT. MONMOUTH  
END DATE : 01/12/95

LOGGER/COMPANY : P. THOMAS

BOREHOLE COMPLETED IN (<0>verburden <B>edrock) : 0

TOTAL DEPTH : 6.00

DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 3.00

INTERVAL: 0.00 ft. to 6.00 ft. BGS

METHOD : HSA

FLUID : NONE

BOREHOLE DIAMETER #2:

INTERVAL:

METHOD :

FLUID :

BOREHOLE DIAMETER #3:

INTERVAL:

METHOD :

FLUID :

DRILLING COMPANY : J.C. ANDERSON

DRILLER : WELL REEVES

DRILL RIG TYPE : MOBILE B57

**SURFACE**  
**ELEVATION :** ESTIMATED 0.000

**N. COORDINATE :** 0.0000

**E. COORDINATE :** 0.0000

**WELL PERMIT.....(Y)es (N)o: N** PERMIT # :

**HOLE ABANDONED... (Y)es (N)o: Y**

**WELL INSTALLED... (Y)es (N)o: N**

**WELL CLUSTER..... (Y)es (N)o: N** No. OF WELLS : 0

**WELL NEST..... (Y)es (N)o: N** No. OF WELLS : 0

**PUMPS INSTALLED.. (Y)es (N)o: N**

PURGE :

DEPTH

0.00

SAMPLE :

0.00

**BOREHOLE TESTING**

**BOREHOLE GEOPHYSICS..... (Y)es (N)o: N**

**SLUG TESTS..... (Y)es (N)o: N**

**PACKER TESTS..... (Y)es (N)o: N**

**PUMPING TESTS..... (Y)es (N)o: N**

**COMMENTS :**

# Borehole Log

Roy F. WESTON, Inc.

PROJECT : FT. MONMOUTH  
 SITE NAME : MAIN POST AREA 18  
 BORING ID : MP18-SB7  
 NORTHING : 0.0000 estimated  
 EASTING : 0.0000 estimated  
 ELEVATION : 0.000 estimated

TOTAL DEPTH : 6.00  
 LOGGER : P. THOMAS  
 DRILLING COMPANY : J.C. ANDERSON  
 DRILLING RIG : MOBILE B57  
 DATE STARTED : 01/12/95  
 DATE COMPLETED : 01/12/95

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION                                          | COLOR          | STRENGTH | MOISTURE | BLOW COUNT | FIELD INSTRUMENT READING | COMMENTS                                                                  |
|-----------|-------|----------|------------|---------------------------------------------------------|----------------|----------|----------|------------|--------------------------|---------------------------------------------------------------------------|
| -1        | 1     |          | 90         | Poorly graded sand with silt, SP-SM                     | OLIVE/YELL BRN | LSE      | MST      | 6          | OVM 0.0                  | Fill. Collected sample MP18-SB07-A01.                                     |
| -2        | 2     |          | 50         | No Sample Recovered<br>Not Classified - Incomplete Data | GRAY           | NA       | SAT      | 6          | OVM 0.0                  | Fill. No sample collected due to all gravel and saturated.                |
| -3        | 3     |          |            | No Sample Recovered                                     |                |          |          |            |                          |                                                                           |
| -4        | 4     |          | 50         | Not Classified - Incomplete Data                        | GRAY           | NA       | SAT      | 5          | OVM 0.0                  | Could not sample interval gravel and saturated. ID of borehole at 6' bgs. |
| -5        | 5     |          |            | No Sample Recovered                                     |                |          |          |            |                          |                                                                           |
| -6        | 6     |          |            |                                                         |                |          |          |            |                          |                                                                           |
| -7        | 7     |          |            |                                                         |                |          |          |            |                          |                                                                           |
| -8        | 8     |          |            |                                                         |                |          |          |            |                          |                                                                           |
| -9        | 9     |          |            |                                                         |                |          |          |            |                          |                                                                           |
| -10       | 10    |          |            |                                                         |                |          |          |            |                          |                                                                           |



DATE: 06/20/95 \*\*\*\* Roy F. WESTON, Inc. LITHOLOGICAL DATA FOR - CLIENT ID: USAC2 \*\*\* PAGE: 44

| BOREHOLE<br>/WELL ID | SMP<br>NUM | LTH<br>NUM | LITHOLOGY INT.<br>(FT BGS) | SAMPLING<br>METHOD | SIZE<br>GRAVEL PCT. | GRAVEL<br>SIZE<br>SAND | SAND<br>PCT | SILT<br>PCT | CLAY<br>PCT | ORGANIC<br>PCT | ROCK<br>TYPE | PLAST | SORT | STRENGTH | MOISTURE | STRAT<br>UNIT |
|----------------------|------------|------------|----------------------------|--------------------|---------------------|------------------------|-------------|-------------|-------------|----------------|--------------|-------|------|----------|----------|---------------|
| MP18-SB7             | 1          | 1          | 0.00                       | SPS                |                     | 0                      | MF          | 90          | 10          | 0              | 0            | NA    | WEL  | LSE      | MST      |               |
| MP18-SB7             | 1          | 2          | 1.80                       | SPS                |                     | 0                      |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| MP18-SB7             | 2          | 1          | 2.00                       | SPS                | M                   | 100                    |             | 0           | 0           | 0              | 0            | NA    | NA   | NA       | SAT      |               |
| MP18-SB7             | 2          | 2          | 3.00                       | SPS                |                     | 0                      |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| MP18-SB7             | 3          | 1          | 4.00                       | SPS                | M                   | 100                    |             | 0           | 0           | 0              | 0            | NA    | NA   | NA       | SAT      |               |
| MP18-SB7             | 3          | 2          | 5.00                       | SPS                |                     | 0                      |             | 0           | 0           | 0              | 0            |       |      |          |          |               |

**Borehole Location Data****Roy F. WESTON, Inc.**

BOREHOLE ID : MP3-SB1  
BEGIN DATE : 12/14/94

PROJECT NAME: FT. MONMOUTH  
END DATE : 12/14/94

LOGGER/COMPANY : K. VALENTE

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : 0

TOTAL DEPTH : 12.00

DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 8.00

INTERVAL: 0.00 ft. to 12.00 ft. BGS

METHOD : HSA

FLUID :

BOREHOLE DIAMETER #2:

INTERVAL:

METHOD :

FLUID :

BOREHOLE DIAMETER #3:

INTERVAL:

METHOD :

FLUID :

DRILLING COMPANY : J.C. ANDERSON

DRILLER : WELLS REEVE

DRILL RIG TYPE : CME-55

|                                        | ESTIMATED        | SURVEYED |
|----------------------------------------|------------------|----------|
| SURFACE<br>ELEVATION :                 | 0.000            |          |
| N. COORDINATE :                        | 0.0000           |          |
| E. COORDINATE :                        | 0.0000           |          |
| WELL PERMIT.....(Y)es (N)o: N          | PERMIT # :       |          |
| HOLE ABANDONED... (Y)es (N)o: Y        |                  |          |
| WELL INSTALLED... (Y)es (N)o: N        |                  |          |
| WELL CLUSTER.....(Y)es (N)o: N         | No. OF WELLS : 0 |          |
| WELL NEST.....(Y)es (N)o: N            | No. OF WELLS : 0 |          |
| PUMPS INSTALLED.. (Y)es (N)o: N        | TYPE             | DEPTH    |
|                                        | PURGE :          | 0.00     |
|                                        | SAMPLE :         | 0.00     |
| BOREHOLE TESTING                       |                  |          |
| BOREHOLE GEOPHYSICS..... (Y)es (N)o: N |                  |          |
| SLUG TESTS..... (Y)es (N)o: N          |                  |          |
| PACKER TESTS..... (Y)es (N)o: N        |                  |          |
| PUMPING TESTS..... (Y)es (N)o: N       |                  |          |

**COMMENTS :**

MPAOC3-SB01 performed, once completed was backfilled to surface with grout. Sample collected MPA3-SB01A02, MPA3-SB01C02 (dup). MPA3-SB01--2 (field blanks)

# Borehole Log

Roy F. WESTON, Inc.

|             |                  |                    |               |
|-------------|------------------|--------------------|---------------|
| PROJECT :   | FT. MONMOUTH     | TOTAL DEPTH :      | 12.00         |
| SITE NAME : | MAIN POST AREA 3 | LOGGER :           | K. VALENTE    |
| BORING ID : | MP3-SB1          | DRILLING COMPANY : | J.C. ANDERSON |
| NORTHING :  | 0.0000 estimated | DRILLING RIG :     | CME-55        |
| EASTING :   | 0.0000 estimated | DATE STARTED :     | 12/14/94      |
| ELEVATION : | 0.000 estimated  | DATE COMPLETED :   | 12/14/94      |

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION                      | COLOR        | STRENGTH | MOISTURE | BLOW COUNT | FIELD INSTRUMENT READING | COMMENTS                                                     |
|-----------|-------|----------|------------|-------------------------------------|--------------|----------|----------|------------|--------------------------|--------------------------------------------------------------|
| -1        | 1     |          | 75         | Silty sand, SM                      | LT BROWN     | SFT      | DRY      | 4          | HNU 15.0                 | Top 3" of soil in spoon is brown sandy silt topsoil/organic. |
|           |       |          |            | No Sample Recovered                 |              |          |          |            |                          |                                                              |
| -2        | 2     |          | 50         | Well-graded sand with gravel, SW    | WHITISH TAN  | LSE      | MST      | 14         | HNU 8.0                  | Beach sand (coarse) & gravel.                                |
|           |       |          |            | No Sample Recovered                 |              |          |          |            |                          |                                                              |
| -3        | 3     |          |            |                                     |              |          |          |            |                          |                                                              |
| -4        | 4     |          | 50         | Silt, ML                            | ORANGE BROWN | LSE      | MST      | 7          | HNU 17.0                 | 1st 2" of recovery slough from borehole.                     |
|           |       |          |            | No Sample Recovered                 |              |          |          |            |                          |                                                              |
| -5        | 5     |          |            |                                     |              |          |          |            |                          |                                                              |
| -6        | 6     |          | 50         | Poorly graded sand with silt, SP-SM | ORANGE-BROWN | LSE      | MST      | 6          | HNU 8.0                  | Same lithology as previous spoon.                            |
|           |       |          |            | No Sample Recovered                 |              |          |          |            |                          |                                                              |
| -7        | 7     |          |            |                                     |              |          |          |            |                          |                                                              |
| -8        | 8     |          | 75         | Silty sand, SM                      | BROWN        | LSE      | MST      | 6          | HNU 40.0                 |                                                              |
|           |       |          |            | Poorly graded sand with silt, SP-SM | ORANGE BROWN | LSE      | MST      |            | HNU 40.0                 | Same lithology as 4-6'bgs                                    |
|           |       |          |            | No Sample Recovered                 |              |          |          |            |                          |                                                              |
| -10       | 10    |          | 50         | Poorly graded sand with silt, SP-SM | ORANGE BROWN | LSE      | MST      | 9          | HNU 9.0                  | Orange brown sand. Same lithology as above interval.         |

# Borehole Log

Roy F. WESTON, Inc.

|                              |                                  |
|------------------------------|----------------------------------|
| PROJECT : FT. MONMOUTH       | TOTAL DEPTH : 12.00              |
| SITE NAME : MAIN POST AREA 3 | LOGGER : K. VALENTE              |
| BORING ID : MP3-SB1          | DRILLING COMPANY : J.C. ANDERSON |
| NORTHING : 0.0000 estimated  | DRILLING RIG : CME-55            |
| EASTING : 0.0000 estimated   | DATE STARTED : 12/14/94          |
| ELEVATION : 0.000 estimated  | DATE COMPLETED : 12/14/94        |

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION                      | COLOR        | STRENGTH | MOISTURE | BLOW COUNT | FIELD INSTRUMENT READING | COMMENTS                                                      |
|-----------|-------|----------|------------|-------------------------------------|--------------|----------|----------|------------|--------------------------|---------------------------------------------------------------|
|           |       |          |            | Poorly graded sand with silt, SP-SM | ORANGE BROWN | LSE      | MST      |            | HNU 9.0                  | Orange brown sand. Same lithology as above interval.          |
|           |       |          |            | Poorly graded sand, SP              | BROWN        | LSE      | WET      |            | HNU 0.0                  | 11.6' wet sand. End of borehole. Borehole grouted to surface. |
| -11       | 11    |          |            | No Sample Recovered                 |              |          |          |            |                          |                                                               |
| -12       | 12    |          |            |                                     |              |          |          |            |                          |                                                               |
| -13       | 13    |          |            |                                     |              |          |          |            |                          |                                                               |
| -14       | 14    |          |            |                                     |              |          |          |            |                          |                                                               |
| -15       | 15    |          |            |                                     |              |          |          |            |                          |                                                               |
| -16       | 16    |          |            |                                     |              |          |          |            |                          |                                                               |
| -17       | 17    |          |            |                                     |              |          |          |            |                          |                                                               |
| -18       | 18    |          |            |                                     |              |          |          |            |                          |                                                               |
| -19       | 19    |          |            |                                     |              |          |          |            |                          |                                                               |
| -20       | 20    |          |            |                                     |              |          |          |            |                          |                                                               |

| BOREHOLE<br>/WELL ID | SMP<br>NUM | LTH<br>NUM | LITHOLOGY INT.<br>(FT BGS) | SAMPLING<br>METHOD | SIZE<br>GRAVEL PCT. | SIZE<br>SAND | SAND<br>PCT | SILT<br>PCT | CLAY<br>PCT | ORGANIC<br>PCT | ROCK<br>TYPE | PLAST | SORT | STRENGTH | MOISTURE | STRAT<br>UNIT |
|----------------------|------------|------------|----------------------------|--------------------|---------------------|--------------|-------------|-------------|-------------|----------------|--------------|-------|------|----------|----------|---------------|
| MP3-SB1              | 1          | 1          | 0.00                       | 1.50               | SPS                 | 0            | F           | 75          | 25          | 0              | 0            | NON   | MOD  | SFT      | DRY      |               |
| MP3-SB1              | 1          | 2          | 1.50                       | 2.00               | SPS                 | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| MP3-SB1              | 2          | 1          | 2.00                       | 3.00               | SPS                 | C            | 20          | CM          | 80          | 0              | 0            | NON   | POR  | LSE      | MST      |               |
| MP3-SB1              | 2          | 2          | 3.00                       | 4.00               | SPS                 | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| MP3-SB1              | 3          | 1          | 4.00                       | 5.00               | SPS                 | 0            |             | 0           | 90          | 10             | 0            | NON   | WEL  | LSE      | MST      |               |
| MP3-SB1              | 3          | 2          | 5.00                       | 6.00               | SPS                 | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| MP3-SB1              | 4          | 1          | 6.00                       | 7.00               | SPS                 | 0            | F           | 90          | 10          | 0              | 0            | NON   | WEL  | LSE      | MST      |               |
| MP3-SB1              | 4          | 2          | 7.00                       | 8.00               | SPS                 | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| MP3-SB1              | 5          | 1          | 8.00                       | 8.70               | SPS                 | 0            | M-F         | 80          | 20          | 0              | 0            | NON   | MOD  | LSE      | MST      |               |
| MP3-SB1              | 5          | 2          | 8.70                       | 9.50               | SPS                 | 0            | MF          | 90          | 10          | 0              | 0            | NON   | WEL  | LSE      | MST      |               |
| MP3-SB1              | 5          | 3          | 9.50                       | 10.00              | SPS                 | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| MP3-SB1              | 6          | 1          | 10.00                      | 10.50              | SPS                 | 0            | F           | 90          | 10          | 0              | 0            | NON   | WEL  | LSE      | MST      |               |
| MP3-SB1              | 6          | 2          | 10.50                      | 11.00              | SPS                 | 0            | MF          | 100         | 0           | 0              | 0            | NON   | MOD  | LSE      | WET      |               |
| MP3-SB1              | 6          | 3          | 11.00                      | 12.00              | SPS                 | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |

**Borehole Location Data****Roy F. WESTON, Inc.**

BOREHOLE ID : MP3-SB2  
BEGIN DATE : 12/15/94

PROJECT NAME: FT. MONMOUTH  
END DATE : 12/15/94

LOGGER/COMPANY : K. VALENTI

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : 0

TOTAL DEPTH : 14.00

DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 8.00

INTERVAL: 0.00 ft. to 4.00 ft. BGS

METHOD : HSA

FLUID : NONE

BOREHOLE DIAMETER #2: 2.00

INTERVAL: 4.00 ft. to 14.00 ft. BGS

METHOD : SPS

FLUID : NONE

BOREHOLE DIAMETER #3:

INTERVAL:

METHOD :

FLUID :

DRILLING COMPANY : J.C. ANDERSON

DRILLER : WELLS REEVE

DRILL RIG TYPE : CME-55

|                        | ESTIMATED | SURVEYED |
|------------------------|-----------|----------|
| SURFACE<br>ELEVATION : | 0.000     |          |

N. COORDINATE : 0.0000

E. COORDINATE : 0.0000

WELL PERMIT.....(Y)es (N)o: N PERMIT # :

HOLE ABANDONED... (Y)es (N)o: Y

WELL INSTALLED... (Y)es (N)o: N

WELL CLUSTER..... (Y)es (N)o: N No. OF WELLS : 0

WELL NEST..... (Y)es (N)o: N No. OF WELLS : 0

PUMPS INSTALLED.. (Y)es (N)o: N

PURGE :

DEPTH

0.00

SAMPLE :

0.00

**BOREHOLE TESTING**

BOREHOLE GEOPHYSICS..... (Y)es (N)o: N

SLUG TESTS..... (Y)es (N)o: N

PACKER TESTS..... (Y)es (N)o: N

PUMPING TESTS..... (Y)es (N)o: N

**COMMENTS :**

Augered to 4'. SPS to 14' bgs. SB02 grouted to ground surface level. Groundwater @12' bgs (w.l. used). Sampled 2-10' composite sample int. Routine sample - MPA3-SB02-A02.

# Borehole Log

Roy F. WESTON, Inc.

PROJECT : FT. MONMOUTH  
 SITE NAME : MAIN POST AREA 3  
 BORING ID : MP3-SB2  
 NORTHING : 0.0000 estimated  
 EASTING : 0.0000 estimated  
 ELEVATION : 0.000 estimated

TOTAL DEPTH : 14.00  
 LOGGER : K. VALENTI  
 DRILLING COMPANY : J.C. ANDERSON  
 DRILLING RIG : CME-55  
 DATE STARTED : 12/15/94  
 DATE COMPLETED : 12/15/94

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION                   | COLOR         | STRENGTH | MOISTURE | BLOW COUNT | FIELD INSTRUMENT READING | COMMENTS                                                                                         |
|-----------|-------|----------|------------|----------------------------------|---------------|----------|----------|------------|--------------------------|--------------------------------------------------------------------------------------------------|
|           |       |          | 100        | Silty sand, SM                   | LT BROWN      | LSE      | MST      | 8          | HNU 0.0                  | Topsoils/organics.                                                                               |
|           |       |          |            | Silty sand, SM                   | BROWN         |          |          | 21         |                          |                                                                                                  |
|           |       |          |            | Silty sand, SM                   | LT BROWN      |          |          | 26         |                          | Sharp color change at 1' from brown to lt. brown.                                                |
| -1        | 1     |          |            |                                  |               |          |          |            |                          |                                                                                                  |
|           |       |          |            | Well-graded gravel with sand, GW | TANNISH WHITE | LSE      | DRY      |            | HNU 0.0                  | Rock fragments and sand. Some small sub-rounded stones in sps (lower 1' of sps) of white quartz. |
| -2        | 2     |          | 40         | Well-graded gravel with sand, GW | TANNISH WHITE | LSE      | MST      | 1          | HNU 3.0                  | Same as above interval. Rock fragments and sand (white quartzite).                               |
|           |       |          |            |                                  |               |          |          | 14         |                          |                                                                                                  |
|           |       |          |            |                                  |               |          |          | 16         |                          |                                                                                                  |
| -3        | 3     |          |            | No Sample Recovered              |               |          |          |            |                          |                                                                                                  |
|           |       |          |            |                                  |               |          |          |            |                          |                                                                                                  |
| -4        | 4     |          | 75         | Silty sand, SM                   | GRAYISH BROWN | FRM      | MST      | 13         | HNU 3.0                  | Silt and sand mottled.                                                                           |
|           |       |          |            |                                  |               |          |          | 15         |                          |                                                                                                  |
|           |       |          |            |                                  |               |          |          | 16         |                          |                                                                                                  |
|           |       |          |            |                                  |               |          |          | 18         |                          |                                                                                                  |
| -5        | 5     |          |            | Poorly graded sand, SP           | ORANGE BROWN  | LSE      | MST      |            | HNU 3.0                  |                                                                                                  |
|           |       |          |            | No Sample Recovered              |               |          |          |            |                          |                                                                                                  |
| -6        | 6     |          | 100        | Poorly graded sand, SP           | ORANGE BROWN  | LSE      | MST      | 11         | HNU 3.0                  | Same lithology as above interval.                                                                |
|           |       |          |            |                                  |               |          |          | 6          |                          |                                                                                                  |
|           |       |          |            |                                  |               |          |          | 5          |                          |                                                                                                  |
| -7        | 7     |          |            |                                  |               |          |          |            |                          |                                                                                                  |
|           |       |          |            |                                  |               |          |          |            |                          |                                                                                                  |
| -8        | 8     |          | 100        | Poorly graded sand, SP           | BROWN         | LSE      | MST      | 10         | HNU 3.0                  |                                                                                                  |
|           |       |          |            |                                  |               |          |          | 7          |                          |                                                                                                  |
|           |       |          |            |                                  |               |          |          | 8          |                          |                                                                                                  |
|           |       |          |            |                                  |               |          |          | 5          |                          |                                                                                                  |
| -9        | 9     |          |            |                                  |               |          |          |            |                          |                                                                                                  |
|           |       |          |            |                                  |               |          |          |            |                          |                                                                                                  |
| -10       | 10    |          | 100        | Poorly graded sand, SP           | BROWN         | LSE      | MST      | 13         | HNU 3.0                  | Iron oxide banding. Uniform bands from lt. orange to dk org. Some bands highly distinct.         |
|           |       |          |            |                                  |               |          |          | 15         |                          |                                                                                                  |
|           |       |          |            |                                  |               |          |          | 3          |                          |                                                                                                  |

# Borehole Log

Roy F. WESTON, Inc.

PROJECT : FT. MONMOUTH  
 SITE NAME : MAIN POST AREA 3  
 BORING ID : MP3-SB2  
 NORTHING : 0.0000 estimated  
 EASTING : 0.0000 estimated  
 ELEVATION : 0.000 estimated

TOTAL DEPTH : 14.00  
 LOGGER : K. VALENTI  
 DRILLING COMPANY : J.C. ANDERSON  
 DRILLING RIG : CME-55  
 DATE STARTED : 12/15/94  
 DATE COMPLETED : 12/15/94

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION         | COLOR         | STRENGTH | MOISTURE | BLOW COUNT           | FIELD INSTRUMENT READING | COMMENTS                                                                                 |
|-----------|-------|----------|------------|------------------------|---------------|----------|----------|----------------------|--------------------------|------------------------------------------------------------------------------------------|
| -11       | 11    |          |            | Poorly graded sand, SP | BROWN         | LSE      | MST      |                      | HNU 3.0                  | Iron oxide banding. Uniform bands from lt. orange to dk org. Some bands highly distinct. |
| -12       | 12    |          | 50         | Silty sand, SM         | BROWNISH GRAY | FRM      | SAT      | 11<br>11<br>13<br>14 | HNU 0.0                  | Gray mottles noted. Water at 12' bgs. TD of borehole.                                    |
| -13       | 13    |          |            |                        |               |          |          |                      |                          |                                                                                          |
| -14       | 14    |          |            |                        |               |          |          |                      |                          |                                                                                          |
| -15       | 15    |          |            |                        |               |          |          |                      |                          |                                                                                          |
| -16       | 16    |          |            |                        |               |          |          |                      |                          |                                                                                          |
| -17       | 17    |          |            |                        |               |          |          |                      |                          |                                                                                          |
| -18       | 18    |          |            |                        |               |          |          |                      |                          |                                                                                          |
| -19       | 19    |          |            |                        |               |          |          |                      |                          |                                                                                          |
| -20       | 20    |          |            |                        |               |          |          |                      |                          |                                                                                          |



| BOREHOLE<br>/WELL ID | SMP<br>NUM | LTH<br>NUM | LITHOLOGY INT.<br>(FT BGS) | SAMPLING<br>METHOD | SIZE<br>GRAVEL PCT. | GRAVEL<br>PCT. | SIZE<br>SAND | SAND<br>PCT | SILT<br>PCT | CLAY<br>PCT | ORGANIC<br>PCT | ROCK<br>TYPE | PLAST | SORT | STRENGTH | MOISTURE | STRAT<br>UNIT |
|----------------------|------------|------------|----------------------------|--------------------|---------------------|----------------|--------------|-------------|-------------|-------------|----------------|--------------|-------|------|----------|----------|---------------|
| MP3-SB2              | 1          | 1          | 0.00                       | 0.20               | SPS                 | 0              | FM           | 65          | 35          | 0           | 0              |              | NON   | MOD  | LSE      | MST      |               |
| MP3-SB2              | 1          | 2          | 0.20                       | 0.50               | SPS                 | 0              | FM           | 65          | 35          | 0           | 0              |              |       |      |          |          |               |
| MP3-SB2              | 1          | 3          | 0.50                       | 1.50               | SPS                 | 0              | FM           | 65          | 35          | 0           | 0              |              |       |      |          |          |               |
| MP3-SB2              | 1          | 4          | 1.50                       | 2.00               | SPS                 | CM             | 80           | MC          | 20          | 0           | 0              | 0            | NON   | POR  | LSE      | DRY      |               |
| MP3-SB2              | 2          | 1          | 2.00                       | 2.80               | SPS                 | C              | 70           | CM          | 30          | 0           | 0              | 0            | NON   | POR  | LSE      | MST      |               |
| MP3-SB2              | 2          | 2          | 2.80                       | 4.00               | SPS                 |                | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| MP3-SB2              | 3          | 1          | 4.00                       | 5.00               | SPS                 |                | 0            | MF          | 60          | 40          | 0              | 0            | LOW   | MOD  | FRM      | MST      |               |
| MP3-SB2              | 3          | 2          | 5.00                       | 5.50               | SPS                 |                | 0            | FM          | 100         | 0           | 0              | 0            | NON   | WEL  | LSE      | MST      |               |
| MP3-SB2              | 3          | 3          | 5.50                       | 6.00               | SPS                 |                | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| MP3-SB2              | 4          | 1          | 6.00                       | 8.00               | SPS                 |                | 0            | MF          | 100         | 0           | 0              | 0            | NON   | WEL  | LSE      | MST      |               |
| MP3-SB2              | 5          | 1          | 8.00                       | 10.00              | SPS                 |                | 0            | FM          | 100         | 0           | 0              | 0            | NON   | WEL  | LSE      | MST      |               |
| MP3-SB2              | 6          | 1          | 10.00                      | 12.00              | SPS                 |                | 0            | MF          | 100         | 0           | 0              | 0            | NON   | WEL  | LSE      | MST      |               |
| MP3-SB2              | 7          | 1          | 12.00                      | 13.00              | SPS                 |                | 0            |             | 60          | 35          | 5              | 0            | LOW   | MOD  | FRM      | SAT      |               |

**CHARLES WOOD**  
**BOREHOLE LOGS AND WELL COMPLETION SUMMARIES**

**Borehole Location Data****Roy F. WESTON, Inc.**

BOREHOLE ID : CW1-MW26  
BEGIN DATE : 12/19/94

PROJECT NAME: FT. MONMOUTH  
END DATE : 12/19/94

LOGGER/COMPANY : K. VALENTI

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : 0

TOTAL DEPTH : 15.00

DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 12.00

INTERVAL: 0.00 ft. to 16.00 ft. BGS

METHOD : HSA

FLUID : WATER

BOREHOLE DIAMETER #2:

INTERVAL:

METHOD :

FLUID :

BOREHOLE DIAMETER #3:

INTERVAL:

METHOD :

FLUID :

DRILLING COMPANY : J.C. ANDERSON

DRILLER : WELLS REEVE

DRILL RIG TYPE : CME-55

|                        | ESTIMATED | SURVEYED |
|------------------------|-----------|----------|
| SURFACE<br>ELEVATION : | 0.000     | 60.540   |
| N. COORDINATE :        | 0.0000    |          |
| E. COORDINATE :        | 0.0000    |          |

WELL PERMIT.....(Y)es (N)o: N PERMIT # : NJ 29 32591

HOLE ABANDONED... (Y)es (N)o: N

WELL INSTALLED... (Y)es (N)o: Y

WELL CLUSTER.....(Y)es (N)o: N No. OF WELLS : 0

WELL NEST.....(Y)es (N)o: N No. OF WELLS : 0

PUMPS INSTALLED.. (Y)es (N)o: N

PURGE :

DEPTH

SAMPLE :

0.00

**BOREHOLE TESTING**

BOREHOLE GEOPHYSICS.....(Y)es (N)o: N

SLUG TESTS.....(Y)es (N)o: N

PACKER TESTS.....(Y)es (N)o: N

PUMPING TESTS.....(Y)es (N)o: N

**COMMENTS :**

Sampled soils for TCE+30; TAL

Latitude-North: 40 degrees 17' 44.5"

Longitude-West: 74 degrees 05' 17.7"

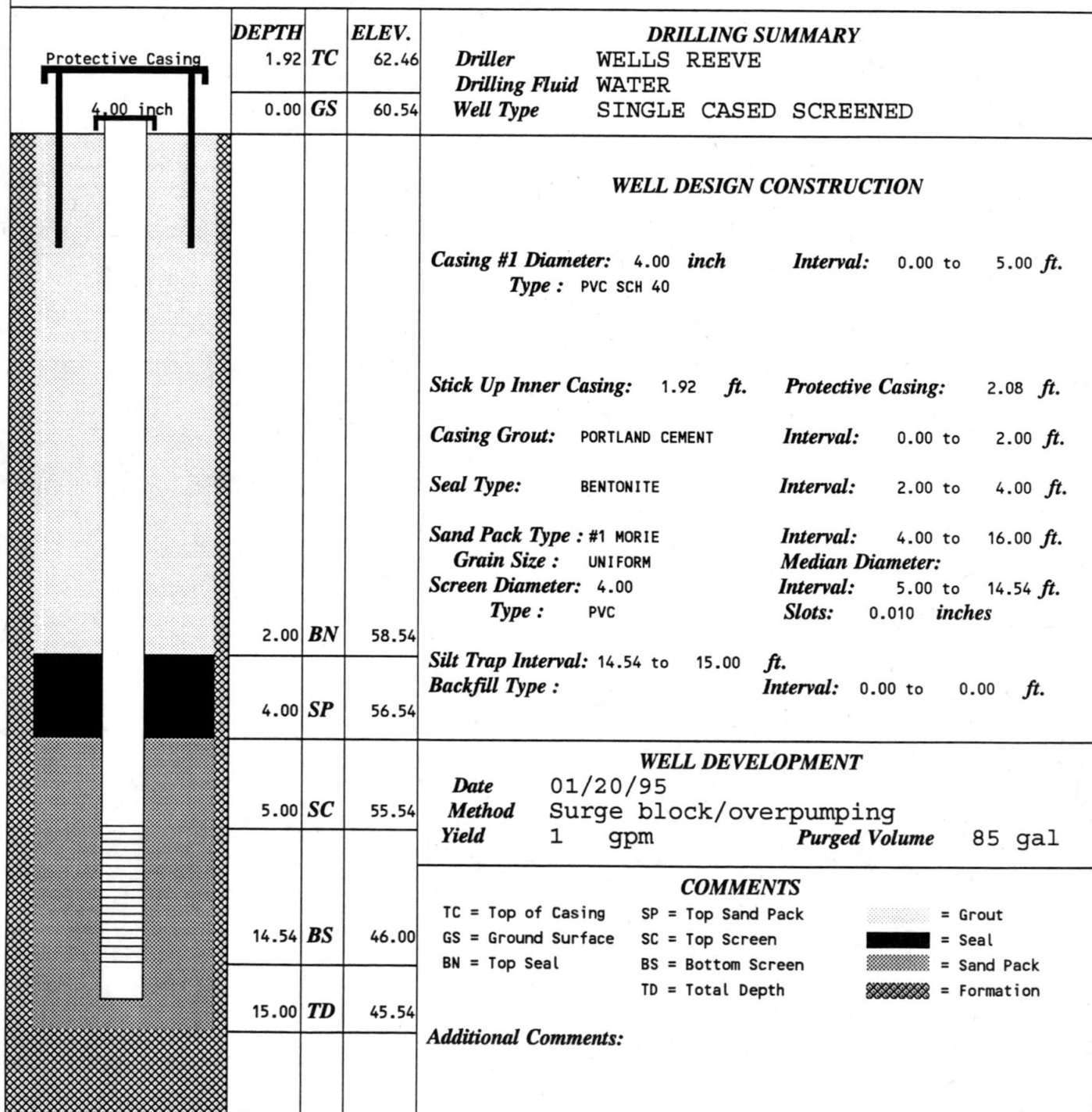
**Roy F. WESTON, Inc.**

**CLIENT** FT. MONMOUTH  
**SITE NAME** CHARLES WOOD AREA

**DRILLING FIRM** J.C. ANDERSON  
**INSPECTOR** K. VALENTI

|                        |            |
|------------------------|------------|
| <b>WELL ID</b>         | CW1 - MW26 |
| <b>START DATE</b>      | 12/19/94   |
| <b>COMPLETION DATE</b> | 12/19/94   |

## WATER LEVELS



**NOTE: Well Diagram not to Scale**

*Elevations are feet above mean sea level*

# Borehole Log

Roy F. WESTON, Inc.

|             |                   |                    |               |
|-------------|-------------------|--------------------|---------------|
| PROJECT :   | FT. MONMOUTH      | TOTAL DEPTH :      | 15.00         |
| SITE NAME : | CHARLES WOOD AREA | LOGGER :           | K. VALENTI    |
| BORING ID : | CW1-MW26          | DRILLING COMPANY : | J.C. ANDERSON |
| NORTHING :  | 0.0000 estimated  | DRILLING RIG :     | CME-55        |
| EASTING :   | 0.0000 estimated  | DATE STARTED :     | 12/19/94      |
| ELEVATION : | 60.540 surveyed   | DATE COMPLETED :   | 12/19/94      |

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION         | COLOR           | STRENGTH | MOISTURE | BLOW COUNT | FIELD INSTRUMENT READING | COMMENTS                                                                               |
|-----------|-------|----------|------------|------------------------|-----------------|----------|----------|------------|--------------------------|----------------------------------------------------------------------------------------|
| 59.1      | 1     |          | 100        | Poorly graded sand, SP | YLLWSH LT BROWN | SFT      | MST      | 3          | HNU 0.0                  | Top 3" consist of topsoil with organics.                                               |
| 58.2      | 2     |          | 100        | Poorly graded sand, SP | YLLWSH LT BROWN | SFT      | MST      | 6          | HNU 0.0                  |                                                                                        |
| 57.3      | 3     |          |            |                        |                 |          |          |            |                          |                                                                                        |
| 56.4      | 4     |          | 100        | Poorly graded sand, SP | YLLWSH LT BROWN | SFT      | MST      | 5          | HNU 0.0                  | Mild iron (Fe) banding throughout spoon.                                               |
| 55.5      | 5     |          |            |                        |                 |          |          |            |                          |                                                                                        |
| 54.6      | 6     |          | 100        | Poorly graded sand, SP | YELLOW LT BROWN | LSE      | SAT      | 5          | HNU 0.0                  | 3" spoon used. Water at 6.1' bgs. Sample CW01-SB06-A02 collected. Mild mottling noted. |
| 53.7      | 7     |          |            |                        |                 |          |          |            |                          |                                                                                        |
| 52.8      | 8     |          | 100        | Poorly graded sand, SP | YELLOW LT BROWN | LSE      | SAT      | 1          | HNU 0.0                  | Collected sample CW01-SB26-A02.                                                        |
| 51.9      | 9     |          |            |                        |                 |          |          |            |                          |                                                                                        |
| 50.10     | 10    |          | 100        | Poorly graded sand, SP | YLLWSH LT BROWN | SFT      | SAT      | 1          | HNU 0.0                  |                                                                                        |

# Borehole Log

Roy F. WESTON, Inc.

|             |                   |                    |               |
|-------------|-------------------|--------------------|---------------|
| PROJECT :   | FT. MONMOUTH      | TOTAL DEPTH :      | 15.00         |
| SITE NAME : | CHARLES WOOD AREA | LOGGER :           | K. VALENTI    |
| BORING ID : | CW1-MW26          | DRILLING COMPANY : | J.C. ANDERSON |
| NORTHING :  | 0.0000 estimated  | DRILLING RIG :     | CME-55        |
| EASTING :   | 0.0000 estimated  | DATE STARTED :     | 12/19/94      |
| ELEVATION : | 60.540 surveyed   | DATE COMPLETED :   | 12/19/94      |

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION         | COLOR           | STRENGTH | MOISTURE | BLOW COUNT  | FIELD INSTRUMENT READING | COMMENTS                                                       |
|-----------|-------|----------|------------|------------------------|-----------------|----------|----------|-------------|--------------------------|----------------------------------------------------------------|
| 49        | 11    |          |            | Poorly graded sand, SP | YLLWSH LT BROWN | SFT      | SAT      |             | HNU 0.0                  |                                                                |
| 48        | 12    |          | 100        | Poorly graded sand, SP | YLLWSH LT BROWN | LSE      | SAT      | 2<br>4<br>6 | HNU 0.0                  | Some gray mottles noted.                                       |
| 47        | 13    |          |            |                        |                 |          |          |             |                          |                                                                |
| 46        | 14    |          |            | Interval Not Sampled   |                 |          |          |             |                          | Augered interval. Set well at 15' bgs. TD of borehole 16' bgs. |
| 45        | 15    |          |            |                        |                 |          |          |             |                          |                                                                |
| 44        | 16    |          |            |                        |                 |          |          |             |                          |                                                                |
| 43        | 17    |          |            |                        |                 |          |          |             |                          |                                                                |
| 42        | 18    |          |            |                        |                 |          |          |             |                          |                                                                |
| 41        | 19    |          |            |                        |                 |          |          |             |                          |                                                                |
| 40        | 20    |          |            |                        |                 |          |          |             |                          |                                                                |

| BOREHOLE<br>/WELL ID | SMP<br>NUM | LTH<br>NUM | LITHOLOGY INT.<br>(FT BGS) | SAMPLING<br>METHOD | SIZE<br>GRAVEL PCT. | GRAVEL<br>PCT. | SIZE<br>SAND | SAND<br>PCT | SILT<br>PCT | CLAY<br>PCT | ORGANIC<br>PCT | ROCK<br>TYPE | PLAST | SORT | STRENGTH | MOISTURE | STRAT<br>UNIT |
|----------------------|------------|------------|----------------------------|--------------------|---------------------|----------------|--------------|-------------|-------------|-------------|----------------|--------------|-------|------|----------|----------|---------------|
| CW1-MW26             | 1          | 1          | 0.00                       | 2.00               | SPS                 | 0              | F            | 100         | 0           | 0           | 0              |              | NON   | WEL  | SFT      | MST      |               |
| CW1-MW26             | 2          | 1          | 2.00                       | 4.00               | SPS                 | 0              | F            | 95          | 5           | 0           | 0              |              | NON   | WEL  | SFT      | MST      |               |
| CW1-MW26             | 3          | 1          | 4.00                       | 6.00               | SPS                 | 0              |              | 95          | 5           | 0           | 0              |              | NON   | WEL  | SFT      | MST      |               |
| CW1-MW26             | 4          | 1          | 6.00                       | 8.00               | SPS                 | 0              | F            | 98          | 2           | 0           | 0              |              | NON   | WEL  | LSE      | SAT      |               |
| CW1-MW26             | 5          | 1          | 8.00                       | 10.00              | SPS                 | 0              | F            | 100         | 0           | 0           | 0              |              | NON   | WEL  | LSE      | SAT      |               |
| CW1-MW26             | 6          | 1          | 10.00                      | 12.00              | SPS                 | 0              | F            | 100         | 0           | 0           | 0              |              | NON   | WEL  | SFT      | SAT      |               |
| CW1-MW26             | 7          | 1          | 12.00                      | 14.00              | SPS                 | 0              | F            | 95          | 5           | 0           | 0              |              | NON   | WEL  | LSE      | SAT      |               |
| CW1-MW26             | 8          | 1          | 14.00                      | 16.00              | NS                  | 0              |              | 0           | 0           | 0           | 0              |              |       |      |          |          |               |

**Borehole Location Data****Roy F. WESTON, Inc.**

BOREHOLE ID : CW1-MW27

PROJECT NAME: FT. MONMOUTH

BEGIN DATE : 12/19/94

END DATE : 12/19/94

LOGGER/COMPANY : K. VALENTI

BOREHOLE COMPLETED IN (&lt;O&gt;verburden &lt;B&gt;edrock) : O

TOTAL DEPTH : 16.00

DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 12.00

INTERVAL: 0.00 ft. to 16.00 ft. BGS

METHOD : HSA

FLUID : WATER

BOREHOLE DIAMETER #2: 2.00

INTERVAL: 0.00 ft. to 16.00 ft. BGS

METHOD : SPS

FLUID :

BOREHOLE DIAMETER #3:

INTERVAL:

METHOD :

FLUID :

DRILLING COMPANY : J.C. ANDERSON

DRILLER : WELLS REEVE

DRILL RIG TYPE : CME-55

|                        | ESTIMATED | SURVEYED |
|------------------------|-----------|----------|
| SURFACE<br>ELEVATION : | 0.000     | 60.810   |

N. COORDINATE : 0.0000

E. COORDINATE : 0.0000

WELL PERMIT.....(Y)es (N)o: N PERMIT # : NJ 29 32592

HOLE ABANDONED... (Y)es (N)o: N

WELL INSTALLED... (Y)es (N)o: Y

WELL CLUSTER.....(Y)es (N)o: N No. OF WELLS : 0

WELL NEST.....(Y)es (N)o: N No. OF WELLS : 0

PUMPS INSTALLED..(Y)es (N)o: N TYPE

DEPTH

PURGE :

0.00

SAMPLE :

0.00

**BOREHOLE TESTING**

BOREHOLE GEOPHYSICS.....(Y)es (N)o: N

SLUG TESTS.....(Y)es (N)o: N

PACKER TESTS.....(Y)es (N)o: N

PUMPING TESTS.....(Y)es (N)o: N

**COMMENTS :**

Sampled TCE+30, TAL

Latitude-North: 40 deg 17' 44.6"

Longitude-West: 74 deg 05' 17.8"



# Well Completion Summary

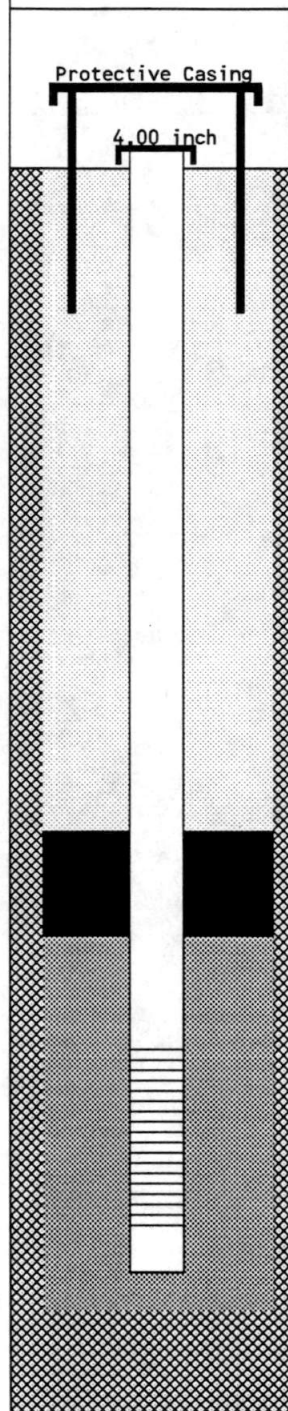
Roy F. WESTON, Inc.

**CLIENT** FT. MONMOUTH  
**SITE NAME** CHARLES WOOD AREA

**DRILLING FIRM** J.C. ANDERSON  
**INSPECTOR** K. VALENTI

**WELL ID** CW1-MW27  
**START DATE** 12/19/94  
**COMPLETION DATE** 12/19/94

## WATER LEVELS

|  | DEPTH                           |       | ELEV.                                      | DRILLING SUMMARY              |                                                                                                   |
|------------------------------------------------------------------------------------|---------------------------------|-------|--------------------------------------------|-------------------------------|---------------------------------------------------------------------------------------------------|
|                                                                                    | 1.75                            | TC    | 62.56                                      | Driller                       | WELLS REEVE                                                                                       |
|                                                                                    |                                 |       |                                            | Drilling Fluid                | WATER                                                                                             |
|                                                                                    | 0.00                            | GS    | 60.81                                      | Well Type                     | SINGLE CASED SCREENED                                                                             |
|                                                                                    | WELL DESIGN CONSTRUCTION        |       |                                            |                               |                                                                                                   |
|                                                                                    | Casing #1 Diameter: 4.00 inch   |       | Interval: 0.00 to 5.00 ft.                 |                               |                                                                                                   |
|                                                                                    | Type : PVC SCH 40               |       |                                            |                               |                                                                                                   |
|                                                                                    | Stick Up Inner Casing: 1.75 ft. |       | Protective Casing: 1.95 ft.                |                               |                                                                                                   |
|                                                                                    | Casing Grout: PORTLAND CEMENT   |       | Interval: 0.00 to 2.00 ft.                 |                               |                                                                                                   |
|                                                                                    | Seal Type: BENTONITE            |       | Interval: 2.00 to 4.00 ft.                 |                               |                                                                                                   |
|                                                                                    | Sand Pack Type : #1 MORIE       |       | Interval: 4.00 to 16.00 ft.                |                               |                                                                                                   |
|                                                                                    | Grain Size : UNIFORM            |       | Median Diameter:                           |                               |                                                                                                   |
|                                                                                    | Screen Diameter: 4.00           |       | Interval: 5.00 to 14.54 ft.                |                               |                                                                                                   |
|                                                                                    | Type : PVC                      |       | Slots: 0.010 inches                        |                               |                                                                                                   |
| 2.00                                                                               | BN                              | 58.81 | Silt Trap Interval: 14.54 to 15.00 ft.     |                               |                                                                                                   |
| 4.00                                                                               | SP                              | 56.81 | Backfill Type : Interval: 0.00 to 0.00 ft. |                               |                                                                                                   |
| WELL DEVELOPMENT                                                                   |                                 |       |                                            |                               |                                                                                                   |
| 5.00                                                                               | SC                              | 55.81 | Date                                       | 01/20/95                      |                                                                                                   |
|                                                                                    |                                 |       | Method                                     | Surge Blocking/Overdril       |                                                                                                   |
|                                                                                    |                                 |       | Yield                                      | 1-2 gpm Purged Volume 128 gal |                                                                                                   |
| COMMENTS                                                                           |                                 |       |                                            |                               |                                                                                                   |
|                                                                                    | TC = Top of Casing              |       | SP = Top Sand Pack                         |                               |  = Grout     |
|                                                                                    | GS = Ground Surface             |       | SC = Top Screen                            |                               |  = Seal      |
|                                                                                    | BN = Top Seal                   |       | BS = Bottom Screen                         |                               |  = Sand Pack |
|                                                                                    |                                 |       | TD = Total Depth                           |                               |  = Formation |
| 14.54                                                                              | BS                              | 46.27 |                                            |                               |                                                                                                   |
| 15.00                                                                              | TD                              | 45.81 |                                            |                               |                                                                                                   |
|                                                                                    |                                 |       | Additional Comments:                       |                               |                                                                                                   |

NOTE: Well Diagram not to Scale

Elevations are feet above mean sea level

# Borehole Log

Roy F. WESTON, Inc.

|                               |                                  |
|-------------------------------|----------------------------------|
| PROJECT : FT. MONMOUTH        | TOTAL DEPTH : 16.00              |
| SITE NAME : CHARLES WOOD AREA | LOGGER : K. VALENTI              |
| BORING ID : CW1-MW27          | DRILLING COMPANY : J.C. ANDERSON |
| NORTHING : 0.0000 estimated   | DRILLING RIG : CME-55            |
| EASTING : 0.0000 estimated    | DATE STARTED : 12/19/94          |
| ELEVATION : 60.810 surveyed   | DATE COMPLETED : 12/19/94        |

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION         | COLOR           | STRENGTH | MOISTURE | BLOW COUNT  | FIELD INSTRUMENT READING | COMMENTS                                                                                          |
|-----------|-------|----------|------------|------------------------|-----------------|----------|----------|-------------|--------------------------|---------------------------------------------------------------------------------------------------|
| 59        | 1     |          | 100        | Poorly graded sand, SP | YELLOW BROWN    | LSE      | MST      | 3<br>2<br>4 | HNU 0.0                  | Top 2" of SPS is topsoil and organics.                                                            |
| 58        | 2     |          | 100        | Poorly graded sand, SP | YELLOW BROWN    | LSE      | MST      | 3<br>2<br>4 | HNU 4.0                  | Same lithology as above interval.                                                                 |
| 57        | 3     |          |            |                        |                 |          |          |             |                          |                                                                                                   |
| 56        | 4     |          | 100        | Poorly graded sand, SP | YELLOW BROWN    | LSE      | SAT      | 1<br>2<br>2 | HNU 6.0                  | First occurrence of water at 5.8" bgs. Same lithology as above interval.                          |
| 55        | 5     |          |            |                        |                 |          |          |             |                          |                                                                                                   |
| 54        | 6     |          | 100        | Poorly graded sand, SP | YELLOW LT BROWN | LSE      | SAT      | 3<br>2<br>3 | HNU 0.0                  | 3" SPS used. Collected sample CW1-SP27 (MW27) A02 at 7" bgs.                                      |
| 53        | 7     |          |            |                        |                 |          |          |             |                          |                                                                                                   |
| 52        | 8     |          | 100        | Poorly graded sand, SP | YLLWSH LT BROWN | LSE      | SAT      | 3<br>4<br>5 | HNU 0.0                  | Same lithology as last spoon. 9-10" bgs pieces of wood and sharp change in color to lt. grysh brn |
| 51        | 9     |          |            |                        |                 |          |          |             |                          |                                                                                                   |
| 50        | 10    |          | 100        | Poorly graded sand, SP | LT GRY YLW-LT B | LSE      | SAT      | 1<br>1<br>1 | HNU 0.0                  | Gray mottles, some slight yellow-orange banding.                                                  |

# Borehole Log

Roy F. WESTON, Inc.

|                               |                                  |
|-------------------------------|----------------------------------|
| PROJECT : FT. MONMOUTH        | TOTAL DEPTH : 16.00              |
| SITE NAME : CHARLES WOOD AREA | LOGGER : K. VALENTI              |
| BORING ID : CW1-MW27          | DRILLING COMPANY : J.C. ANDERSON |
| NORTHING : 0.0000 estimated   | DRILLING RIG : CME-55            |
| EASTING : 0.0000 estimated    | DATE STARTED : 12/19/94          |
| ELEVATION : 60.810 surveyed   | DATE COMPLETED : 12/19/94        |

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION         | COLOR           | STRENGTH | MOISTURE | BLOW COUNT       | FIELD INSTRUMENT READING | COMMENTS                                                               |
|-----------|-------|----------|------------|------------------------|-----------------|----------|----------|------------------|--------------------------|------------------------------------------------------------------------|
| 49        | 11    |          |            | Poorly graded sand, SP | LT GRY YLW-LT B | LSE      | SAT      |                  | HNU 0.0                  | Gray mottles, some slight yellow-orange banding.                       |
| 48        | 12    |          | 100        | Poorly graded sand, SP | LT YLLWSH BROWN | LSE      | SAT      | 3<br>4<br>3<br>4 | HNU 0.0                  | Gray mottles, some banding.                                            |
| 47        | 13    |          |            |                        |                 |          |          |                  |                          |                                                                        |
| 46        | 14    |          | 100        | Poorly graded sand, SP | YLLWSH LT BROWN | LSE      | SAT      | 3<br>4<br>4<br>6 | HNU 0.0                  | Mottles, Fe banding (orange) towards bottom of sps. TD of hole 16' bgs |
| 45        | 15    |          |            |                        |                 |          |          |                  |                          |                                                                        |
| 44        | 16    |          |            |                        |                 |          |          |                  |                          |                                                                        |
| 43        | 17    |          |            |                        |                 |          |          |                  |                          |                                                                        |
| 42        | 18    |          |            |                        |                 |          |          |                  |                          |                                                                        |
| 41        | 19    |          |            |                        |                 |          |          |                  |                          |                                                                        |
| 40        | 20    |          |            |                        |                 |          |          |                  |                          |                                                                        |

DATE: 06/20/95 \*\*\*\* Roy F. WESTON, Inc. LITHOLOGICAL DATA FOR - CLIENT ID: USAC2 \*\*\* PAGE: 9

| BOREHOLE | SMP | LTH | LITHOLOGY | INT.  | SAMPLING | SIZE   | GRAVEL | SIZE | SAND | SILT | CLAY | ORGANIC | ROCK |       |      |          |          | STRAT |
|----------|-----|-----|-----------|-------|----------|--------|--------|------|------|------|------|---------|------|-------|------|----------|----------|-------|
| /WELL ID | NUM | NUM | (FT BGS)  |       | METHOD   | GRAVEL | PCT.   | SAND | PCT  | PCT  | PCT  | PCT     | TYPE | PLAST | SORT | STRENGTH | MOISTURE | UNIT  |
| CW1-MW27 | 1   | 1   | 0.00      | 2.00  | SPS      |        | 0      | F    | 100  | 0    | 0    | 0       |      | NON   | WEL  | LSE      | MST      |       |
| CW1-MW27 | 2   | 1   | 2.00      | 4.00  | SPS      |        | 0      | F    | 100  | 0    | 0    | 0       |      | NON   | WEL  | LSE      | MST      |       |
| CW1-MW27 | 3   | 1   | 4.00      | 6.00  | SPS      |        | 0      | F    | 100  | 0    | 0    | 0       |      | NON   | WEL  | LSE      | SAT      |       |
| CW1-MW27 | 4   | 1   | 6.00      | 8.00  | SPS      |        | 0      | F    | 100  | 0    | 0    | 0       |      | NON   | WEL  | LSE      | SAT      |       |
| CW1-MW27 | 5   | 1   | 8.00      | 10.00 | SPS      |        | 0      | F    | 100  | 0    | 0    | 0       |      | NON   | WEL  | LSE      | SAT      |       |
| CW1-MW27 | 6   | 1   | 10.00     | 12.00 | SPS      |        | 0      | F    | 100  | 0    | 0    | 0       |      | NON   | WEL  | LSE      | SAT      |       |
| CW1-MW27 | 7   | 1   | 12.00     | 14.00 | SPS      |        | 0      | F    | 100  | 0    | 0    | 0       |      | NON   | WEL  | LSE      | SAT      |       |
| CW1-MW27 | 8   | 1   | 14.00     | 16.00 | SPS      |        | 0      | F    | 100  | 0    | 0    | 0       |      | NON   | WEL  | LSE      | SAT      |       |

**Borehole Location Data****Roy F. WESTON, Inc.**

BOREHOLE ID : CW1-MW28  
BEGIN DATE : 12/19/94

PROJECT NAME: FT. MONMOUTH  
END DATE : 12/19/94

LOGGER/COMPANY : P. THOMAS

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : 0

TOTAL DEPTH : 15.00

DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 12.25

INTERVAL: 0.00 ft. to 15.00 ft. BGS

METHOD : HSA

FLUID : NONE

BOREHOLE DIAMETER #2:

INTERVAL:

METHOD :

FLUID :

BOREHOLE DIAMETER #3:

INTERVAL:

METHOD :

FLUID :

DRILLING COMPANY : J.C. ANDERSON

DRILLER : STEVE BURGER

DRILL RIG TYPE : MOBILE B-57

|                        | ESTIMATED | SURVEYED |
|------------------------|-----------|----------|
| SURFACE<br>ELEVATION : | 0.000     | 60.730   |
| N. COORDINATE :        | 0.0000    |          |
| E. COORDINATE :        | 0.0000    |          |

WELL PERMIT.....(Y)es (N)o: N PERMIT # : NJ 29 32593

HOLE ABANDONED... (Y)es (N)o: N

WELL INSTALLED... (Y)es (N)o: Y

WELL CLUSTER.....(Y)es (N)o: N No. OF WELLS : 0

WELL NEST.....(Y)es (N)o: N No. OF WELLS : 0

PUMPS INSTALLED.. (Y)es (N)o: N TYPE

DEPTH

PURGE : 0.00

SAMPLE : 0.00

**BOREHOLE TESTING**

BOREHOLE GEOPHYSICS.....(Y)es (N)o: N

SLUG TESTS.....(Y)es (N)o: N

PACKER TESTS.....(Y)es (N)o: N

PUMPING TESTS.....(Y)es (N)o: N

**COMMENTS :**

Latitude-North: 40 degrees 17' 44.8"

Longitude-West: 74 degrees 05' 17.7"

# Well Completion Summary

Roy F. WESTON, Inc.

**CLIENT** FT. MONMOUTH  
**SITE NAME** CHARLES WOOD AREA

**DRILLING FIRM** J.C. ANDERSON  
**INSPECTOR** P. THOMAS

**WELL ID** CW1-MW28  
**START DATE** 12/19/94  
**COMPLETION DATE** 12/19/94

## WATER LEVELS

|                                                                                 |                                 | DEPTH |    | ELEV. | DRILLING SUMMARY              |                         |
|---------------------------------------------------------------------------------|---------------------------------|-------|----|-------|-------------------------------|-------------------------|
| <p>Protective Casing<br/>4.00 inch</p>                                          |                                 | 2.16  | TC | 62.89 | <b>Driller</b>                | STEVE BURGER            |
|                                                                                 |                                 | 0.00  | GS | 60.73 | <b>Drilling Fluid</b>         | NONE                    |
|                                                                                 |                                 |       |    |       | <b>Well Type</b>              | SINGLE CASSED SCREENED  |
|                                                                                 | <b>WELL DESIGN CONSTRUCTION</b> |       |    |       |                               |                         |
|                                                                                 |                                 |       |    |       | <b>Casing #1 Diameter:</b>    | 4.00 inch               |
|                                                                                 |                                 |       |    |       | <b>Interval:</b>              | 0.00 to 5.00 ft.        |
|                                                                                 |                                 |       |    |       | <b>Type :</b>                 | PVC SCH 40              |
|                                                                                 |                                 |       |    |       | <b>Stick Up Inner Casing:</b> | 2.16 ft.                |
|                                                                                 |                                 |       |    |       | <b>Protective Casing:</b>     | 2.44 ft.                |
|                                                                                 |                                 |       |    |       | <b>Casing Grout:</b>          | CEMT/BENT               |
|                                                                                 |                                 |       |    |       | <b>Interval:</b>              | 0.00 to 0.50 ft.        |
|                                                                                 |                                 |       |    |       | <b>Seal Type:</b>             | BENTONITE SLURRY        |
|                                                                                 |                                 |       |    |       | <b>Interval:</b>              | 0.50 to 3.00 ft.        |
|                                                                                 |                                 |       |    |       | <b>Sand Pack Type :</b>       | NO. 1 MORIE             |
|                                                                                 |                                 |       |    |       | <b>Interval:</b>              | 3.00 to 15.00 ft.       |
|                                                                                 |                                 |       |    |       | <b>Grain Size :</b>           | UNIFORM                 |
|                                                                                 |                                 |       |    |       | <b>Median Diameter:</b>       |                         |
|                                                                                 |                                 |       |    |       | <b>Screen Diameter:</b>       | 4.00                    |
|                                                                                 |                                 |       |    |       | <b>Interval:</b>              | 5.00 to 14.54 ft.       |
|                                                                                 |                                 |       |    |       | <b>Type :</b>                 | PVC                     |
|                                                                                 |                                 |       |    |       | <b>Slots:</b>                 | 0.010 inches            |
|                                                                                 |                                 | 0.50  | BN | 60.23 | <b>Silt Trap Interval:</b>    | 14.54 to 15.00 ft.      |
|                                                                                 |                                 |       |    |       | <b>Backfill Type :</b>        |                         |
|                                                                                 |                                 | 3.00  | SP | 57.73 | <b>Interval:</b>              | 0.00 to 0.00 ft.        |
| <b>WELL DEVELOPMENT</b>                                                         |                                 |       |    |       |                               |                         |
|                                                                                 |                                 | 5.00  | SC | 55.73 | <b>Date</b>                   | 01/20/95                |
|                                                                                 |                                 |       |    |       | <b>Method</b>                 | Surge blocking/overpump |
|                                                                                 |                                 |       |    |       | <b>Yield</b>                  | ~2 gpm                  |
|                                                                                 |                                 |       |    |       | <b>Purged Volume</b>          | 147 gal                 |
| <b>COMMENTS</b>                                                                 |                                 |       |    |       |                               |                         |
|                                                                                 |                                 | 14.54 | BS | 46.19 | TC = Top of Casing            | SP = Top Sand Pack      |
|                                                                                 |                                 |       |    |       | GS = Ground Surface           | SC = Top Screen         |
|                                                                                 |                                 |       |    |       | BN = Top Seal                 | BS = Bottom Screen      |
|                                                                                 |                                 | 15.00 | TD | 45.73 | TD = Total Depth              |                         |
|                                                                                 |                                 |       |    |       |                               |                         |
| <p><b>Additional Comments:</b></p> <p>Depths measured below ground surface.</p> |                                 |       |    |       |                               |                         |

NOTE: Well Diagram not to Scale

Elevations are feet above mean sea level

# Borehole Log

Roy F. WESTON, Inc.

|                               |                                  |
|-------------------------------|----------------------------------|
| PROJECT : FT. MONMOUTH        | TOTAL DEPTH : 15.00              |
| SITE NAME : CHARLES WOOD AREA | LOGGER : P. THOMAS               |
| BORING ID : CW1-MW28          | DRILLING COMPANY : J.C. ANDERSON |
| NORTHING : 0.0000 estimated   | DRILLING RIG : MOBILE B-57       |
| EASTING : 0.0000 estimated    | DATE STARTED : 12/19/94          |
| ELEVATION : 60.730 surveyed   | DATE COMPLETED : 12/19/94        |

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION         | COLOR         | STRENGTH | MOISTURE | BLOW COUNT | FIELD INSTRUMENT READING | COMMENTS                               |
|-----------|-------|----------|------------|------------------------|---------------|----------|----------|------------|--------------------------|----------------------------------------|
|           |       |          | 70         | Sandy silt, ML         | BROWN         | SFT      | MST      | 4          | HNU 0.0                  | Fill. Topsoil.                         |
|           |       |          |            | Poorly graded sand, SP | ORANGE BROWN  | LSE      | MST      | 5          | HNU 0.0                  | Fill.                                  |
| 59        | 1     |          |            | No Sample Recovered    |               |          |          |            |                          |                                        |
|           |       |          | 60         | Poorly graded sand, SP | ORG/OLV BRN   | LSE      | MST      | 3          | HNU 0.0                  | Fill.                                  |
| 58        | 2     |          |            | No Sample Recovered    |               |          |          |            |                          |                                        |
|           |       |          | 50         | Poorly graded sand, SP | OLV/ORG BROWN | LSE      | MST      | 3          | HNU 0.0                  | Fill.                                  |
| 57        | 3     |          |            | No Sample Recovered    |               |          |          |            |                          |                                        |
|           |       |          |            | No Sample Recovered    |               |          |          |            |                          |                                        |
| 56        | 4     |          |            | No Sample Recovered    |               |          |          |            |                          |                                        |
|           |       |          |            | No Sample Recovered    |               |          |          |            |                          |                                        |
| 55        | 5     |          |            | No Sample Recovered    |               |          |          |            |                          |                                        |
|           |       |          |            | No Sample Recovered    |               |          |          |            |                          |                                        |
| 54        | 6     |          | 100        | Poorly graded sand, SP | OLIVE         | LSE      | MST      | 3          | HNU 0.0                  | Fill. Saturation observed at 7.8' bgs. |
|           |       |          |            |                        |               |          |          | 4          |                          |                                        |
| 53        | 7     |          |            |                        |               |          |          |            |                          |                                        |
|           |       |          |            |                        |               |          |          |            |                          |                                        |
| 52        | 8     |          | 100        | Poorly graded sand, SP | OLV/ORG BROWN | LSE      | SAT      | 2          | HNU 0.0                  | Fill.                                  |
|           |       |          |            |                        |               |          |          | 3          |                          |                                        |
| 51        | 9     |          |            |                        |               |          |          |            |                          |                                        |
|           |       |          |            |                        |               |          |          |            |                          |                                        |
| 50        | 10    |          | 100        | Poorly graded sand, SP | YELLOW BROWN  | LSE      | SAT      | 3          | HNU 0.0                  | Fill.                                  |
|           |       |          |            |                        |               |          |          | 4          |                          |                                        |

# Borehole Log

Roy F. WESTON, Inc.

PROJECT : FT. MONMOUTH  
 SITE NAME : CHARLES WOOD AREA  
 BORING ID : CW1-MW28  
 NORTHING : 0.0000 estimated  
 EASTING : 0.0000 estimated  
 ELEVATION : 60.730 surveyed

TOTAL DEPTH : 15.00  
 LOGGER : P. THOMAS  
 DRILLING COMPANY : J.C. ANDERSON  
 DRILLING RIG : MOBILE B-57  
 DATE STARTED : 12/19/94  
 DATE COMPLETED : 12/19/94

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION         | COLOR        | STRENGTH | MOISTURE | BLOW COUNT       | FIELD INSTRUMENT READING | COMMENTS          |
|-----------|-------|----------|------------|------------------------|--------------|----------|----------|------------------|--------------------------|-------------------|
| 49        | 11    |          |            | Poorly graded sand, SP | YELLOW BROWN | LSE      | SAT      |                  | HNU 0.0                  | Fill.             |
| 48        | 12    |          | 100        | Poorly graded sand, SP | YELLOW BROWN | LSE      | SAT      | 4<br>4<br>3<br>4 | HNU 0.0                  | Fill.             |
| 47        | 13    |          |            |                        |              |          |          |                  |                          |                   |
| 46        | 14    |          |            | Interval Not Sampled.  |              |          |          |                  |                          | Augered interval. |
| 45        | 15    |          |            |                        |              |          |          |                  |                          |                   |
| 44        | 16    |          |            |                        |              |          |          |                  |                          |                   |
| 43        | 17    |          |            |                        |              |          |          |                  |                          |                   |
| 42        | 18    |          |            |                        |              |          |          |                  |                          |                   |
| 41        | 19    |          |            |                        |              |          |          |                  |                          |                   |
| 40        | 20    |          |            |                        |              |          |          |                  |                          |                   |



| BOREHOLE<br>/WELL ID | SMP<br>NUM | LTH<br>NUM | LITHOLOGY INT.<br>(FT BGS) | SAMPLING<br>METHOD | SIZE<br>GRAVEL PCT. | SIZE<br>SAND | SAND<br>PCT | SILT<br>PCT | CLAY<br>PCT | ORGANIC<br>PCT | ROCK<br>TYPE | PLAST | SORT | STRENGTH | MOISTURE | STRAT<br>UNIT |
|----------------------|------------|------------|----------------------------|--------------------|---------------------|--------------|-------------|-------------|-------------|----------------|--------------|-------|------|----------|----------|---------------|
| CW1-MW28             | 1          | 1          | 0.00                       | 0.50               | SPS                 | 0            | MF          | 40          | 35          | 0              | 25           | NA    | POR  | SFT      | MST      |               |
| CW1-MW28             | 1          | 2          | 0.50                       | 1.40               | SPS                 | 0            | MF          | 95          | 5           | 0              | 0            | NON   | WEL  | LSE      | MST      |               |
| CW1-MW28             | 1          | 3          | 1.40                       | 2.00               | SPS                 | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| CW1-MW28             | 2          | 1          | 2.00                       | 3.20               | SPS                 | 0            | MF          | 95          | 5           | 0              | 0            | NON   | WEL  | LSE      | MST      |               |
| CW1-MW28             | 2          | 2          | 3.20                       | 4.00               | SPS                 | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| CW1-MW28             | 3          | 1          | 4.00                       | 5.00               | SPS                 | 0            | MF          | 95          | 5           | 0              | 0            | NON   | WEL  | LSE      | MST      |               |
| CW1-MW28             | 3          | 2          | 5.00                       | 6.00               | SPS                 | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| CW1-MW28             | 4          | 1          | 6.00                       | 8.00               | SPS                 | 0            | MF          | 95          | 5           | 0              | 0            | NON   | WEL  | LSE      | MST      |               |
| CW1-MW28             | 5          | 1          | 8.00                       | 10.00              | SPS                 | 0            | MF          | 95          | 5           | 0              | 0            | NON   | MOD  | LSE      | SAT      |               |
| CW1-MW28             | 6          | 1          | 10.00                      | 12.00              | SPS                 | 0            | MF          | 95          | 5           | 0              | 0            | NON   | WEL  | LSE      | SAT      |               |
| CW1-MW28             | 7          | 1          | 12.00                      | 14.00              | SPS                 | 0            | MF          | 95          | 5           | 0              | 0            | NON   | WEL  | LSE      | SAT      |               |
| CW1-MW28             | 8          | 1          | 14.00                      | 15.00              | NS                  | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |

**Borehole Location Data****Roy F. WESTON, Inc.**

BOREHOLE ID : CW1-MW29-  
BEGIN DATE : 12/19/94

PROJECT NAME: FT. MONMOUTH  
END DATE : 12/19/94

LOGGER/COMPANY : P. THOMAS

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : O

TOTAL DEPTH : 15.00

DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 12.25

INTERVAL: 0.00 ft. to 15.00 ft. BGS

METHOD : HSA

FLUID : NONE

BOREHOLE DIAMETER #2:

INTERVAL:

METHOD :

FLUID :

BOREHOLE DIAMETER #3:

INTERVAL:

METHOD :

FLUID :

DRILLING COMPANY : J.C. ANDERSON

DRILLER : STEVE BURGER

DRILL RIG TYPE : MOBILE B-57

|                        | ESTIMATED | SURVEYED |
|------------------------|-----------|----------|
| SURFACE<br>ELEVATION : | 0.000     | 60.410   |

N. COORDINATE : 0.0000

E. COORDINATE : 0.0000

WELL PERMIT.....(Y)es (N)o: N PERMIT # : NJ 29 32590

HOLE ABANDONED... (Y)es (N)o: N

WELL INSTALLED... (Y)es (N)o: Y

WELL CLUSTER.....(Y)es (N)o: N No. OF WELLS : 0

WELL NEST.....(Y)es (N)o: N No. OF WELLS : 0

PUMPS INSTALLED.. (Y)es (N)o: N TYPE

DEPTH

PURGE :

0.00

SAMPLE :

0.00

**BOREHOLE TESTING**

BOREHOLE GEOPHYSICS..... (Y)es (N)o: N

SLUG TESTS..... (Y)es (N)o: N

PACKER TESTS..... (Y)es (N)o: N

PUMPING TESTS..... (Y)es (N)o: N

**COMMENTS :**

Latitude North: 40 degrees 17' 44.7"

Longitude West: 74 degrees 05' 17.4"

# Well Completion Summary

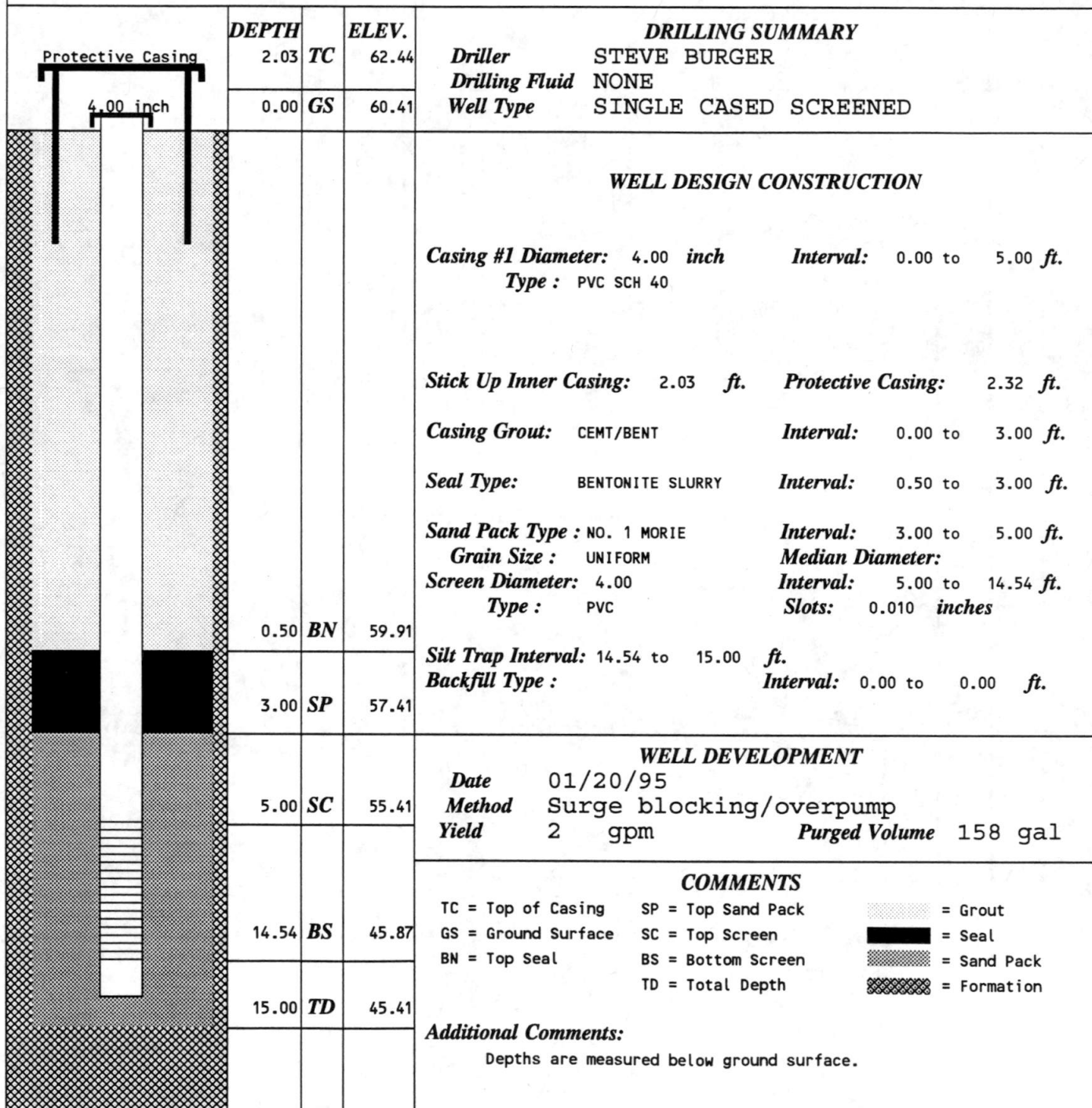
Roy F. WESTON, Inc.

**CLIENT** FT. MONMOUTH  
**SITE NAME** CHARLES WOOD AREA

**DRILLING FIRM** J.C. ANDERSON  
**INSPECTOR** K. VALENTI

**WELL ID** CW1-MW29  
**START DATE** 12/19/94  
**COMPLETION DATE** 12/19/94

## WATER LEVELS



NOTE: Well Diagram not to Scale

Elevations are feet above mean sea level

# Borehole Log

Roy F. WESTON, Inc.

|                               |                                  |
|-------------------------------|----------------------------------|
| PROJECT : FT. MONMOUTH        | TOTAL DEPTH : 15.00              |
| SITE NAME : CHARLES WOOD AREA | LOGGER : P. THOMAS               |
| BORING ID : CW1-MW29          | DRILLING COMPANY : J.C. ANDERSON |
| NORTHING : 0.0000 estimated   | DRILLING RIG : MOBILE B-57       |
| EASTING : 0.0000 estimated    | DATE STARTED : 12/19/94          |
| ELEVATION : 60.410 surveyed   | DATE COMPLETED : 12/19/94        |

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION                      | COLOR           | STRENGTH | MOISTURE | BLOW COUNT | FIELD INSTRUMENT READING | COMMENTS                                                      |
|-----------|-------|----------|------------|-------------------------------------|-----------------|----------|----------|------------|--------------------------|---------------------------------------------------------------|
|           |       |          | 100        | Sandy silt, ML                      | BROWN           | SFT      | MST      | 12         | HNU 0.0                  | Fill and topsoil.                                             |
|           |       |          |            | Poorly graded sand, SP              | OLIVE BROWN     | LSE      | MST      | 11         | HNU 0.0                  | Fill.                                                         |
| 59        | 1     |          |            |                                     |                 |          |          |            |                          |                                                               |
| 58        | 2     |          | 90         | Poorly graded sand, SP              | ORANGE/OLIVE BR | LSE      | MST      | 12         | HNU 0.0                  |                                                               |
| 57        | 3     |          |            |                                     |                 |          |          |            |                          |                                                               |
| 56        | 4     |          | 100        | No Sample Recovered                 | ORANGE/OLIVE BR | LSE      | WET      | 6          | HNU 0.0                  | Fill.                                                         |
| 55        | 5     |          |            | Poorly graded sand, SP              | ORANGE/OLIVE BR | LSE      | WET      | 4          | HNU 0.0                  |                                                               |
| 54        | 6     |          | 100        | Poorly graded sand, SP              | ORANGE/OLIVE BR | LSE      | SAT      | 3          | HNU 2.0                  | Saturated conditions observed at ~6.4' bgs..                  |
| 53        | 7     |          |            |                                     |                 |          |          |            |                          |                                                               |
| 52        | 8     |          | 100        | Poorly graded sand with silt, SP-SM | GRAY            | LSE      | SAT      | 3          | HNU 0.0                  | Fe stained laminae at bottom of interval; sharp color change. |
|           |       |          |            | Poorly graded sand with silt, SP-SM | GRAY            | LSE      | SAT      | 3          | HNU 0.1                  | Fill.                                                         |
|           |       |          |            | Poorly graded sand, SP              | BROWN           | LSE      | SAT      | 9          | HNU 1.0                  | Fill.                                                         |
| 51        | 9     |          |            |                                     |                 |          |          |            |                          |                                                               |
| 50        | 10    |          | 100        | Poorly graded sand, SP              | OLIVE BROWN     | LSE      | SAT      | 2          | HNU 0.0                  | Fill.                                                         |

# Borehole Log

Roy F. WESTON, Inc.

PROJECT : FT. MONMOUTH  
 SITE NAME : CHARLES WOOD AREA  
 BORING ID : CW1-MW29  
 NORTHING : 0.0000 estimated  
 EASTING : 0.0000 estimated  
 ELEVATION : 60.410 surveyed

TOTAL DEPTH : 15.00  
 LOGGER : P. THOMAS  
 DRILLING COMPANY : J.C. ANDERSON  
 DRILLING RIG : MOBILE B-57  
 DATE STARTED : 12/19/94  
 DATE COMPLETED : 12/19/94

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION         | COLOR       | STRENGTH | MOISTURE | BLOW COUNT           | FIELD INSTRUMENT READING | COMMENTS                                            |
|-----------|-------|----------|------------|------------------------|-------------|----------|----------|----------------------|--------------------------|-----------------------------------------------------|
| 49        | 11    |          |            | Poorly graded sand, SP | OLIVE BROWN | LSE      | SAT      |                      | HNU 0.0                  | Fill.                                               |
| 48        | 12    |          | 100        | Poorly graded sand, SP | OLIVE BROWN | LSE      | SAT      | 3<br>4<br>3<br>4     | HNU 0.0                  | Fill.                                               |
| 47        | 13    |          |            |                        |             |          |          |                      |                          |                                                     |
| 46        | 14    |          | 75         | Poorly graded sand, SP | OLIVE BROWN | LSE      | SAT      | 10<br>14<br>16<br>10 | HNU 0.5                  | Fill.                                               |
| 45        | 15    |          |            | Silty sand, SM         | OLIVE BROWN | LSE      | SAT      |                      | HNU 0.5                  | Fill, Fe stained lamina.<br>TD of borehole 16' bgs. |
| 44        | 16    |          |            | No Sample Recovered    |             |          |          |                      |                          |                                                     |
| 43        | 17    |          |            |                        |             |          |          |                      |                          |                                                     |
| 42        | 18    |          |            |                        |             |          |          |                      |                          |                                                     |
| 41        | 19    |          |            |                        |             |          |          |                      |                          |                                                     |
| 40        | 20    |          |            |                        |             |          |          |                      |                          |                                                     |

| BOREHOLE<br>/WELL ID | SMP<br>NUM | LTH<br>NUM | LITHOLOGY INT.<br>(FT BGS) | SAMPLING<br>METHOD | SIZE<br>GRAVEL PCT. | GRAVEL<br>PCT. | SIZE<br>SAND | SAND<br>PCT | SILT<br>PCT | CLAY<br>PCT | ORGANIC<br>PCT | ROCK<br>TYPE | PLAST | SORT | STRENGTH | MOISTURE | STRAT.<br>UNIT |
|----------------------|------------|------------|----------------------------|--------------------|---------------------|----------------|--------------|-------------|-------------|-------------|----------------|--------------|-------|------|----------|----------|----------------|
| CW1-MW29             | 1          | 1          | 0.00                       | 0.40               | SPS                 | 0              | MF           | 45          | 35          | 0           | 20             |              | NA    | POR  | SFT      | MST      |                |
| CW1-MW29             | 1          | 2          | 0.40                       | 2.00               | SPS                 | 0              | MF           | 95          | 5           | 0           | 0              |              | NON   | WEL  | LSE      | MST      |                |
| CW1-MW29             | 2          | 1          | 2.00                       | 3.80               | SPS                 | 0              | MF           | 95          | 5           | 0           | 0              |              | NA    | WEL  | LSE      | MST      |                |
| CW1-MW29             | 2          | 2          | 3.80                       | 4.00               | SPS                 | 0              |              | 0           | 0           | 0           | 0              |              |       |      |          |          |                |
| CW1-MW29             | 3          | 1          | 4.00                       | 6.00               | SPS                 | 0              | MF           | 95          | 5           | 0           | 0              |              | NON   | WEL  | LSE      | WET      |                |
| CW1-MW29             | 4          | 1          | 6.00                       | 7.60               | SPS                 | 0              | MF           | 95          | 5           | 0           | 0              |              | NON   | WEL  | LSE      | SAT      |                |
| CW1-MW29             | 4          | 2          | 7.60                       | 8.00               | SPS                 | 0              | MF           | 90          | 10          | 0           | 0              |              | NA    | WEL  | LSE      | SAT      |                |
| CW1-MW29             | 5          | 1          | 8.00                       | 8.40               | SPS                 | 0              | MF           | 90          | 10          | 0           | 0              |              | NON   | WEL  | LSE      | SAT      |                |
| CW1-MW29             | 5          | 2          | 8.40                       | 10.00              | SPS                 | 0              | MF           | 95          | 5           | 0           | 0              |              | NA    | WEL  | LSE      | SAT      |                |
| CW1-MW29             | 6          | 1          | 10.00                      | 12.00              | SPS                 | 0              | MF           | 95          | 5           | 0           | 0              |              | NA    | WEL  | LSE      | SAT      |                |
| CW1-MW29             | 7          | 1          | 12.00                      | 14.00              | SPS                 | 0              | MF           | 95          | 5           | 0           | 0              |              | NON   | WEL  | LSE      | SAT      |                |
| CW1-MW29             | 8          | 1          | 14.00                      | 15.00              | SPS                 | 0              | MF           | 95          | 5           | 0           | 0              |              | NON   | WEL  | LSE      | SAT      |                |
| CW1-MW29             | 8          | 2          | 15.00                      | 15.50              | SPS                 | 0              | F            | 85          | 13          | 2           | 0              |              | NON   | WEL  | LSE      | SAT      |                |
| CW1-MW29             | 8          | 3          | 15.50                      | 16.00              | SPS                 | 0              |              | 0           | 0           | 0           | 0              |              |       |      |          |          |                |

**Borehole Location Data****Roy F. WESTON, Inc.**

BOREHOLE ID : CW2-MW30  
BEGIN DATE : 12/16/94

PROJECT NAME: FT. MONMOUTH  
END DATE : 12/16/94

LOGGER/COMPANY : K. VALENTI

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) :

TOTAL DEPTH : 16.00

DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 12.00

INTERVAL: 0.00 ft. to 16.00 ft. BGS

METHOD : HSA FLUID : WATER

BOREHOLE DIAMETER #2: 3.00

INTERVAL: 12.00 ft. to 14.00 ft. BGS

METHOD : SPS FLUID :

BOREHOLE DIAMETER #3:

INTERVAL:

METHOD : FLUID :

DRILLING COMPANY : J.C. ANDERSON

DRILLER : WELLS REEVE

DRILL RIG TYPE : CME-55

|                        | ESTIMATED | SURVEYED |
|------------------------|-----------|----------|
| SURFACE<br>ELEVATION : | 0.000     | 49.470   |

N. COORDINATE : 0.0000

E. COORDINATE : 0.0000

WELL PERMIT.....(Y)es (N)o: N PERMIT # : NJ 29 32594

HOLE ABANDONED... (Y)es (N)o: N

WELL INSTALLED... (Y)es (N)o: Y

WELL CLUSTER..... (Y)es (N)o: N No. OF WELLS : 0

WELL NEST..... (Y)es (N)o: N No. OF WELLS : 0

PUMPS INSTALLED.. (Y)es (N)o: N TYPE DEPTH

PURGE : 0.00

SAMPLE : 0.00

**BOREHOLE TESTING**

BOREHOLE GEOPHYSICS..... (Y)es (N)o: N

SLUG TESTS..... (Y)es (N)o: N

PACKER TESTS..... (Y)es (N)o: N

PUMPING TESTS..... (Y)es (N)o: N

**COMMENTS :**

1st location moved after collecting one spoon with no rec.

Latitude-North: 40 deg 17' 43.3"

Longitude-West: 74 deg 05' 10.4"

# Well Completion Summary

Roy F. WESTON, Inc.

CLIENT FT. MONMOUTH  
SITE NAME CHARLES WOOD AREA

DRILLING FIRM J.C. ANDERSON  
INSPECTOR K. VALENTI

WELL ID CW2-MW30  
START DATE 12/16/94  
COMPLETION DATE 12/16/94

## WATER LEVELS

|                                        |                                 | DEPTH |       | ELEV. | DRILLING SUMMARY                                                                                                                                                                                                   |                       |
|----------------------------------------|---------------------------------|-------|-------|-------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| <p>Protective Casing<br/>4.00 inch</p> |                                 | 2.24  | TC    | 51.71 | Driller                                                                                                                                                                                                            | WELLS REEVE           |
|                                        |                                 | 0.00  | GS    | 49.47 | Drilling Fluid                                                                                                                                                                                                     | WATER                 |
|                                        |                                 |       |       |       | Well Type                                                                                                                                                                                                          | SINGLE CASED SCREENED |
|                                        | <b>WELL DESIGN CONSTRUCTION</b> |       |       |       |                                                                                                                                                                                                                    |                       |
|                                        |                                 |       |       |       |                                                                                                                                                                                                                    |                       |
|                                        |                                 |       |       |       | <b>Casing #1 Diameter:</b> 4.00 inch <b>Interval:</b> 0.00 to 6.00 ft.<br><b>Type :</b> PVC SCH 40                                                                                                                 |                       |
|                                        |                                 |       |       |       | <b>Stick Up Inner Casing:</b> 2.24 ft. <b>Protective Casing:</b> 2.68 ft.                                                                                                                                          |                       |
|                                        |                                 |       |       |       | <b>Casing Grout:</b> PORTLAND CEMENT <b>Interval:</b> 0.00 to 2.00 ft.                                                                                                                                             |                       |
|                                        |                                 |       |       |       | <b>Seal Type:</b> BENTONITE <b>Interval:</b> 2.00 to 4.00 ft.                                                                                                                                                      |                       |
|                                        |                                 |       |       |       | <b>Sand Pack Type :</b> #1 MORIE <b>Interval:</b> 4.00 to 16.00 ft.<br><b>Grain Size :</b> UNIFORM <b>Median Diameter:</b>                                                                                         |                       |
|                                        |                                 |       |       |       | <b>Screen Diameter:</b> 4.00 <b>Interval:</b> 6.00 to 15.54 ft.<br><b>Type :</b> PVC <b>Slots:</b> 0.010 inches                                                                                                    |                       |
|                                        | 2.00                            | BN    | 47.47 |       | <b>Silt Trap Interval:</b> 15.54 to 16.00 ft.                                                                                                                                                                      |                       |
|                                        | 4.00                            | SP    | 45.47 |       | <b>Backfill Type :</b> <b>Interval:</b> 0.00 to 0.00 ft.                                                                                                                                                           |                       |
| <b>WELL DEVELOPMENT</b>                |                                 |       |       |       |                                                                                                                                                                                                                    |                       |
|                                        | 6.00                            | SC    | 43.47 |       | <b>Date</b> 01/08/95<br><b>Method</b> Bailing/surge blocking<br><b>Yield</b> 1 gpm <b>Purged Volume</b> 68 gal                                                                                                     |                       |
| <b>COMMENTS</b>                        |                                 |       |       |       |                                                                                                                                                                                                                    |                       |
|                                        | 15.54                           | BS    | 33.93 |       | TC = Top of Casing      SP = Top Sand Pack       = Grout<br>GS = Ground Surface      SC = Top Screen       = Seal<br>BN = Top Seal      BS = Bottom Screen       = Sand Pack<br>TD = Total Depth       = Formation |                       |
|                                        | 16.00                           | TD    | 33.47 |       | <b>Additional Comments:</b>                                                                                                                                                                                        |                       |

NOTE: Well Diagram not to Scale

Elevations are feet above mean sea level



# Borehole Log

Roy F. WESTON, Inc.

|                               |                                  |
|-------------------------------|----------------------------------|
| PROJECT : FT. MONMOUTH        | TOTAL DEPTH : 16.00              |
| SITE NAME : CHARLES WOOD AREA | LOGGER : K. VALENTI              |
| BORING ID : CW2-MW30          | DRILLING COMPANY : J.C. ANDERSON |
| NORTHING : 0.0000 estimated   | DRILLING RIG : CME-55            |
| EASTING : 0.0000 estimated    | DATE STARTED : 12/16/94          |
| ELEVATION : 49.470 surveyed   | DATE COMPLETED : 12/16/94        |

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION                      | COLOR          | STRENGTH | MOISTURE | BLOW COUNT           | FIELD INSTRUMENT READING | COMMENTS                                                                     |
|-----------|-------|----------|------------|-------------------------------------|----------------|----------|----------|----------------------|--------------------------|------------------------------------------------------------------------------|
|           |       |          | 65         | Silty sand, SM                      | BROWN          | LSE      | MST      | 10<br>11<br>10<br>12 | HNU 2.0                  | Top 3" bgs = topsoil. Some organics-roots. 1st hole abandoned with HNU=10.0. |
| 48        | 1     |          |            | Poorly graded sand with silt, SP-SM | LT BROWN       | LSE      | MST      |                      | HNU 0.0                  | Lt brown sand (little silt, mottles noted.)                                  |
|           |       |          |            | No Sample Recovered                 |                |          |          |                      |                          |                                                                              |
| 47        | 2     |          | 65         | Silty sand, SM                      | DK GRAY TO BRN | LSE      | WET      | 8<br>9<br>13<br>11   | HNU 20.0                 | Noted mottling with iron (Fe) staining.                                      |
| 46        | 3     |          |            | Silty sand, SM                      | DK GRAY        | SFT      | WET      |                      | HNU 20.0                 | Fine silt (some) finer sands. SPS is wet.                                    |
|           |       |          |            | No Sample Recovered                 |                |          |          |                      |                          |                                                                              |
| 45        | 4     |          | 75         | Silty sand, SM                      | GRAY BROWN     | SFT      | WET      | 15<br>17<br>11<br>7  | HNU 7.0                  | Gray mottles noted.                                                          |
|           |       |          |            | Sandy elastic silt, MH              | GREENISH GRAY  | SFT      | WET      |                      | HNU 0.0                  | 6" piece of wood noted at bottom of spoon/                                   |
| 44        | 5     |          |            | No Sample Recovered                 |                |          |          |                      |                          |                                                                              |
| 43        | 6     |          | 20         | Sandy elastic silt, MH              | GRAYISH GREEN  | SFT      | WET      | 5<br>6<br>5<br>4     | HNU 3.0                  | Same as above interval. Wood pieces.                                         |
|           |       |          |            | No Sample Recovered                 |                |          |          |                      |                          |                                                                              |
| 42        | 7     |          |            |                                     |                |          |          |                      |                          |                                                                              |
| 41        | 8     |          | 50         | Sandy silt, ML                      | GREENISH GRAY  | SFT      | WET      | 5<br>4<br>4<br>3     | HNU 150.0                | 3" SPS used. Same lith. as noted in previous interval. Sampled W2-SB30       |
| 40        | 9     |          |            | No Sample Recovered                 |                |          |          |                      |                          |                                                                              |
| 39        | 10    |          | 80         | Silty sand, SM                      | GREENISH GRAY  | LSE      | WET      |                      | HNU 0.0                  | 3" SPS used. Fine sands little silt.                                         |

# Borehole Log

Roy F. WESTON, Inc.

PROJECT : FT. MONMOUTH  
 SITE NAME : CHARLES WOOD AREA  
 BORING ID : CW2-MW30  
 NORTHING : 0.0000 estimated  
 EASTING : 0.0000 estimated  
 ELEVATION : 49.470 surveyed

TOTAL DEPTH : 16.00  
 LOGGER : K. VALENTI  
 DRILLING COMPANY : J.C. ANDERSON  
 DRILLING RIG : CME-55  
 DATE STARTED : 12/16/94  
 DATE COMPLETED : 12/16/94

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION       | COLOR         | STRENGTH | MOISTURE | BLOW COUNT | FIELD INSTRUMENT READING | COMMENTS                                     |
|-----------|-------|----------|------------|----------------------|---------------|----------|----------|------------|--------------------------|----------------------------------------------|
| 38        | 11    |          |            | Silty sand, SM       | GREENISH GRAY | LSE      | WET      |            | HNU 0.0                  | 3" SPS used. Fine sands little silt.         |
|           |       |          |            | No Sample Recovered  |               |          |          |            |                          |                                              |
| 37        | 12    |          | 100        | Silty sand, SM       | GREENISH GRAY | SFT      | WET      | 4-8        | HNU 0.0                  | Mostly quartz sand.                          |
| 36        | 13    |          |            |                      |               |          |          | 3-4        |                          |                                              |
| 35        | 14    |          | 50         | Well-graded sand, SW | GREENISH GRAY | LSE      | MST      | 3          | HNU 0.0                  | Some white quartz stones.                    |
|           |       |          |            | Elastic silt, MH     | DK GRAY BLACK | FRM      | MST      | 3          | HNU 0.0                  | Set well at 16' bgs. TD of borehole 16' bgs. |
| 34        | 15    |          |            | No Sample Recovered  |               |          |          |            |                          |                                              |
| 33        | 16    |          |            |                      |               |          |          |            |                          |                                              |
| 32        | 17    |          |            |                      |               |          |          |            |                          |                                              |
| 31        | 18    |          |            |                      |               |          |          |            |                          |                                              |
| 30        | 19    |          |            |                      |               |          |          |            |                          |                                              |
| 29        | 20    |          |            |                      |               |          |          |            |                          |                                              |

| BOREHOLE<br>/WELL ID | SMP<br>NUM | LTH<br>NUM | LITHOLOGY INT.<br>(FT BGS) | SAMPLING<br>METHOD | SIZE<br>GRAVEL PCT. | SIZE<br>SAND | SAND<br>PCT | SILT<br>PCT | CLAY<br>PCT | ORGANIC<br>PCT | ROCK<br>TYPE | PLAST | SORT | STRENGTH | MOISTURE | STRAT<br>UNIT |
|----------------------|------------|------------|----------------------------|--------------------|---------------------|--------------|-------------|-------------|-------------|----------------|--------------|-------|------|----------|----------|---------------|
| CW2-MW30             | 1          | 1          | 0.00                       | 0.80               | SPS                 | 1            | 60          | 35          | 0           | 4              |              | NON   | MOD  | LSE      | MST      |               |
| CW2-MW30             | 1          | 2          | 0.80                       | 1.30               | SPS                 | 0            | 90          | 10          | 0           | 0              |              | NON   | MOD  | LSE      | MST      |               |
| CW2-MW30             | 1          | 3          | 1.30                       | 2.00               | SPS                 | 0            | 0           | 0           | 0           | 0              |              |       |      |          |          |               |
| CW2-MW30             | 2          | 1          | 2.00                       | 2.80               | SPS                 | 1            | 55          | 39          | 5           | 0              |              | LOW   | MOD  | LSE      | WET      |               |
| CW2-MW30             | 2          | 2          | 2.80                       | 3.30               | SPS                 | 0            | 70          | 30          | 0           | 0              |              | LOW   | WEL  | SFT      | WET      |               |
| CW2-MW30             | 2          | 3          | 3.30                       | 4.00               | SPS                 | 0            | 0           | 0           | 0           | 0              |              |       |      |          |          |               |
| CW2-MW30             | 3          | 1          | 4.00                       | 4.50               | SPS                 | 0            | 65          | 35          | 0           | 0              |              | LOW   | POR  | SFT      | WET      |               |
| CW2-MW30             | 3          | 2          | 4.50                       | 5.50               | SPS                 | 0            | 35          | 60          | 5           | 0              |              | MOD   | MOD  | SFT      | WET      |               |
| CW2-MW30             | 3          | 3          | 5.50                       | 6.00               | SPS                 | 0            | 0           | 0           | 0           | 0              |              |       |      |          |          |               |
| CW2-MW30             | 4          | 1          | 6.00                       | 6.40               | SPS                 | 0            | 40          | 60          | 0           | 0              |              | MOD   | WEL  | SFT      | WET      |               |
| CW2-MW30             | 4          | 2          | 6.40                       | 8.00               | SPS                 | 0            | 0           | 0           | 0           | 0              |              |       |      |          |          |               |
| CW2-MW30             | 5          | 1          | 8.00                       | 9.00               | SPS                 | 0            | 40          | 60          | 0           | 0              |              | LOW   | MOD  | SFT      | WET      |               |
| CW2-MW30             | 5          | 2          | 9.00                       | 10.00              | SPS                 | 0            | 0           | 0           | 0           | 0              |              |       |      |          |          |               |
| CW2-MW30             | 6          | 1          | 10.00                      | 11.60              | SPS                 | 0            | F 85        | 15          | 0           | 0              |              | LOW   | WEL  | LSE      | WET      |               |
| CW2-MW30             | 6          | 2          | 11.60                      | 12.00              | SPS                 | 0            | 0           | 0           | 0           | 0              |              |       |      |          |          |               |
| CW2-MW30             | 7          | 1          | 12.00                      | 14.00              | SPS                 | 5            | 80          | 15          | 0           | 0              |              | NON   | MOD  | SFT      | WET      |               |
| CW2-MW30             | 8          | 1          | 14.00                      | 14.30              | SPS                 | 10           | 80          | 5           | 0           | 0              |              | NON   | POR  | LSE      | MST      |               |
| CW2-MW30             | 8          | 2          | 14.30                      | 15.00              | SPS                 | 0            | 0           | 90          | 10          | 0              |              | MOD   | WEL  | FRM      | MST      |               |
| CW2-MW30             | 8          | 3          | 15.00                      | 16.00              | SPS                 | 0            | 0           | 0           | 0           | 0              |              |       |      |          |          |               |

**Borehole Location Data****Roy F. WESTON, Inc.**

BOREHOLE ID : CW2-MW31  
BEGIN DATE : 12/16/94

PROJECT NAME: FT. MONMOUTH  
END DATE : 12/16/94

LOGGER/COMPANY : K. VALENTI

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : 0

TOTAL DEPTH : 16.00

DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 12.00

INTERVAL: 0.00 ft. to 16.00 ft. BGS

METHOD : HSA

FLUID : WATER

BOREHOLE DIAMETER #2:

INTERVAL:

METHOD :

FLUID :

BOREHOLE DIAMETER #3:

INTERVAL:

METHOD :

FLUID :

DRILLING COMPANY : J.C. ANDERSON

DRILLER : STEVE BURGER

DRILL RIG TYPE : MOBILE B-57

|                                        | ESTIMATED              | SURVEYED |
|----------------------------------------|------------------------|----------|
| SURFACE<br>ELEVATION :                 | 0.000                  | 49.670   |
| N. COORDINATE :                        | 0.0000                 |          |
| E. COORDINATE :                        | 0.0000                 |          |
| WELL PERMIT.....(Y)es (N)o: N          | PERMIT # : NJ 29 32595 |          |
| HOLE ABANDONED... (Y)es (N)o: N        |                        |          |
| WELL INSTALLED... (Y)es (N)o: Y        |                        |          |
| WELL CLUSTER..... (Y)es (N)o: N        | No. OF WELLS : 0       |          |
| WELL NEST..... (Y)es (N)o: N           | No. OF WELLS : 0       |          |
| PUMPS INSTALLED.. (Y)es (N)o: N        | TYPE                   | DEPTH    |
|                                        | PURGE :                | 0.00     |
|                                        | SAMPLE :               | 0.00     |
| BOREHOLE TESTING                       |                        |          |
| BOREHOLE GEOPHYSICS..... (Y)es (N)o: N |                        |          |
| SLUG TESTS..... (Y)es (N)o: N          |                        |          |
| PACKER TESTS..... (Y)es (N)o: N        |                        |          |
| PUMPING TESTS..... (Y)es (N)o: N       |                        |          |

**COMMENTS :**

SPS/augered to 8' bgs. Severed wire (subsurface) @approx. 2'  
bgs. Abandoned location. Moved location 1'. Latitude-North:  
40 deg 17' 43.6"/Longitude-West: 74 deg 05' 10.5"

# Well Completion Summary

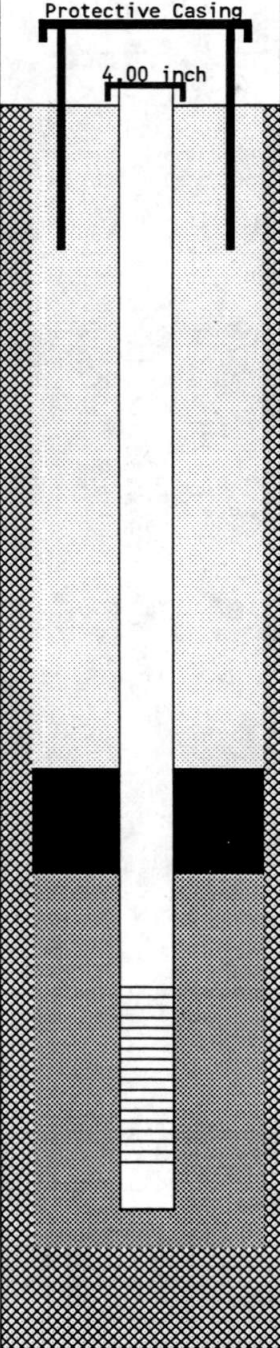
Roy F. WESTON, Inc.

**CLIENT** FT. MONMOUTH  
**SITE NAME** CHARLES WOOD AREA

**DRILLING FIRM** J.C. ANDERSON  
**INSPECTOR** K. VALENTI

**WELL ID** CW2-MW31  
**START DATE** 12/16/94  
**COMPLETION DATE** 12/16/94

## WATER LEVELS

|  | DEPTH                                                                                                                                                                                 |       | ELEV.                                      | DRILLING SUMMARY   |                                                                                                   |
|------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|--------------------------------------------|--------------------|---------------------------------------------------------------------------------------------------|
|                                                                                    | 1.91                                                                                                                                                                                  | TC    | 51.58                                      | Driller            | STEVE BURGER                                                                                      |
|                                                                                    | 0.00                                                                                                                                                                                  | GS    | 49.67                                      | Drilling Fluid     | WATER                                                                                             |
|                                                                                    |                                                                                                                                                                                       |       |                                            | Well Type          | SINGLE CASED SCREENED                                                                             |
|                                                                                    | WELL DESIGN CONSTRUCTION                                                                                                                                                              |       |                                            |                    |                                                                                                   |
|                                                                                    | Casing #1 Diameter: 4.00 inch Interval: 0.00 to 5.00 ft.<br>Type : PVC SCH 40                                                                                                         |       |                                            |                    |                                                                                                   |
|                                                                                    | Stick Up Inner Casing: 1.91 ft. Protective Casing: 2.51 ft.                                                                                                                           |       |                                            |                    |                                                                                                   |
|                                                                                    | Casing Grout: PORTLAND CEMENT Interval: 0.00 to 1.00 ft.                                                                                                                              |       |                                            |                    |                                                                                                   |
|                                                                                    | Seal Type: BENTONITE Interval: 1.00 to 3.00 ft.                                                                                                                                       |       |                                            |                    |                                                                                                   |
|                                                                                    | Sand Pack Type : #1 MORIE Interval: 3.00 to 16.00 ft.<br>Grain Size : UNIFORM Median Diameter:<br>Screen Diameter: 4.00 Interval: 5.00 to 14.54 ft.<br>Type : PVC Slots: 0.010 inches |       |                                            |                    |                                                                                                   |
| 1.00                                                                               | BN                                                                                                                                                                                    | 48.67 | Silt Trap Interval: 14.45 to 15.00 ft.     |                    |                                                                                                   |
| 3.00                                                                               | SP                                                                                                                                                                                    | 46.67 | Backfill Type : Interval: 0.00 to 0.00 ft. |                    |                                                                                                   |
| WELL DEVELOPMENT                                                                   |                                                                                                                                                                                       |       |                                            |                    |                                                                                                   |
| 5.00                                                                               | SC                                                                                                                                                                                    | 44.67 | Date                                       | 01/05/95           |                                                                                                   |
|                                                                                    |                                                                                                                                                                                       |       | Method                                     | Bailing            |                                                                                                   |
|                                                                                    |                                                                                                                                                                                       |       | Yield                                      | <1 gpm             |                                                                                                   |
|                                                                                    |                                                                                                                                                                                       |       | Purged Volume                              | 25 gal             |                                                                                                   |
| COMMENTS                                                                           |                                                                                                                                                                                       |       |                                            |                    |                                                                                                   |
| 14.54                                                                              | BS                                                                                                                                                                                    | 35.13 | TC = Top of Casing                         | SP = Top Sand Pack |  = Grout     |
|                                                                                    |                                                                                                                                                                                       |       | GS = Ground Surface                        | SC = Top Screen    |  = Seal      |
|                                                                                    |                                                                                                                                                                                       |       | BN = Top Seal                              | BS = Bottom Screen |  = Sand Pack |
| 15.00                                                                              | TD                                                                                                                                                                                    | 34.67 |                                            | TD = Total Depth   |  = Formation |
|                                                                                    |                                                                                                                                                                                       |       | Additional Comments:                       |                    |                                                                                                   |

**NOTE:** Well Diagram not to Scale

Elevations are feet above mean sea level

## ***Borehole Log***

**Roy F. WESTON, Inc.**

```
PROJECT      :  FT. MONMOUTH
SITE NAME    :  CHARLES WOOD AREA
BORING ID    :  CW2-MW31
NORTHING     :  0.0000 estimated
EASTING      :  0.0000 estimated
ELEVATION    :  49.670 surveyed
```

TOTAL DEPTH : 16.00  
 LOGGER : K. VALENTI  
 DRILLING COMPANY : J.C. ANDERSON  
 DRILLING RIG : MOBILE B-57  
 DATE STARTED : 12/16/94  
 DATE COMPLETED : 12/16/94

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION         | COLOR         | STRENGTH | MOISTURE | BLOW COUNT           | FIELD INSTRUMENT READING | COMMENTS                                                                                          |
|-----------|-------|----------|------------|------------------------|---------------|----------|----------|----------------------|--------------------------|---------------------------------------------------------------------------------------------------|
|           |       |          | 100        | Silty sand, SM         | BROWN         | LSE      | MST      | 5<br>6<br>7          | HNU 3.0                  | Fill. Top 3" organics/topsoil. Brown little silt, mostly sand.                                    |
| 48        | 1     |          |            |                        |               |          |          |                      |                          |                                                                                                   |
| 47        | 2     |          | 75         | Silty sand, SM         | BROWN         | SFT      | MST      | 10<br>10<br>10<br>11 | HNU 1.0                  | Fill. Same lithology as previous interval. Some orange iron (Fe) staining noted throughout spoon. |
| 46        | 3     |          |            | Silty sand, SM         | GRAY          | FRM      | MST      | 5<br>6<br>7          | HNU 1.0                  | Fill. More silt than above interval. Firm but able to crush between fingers.                      |
|           |       |          |            | No Sample Recovered    |               |          |          |                      |                          |                                                                                                   |
| 45        | 4     |          | 50         | Sandy elastic silt, MH | DK GRAY       | FRM      | MST      | 7<br>7<br>9          | HNU 0.0                  | Fill. Same as previous interval. More silt/clay texture. Water present at 5' bgs.                 |
| 44        | 5     |          |            | No Sample Recovered    |               |          |          |                      |                          |                                                                                                   |
|           |       |          |            |                        |               |          |          |                      |                          |                                                                                                   |
| 43        | 6     |          | 75         | Sandy elastic silt, MH | DK GRAY       | SFT      | WET      | 4<br>4<br>7<br>9     | HNU 2.0                  | Same lithology as previous interval.                                                              |
| <42       | 7     |          |            | Silty sand, SM         | GRAYISH GREEN | SFT      | WET      |                      | HNU 2.0                  | Uncertain. Mostly fine sands. Sample CW2-SB31 collected. Wine at depth noted by auger cuttings.   |
|           |       |          |            | No Sample Recovered    |               |          |          |                      |                          |                                                                                                   |
| 41        | 8     |          | 60         | Silty sand, SM         | GRAYISH GREEN | SFT      | SAT      | 2<br>2<br>2<br>6     | HNU 0.0                  | Same lithology previous interval. Sample CW2-SB31 collected.                                      |
| 40        | 9     |          |            | No Sample Recovered    |               |          |          |                      |                          |                                                                                                   |
|           |       |          |            |                        |               |          |          |                      |                          |                                                                                                   |
| 39        | 10    |          | 75         | Silty sand, SM         | GRAY GREEN    | SFT      | SAT      | 2<br>2<br>2<br>4     | HNU 0.0                  | Uncertain.                                                                                        |

# Borehole Log

Roy F. WESTON, Inc.

|             |                   |                    |               |
|-------------|-------------------|--------------------|---------------|
| PROJECT :   | FT. MONMOUTH      | TOTAL DEPTH :      | 16.00         |
| SITE NAME : | CHARLES WOOD AREA | LOGGER :           | K. VALENTI    |
| BORING ID : | CW2-MW31          | DRILLING COMPANY : | J.C. ANDERSON |
| NORTHING :  | 0.0000 estimated  | DRILLING RIG :     | MOBILE B-57   |
| EASTING :   | 0.0000 estimated  | DATE STARTED :     | 12/16/94      |
| ELEVATION : | 49.670 surveyed   | DATE COMPLETED :   | 12/16/94      |

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION                      | COLOR         | STRENGTH | MOISTURE | BLOW COUNT        | FIELD INSTRUMENT READING | COMMENTS                             |
|-----------|-------|----------|------------|-------------------------------------|---------------|----------|----------|-------------------|--------------------------|--------------------------------------|
| 38        | 11    |          |            | Silty sand, SM                      | GRAY GREEN    | SFT      | SAT      |                   | HNU 0.0                  | Uncertain.                           |
|           |       |          |            | No Sample Recovered                 |               |          |          |                   |                          |                                      |
| 37        | 12    |          | 75         | Poorly graded sand with silt, SP-SM | DK GREEN GRAY | LSE      | SAT      | 2<br>3<br>6       | HNU 0.0                  | Mostly sand with little silt.        |
| 36        | 13    |          |            | Elastic silt, MH                    | DK GRAY       | FRM      | MST      |                   | HNU 0.0                  |                                      |
|           |       |          |            | No Sample Recovered                 |               |          |          |                   |                          |                                      |
| 35        | 14    |          | 50         | Elastic silt, MH                    | DK GRAY       | FRM      | MST      | 5<br>5<br>10<br>7 | HNU 0.0                  | Same lithology as previous interval. |
| 34        | 15    |          |            | No Sample Recovered                 |               |          |          |                   |                          |                                      |
| 33        | 16    |          |            |                                     |               |          |          |                   |                          |                                      |
| 32        | 17    |          |            |                                     |               |          |          |                   |                          |                                      |
| 31        | 18    |          |            |                                     |               |          |          |                   |                          |                                      |
| 30        | 19    |          |            |                                     |               |          |          |                   |                          |                                      |
| 29        | 20    |          |            |                                     |               |          |          |                   |                          |                                      |

| BOREHOLE<br>/WELL ID | SMP<br>NUM | LTH<br>NUM | LITHOLOGY INT.<br>(FT BGS) | SAMPLING<br>METHOD | SIZE<br>GRAVEL PCT. | SIZE<br>SAND | SAND<br>PCT | SILT<br>PCT | CLAY<br>PCT | ORGANIC<br>PCT | ROCK<br>TYPE | PLAST | SORT | STRENGTH | MOISTURE | STRAT<br>UNIT |
|----------------------|------------|------------|----------------------------|--------------------|---------------------|--------------|-------------|-------------|-------------|----------------|--------------|-------|------|----------|----------|---------------|
| CW2-MW31             | 1          | 1          | 0.00                       | SPS                | 0                   |              | 80          | 20          | 0           | 0              |              | LOW   | MOD  | LSE      | MST      |               |
| CW2-MW31             | 2          | 1          | 2.00                       | SPS                | 0                   |              | 85          | 15          | 0           | 0              |              | LOW   | MOD  | SFT      | MST      |               |
| CW2-MW31             | 2          | 2          | 3.00                       | SPS                | 0                   |              | 60          | 40          | 0           | 0              |              | LOW   | WEL  | FRM      | MST      |               |
| CW2-MW31             | 2          | 3          | 3.50                       | SPS                | 0                   |              | 0           | 0           | 0           | 0              |              |       |      |          |          |               |
| CW2-MW31             | 3          | 1          | 4.00                       | SPS                | 0                   | F            | 40          | 55          | 5           | 0              |              | MOD   | WEL  | FRM      | MST      |               |
| CW2-MW31             | 3          | 2          | 5.00                       | SPS                | 0                   |              | 0           | 0           | 0           | 0              |              |       |      |          |          |               |
| CW2-MW31             | 4          | 1          | 6.00                       | SPS                | 0                   |              | 40          | 55          | 5           | 0              |              | MOD   | MOD  | SFT      | WET      |               |
| CW2-MW31             | 4          | 2          | 7.00                       | SPS                | 0                   | F            | 80          | 20          | 0           | 0              |              | LOW   | WEL  | SFT      | WET      |               |
| CW2-MW31             | 4          | 3          | 7.50                       | SPS                | 0                   |              | 0           | 0           | 0           | 0              |              |       |      |          |          |               |
| CW2-MW31             | 5          | 1          | 8.00                       | SPS                | 0                   |              | 80          | 20          | 0           | 0              |              | LOW   | WEL  | SFT      | SAT      |               |
| CW2-MW31             | 5          | 2          | 9.20                       | SPS                | 0                   |              | 0           | 0           | 0           | 0              |              |       |      |          |          |               |
| CW2-MW31             | 6          | 1          | 10.00                      | SPS                | 0                   |              | 80          | 20          | 0           | 0              |              | LOW   | WEL  | SFT      | SAT      |               |
| CW2-MW31             | 6          | 2          | 11.50                      | SPS                | 0                   |              | 0           | 0           | 0           | 0              |              |       |      |          |          |               |
| CW2-MW31             | 7          | 1          | 12.00                      | SPS                | 0                   |              | 90          | 10          | 0           | 0              |              | NON   | WEL  | LSE      | SAT      |               |
| CW2-MW31             | 7          | 2          | 13.00                      | SPS                | 0                   |              | 0           | 80          | 20          | 0              |              | MOD   | WEL  | FRM      | MST      |               |
| CW2-MW31             | 7          | 3          | 13.50                      | SPS                | 0                   |              | 0           | 0           | 0           | 0              |              |       |      |          |          |               |
| CW2-MW31             | 8          | 1          | 14.00                      | SPS                | 0                   |              | 0           | 80          | 20          | 0              |              | MOD   | WEL  | FRM      | MST      |               |
| CW2-MW31             | 8          | 2          | 15.00                      | SPS                | 0                   |              | 0           | 0           | 0           | 0              |              |       |      |          |          |               |



**Borehole Location Data****Roy F. WESTON, Inc.**

BOREHOLE ID : CW2-MW32  
BEGIN DATE : 12/16/94

PROJECT NAME: FT. MONMOUTH  
END DATE : 12/16/94

LOGGER/COMPANY : P. THOMAS

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : 0

TOTAL DEPTH : 15.00

DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 12.25

INTERVAL: 0.00 ft. to 15.00 ft. BGS

METHOD : HSA

FLUID : NONE

BOREHOLE DIAMETER #2:

INTERVAL:

METHOD :

FLUID :

BOREHOLE DIAMETER #3:

INTERVAL:

METHOD :

FLUID :

DRILLING COMPANY : J.C. ANDERSON

DRILLER : STEVE BURGER

DRILL RIG TYPE : MOBILE B-57

|                     | ESTIMATED | SURVEYED |
|---------------------|-----------|----------|
| SURFACE ELEVATION : | 0.000     | 49.470   |
| N. COORDINATE :     | 0.0000    |          |
| E. COORDINATE :     | 0.0000    |          |

WELL PERMIT.....(Y)es (N)o: N PERMIT # : NJ 29 32596

HOLE ABANDONED... (Y)es (N)o: N

WELL INSTALLED... (Y)es (N)o: Y

WELL CLUSTER..... (Y)es (N)o: N No. OF WELLS : 0

WELL NEST..... (Y)es (N)o: N No. OF WELLS : 0

PUMPS INSTALLED.. (Y)es (N)o: N

PURGE :

DEPTH

0.00

SAMPLE :

0.00

**BOREHOLE TESTING**

BOREHOLE GEOPHYSICS..... (Y)es (N)o: N

SLUG TESTS..... (Y)es (N)o: N

PACKER TESTS..... (Y)es (N)o: N

PUMPING TESTS..... (Y)es (N)o: N

**COMMENTS :**

Latitude North: 40 deg 17' 43.6"

Longitude West: 74 deg 05' 10.3"

# Well Completion Summary

Roy F. WESTON, Inc.

**CLIENT** FT. MONMOUTH  
**SITE NAME** CHARLES WOOD AREA

**DRILLING FIRM** J.C. ANDERSON  
**INSPECTOR** P. THOMAS

**WELL ID** CW2-MW32  
**START DATE** 12/16/94  
**COMPLETION DATE** 12/16/94

## WATER LEVELS

|  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | DEPTH |    | ELEV. | DRILLING SUMMARY                                                                                                                                                                                                                      |                       |
|--|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|----|-------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
|  | Protective Casing                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 1.91  | TC | 51.38 | <b>Driller</b>                                                                                                                                                                                                                        | STEVE BURGER          |
|  | 4.00 inch                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 0.00  | GS | 49.47 | <b>Drilling Fluid</b>                                                                                                                                                                                                                 | NONE                  |
|  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |       |    |       | <b>Well Type</b>                                                                                                                                                                                                                      | SINGLE CASED SCREENED |
|  | <b>WELL DESIGN CONSTRUCTION</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |       |    |       |                                                                                                                                                                                                                                       |                       |
|  | <p><b>Casing #1 Diameter:</b> 4.00 inch      <b>Interval:</b> 0.00 to 5.00 ft.<br/> <b>Type :</b> PVC SCH 40</p> <p><b>Stick Up Inner Casing:</b> 1.91 ft.      <b>Protective Casing:</b> 2.61 ft.</p> <p><b>Casing Grout:</b> CEMENT/BENT      <b>Interval:</b> 0.00 to 0.80 ft.</p> <p><b>Seal Type:</b> BENTONITE SLURRY      <b>Interval:</b> 0.80 to 3.00 ft.</p> <p><b>Sand Pack Type :</b> NO. 1 MORIE      <b>Interval:</b> 3.00 to 5.00 ft.<br/> <b>Grain Size :</b> UNIFORM      <b>Median Diameter:</b></p> <p><b>Screen Diameter:</b> 4.00      <b>Interval:</b> 5.00 to 14.54 ft.<br/> <b>Type :</b> PVC      <b>Slots:</b> 0.010 inches</p> <p><b>Silt Trap Interval:</b> 14.54 to 15.00 ft.<br/> <b>Backfill Type :</b>      <b>Interval:</b> 0.00 to 0.00 ft.</p> |       |    |       |                                                                                                                                                                                                                                       |                       |
|  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 0.80  | BN | 48.67 | <b>WELL DEVELOPMENT</b><br><b>Date</b> 01/05/95<br><b>Method</b> Bailing/surge blocking<br><b>Yield</b> 1 gpm <b>Purged Volume</b> 46 gal                                                                                             |                       |
|  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 3.00  | SP | 46.47 |                                                                                                                                                                                                                                       |                       |
|  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 5.00  | SC | 44.47 |                                                                                                                                                                                                                                       |                       |
|  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 14.54 | BS | 34.93 |                                                                                                                                                                                                                                       |                       |
|  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 15.00 | TD | 34.47 |                                                                                                                                                                                                                                       |                       |
|  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |       |    |       | <b>COMMENTS</b><br>TC = Top of Casing      SP = Top Sand Pack       = Grout<br>GS = Ground Surface      SC = Top Screen       = Seal<br>BN = Top Seal      BS = Bottom Screen       = Sand Pack<br>TD = Total Depth       = Formation |                       |
|  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |       |    |       | <b>Additional Comments:</b><br>Depths measured below ground surface.                                                                                                                                                                  |                       |

**NOTE:** Well Diagram not to Scale

Elevations are feet above mean sea level

# Borehole Log

Roy F. WESTON, Inc.

PROJECT : FT. MONMOUTH  
 SITE NAME : CHARLES WOOD AREA  
 BORING ID : CW2-MW32  
 NORTHING : 0.0000 estimated  
 EASTING : 0.0000 estimated  
 ELEVATION : 49.470 surveyed

TOTAL DEPTH : 15.00  
 LOGGER : P. THOMAS  
 DRILLING COMPANY : J.C. ANDERSON  
 DRILLING RIG : MOBILE B-57  
 DATE STARTED : 12/16/94  
 DATE COMPLETED : 12/16/94

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION             | COLOR      | STRENGTH | MOISTURE | BLOW COUNT           | FIELD INSTRUMENT READING | COMMENTS                             |
|-----------|-------|----------|------------|----------------------------|------------|----------|----------|----------------------|--------------------------|--------------------------------------|
|           |       |          | 40         | Silty sand, SM             | BROWN      | SFT      | SAT      | 5<br>5<br>10<br>12   | HNU 0.0                  | 0-0.4 topsoil.                       |
| 48        | 1     |          |            | No Sample Recovered        |            |          |          |                      |                          |                                      |
| 47        | 2     |          | 20         | Silty sand with gravel, SM | BROWN      | LSE      | SAT      | 13<br>20<br>10<br>10 | HNU 0.0                  | Note: Top 4-4.1 - gravel (concrete?) |
|           |       |          |            | No Sample Recovered        |            |          |          |                      |                          |                                      |
| 46        | 3     |          |            |                            |            |          |          |                      |                          |                                      |
| 45        | 4     |          | 20         | Silty sand, SM             | GRAY       | SFT      | SAT      | 5<br>5<br>5<br>5     | HNU 0.0                  |                                      |
|           |       |          |            | No Sample Recovered        |            |          |          |                      |                          |                                      |
| 44        | 5     |          |            |                            |            |          |          |                      |                          |                                      |
| 43        | 6     |          | 60         | Silty sand, SM             | BROWN/GRAY | LSE      | SAT      | 3<br>5<br>7<br>14    | HNU 0.0                  |                                      |
| 42        | 7     |          |            | No Sample Recovered        |            |          |          |                      |                          |                                      |
| 41        | 8     |          | 65         | Silty sand, SM             | OLIVE/GRAY | LSE      | SAT      | 4<br>7<br>9<br>7     | HNU 0.0                  |                                      |
| 40        | 9     |          |            | Silty sand with gravel, SM | BROWN      | LSE      | SAT      |                      | HNU 0.0                  |                                      |
|           |       |          |            | No Sample Recovered        |            |          |          |                      |                          |                                      |
| 39        | 10    |          | 75         | Sandy silt, ML             | GRAY       | SFT      | WET      | 5<br>5<br>5<br>5     | HNU 0.0                  | v. micaceous                         |

# Borehole Log

Roy F. WESTON, Inc.

|           |                     |                  |                 |
|-----------|---------------------|------------------|-----------------|
| PROJECT   | : FT. MONMOUTH      | TOTAL DEPTH      | : 15.00         |
| SITE NAME | : CHARLES WOOD AREA | LOGGER           | : P. THOMAS     |
| BORING ID | : CW2-MW32          | DRILLING COMPANY | : J.C. ANDERSON |
| NORTHING  | : 0.0000 estimated  | DRILLING RIG     | : MOBILE B-57   |
| EASTING   | : 0.0000 estimated  | DATE STARTED     | : 12/16/94      |
| ELEVATION | : 49.470 surveyed   | DATE COMPLETED   | : 12/16/94      |

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION       | COLOR | STRENGTH | MOISTURE | BLOW COUNT | FIELD INSTRUMENT READING | COMMENTS             |
|-----------|-------|----------|------------|----------------------|-------|----------|----------|------------|--------------------------|----------------------|
| 38        | 11    |          |            | Sandy silt, ML       | GRAY  | SFT      | WET      |            | HNU 0.0                  | v. micaceous         |
|           |       |          |            | No Sample Recovered  |       |          |          |            |                          |                      |
| 37        | 12    |          | 60         | Sandy silt, ML       | GRAY  | SFT      | WET      | 12         | HNU 0.0                  |                      |
|           |       |          |            | No Sample Recovered  |       |          |          |            |                          |                      |
| 36        | 13    |          |            |                      |       |          |          |            |                          |                      |
|           |       |          |            | No Sample Recovered  |       |          |          |            |                          |                      |
| 35        | 14    |          |            | Interval Not Sampled |       |          |          |            |                          | Set well at 15' bgs. |
| 34        | 15    |          |            |                      |       |          |          |            |                          |                      |
| 33        | 16    |          |            |                      |       |          |          |            |                          |                      |
| 32        | 17    |          |            |                      |       |          |          |            |                          |                      |
| 31        | 18    |          |            |                      |       |          |          |            |                          |                      |
| 30        | 19    |          |            |                      |       |          |          |            |                          |                      |
| 29        | 20    |          |            |                      |       |          |          |            |                          |                      |

| BOREHOLE<br>/WELL ID | SMP<br>NUM | LTH<br>NUM | LITHOLOGY INT.<br>(FT BGS) | SAMPLING<br>METHOD | SIZE<br>GRAVEL | GRAVEL<br>PCT. | SIZE<br>SAND | SAND<br>PCT | SILT<br>PCT | CLAY<br>PCT | ORGANIC<br>PCT | ROCK<br>TYPE | PLAST | SORT | STRENGTH | MOISTURE | STRAT<br>UNIT |
|----------------------|------------|------------|----------------------------|--------------------|----------------|----------------|--------------|-------------|-------------|-------------|----------------|--------------|-------|------|----------|----------|---------------|
| CW2-MW32             | 1          | 1          | 0.00                       | 0.80               | SPS            | C              | 10           | MF          | 45          | 25          | 5              | 15           | NON   | POR  | SFT      | SAT      |               |
| CW2-MW32             | 1          | 2          | 0.80                       | 2.00               | SPS            |                | 0            |             | 0           | 0           | 0              |              |       |      |          |          |               |
| CW2-MW32             | 2          | 1          | 2.00                       | 2.40               | SPS            | MF             | 15           | MF          | 55          | 25          | 5              | 0            | NON   | POR  | LSE      | SAT      |               |
| CW2-MW32             | 2          | 2          | 2.40                       | 4.00               | SPS            |                | 0            |             | 0           | 0           | 0              |              |       |      |          |          |               |
| CW2-MW32             | 3          | 1          | 4.00                       | 4.40               | SPS            |                | 0            | MF          | 60          | 30          | 10             | 0            | LOW   | MOD  | SFT      | SAT      |               |
| CW2-MW32             | 3          | 2          | 4.40                       | 6.00               | SPS            |                | 0            |             | 0           | 0           | 0              |              |       |      |          |          |               |
| CW2-MW32             | 4          | 1          | 6.00                       | 7.20               | SPS            |                | 0            | MFC         | 75          | 20          | 5              | 0            | NON   | MOD  | LSE      | SAT      |               |
| CW2-MW32             | 4          | 2          | 7.20                       | 8.00               | SPS            |                | 0            |             | 0           | 0           | 0              |              |       |      |          |          |               |
| CW2-MW32             | 5          | 1          | 8.00                       | 9.00               | SPS            |                | 0            | MF          | 75          | 20          | 5              | 0            | NON   | MOD  | LSE      | SAT      |               |
| CW2-MW32             | 5          | 2          | 9.00                       | 9.30               | SPS            | MCF            | 35           | MF          | 50          | 15          | 0              | 0            | NA    | POR  | LSE      | SAT      |               |
| CW2-MW32             | 5          | 3          | 9.30                       | 10.00              | SPS            |                | 0            |             | 0           | 0           | 0              |              |       |      |          |          |               |
| CW2-MW32             | 6          | 1          | 10.00                      | 11.50              | SPS            |                | 0            | F           | 40          | 55          | 5              | 0            | NON   | MOD  | SFT      | WET      |               |
| CW2-MW32             | 6          | 2          | 11.50                      | 12.00              | SPS            |                | 0            |             | 0           | 0           | 0              |              |       |      |          |          |               |
| CW2-MW32             | 7          | 1          | 12.00                      | 13.20              | SPS            |                | 0            | F           | 40          | 55          | 5              | 0            | NON   | WEL  | SFT      | WET      |               |
| CW2-MW32             | 7          | 2          | 13.20                      | 14.00              | SPS            |                | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| CW2-MW32             | 8          | 1          | 14.00                      | 15.00              | NS             |                | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |

**Borehole Location Data****Roy F. WESTON, Inc.**

BOREHOLE ID : CW2-MW33  
BEGIN DATE : 12/15/94

PROJECT NAME: FT. MONMOUTH  
END DATE : 12/15/94

LOGGER/COMPANY : P. THOMAS

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : 0

TOTAL DEPTH : 15.00

DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 12.25

INTERVAL: 0.00 ft. to 15.00 ft. BGS

METHOD : HSA

FLUID : NONE

BOREHOLE DIAMETER #2:

INTERVAL:

METHOD :

FLUID :

BOREHOLE DIAMETER #3:

INTERVAL:

METHOD :

FLUID :

DRILLING COMPANY : J.C. ANDERSON

DRILLER : STEVE BURGER

DRILL RIG TYPE : MOBILE B-57

|                        | ESTIMATED | SURVEYED |
|------------------------|-----------|----------|
| SURFACE<br>ELEVATION : | 0.000     | 49.180   |

N. COORDINATE : 0.0000

E. COORDINATE : 0.0000

WELL PERMIT.....(Y)es (N)o: N PERMIT # : NJ 29 32597

HOLE ABANDONED... (Y)es (N)o: N

WELL INSTALLED... (Y)es (N)o: Y

WELL CLUSTER.....(Y)es (N)o: N No. OF WELLS : 0

WELL NEST.....(Y)es (N)o: N No. OF WELLS : 0

PUMPS INSTALLED..(Y)es (N)o: N TYPE

DEPTH

PURGE :

0.00

SAMPLE :

0.00

**BOREHOLE TESTING**

BOREHOLE GEOPHYSICS.....(Y)es (N)o: N

SLUG TESTS.....(Y)es (N)o: N

PACKER TESTS.....(Y)es (N)o: N

PUMPING TESTS.....(Y)es (N)o: N

**COMMENTS :**

Latitude-North: 40 deg 17' 43.3"

Longitude-West: 74 deg 05' 10.2"

# Well Completion Summary

Roy F. WESTON, Inc.

**CLIENT** FT. MONMOUTH  
**SITE NAME** CHARLES WOOD AREA

**DRILLING FIRM** J.C. ANDERSON  
**INSPECTOR** P. THOMAS

**WELL ID** CW2 - MW33  
**START DATE** 12/15/94  
**COMPLETION DATE** 12/15/94

## WATER LEVELS

|                                        |                                 | DEPTH | ELEV.                                         | DRILLING SUMMARY                     |                                   |
|----------------------------------------|---------------------------------|-------|-----------------------------------------------|--------------------------------------|-----------------------------------|
| <p>Protective Casing<br/>4.00 inch</p> | 1.91                            | TC    | 51.09                                         | <b>Driller</b>                       | STEVE BURGER                      |
|                                        | 0.00                            | GS    | 49.18                                         | <b>Drilling Fluid</b>                | NONE                              |
|                                        |                                 |       |                                               | <b>Well Type</b>                     | SINGLE CASED SCREENED             |
|                                        | <b>WELL DESIGN CONSTRUCTION</b> |       |                                               |                                      |                                   |
|                                        |                                 |       |                                               | <b>Casing #1 Diameter:</b> 4.00 inch | <b>Interval:</b> 0.00 to 5.00 ft. |
|                                        |                                 |       |                                               | <b>Type :</b> PVC SCH 40             |                                   |
|                                        |                                 |       | <b>Stick Up Inner Casing:</b> 1.91 ft.        | <b>Protective Casing:</b> 1.99 ft.   |                                   |
|                                        |                                 |       | <b>Casing Grout:</b> CEMENT/BENT              | <b>Interval:</b> 0.00 to 0.50 ft.    |                                   |
|                                        |                                 |       | <b>Seal Type:</b> BENTONITE SLURRY            | <b>Interval:</b> 0.50 to 3.00 ft.    |                                   |
|                                        |                                 |       | <b>Sand Pack Type :</b> NO. 3 MORIE           | <b>Interval:</b> 3.00 to 15.00 ft.   |                                   |
|                                        |                                 |       | <b>Grain Size :</b> UNIFORM                   | <b>Median Diameter:</b>              |                                   |
|                                        |                                 |       | <b>Screen Diameter:</b> 4.00                  | <b>Interval:</b> 5.00 to 14.54 ft.   |                                   |
|                                        |                                 |       | <b>Type :</b> PVC                             | <b>Slots:</b> 0.010 inches           |                                   |
| 0.50                                   | BN                              | 48.68 | <b>Silt Trap Interval:</b> 14.54 to 15.00 ft. |                                      |                                   |
| 3.00                                   | SP                              | 46.18 | <b>Backfill Type :</b>                        | <b>Interval:</b> 0.00 to 0.00 ft.    |                                   |
| <b>WELL DEVELOPMENT</b>                |                                 |       |                                               |                                      |                                   |
| 5.00                                   | SC                              | 44.18 | <b>Date</b> 01/24/95                          |                                      |                                   |
|                                        |                                 |       | <b>Method</b> Surge Blocking/Bailing          |                                      |                                   |
|                                        |                                 |       | <b>Yield</b> 1 gpm                            | <b>Purged Volume</b> 60 gal          |                                   |
| <b>COMMENTS</b>                        |                                 |       |                                               |                                      |                                   |
|                                        |                                 |       | TC = Top of Casing                            | SP = Top Sand Pack                   | = Grout                           |
|                                        |                                 |       | GS = Ground Surface                           | SC = Top Screen                      | = Seal                            |
|                                        |                                 |       | BN = Top Seal                                 | BS = Bottom Screen                   | = Sand Pack                       |
|                                        |                                 |       | TD = Total Depth                              |                                      | = Formation                       |
| 14.54                                  | BS                              | 34.64 | <b>Additional Comments:</b>                   |                                      |                                   |
| 15.00                                  | TD                              | 34.18 | Depths measured below ground surface.         |                                      |                                   |

NOTE: Well Diagram not to Scale

Elevations are feet above mean sea level

# Borehole Log

Roy F. WESTON, Inc.

|             |                   |                    |               |
|-------------|-------------------|--------------------|---------------|
| PROJECT :   | FT. MONMOUTH      | TOTAL DEPTH :      | 15.00         |
| SITE NAME : | CHARLES WOOD AREA | LOGGER :           | P. THOMAS     |
| BORING ID : | CW2-MW33          | DRILLING COMPANY : | J.C. ANDERSON |
| NORTHING :  | 0.0000 estimated  | DRILLING RIG :     | MOBILE B-57   |
| EASTING :   | 0.0000 estimated  | DATE STARTED :     | 12/15/94      |
| ELEVATION : | 49.180 surveyed   | DATE COMPLETED :   | 12/15/94      |

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION      | COLOR | STRENGTH | MOISTURE | BLOW COUNT | FIELD INSTRUMENT READING | COMMENTS                                                                   |
|-----------|-------|----------|------------|---------------------|-------|----------|----------|------------|--------------------------|----------------------------------------------------------------------------|
|           |       |          | 70         | Silt with sand, ML  | BROWN | SFT      | MST      | 6          | HNU 0.0                  | Topsoil; plant/grass fragments.                                            |
|           |       |          |            | Silty sand, SM      | BROWN | SFT      | MST      | 11         | HNU 0.0                  |                                                                            |
| 48        | 1     |          |            | No Sample Recovered |       |          |          | 12         |                          |                                                                            |
|           |       |          | 60         | Silty sand, SM      | BROWN | SFT      | MST      | 11         | HNU 0.0                  |                                                                            |
| 47        | 2     |          |            | No Sample Recovered |       |          |          | 10         |                          |                                                                            |
| 46        | 3     |          |            | No Sample Recovered |       |          |          | 9          |                          |                                                                            |
|           |       |          | 80         | Silty sand, SM      | GRAY  | SFT      | SAT      | 3          | HNU 0.1                  |                                                                            |
| 45        | 4     |          |            | No Sample Recovered |       |          |          | 3          |                          |                                                                            |
| 44        | 5     |          |            | No Sample Recovered |       |          |          | 3          |                          |                                                                            |
|           |       |          | 75         | Silty sand, SM      | GRAY  | SFT      | SAT      | 3          | HNU 0.0                  | Note at 7.3 to 7.5' bgs occurrence of green sand layer (75% sand/25% silt) |
| 43        | 6     |          |            | No Sample Recovered |       |          |          | 5          |                          |                                                                            |
|           |       |          |            | Silty sand, SM      | GREEN | LSE      | SAT      |            | HNU 0.0                  |                                                                            |
| 42        | 7     |          |            | No Sample Recovered |       |          |          |            |                          |                                                                            |
|           |       |          | 60         | Silty sand, SM      | GREEN | LSE      | SAT      | 6          | HNU 0.0                  |                                                                            |
| 41        | 8     |          |            | No Sample Recovered |       |          |          | 6          |                          |                                                                            |
| 40        | 9     |          |            | No Sample Recovered |       |          |          |            |                          |                                                                            |
|           |       |          | 45         | Silty sand, SM      | GREEN | LSE      | SAT      | 5          | HNU 0.0                  |                                                                            |
| 39        | 10    |          |            |                     |       |          |          | 10         |                          |                                                                            |



# Borehole Log

Roy F. WESTON, Inc.

PROJECT : FT. MONMOUTH  
 SITE NAME : CHARLES WOOD AREA  
 BORING ID : CW2-MW33  
 NORTHING : 0.0000 estimated  
 EASTING : 0.0000 estimated  
 ELEVATION : 49.180 surveyed

TOTAL DEPTH : 15.00  
 LOGGER : P. THOMAS  
 DRILLING COMPANY : J.C. ANDERSON  
 DRILLING RIG : MOBILE B-57  
 DATE STARTED : 12/15/94  
 DATE COMPLETED : 12/15/94

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION       | COLOR | STRENGTH | MOISTURE | BLOW COUNT | FIELD INSTRUMENT READING | COMMENTS          |
|-----------|-------|----------|------------|----------------------|-------|----------|----------|------------|--------------------------|-------------------|
|           |       |          |            | Silty sand, SM       | GREEN | LSE      | SAT      |            | HNU 0.0                  |                   |
| 38        | 11    |          |            | No Sample Recovered  |       |          |          |            |                          |                   |
| 37        | 12    |          |            | No Sample Recovered  |       |          |          |            |                          |                   |
| 36        | 13    |          |            |                      |       |          |          |            |                          |                   |
| 35        | 14    |          |            | Interval Not Sampled |       |          |          |            |                          | Augered interval. |
| 34        | 15    |          |            |                      |       |          |          |            |                          |                   |
| 33        | 16    |          |            |                      |       |          |          |            |                          |                   |
| 32        | 17    |          |            |                      |       |          |          |            |                          |                   |
| 31        | 18    |          |            |                      |       |          |          |            |                          |                   |
| 30        | 19    |          |            |                      |       |          |          |            |                          |                   |
| 29        | 20    |          |            |                      |       |          |          |            |                          |                   |

| BOREHOLE<br>/WELL ID | SMP<br>NUM | LTH<br>NUM | LITHOLOGY INT.<br>(FT BGS) | SAMPLING<br>METHOD | SIZE<br>GRAVEL | GRAVEL<br>PCT. | SIZE<br>SAND | SAND<br>PCT | SILT<br>PCT | CLAY<br>PCT | ORGANIC<br>PCT | ROCK<br>TYPE | PLAST | SORT | STRENGTH | MOISTURE | STRAT<br>UNIT |
|----------------------|------------|------------|----------------------------|--------------------|----------------|----------------|--------------|-------------|-------------|-------------|----------------|--------------|-------|------|----------|----------|---------------|
| CW2-MW33             | 1          | 1          | 0.00                       | 0.60               | SPS            |                | 0            | FM          | 15          | 30          | 15             | 40           | NON   | POR  | SFT      | MST      |               |
| CW2-MW33             | 1          | 2          | 0.60                       | 1.40               | SPS            | FM             | 10           | MFC         | 60          | 20          | 5              | 5            | NON   | MOD  | SFT      | MST      |               |
| CW2-MW33             | 1          | 3          | 1.40                       | 2.00               | SPS            |                | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| CW2-MW33             | 2          | 1          | 2.00                       | 3.20               | SPS            |                | 0            | MFC         | 60          | 35          | 5              | 0            | NON   | MOD  | SFT      | MST      |               |
| CW2-MW33             | 2          | 2          | 3.20                       | 4.00               | SPS            |                | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| CW2-MW33             | 3          | 1          | 4.00                       | 5.60               | SPS            |                | 0            | MFC         | 55          | 35          | 10             | 0            | NON   | MOD  | SFT      | SAT      |               |
| CW2-MW33             | 3          | 2          | 5.60                       | 6.00               | SPS            |                | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| CW2-MW33             | 4          | 1          | 6.00                       | 7.30               | SPS            |                | 0            | MFC         | 55          | 35          | 10             | 0            | NON   | MOD  | SFT      | SAT      |               |
| CW2-MW33             | 4          | 2          | 7.30                       | 7.50               | SPS            |                | 0            | MF          | 75          | 25          | 0              | 0            | NA    | MOD  | LSE      | SAT      |               |
| CW2-MW33             | 4          | 3          | 7.50                       | 8.00               | SPS            |                | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| CW2-MW33             | 5          | 1          | 8.00                       | 9.20               | SPS            | F              | 10           | MF          | 70          | 20          | 0              | 0            | NA    | MOD  | LSE      | SAT      |               |
| CW2-MW33             | 5          | 2          | 9.20                       | 10.00              | SPS            |                | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| CW2-MW33             | 6          | 1          | 10.00                      | 10.90              | SPS            | F              | 10           | MF          | 70          | 20          | 0              | 0            | NON   | MOD  | LSE      | SAT      |               |
| CW2-MW33             | 6          | 2          | 10.90                      | 12.00              | SPS            |                | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| CW2-MW33             | 7          | 1          | 12.00                      | 14.00              | SPS            |                | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| CW2-MW33             | 8          | 1          | 14.00                      | 15.00              | NS             |                | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |

**Borehole Location Data****Roy F. WESTON, Inc.**

BOREHOLE ID : CW6-MW34  
BEGIN DATE : 01/03/95

PROJECT NAME: FT. MONMOUTH  
END DATE : 01/03/95

LOGGER/COMPANY : K VALENTI

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : 0

TOTAL DEPTH : 14.50

DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 12.00

INTERVAL: 0.00 ft. to 14.50 ft. BGS

METHOD : HSA

FLUID : WATER

BOREHOLE DIAMETER #2:

INTERVAL:

METHOD :

FLUID :

BOREHOLE DIAMETER #3:

INTERVAL:

METHOD :

FLUID :

DRILLING COMPANY : J.C. ANDERSON

DRILLER : WELLS REEVE

DRILL RIG TYPE : CME-55

*SURFACE*  
ELEVATION : ESTIMATED 0.000

*SURVEYED*

N. COORDINATE : 0.0000

E. COORDINATE : 0.0000

WELL PERMIT.....(Y)es (N)o: N PERMIT # :

HOLE ABANDONED... (Y)es (N)o: N

WELL INSTALLED... (Y)es (N)o: Y

WELL CLUSTER.....(Y)es (N)o: N No. OF WELLS : 0

WELL NEST.....(Y)es (N)o: N No. OF WELLS : 0

PUMPS INSTALLED..(Y)es (N)o: N TYPE

DEPTH

PURGE :

0.00

SAMPLE :

0.00

**BOREHOLE TESTING**

BOREHOLE GEOPHYSICS.....(Y)es (N)o: N

SLUG TESTS.....(Y)es (N)o: N

PACKER TESTS.....(Y)es (N)o: N

PUMPING TESTS.....(Y)es (N)o: N

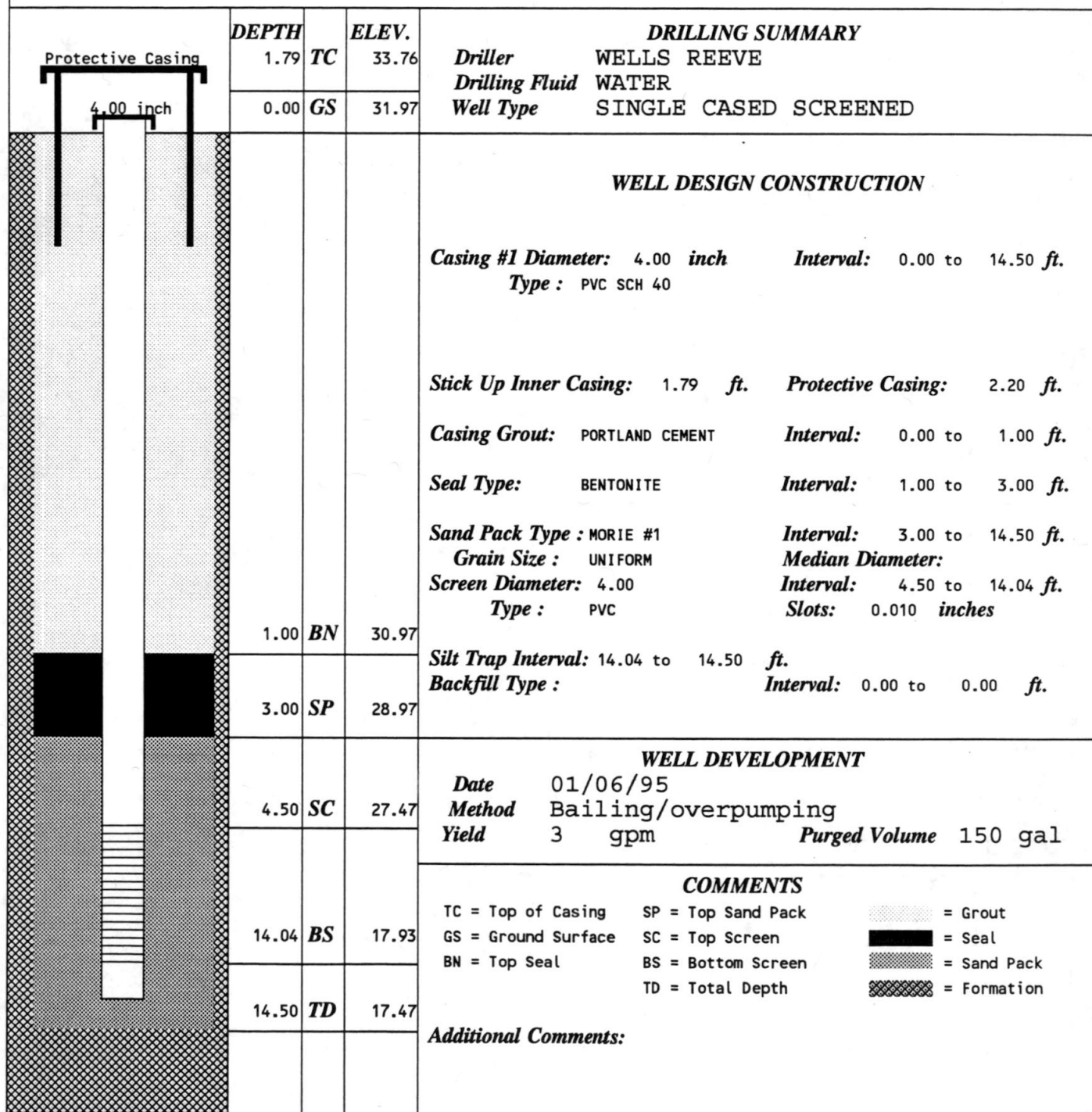
COMMENTS :

# Well Completion Summary

Roy F. WESTON, Inc.

CLIENT FT. MONMOUTH DRILLING FIRM J.C. ANDERSON  
SITE NAME CHARLES WOOD AREA 6 INSPECTOR K. VALENTI

WELL ID CW6-MW34 WATER LEVELS  
START DATE 01/03/95  
COMPLETION DATE 01/03/95



NOTE: Well Diagram not to Scale

Elevations are feet above mean sea level

# Borehole Log

Roy F. WESTON, Inc.

PROJECT : FT. MONMOUTH  
 SITE NAME : CHARLES WOOD AREA 6  
 BORING ID : CW6-MW34  
 NORTHING : 0.0000 estimated  
 EASTING : 0.0000 estimated  
 ELEVATION : 0.000 estimated

TOTAL DEPTH : 14.50  
 LOGGER : K VALENTI  
 DRILLING COMPANY : J.C. ANDERSON  
 DRILLING RIG : CME-55  
 DATE STARTED : 01/03/95  
 DATE COMPLETED : 01/03/95

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION             | COLOR           | STRENGTH | MOISTURE | BLOW COUNT           | FIELD INSTRUMENT READING | COMMENTS                                                                                          |
|-----------|-------|----------|------------|----------------------------|-----------------|----------|----------|----------------------|--------------------------|---------------------------------------------------------------------------------------------------|
|           |       |          | 25         | Silty sand with gravel, SM | BROWN           | LSE      | MST      | 10<br>10<br>10<br>11 | HNU 0.0                  | Fill(?) Collected sample CW06-SB34-A01. 3" SPS used.                                              |
| -1        | 1     |          |            | No Sample Recovered        |                 |          |          |                      |                          |                                                                                                   |
| -2        | 2     |          | 100        | Poorly graded sand, SP     | GRAYISH BROWN   | LSE      | WET      | 15<br>18<br>17<br>21 | HNU 0.0                  | Fill(?). 3" SPS used. Collected samp. CW06-SB34 A02. Wet @ 2' bgs. Sands coarsens down. Fe stain. |
| -3        | 3     |          |            |                            |                 |          |          |                      |                          |                                                                                                   |
| -4        | 4     |          | 100        | Poorly graded sand, SP     | OLIVE GREEN-BRO | LSE      | SAT      | 3<br>3<br>4<br>4     | HNU 0.0                  | Colors: 4-5' olive green, 5-5.6' pale brown. 5.5-6' orange brown.                                 |
| -5        | 5     |          |            |                            |                 |          |          |                      |                          |                                                                                                   |
| -6        | 6     |          | 100        | Poorly graded sand, SP     | BROWN           | LSE      | SAT      | 4<br>4<br>5<br>5     |                          | Colors: 6-6.5 brown, 6.9-7.6 orange, 7.5-8' greenish brown.                                       |
| -7        | 7     |          |            |                            |                 |          |          |                      |                          |                                                                                                   |
| -8        | 8     |          | 100        | Poorly graded sand, SP     | BROWN           | LSE      | SAT      | 6<br>7<br>7<br>7     | HNU 0.0                  | Color: 8-8.5' orange 8.5-10' greenish brown more olive/brown towards bottom of spoon.             |
| -9        | 9     |          |            |                            |                 |          |          |                      |                          |                                                                                                   |
| -10       | 10    |          | 25         | Poorly graded sand, SP     | LT BROWN        | LSE      | SAT      | 10<br>10<br>13<br>15 | HNU 0.0                  |                                                                                                   |

# Borehole Log

Roy F. WESTON, Inc.

|             |                     |                    |               |
|-------------|---------------------|--------------------|---------------|
| PROJECT :   | FT. MONMOUTH        | TOTAL DEPTH :      | 14.50         |
| SITE NAME : | CHARLES WOOD AREA 6 | LOGGER :           | K VALENTI     |
| BORING ID : | CW6-MW34            | DRILLING COMPANY : | J.C. ANDERSON |
| NORTHING :  | 0.0000 estimated    | DRILLING RIG :     | CME-55        |
| EASTING :   | 0.0000 estimated    | DATE STARTED :     | 01/03/95      |
| ELEVATION : | 0.000 estimated     | DATE COMPLETED :   | 01/03/95      |

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION         | COLOR    | STRENGTH | MOISTURE | BLOW COUNT     | FIELD INSTRUMENT READING | COMMENTS                                                                                 |
|-----------|-------|----------|------------|------------------------|----------|----------|----------|----------------|--------------------------|------------------------------------------------------------------------------------------|
| -11       | 11    |          |            | Poorly graded sand, SP | LT BROWN | LSE      | SAT      |                | HNU 0.0                  |                                                                                          |
|           |       |          |            | No Sample Recovered    |          |          |          |                |                          |                                                                                          |
| -12       | 12    |          | 100        | Poorly graded sand, SP | LT BROWN | LSE      | SAT      | 10<br>13<br>15 | HNU 0.0                  | TD of borehole 14.5'.<br>Lt orange banding from<br>13-13.8. 13-8-14 heavy Fe<br>banding. |
| -13       | 13    |          |            |                        |          |          |          |                |                          |                                                                                          |
| -14       | 14    |          |            | Interval Not Sampled   |          |          |          |                |                          | Augered interval.                                                                        |
| -15       | 15    |          |            |                        |          |          |          |                |                          |                                                                                          |
| -16       | 16    |          |            |                        |          |          |          |                |                          |                                                                                          |
| -17       | 17    |          |            |                        |          |          |          |                |                          |                                                                                          |
| -18       | 18    |          |            |                        |          |          |          |                |                          |                                                                                          |
| -19       | 19    |          |            |                        |          |          |          |                |                          |                                                                                          |
| -20       | 20    |          |            |                        |          |          |          |                |                          |                                                                                          |

DATE: 06/20/95 \*\*\*\* Roy F. WESTON, Inc. LITHOLOGICAL DATA FOR - CLIENT ID: USAC2 \*\*\* PAGE: 19

| BOREHOLE<br>/WELL ID | SMP<br>NUM | LTH<br>NUM | LITHOLOGY<br>(FT BGS) | INT.  | SAMPLING<br>METHOD | SIZE<br>GRAVEL | GRAVEL<br>PCT. | SIZE<br>SAND | SAND<br>PCT | SILT<br>PCT | CLAY<br>PCT | ORGANIC<br>PCT | ROCK<br>TYPE | PLAST | SORT | STRENGTH | MOISTURE | STRAT<br>UNIT |
|----------------------|------------|------------|-----------------------|-------|--------------------|----------------|----------------|--------------|-------------|-------------|-------------|----------------|--------------|-------|------|----------|----------|---------------|
| CW6-MW34             | 1          | 1          | 0.00                  | 0.50  | SPS                |                | 20             |              | 65          | 15          | 0           | 0              |              | NON   | POR  | LSE      | MST      |               |
| CW6-MW34             | 1          | 2          | 0.50                  | 2.00  | SPS                |                | 0              |              | 0           | 0           | 0           | 0              |              |       |      |          |          |               |
| CW6-MW34             | 2          | 1          | 2.00                  | 4.00  | SPS                |                | 0              |              | 100         | 0           | 0           | 0              |              | NON   | MOD  | LSE      | WET      |               |
| CW6-MW34             | 3          | 1          | 4.00                  | 6.00  | SPS                |                | 0              |              | 100         | 0           | 0           | 0              |              | NON   | MOD  | LSE      | SAT      |               |
| CW6-MW34             | 4          | 1          | 6.00                  | 8.00  | SPS                |                | 0              | F            | 100         | 0           | 0           | 0              |              | NON   | MOD  | LSE      | SAT      |               |
| CW6-MW34             | 5          | 1          | 8.00                  | 10.00 | SPS                |                | 0              |              | 100         | 0           | 0           | 0              |              | NON   | MOD  | LSE      | SAT      |               |
| CW6-MW34             | 6          | 1          | 10.00                 | 10.50 | SPS                |                | 0              | MF           | 100         | 0           | 0           | 0              |              | NON   | MOD  | LSE      | SAT      |               |
| CW6-MW34             | 6          | 2          | 10.50                 | 12.00 | SPS                |                | 0              |              | 0           | 0           | 0           | 0              |              |       |      |          |          |               |
| CW6-MW34             | 7          | 1          | 12.00                 | 14.00 | SPS                |                | 0              |              | 100         | 0           | 0           | 0              |              | NON   | MOD  | LSE      | SAT      |               |
| CW6-MW34             | 8          | 1          | 14.00                 | 14.50 | NS                 |                | 0              |              | 0           | 0           | 0           | 0              |              |       |      |          |          |               |

**Borehole Location Data****Roy F. WESTON, Inc.**

BOREHOLE ID : CW9-MW35

PROJECT NAME: FT. MONMOUTH

BEGIN DATE : 01/03/95

END DATE : 01/04/95

LOGGER/COMPANY : P. THOMAS

BOREHOLE COMPLETED IN (&lt;O&gt;verburden &lt;B&gt;edrock) : 0

TOTAL DEPTH : 0.00

DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 12.25

INTERVAL: 0.00 ft. to 14.50 ft. BGS

METHOD : HSA

FLUID : NONE

BOREHOLE DIAMETER #2:

INTERVAL:

METHOD :

FLUID :

BOREHOLE DIAMETER #3:

INTERVAL:

METHOD :

FLUID :

DRILLING COMPANY : J.C. ANDERSON

DRILLER : WELLINGTON REEVE

DRILL RIG TYPE : CME-55

|                                 | ESTIMATED      | SURVEYED    |
|---------------------------------|----------------|-------------|
| SURFACE<br>ELEVATION :          | 0.000          | 29.270      |
| N. COORDINATE :                 | 0.0000         |             |
| E. COORDINATE :                 | 0.0000         |             |
| WELL PERMIT.....(Y)es (N)o: N   | PERMIT # :     | NJ 29 32600 |
| HOLE ABANDONED... (Y)es (N)o: N |                |             |
| WELL INSTALLED... (Y)es (N)o: Y |                |             |
| WELL CLUSTER.....(Y)es (N)o: N  | No. OF WELLS : | 0           |
| WELL NEST.....(Y)es (N)o: N     | No. OF WELLS : | 0           |
| PUMPS INSTALLED.. (Y)es (N)o: N | TYPE           | DEPTH       |
|                                 | PURGE :        | 0.00        |
|                                 | SAMPLE :       | 0.00        |

**BOREHOLE TESTING**

BOREHOLE GEOPHYSICS.....(Y)es (N)o: N

SLUG TESTS.....(Y)es (N)o: N

PACKER TESTS.....(Y)es (N)o: N

PUMPING TESTS.....(Y)es (N)o: N

**COMMENTS :**

Latitude-North: 40 deg 17' 48.9"

Longitude-West: 74 deg 04' 25.2"

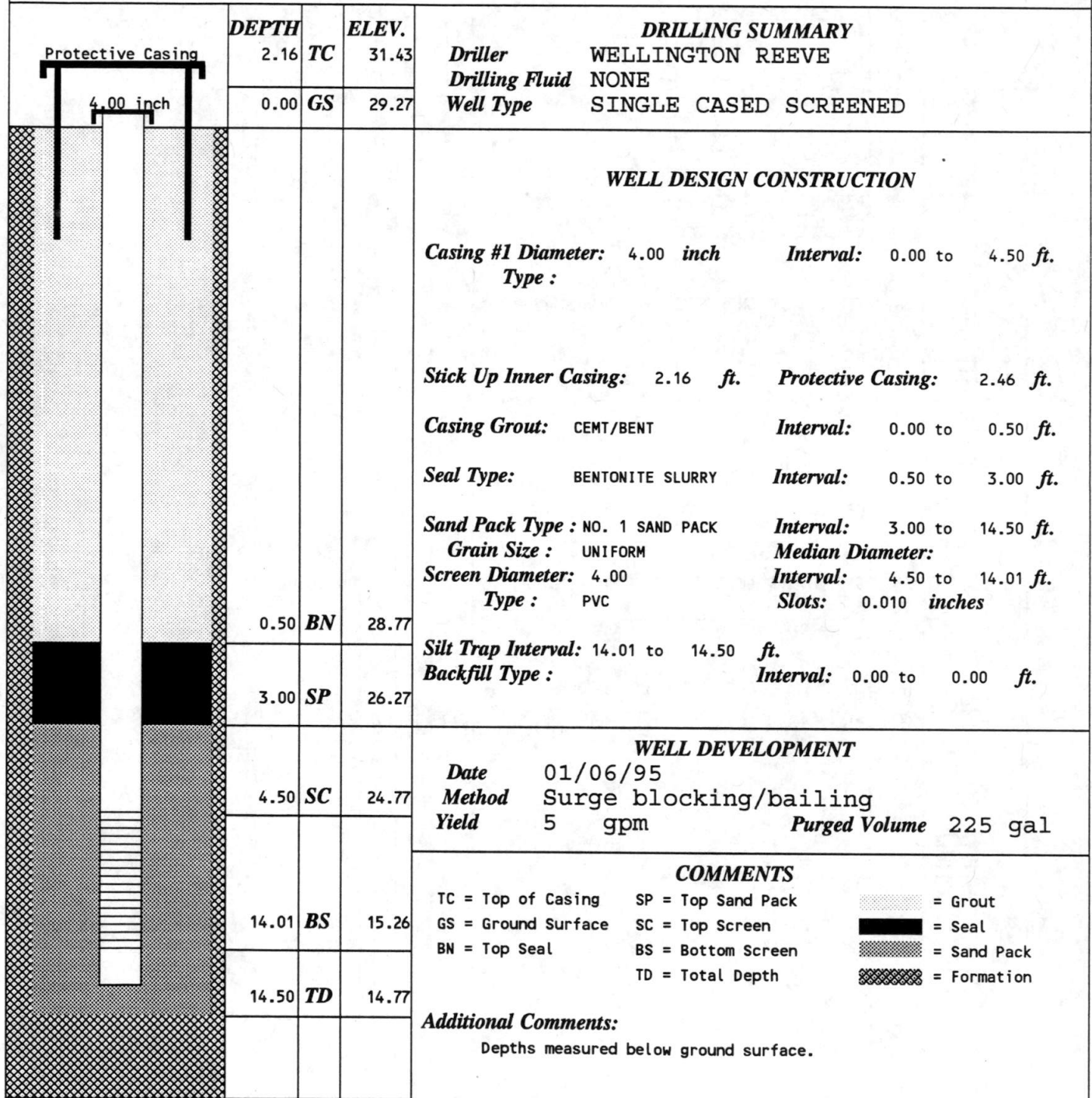


# Well Completion Summary

Roy F. WESTON, Inc.

CLIENT FT. MONMOUTH DRILLING FIRM J.C. ANDERSON  
SITE NAME CHARLES WOOD AREA 9 INSPECTOR P. THOMAS

WELL ID CW9-MW35 WATER LEVELS  
START DATE 01/03/95  
COMPLETION DATE 01/04/95



NOTE: Well Diagram not to Scale

Elevations are feet above mean sea level

# Borehole Log

Roy F. WESTON, Inc.

|                                 |                                  |
|---------------------------------|----------------------------------|
| PROJECT : FT. MONMOUTH          | TOTAL DEPTH : 0.00               |
| SITE NAME : CHARLES WOOD AREA 9 | LOGGER : P. THOMAS               |
| BORING ID : CW9-MW35            | DRILLING COMPANY : J.C. ANDERSON |
| NORTHING : 0.0000 estimated     | DRILLING RIG : CME-55            |
| EASTING : 0.0000 estimated      | DATE STARTED : 01/03/95          |
| ELEVATION : 29.270 surveyed     | DATE COMPLETED : 01/04/95        |

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION                                    | COLOR           | STRENGTH | MOISTURE | BLOW COUNT     | FIELD INSTRUMENT READING | COMMENTS                                                                                              |
|-----------|-------|----------|------------|---------------------------------------------------|-----------------|----------|----------|----------------|--------------------------|-------------------------------------------------------------------------------------------------------|
|           |       |          | 65         | Silty sand, SM                                    | DK BROWN        | SFT      | MST      | 6<br>8<br>11   | HNU 0.0                  | Fill. Topsoil; plant/<br>grass fragments. M. qtz<br>gravel -0.9-1.0 bgs.                              |
| 28        | 1     |          |            | Poorly graded sand with<br>silt, SP-SM            | GRAY BROWN      | LSE      | WET      |                | HNU 0.0                  |                                                                                                       |
|           |       |          |            | No Sample Recovered                               |                 |          |          |                |                          |                                                                                                       |
| 27        | 2     |          | 80         | Silty sand, SM                                    | OLV/GRAY/ORG/BR | LSE      | WET      | 36<br>22<br>11 | HNU 0.0                  | Color change from gray<br>brown 2-2.45' to olive<br>brown 2.45-2.7' bgs, and<br>orange brown 2.7-3.6. |
| 26        | 3     |          |            |                                                   |                 |          |          |                |                          |                                                                                                       |
|           |       |          |            | No Sample Recovered                               |                 |          |          |                |                          |                                                                                                       |
| 25        | 4     |          | 55         | Poorly graded sand with<br>silt and gravel, SP-SM | ORANGE BROWN    | LSE      | SAT      | 7<br>7<br>7    | HNU 0.0                  |                                                                                                       |
|           |       |          |            | Silty sand, SM                                    | OLIVE BROWN     | LSE      | SAT      |                | HNU 0.0                  |                                                                                                       |
| 24        | 5     |          |            | No Sample Recovered                               |                 |          |          |                |                          |                                                                                                       |
|           |       |          |            |                                                   |                 |          |          |                |                          |                                                                                                       |
| 23        | 6     |          | 80         | Silty sand, SM                                    | OLIVE BROWN     | SFT      | SAT      | 8<br>6<br>6    | HNU 0.0                  | Iron (Fe) stained laminae<br>6-7' bgs. 7-7.6' bgs.<br>color change to gray<br>brown, fining downward. |
| 22        | 7     |          |            |                                                   |                 |          |          |                |                          |                                                                                                       |
|           |       |          |            | No Sample Recovered                               |                 |          |          |                |                          |                                                                                                       |
| 21        | 8     |          | 50         | Silty sand, SM                                    | OLIVE BROWN     | SFT      | SAT      | 6<br>6<br>7    | HNU 0.0                  | Sand with silt laminae                                                                                |
| 20        | 9     |          |            | No Sample Recovered                               |                 |          |          |                |                          |                                                                                                       |
|           |       |          |            |                                                   |                 |          |          |                |                          |                                                                                                       |
| 19        | 10    |          | 30         | Silty sand, SM                                    | OLIVE BROWN     | SFT      | SAT      | 3<br>3<br>3    | HNU 0.0                  | Strong presence of dark<br>heavy minerals.                                                            |

# Borehole Log

Roy F. WESTON, Inc.

|             |                     |                    |               |
|-------------|---------------------|--------------------|---------------|
| PROJECT :   | FT. MONMOUTH        | TOTAL DEPTH :      | 0.00          |
| SITE NAME : | CHARLES WOOD AREA 9 | LOGGER :           | P. THOMAS     |
| BORING ID : | CW9-MW35            | DRILLING COMPANY : | J.C. ANDERSON |
| NORTHING :  | 0.0000 estimated    | DRILLING RIG :     | CME-55        |
| EASTING :   | 0.0000 estimated    | DATE STARTED :     | 01/03/95      |
| ELEVATION : | 29.270 surveyed     | DATE COMPLETED :   | 01/04/95      |

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION       | COLOR       | STRENGTH | MOISTURE | BLOW COUNT | FIELD INSTRUMENT READING | COMMENTS                                                      |
|-----------|-------|----------|------------|----------------------|-------------|----------|----------|------------|--------------------------|---------------------------------------------------------------|
|           |       |          |            | Silty sand, SM       | OLIVE BROWN | SFT      | SAT      |            | HNU 0.0                  | Strong presence of dark heavy minerals.                       |
| 18        | 11    |          |            | No Sample Recovered  |             |          |          |            |                          |                                                               |
| 17        | 12    |          | 50         | Silty sand, SM       | OLIVE BROWN | SFT      | SAT      | 4          | HNU 0.0                  | Strong presence of dark heavy minerals.                       |
| 16        | 13    |          |            | No Sample Recovered  |             |          |          | 980        |                          |                                                               |
| 15        | 14    |          |            | Interval Not Sampled |             |          |          |            |                          | Interval not sampled, augered interval; set well at 14.5 bgs. |
| 14        | 15    |          |            |                      |             |          |          |            |                          |                                                               |
| 13        | 16    |          |            |                      |             |          |          |            |                          |                                                               |
| 12        | 17    |          |            |                      |             |          |          |            |                          |                                                               |
| 11        | 18    |          |            |                      |             |          |          |            |                          |                                                               |
| 10        | 19    |          |            |                      |             |          |          |            |                          |                                                               |
| 9         | 20    |          |            |                      |             |          |          |            |                          |                                                               |

| BOREHOLE<br>/WELL ID | SMP<br>NUM | LTH<br>NUM | LITHOLOGY INT.<br>(FT BGS) | SAMPLING<br>METHOD | SIZE<br>GRAVEL | GRAVEL<br>PCT. | SIZE<br>SAND | SAND<br>PCT | SILT<br>PCT | CLAY<br>PCT | ORGANIC<br>PCT | ROCK<br>TYPE | PLAST | SORT | STRENGTH | MOISTURE | STRAT<br>UNIT |
|----------------------|------------|------------|----------------------------|--------------------|----------------|----------------|--------------|-------------|-------------|-------------|----------------|--------------|-------|------|----------|----------|---------------|
| CW9-MW35             | 1          | 1          | 0.00                       | 1.00               | SPS            | M              | 10           | 45          | 30          | 5           | 10             |              | NON   | MOD  | SFT      | MST      |               |
| CW9-MW35             | 1          | 2          | 1.00                       | 1.30               | SPS            |                | 0            | MFC         | 90          | 10          | 0              | 0            | NA    | MOD  | LSE      | WET      |               |
| CW9-MW35             | 1          | 3          | 1.30                       | 2.00               | SPS            |                | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| CW9-MW35             | 2          | 1          | 2.00                       | 3.60               | SPS            |                | 0            | MCF         | 85          | 15          | 0              | 0            | NA    | MOD  | LSE      | WET      |               |
| CW9-MW35             | 2          | 2          | 3.60                       | 4.00               | SPS            |                | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| CW9-MW35             | 3          | 1          | 4.00                       | 4.70               | SPS            | M              | 30           | MCF         | 60          | 10          | 0              | 0            | NA    | MOD  | LSE      | SAT      |               |
| CW9-MW35             | 3          | 2          | 4.70                       | 5.10               | SPS            |                | 0            | MCF         | 85          | 15          | 0              | 0            | NA    | MOD  | LSE      | SAT      |               |
| CW9-MW35             | 3          | 3          | 5.10                       | 6.00               | SPS            |                | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| CW9-MW35             | 4          | 1          | 6.00                       | 7.60               | SPS            |                | 0            | MF          | 70          | 30          | 0              | 0            | NA    | MOD  | SFT      | SAT      |               |
| CW9-MW35             | 4          | 2          | 7.60                       | 8.00               | SPS            |                | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| CW9-MW35             | 5          | 1          | 8.00                       | 9.00               | SPS            |                | 0            | FM          | 80          | 20          | 0              | 0            | NON   | MOD  | SFT      | SAT      |               |
| CW9-MW35             | 5          | 2          | 9.00                       | 10.00              | SPS            |                | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| CW9-MW35             | 6          | 1          | 10.00                      | 10.60              | SPS            |                | 0            | FM          | 80          | 20          | 0              | 0            | NA    | MOD  | SFT      | SAT      |               |
| CW9-MW35             | 6          | 2          | 10.60                      | 12.00              | SPS            |                | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| CW9-MW35             | 7          | 1          | 12.00                      | 13.00              | SPS            |                | 0            | MF          | 80          | 20          | 0              | 0            | NA    | MOD  | SFT      | SAT      |               |
| CW9-MW35             | 7          | 2          | 13.00                      | 14.00              | SPS            |                | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| CW9-MW35             | 8          | 1          | 14.00                      | 14.50              | NS             |                | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |

**Borehole Location Data****Roy F. WESTON, Inc.**

BOREHOLE ID : CW9-MW36  
BEGIN DATE : 01/04/94

PROJECT NAME: FT. MONMOUTH  
END DATE : 01/04/95

LOGGER/COMPANY : P. THOMAS

BOREHOLE COMPLETED IN (<0>verburden <B>edrock) : 0

TOTAL DEPTH : 14.00

DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 12.00

INTERVAL: 0.00 ft. to 14.00 ft. BGS

METHOD : FLUID :

BOREHOLE DIAMETER #2:

INTERVAL:

METHOD : FLUID :

BOREHOLE DIAMETER #3:

INTERVAL:

METHOD : FLUID :

DRILLING COMPANY : J.C. ANDERSON

DRILLER : STEVE BURGER

DRILL RIG TYPE : ATV-SKID RIG

|                                        | ESTIMATED        | SURVEYED |
|----------------------------------------|------------------|----------|
| SURFACE<br>ELEVATION :                 | 0.000            | 31.220   |
| N. COORDINATE :                        | 0.0000           |          |
| E. COORDINATE :                        | 0.0000           |          |
| WELL PERMIT.....(Y)es (N)o: N          | PERMIT # :       |          |
| HOLE ABANDONED... (Y)es (N)o: N        |                  |          |
| WELL INSTALLED... (Y)es (N)o: Y        |                  |          |
| WELL CLUSTER.....(Y)es (N)o: N         | No. OF WELLS : 0 |          |
| WELL NEST..... (Y)es (N)o: N           | No. OF WELLS : 0 |          |
| PUMPS INSTALLED.. (Y)es (N)o: N        | TYPE             | DEPTH    |
|                                        | PURGE :          | 0.00     |
|                                        | SAMPLE :         | 0.00     |
| BOREHOLE TESTING                       |                  |          |
| BOREHOLE GEOPHYSICS..... (Y)es (N)o: N |                  |          |
| SLUG TESTS..... (Y)es (N)o: N          |                  |          |
| PACKER TESTS..... (Y)es (N)o: N        |                  |          |
| PUMPING TESTS..... (Y)es (N)o: N       |                  |          |
| COMMENTS :                             |                  |          |
| Lat. N. 40 deg. 17'47"                 |                  |          |
| Long. W. 74 deg. 4'28"                 |                  |          |

# Well Completion Summary

Roy F. WESTON, Inc.

CLIENT FT. MONMOUTH  
SITE NAME

DRILLING FIRM J.C. ANDERSON  
INSPECTOR P. THOMAS

WELL ID CW9MW36  
START DATE 01/03/95  
COMPLETION DATE 01/04/95

## WATER LEVELS

|                                        |                                 | DEPTH |       | ELEV. | DRILLING SUMMARY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                       |
|----------------------------------------|---------------------------------|-------|-------|-------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| <p>Protective Casing<br/>4.00 inch</p> |                                 | 1.99  | TC    | 33.21 | Driller                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | STEVE BURGER          |
|                                        |                                 | 0.00  | GS    | 31.22 | Drilling Fluid                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | WATER                 |
|                                        |                                 |       |       |       | Well Type                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | SINGLE CASED SCREENED |
|                                        | <b>WELL DESIGN CONSTRUCTION</b> |       |       |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                       |
|                                        |                                 |       |       |       | <p>Casing #1 Diameter: 4.00 inch Interval: 0.00 to 14.00 ft.<br/>Type : PVC SCH 40</p> <p>Stick Up Inner Casing: 1.99 ft. Protective Casing: 2.38 ft.</p> <p>Casing Grout: CEMENT/BENT Interval: 0.00 to 1.00 ft.</p> <p>Seal Type: BENTONITE SLURRY Interval: 1.00 to 3.00 ft.</p> <p>Sand Pack Type : NO. 1 MORIE Interval: 3.00 to 14.00 ft.<br/>Grain Size : UNIFORM<br/>Screen Diameter: 4.00 Median Diameter:<br/>Type : PVC Interval: 4.00 to 13.54 ft.<br/>Slots: 0.010 inches</p> <p>Silt Trap Interval: 13.54 to 14.00 ft.<br/>Backfill Type : Interval: 0.00 to 0.00 ft.</p> |                       |
|                                        | 1.00                            | BN    | 30.22 |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                       |
|                                        | 3.00                            | SP    | 28.22 |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                       |
|                                        | 4.00                            | SC    | 27.22 |       | <b>WELL DEVELOPMENT</b><br>Date 01/06/95<br>Method Bailed, surge blocking<br>Yield 4 gpm Purged Volume 175 gal                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                       |
|                                        | 13.54                           | BS    | 17.68 |       | <b>COMMENTS</b><br>TC = Top of Casing SP = Top Sand Pack<br>GS = Ground Surface SC = Top Screen<br>BN = Top Seal BS = Bottom Screen<br>TD = Total Depth                                                                                                                                                                                                                                                                                                                                                                                                                                 |                       |
|                                        | 14.00                           | TD    | 17.22 |       | Additional Comments:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                       |

NOTE: Well Diagram not to Scale

Elevations are feet above mean sea level

# Borehole Log

Roy F. WESTON, Inc.

|             |                     |                    |               |
|-------------|---------------------|--------------------|---------------|
| PROJECT :   | FT. MONMOUTH        | TOTAL DEPTH :      | 14.00         |
| SITE NAME : | CHARLES WOOD AREA 9 | LOGGER :           | P. THOMAS     |
| BORING ID : | CW9-MW36            | DRILLING COMPANY : | J.C. ANDERSON |
| NORTHING :  | 0.0000 estimated    | DRILLING RIG :     | ATV-SKID RIG  |
| EASTING :   | 0.0000 estimated    | DATE STARTED :     | 01/04/94      |
| ELEVATION : | 31.220 surveyed     | DATE COMPLETED :   | 01/04/95      |

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION                    | COLOR           | STRENGTH | MOISTURE | BLOW COUNT | FIELD INSTRUMENT READING | COMMENTS                                                      |
|-----------|-------|----------|------------|-----------------------------------|-----------------|----------|----------|------------|--------------------------|---------------------------------------------------------------|
| 30        | 1     |          | 100        | Well graded sand with silt, SW-SM | BROWN TO BLACK  | LSE      | MST      | 4          | HNU 0.0                  | Fill/topsoil.                                                 |
| 29        | 2     |          | 100        | Well-graded sand, SW              | LT BROWN        | LSE      | WET      | 5          | HNU 0.0                  | Moderate lt. gray mottling. SPS wet @3' bgs                   |
| 28        | 3     |          |            |                                   |                 |          |          | 6          |                          |                                                               |
| 27        | 4     |          | 100        | Other                             | LT BROWN        | LSE      | SAT      | 5          | HNU 0.0                  | Saturated at 5' bgs. Lt. iron (Fe) staining at bottom of SPS. |
| 26        | 5     |          |            |                                   |                 |          |          | 8          |                          |                                                               |
| 25        | 6     |          | 50         | Other                             | LT ORANGE-BROWN | LSE      | SAT      | 7          | HNU 4.0                  |                                                               |
| 24        | 7     |          |            | No Sample Recovered               |                 |          |          | 10         |                          |                                                               |
| 23        | 8     |          | 100        | Poorly graded sand, SP            | LT ORANGE-BROWN | LSE      | SAT      | 3          | HNU 5.0                  | Lt (orange/red) iron (Fe) staining in lower half of SPS.      |
| 22        | 9     |          |            |                                   |                 |          |          | 3          |                          |                                                               |
| 21        | 10    |          | 100        | Poorly graded sand, SP            | YELLOWISH BROWN | LSE      | SAT      | 2          | HNU 5.0                  | Some iron (Fe) staining.                                      |

# Borehole Log

Roy F. WESTON, Inc.

PROJECT : FT. MONMOUTH  
 SITE NAME : CHARLES WOOD AREA 9  
 BORING ID : CW9-MW36  
 NORTHING : 0.0000 estimated  
 EASTING : 0.0000 estimated  
 ELEVATION : 31.220 surveyed

TOTAL DEPTH : 14.00  
 LOGGER : P. THOMAS  
 DRILLING COMPANY : J.C. ANDERSON  
 DRILLING RIG : ATV-SKID RIG  
 DATE STARTED : 01/04/94  
 DATE COMPLETED : 01/04/95

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION         | COLOR           | STRENGTH | MOISTURE | BLOW COUNT | FIELD INSTRUMENT READING | COMMENTS                                                             |
|-----------|-------|----------|------------|------------------------|-----------------|----------|----------|------------|--------------------------|----------------------------------------------------------------------|
| 20        | 11    |          |            | Poorly graded sand, SP | YELLOWISH BROWN | LSE      | SAT      |            | HNU 5.0                  | Some iron (Fe) staining.                                             |
| 19        | 12    |          | 100        | Poorly graded sand, SP | LT BROWN        | LSE      | SAT      | 3          | HNU 6.0                  | Fe staining throughout SPS. End SPS. To auger to 15. Set well TD 14. |
| 18        | 13    |          |            |                        |                 |          |          |            |                          |                                                                      |
| 17        | 14    |          |            |                        |                 |          |          |            |                          |                                                                      |
| 16        | 15    |          |            |                        |                 |          |          |            |                          |                                                                      |
| 15        | 16    |          |            |                        |                 |          |          |            |                          |                                                                      |
| 14        | 17    |          |            |                        |                 |          |          |            |                          |                                                                      |
| 13        | 18    |          |            |                        |                 |          |          |            |                          |                                                                      |
| 12        | 19    |          |            |                        |                 |          |          |            |                          |                                                                      |
| 11        | 20    |          |            |                        |                 |          |          |            |                          |                                                                      |



DATE: 06/20/95 \*\*\*\* Roy F. WESTON, Inc. LITHOLOGICAL DATA FOR - CLIENT ID: USAC2 \*\*\* PAGE: 27

| BOREHOLE | SMP | LTH | LITHOLOGY | INT.  | SAMPLING | SIZE   | GRAVEL | SIZE | SAND | SILT | CLAY | ORGANIC | ROCK |       |      |          |          | STRAT |
|----------|-----|-----|-----------|-------|----------|--------|--------|------|------|------|------|---------|------|-------|------|----------|----------|-------|
| /WELL ID | NUM | NUM | (FT BGS)  |       | METHOD   | GRAVEL | PCT.   | SAND | PCT  | PCT  | PCT  | PCT     | TYPE | PLAST | SORT | STRENGTH | MOISTURE | UNIT  |
| CW9-MW36 | 1   | 1   | 0.00      | 2.00  | SPS      | M      | 5      | CM   | 55   | 10   | 0    | 0       |      | NA    | POR  | LSE      | MST      |       |
| CW9-MW36 | 2   | 1   | 2.00      | 4.00  | SPS      |        | 0      | CM   | 100  | 0    | 0    | 0       |      | NA    | POR  | LSE      | WET      |       |
| CW9-MW36 | 3   | 1   | 4.00      | 6.00  | SPS      |        | 0      | CM   | 100  | 0    | 0    | 0       |      | NA    | MOD  | LSE      | SAT      |       |
| CW9-MW36 | 4   | 1   | 6.00      | 7.00  | SPS      |        | 0      | CM   | 100  | 0    | 0    | 0       |      | NA    | POR  | LSE      | SAT      |       |
| CW9-MW36 | 4   | 2   | 7.00      | 8.00  | SPS      |        | 0      |      | 0    | 0    | 0    | 0       |      |       |      |          |          |       |
| CW9-MW36 | 5   | 1   | 8.00      | 10.00 | SPS      |        | 0      | MF   | 100  | 0    | 0    | 0       |      | NA    | MOD  | LSE      | SAT      |       |
| CW9-MW36 | 6   | 1   | 10.00     | 12.00 | SPS      |        | 0      | MF   | 100  | 0    | 0    | 0       |      | NA    | MOD  | LSE      | SAT      |       |
| CW9-MW36 | 7   | 1   | 12.00     | 14.00 | SPS      |        | 0      | MF   | 100  | 0    | 0    | 0       |      | NA    | MOD  | LSE      | SAT      |       |

**Borehole Location Data****Roy F. WESTON, Inc.**

BOREHOLE ID : B6-MW6B  
BEGIN DATE : 01/10/95

PROJECT NAME: FT. MONMOUTH  
END DATE : 01/10/95

LOGGER/COMPANY : K. VALENTI

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : O

TOTAL DEPTH : 0.00

DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 12.00

INTERVAL: 0.00 ft. to 14.00 ft. BGS

METHOD : HSA

FLUID : WATER

BOREHOLE DIAMETER #2:

INTERVAL:

METHOD :

FLUID :

BOREHOLE DIAMETER #3:

INTERVAL:

METHOD :

FLUID :

DRILLING COMPANY : J.C. ANDERSON

DRILLER : WELLS REEVE

DRILL RIG TYPE : CME-55

|                        | ESTIMATED | SURVEYED |
|------------------------|-----------|----------|
| SURFACE<br>ELEVATION : | 0.000     | 35.190   |
| N. COORDINATE :        | 0.0000    |          |
| E. COORDINATE :        | 0.0000    |          |

WELL PERMIT.....(Y)es (N)o: N PERMIT # : NJ 29 32602

HOLE ABANDONED... (Y)es (N)o: N

WELL INSTALLED... (Y)es (N)o: Y

WELL CLUSTER..... (Y)es (N)o: N No. OF WELLS : 0

WELL NEST..... (Y)es (N)o: N No. OF WELLS : 0

PUMPS INSTALLED.. (Y)es (N)o: N

PURGE :

DEPTH

0.00

SAMPLE :

0.00

**BOREHOLE TESTING**

BOREHOLE GEOPHYSICS..... (Y)es (N)o: N

SLUG TESTS..... (Y)es (N)o: N

PACKER TESTS..... (Y)es (N)o: N

PUMPING TESTS..... (Y)es (N)o: N

**COMMENTS :**

Latitude-North: 40 deg 17' 48.4"

Longitude-West: 74 deg 04' 43.8"

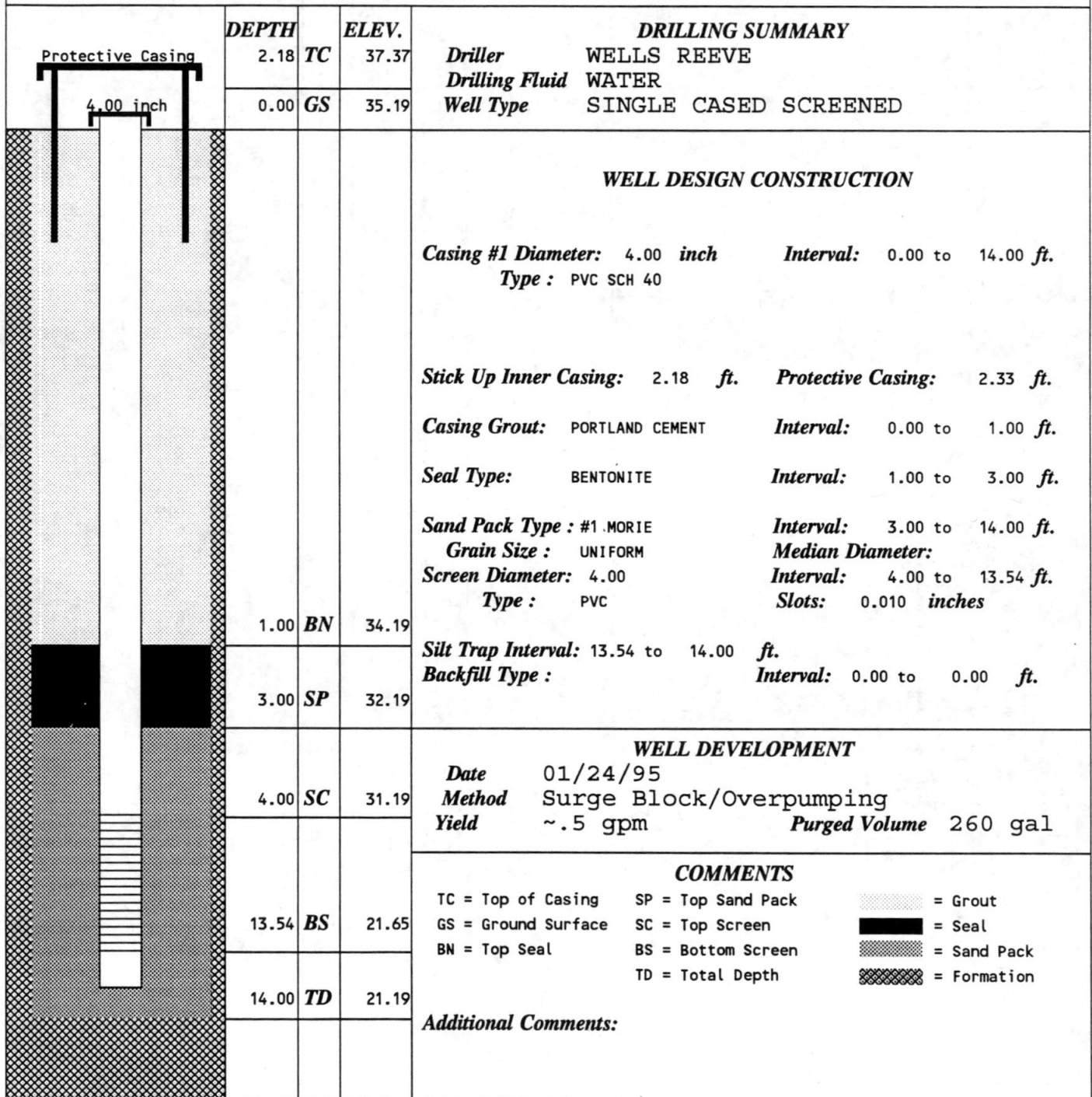
**Roy F. WESTON, Inc.**

**CLIENT** FT. MONMOUTH  
**SITE NAME** CHARLES WOOD AREA

**DRILLING FIRM** J.C. ANDERSON  
**INSPECTOR** K. VALENTI

|                        |          |
|------------------------|----------|
| <b>WELL ID</b>         | B6-MW6B  |
| <b>START DATE</b>      | 01/10/95 |
| <b>COMPLETION DATE</b> | 01/10/95 |

## WATER LEVELS



**NOTE: Well Diagram not to Scale**

*Elevations are feet above mean sea level*

# Borehole Log

Roy F. WESTON, Inc.

|                               |                                  |
|-------------------------------|----------------------------------|
| PROJECT : FT. MONMOUTH        | TOTAL DEPTH : 0.00               |
| SITE NAME : CHARLES WOOD AREA | LOGGER : K. VALENTI              |
| BORING ID : B6-MW6B           | DRILLING COMPANY : J.C. ANDERSON |
| NORTHING : 0.0000 estimated   | DRILLING RIG : CME-55            |
| EASTING : 0.0000 estimated    | DATE STARTED : 01/10/95          |
| ELEVATION : 35.190 surveyed   | DATE COMPLETED : 01/10/95        |

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION                      | COLOR           | STRENGTH | MOISTURE | BLOW COUNT          | FIELD INSTRUMENT READING | COMMENTS                                                                                        |
|-----------|-------|----------|------------|-------------------------------------|-----------------|----------|----------|---------------------|--------------------------|-------------------------------------------------------------------------------------------------|
| 34        | 1     |          |            | Poorly graded sand, SP              | YELLOW LT BROWN | LSE      | MST      | 14<br>11<br>9<br>11 | HNU 2.0                  | Uncertain/fill? Used 3" spoon. Collected sample B6-SB01-A01. Top of spoon 3 inches was topsoil. |
| 33        | 2     |          | 100        | Poorly graded sand, SP              | YELLOW LT BROWN | LSE      | WET      | 6<br>7<br>10        | HNU 2.5                  | Uncertain/fill? Drove 2" and 3" SPS. Some Fe (orange) staining. Sample B6-SB01-A02 collected.   |
| 32        | 3     |          |            |                                     |                 |          |          |                     |                          |                                                                                                 |
| 31        | 4     |          | 100        | Poorly graded sand with silt, SP-SM | YLLWSH LT BROWN | LSE      | SAT      | 3<br>3<br>4<br>5    | HNU 0.0                  | Uncertain/fill? 2" sps here to 10. Sps wet. Mild orange staining. Soil brown towards bottom.    |
| 30        | 5     |          |            |                                     |                 |          |          |                     |                          |                                                                                                 |
| 29        | 6     |          | 100        | Poorly graded sand with silt, SP-SM | BROWN           | LSE      | SAT      | 3<br>4<br>5<br>6    | HNU 0.0                  |                                                                                                 |
| 28        | 7     |          |            |                                     |                 |          |          |                     |                          |                                                                                                 |
| 27        | 8     |          | 100        | Elastic silt, MH                    | BLACK           | FRM      | DRY      | 3<br>4<br>4<br>9    | HNU 0.0                  | Top 2" of SPS is same as above interval. Sharp interval change.                                 |
| 26        | 9     |          |            |                                     |                 |          |          |                     |                          |                                                                                                 |
| 25        | 10    |          | 100        | Elastic silt, MH                    | BLACK           | FRM      | MST      | 4<br>4<br>5<br>6    | HNU 0.0                  | Same as above. Top 4" of sps was wet.                                                           |

# Borehole Log

Roy F. WESTON, Inc.

|           |                     |                  |                 |
|-----------|---------------------|------------------|-----------------|
| PROJECT   | : FT. MONMOUTH      | TOTAL DEPTH      | : 0.00          |
| SITE NAME | : CHARLES WOOD AREA | LOGGER           | : K. VALENTI    |
| BORING ID | : B6-MW6B           | DRILLING COMPANY | : J.C. ANDERSON |
| NORTHING  | : 0.0000 estimated  | DRILLING RIG     | : CME-55        |
| EASTING   | : 0.0000 estimated  | DATE STARTED     | : 01/10/95      |
| ELEVATION | : 35.190 surveyed   | DATE COMPLETED   | : 01/10/95      |

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION   | COLOR | STRENGTH | MOISTURE | BLOW COUNT | FIELD INSTRUMENT READING | COMMENTS                              |
|-----------|-------|----------|------------|------------------|-------|----------|----------|------------|--------------------------|---------------------------------------|
| 24        | 11    |          |            | Elastic silt, MH | BLACK | FRM      | MST      |            | HNU 0.0                  | Same as above. Top 4" of sps was wet. |
| 23        | 12    |          | 100        | Elastic silt, MH | BLACK | FRM      | WET      |            | HNU 0.0                  | TD of borehole.                       |
| 22        | 13    |          |            |                  |       |          |          |            |                          |                                       |
| 21        | 14    |          |            |                  |       |          |          |            |                          |                                       |
| 20        | 15    |          |            |                  |       |          |          |            |                          |                                       |
| 19        | 16    |          |            |                  |       |          |          |            |                          |                                       |
| 18        | 17    |          |            |                  |       |          |          |            |                          |                                       |
| 17        | 18    |          |            |                  |       |          |          |            |                          |                                       |
| 16        | 19    |          |            |                  |       |          |          |            |                          |                                       |
| 15        | 20    |          |            |                  |       |          |          |            |                          |                                       |

DATE: 06/20/95 \*\*\*\* Roy F. WESTON, Inc. LITHOLOGICAL DATA FOR - CLIENT ID: USAC2 \*\*\* PAGE: 4

| BOREHOLE<br>/WELL ID | SMP<br>NUM | LTH<br>NUM | LITHOLOGY INT.<br>(FT BGS) | SAMPLING<br>METHOD | SIZE<br>GRAVEL PCT. | GRAVEL<br>SIZE<br>SAND | SAND<br>PCT | SILT<br>PCT | CLAY<br>PCT | ORGANIC<br>PCT | ROCK<br>TYPE | PLAST | SORT | STRENGTH | MOISTURE | STRAT<br>UNIT |
|----------------------|------------|------------|----------------------------|--------------------|---------------------|------------------------|-------------|-------------|-------------|----------------|--------------|-------|------|----------|----------|---------------|
| B6-MW6B              | 1          | 1          | 0.00                       | 2.00               | SPS                 | 0                      | MF          | 100         | 0           | 0              | 0            | NON   | WEL  | LSE      | MST      |               |
| B6-MW6B              | 2          | 1          | 2.00                       | 4.00               | SPS                 | 0                      |             | 95          | 5           | 0              | 0            | NON   | WEL  | LSE      | WET      |               |
| B6-MW6B              | 3          | 1          | 4.00                       | 6.00               | SPS                 | 0                      | MF          | 90          | 10          | 0              | 0            | NON   | WEL  | LSE      | SAT      |               |
| B6-MW6B              | 4          | 1          | 6.00                       | 8.00               | SPS                 | 0                      | MF          | 90          | 10          | 0              | 0            | NON   | WEL  | LSE      | SAT      |               |
| B6-MW6B              | 5          | 1          | 8.00                       | 10.00              | SPS                 | 0                      |             | 5           | 65          | 30             | 0            | MOD   | MOD  | FRM      | DRY      |               |
| B6-MW6B              | 6          | 1          | 10.00                      | 12.00              | SPS                 | 0                      |             | 2           | 70          | 28             | 0            | MOD   | WEL  | FRM      | MST      |               |
| B6-MW6B              | 7          | 1          | 12.00                      | 14.00              | SPS                 | 0                      |             | 0           | 90          | 10             | 0            | MOD   | WEL  | FRM      | WET      |               |

**Borehole Location Data****Roy F. WESTON, Inc.**

BOREHOLE ID : B7-MW7B  
BEGIN DATE : 01/10/95

PROJECT NAME: FT. MONMOUTH  
END DATE : 01/10/95

LOGGER/COMPANY : K. VALENTI

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : 0

TOTAL DEPTH : 15.00

DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 12.00

INTERVAL: 0.00 ft. to 15.00 ft. BGS

METHOD : HSA

FLUID : WATER

BOREHOLE DIAMETER #2:

INTERVAL:

METHOD :

FLUID :

BOREHOLE DIAMETER #3:

INTERVAL:

METHOD :

FLUID :

DRILLING COMPANY : J.C. ANDERSON

DRILLER : WELLS REEVE

DRILL RIG TYPE : CME-55

|                        | ESTIMATED | SURVEYED |
|------------------------|-----------|----------|
| SURFACE<br>ELEVATION : | 0.000     | 64.270   |
| N. COORDINATE :        | 0.0000    |          |
| E. COORDINATE :        | 0.0000    |          |

WELL PERMIT.....(Y)es (N)o: N PERMIT # : NJ 29 32604

HOLE ABANDONED... (Y)es (N)o: N

WELL INSTALLED... (Y)es (N)o: Y

WELL CLUSTER.....(Y)es (N)o: N No. OF WELLS : 0

WELL NEST.....(Y)es (N)o: N No. OF WELLS : 0

| PUMPS INSTALLED.. (Y)es (N)o: N | TYPE     | DEPTH |
|---------------------------------|----------|-------|
|                                 | PURGE :  | 0.00  |
|                                 | SAMPLE : | 0.00  |

**BOREHOLE TESTING**

BOREHOLE GEOPHYSICS..... (Y)es (N)o: N

SLUG TESTS..... (Y)es (N)o: N

PACKER TESTS..... (Y)es (N)o: N

PUMPING TESTS..... (Y)es (N)o: N

**COMMENTS :**

Sample B7-SB01-A01 collected at 1-2' bgs. Sample B7-SB01-A02 collected at 5-6' bgs. Top of water table ~6' bgs. Latitude-North: 40 deg 17' 32.5"/Longitude-West: 74 deg 05' 21.3"

# Well Completion Summary

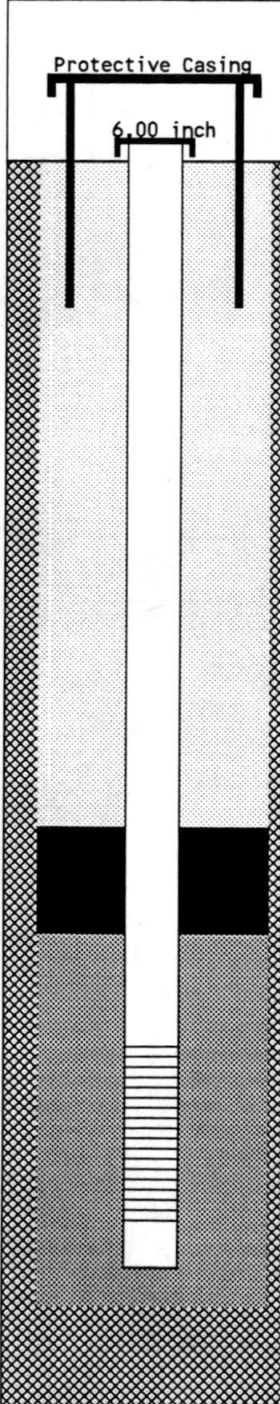
Roy F. WESTON, Inc.

**CLIENT** FT. MONMOUTH  
**SITE NAME** CHARLES WOOD AREA

**DRILLING FIRM** J.C. ANDERSON  
**INSPECTOR** K. VALENTI

**WELL ID** B7-MW7B  
**START DATE** 01/10/95  
**COMPLETION DATE** 01/10/95

## WATER LEVELS

|                                                                                    |                          |    |       |                                                                                                                                                                                       |                       |
|------------------------------------------------------------------------------------|--------------------------|----|-------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
|  | DEPTH                    |    | ELEV. | DRILLING SUMMARY                                                                                                                                                                      |                       |
|                                                                                    | 2.04                     | TC | 66.31 | Driller                                                                                                                                                                               | WELLS REEVE           |
|                                                                                    | 0.00                     | GS | 64.27 | Drilling Fluid                                                                                                                                                                        | WATER                 |
|                                                                                    |                          |    |       | Well Type                                                                                                                                                                             | SINGLE CASED SCREENED |
|                                                                                    | WELL DESIGN CONSTRUCTION |    |       |                                                                                                                                                                                       |                       |
|                                                                                    |                          |    |       | Casing #1 Diameter: 6.00 inch Interval: 0.00 to 15.00 ft.<br>Type : PVC SCH 40                                                                                                        |                       |
|                                                                                    |                          |    |       | Stick Up Inner Casing: 2.04 ft. Protective Casing: 2.47 ft.                                                                                                                           |                       |
|                                                                                    |                          |    |       | Casing Grout: PORTLAND CEMENT Interval: 0.00 to 1.00 ft.                                                                                                                              |                       |
|                                                                                    |                          |    |       | Seal Type: BENTONITE Interval: 1.00 to 3.00 ft.                                                                                                                                       |                       |
|                                                                                    |                          |    |       | Sand Pack Type : #1 MORIE Interval: 3.00 to 15.00 ft.<br>Grain Size : UNIFORM Median Diameter:<br>Screen Diameter: 4.00 Interval: 5.00 to 14.54 ft.<br>Type : PVC Slots: 0.010 inches |                       |
|                                                                                    | 1.00                     | BN | 63.27 | Silt Trap Interval: 14.54 to 15.00 ft.                                                                                                                                                |                       |
|                                                                                    | 3.00                     | SP | 61.27 | Backfill Type : Interval: 0.00 to 0.00 ft.                                                                                                                                            |                       |
|                                                                                    |                          |    |       | WELL DEVELOPMENT                                                                                                                                                                      |                       |
|                                                                                    | 5.00                     | SC | 59.27 | Date 01/24/95<br>Method Surge Block/Overpumping<br>Yield 2 gpm Purged Volume 122 gal                                                                                                  |                       |
|                                                                                    |                          |    |       | COMMENTS                                                                                                                                                                              |                       |
|                                                                                    | 14.54                    | BS | 49.73 | TC = Top of Casing SP = Top Sand Pack<br>GS = Ground Surface SC = Top Screen<br>BN = Top Seal BS = Bottom Screen<br>TD = Total Depth                                                  |                       |
|                                                                                    | 15.00                    | TD | 49.27 | = Grout<br>= Seal<br>= Sand Pack<br>= Formation                                                                                                                                       |                       |
|                                                                                    |                          |    |       | Additional Comments:                                                                                                                                                                  |                       |

NOTE: Well Diagram not to Scale

Elevations are feet above mean sea level



# Borehole Log

Roy F. WESTON, Inc.

PROJECT : FT. MONMOUTH  
 SITE NAME : CHARLES WOOD AREA  
 BORING ID : B7-MW7B  
 NORTHING : 0.0000 estimated  
 EASTING : 0.0000 estimated  
 ELEVATION : 64.270 surveyed

TOTAL DEPTH : 15.00  
 LOGGER : K. VALENTI  
 DRILLING COMPANY : J.C. ANDERSON  
 DRILLING RIG : CME-55  
 DATE STARTED : 01/10/95  
 DATE COMPLETED : 01/10/95

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION         | COLOR        | STRENGTH | MOISTURE | BLOW COUNT | FIELD INSTRUMENT READING | COMMENTS                                                                                         |
|-----------|-------|----------|------------|------------------------|--------------|----------|----------|------------|--------------------------|--------------------------------------------------------------------------------------------------|
| 63        | 1     |          | 100        | Silt with sand, ML     | BROWN        | STF      | DRY      | 3          | HNU 2.0                  | Fill/uncertain. 3" SPS Sampled B7-SB01-A01 from tightly packed silt.                             |
| 62        | 2     |          | 100        | Silt with sand, ML     | BROWN        | STF      | DRY      | 3          | HNU 1.0                  | Fill/uncertain. 3" sps used.                                                                     |
| 61        | 3     |          |            | Poorly graded sand, SP | YELLOW BROWN | LSE      | MST      | 5          | HNU 1.0                  | Fill/uncertain. Brown sand 2.4-2.6' Grades into lt brown-yellowish sand w/few cobbles to 4' bgs. |
| 60        | 4     |          | 100        | Poorly graded sand, SP | OLIVE        | LSE      | WET      | 5          | HNU 5.0                  | Fill/uncertain. 3" SPS used. Sample B7-SB01-A02.                                                 |
| 59        | 5     |          |            |                        |              |          |          |            |                          |                                                                                                  |
| 58        | 6     |          | 100        | Poorly graded sand, SP | OLIVE GRAY   | LSE      | SAT      | 2          | HNU 0.0                  | SPS 2" used. Saturated at 6' bgs.                                                                |
| 57        | 7     |          |            |                        |              |          |          |            |                          |                                                                                                  |
| 56        | 8     |          | 50         | Poorly graded sand, SP |              | LSE      | SAT      | 5          | HNU 0.0                  | SPS saturated.                                                                                   |
| 55        | 9     |          |            | No Sample Recovered    |              |          |          |            |                          |                                                                                                  |
| 54        | 10    |          | 100        | Poorly graded sand, SP | LT BROWN     | LSE      | SAT      | 2          | HNU 0.0                  |                                                                                                  |

# Borehole Log

Roy F. WESTON, Inc.

|           |                     |                  |                 |
|-----------|---------------------|------------------|-----------------|
| PROJECT   | : FT. MONMOUTH      | TOTAL DEPTH      | : 15.00         |
| SITE NAME | : CHARLES WOOD AREA | LOGGER           | : K. VALENTI    |
| BORING ID | : B7-MW7B           | DRILLING COMPANY | : J.C. ANDERSON |
| NORTHING  | : 0.0000 estimated  | DRILLING RIG     | : CME-55        |
| EASTING   | : 0.0000 estimated  | DATE STARTED     | : 01/10/95      |
| ELEVATION | : 64.270 surveyed   | DATE COMPLETED   | : 01/10/95      |

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION         | COLOR    | STRENGTH | MOISTURE | BLOW COUNT | FIELD INSTRUMENT READING | COMMENTS                                              |
|-----------|-------|----------|------------|------------------------|----------|----------|----------|------------|--------------------------|-------------------------------------------------------|
| 53        | 11    |          |            | Poorly graded sand, SP | LT BROWN | LSE      | SAT      |            | HNU 0.0                  |                                                       |
| 52        | 12    |          | 100        | Poorly graded sand, SP | LT BROWN | LSE      | SAT      | 96556      | HNU 0.0                  | Some lt orange banding. Auger to 15' bgs to set well. |
| 51        | 13    |          |            |                        |          |          |          |            |                          |                                                       |
| 50        | 14    |          |            | Interval Not Sampled   |          |          |          |            |                          | Augered interval TD at 15' bgs.                       |
| 49        | 15    |          |            |                        |          |          |          |            |                          |                                                       |
| 48        | 16    |          |            |                        |          |          |          |            |                          |                                                       |
| 47        | 17    |          |            |                        |          |          |          |            |                          |                                                       |
| 46        | 18    |          |            |                        |          |          |          |            |                          |                                                       |
| 45        | 19    |          |            |                        |          |          |          |            |                          |                                                       |
| 44        | 20    |          |            |                        |          |          |          |            |                          |                                                       |

| BOREHOLE<br>/WELL ID | SMP<br>NUM | LTH<br>NUM | LITHOLOGY INT.<br>(FT BGS) | SAMPLING<br>METHOD | SIZE<br>GRAVEL PCT. | GRAVEL<br>SIZE<br>SAND | SAND<br>PCT | SILT<br>PCT | CLAY<br>PCT | ORGANIC<br>PCT | ROCK<br>TYPE | PLAST | SORT | STRENGTH | MOISTURE | STRAT<br>UNIT |
|----------------------|------------|------------|----------------------------|--------------------|---------------------|------------------------|-------------|-------------|-------------|----------------|--------------|-------|------|----------|----------|---------------|
| B7-MW7B              | 1          | 1          | 0.00                       | 2.00               | SPS                 | 0                      | 15          | 80          | 0           | 5              |              | LOW   | POR  | STF      | DRY      |               |
| B7-MW7B              | 2          | 1          | 2.00                       | 2.40               | SPS                 | 0                      | 15          | 85          | 0           | 0              |              | LOW   | NA   | STF      | DRY      |               |
| B7-MW7B              | 2          | 2          | 2.40                       | 4.00               | SPS                 | 5                      | MF          | 95          | 0           | 0              | 0            | NON   | MOD  | LSE      | MST      |               |
| B7-MW7B              | 3          | 1          | 4.00                       | 6.00               | SPS                 | 0                      | MF          | 100         | 0           | 0              | 0            | NON   | MOD  | LSE      | WET      |               |
| B7-MW7B              | 4          | 1          | 6.00                       | 8.00               | SPS                 | 0                      | M           | 100         | 0           | 0              | 0            | NON   | MOD  | LSE      | SAT      |               |
| B7-MW7B              | 5          | 1          | 8.00                       | 9.00               | SPS                 | 0                      |             | 100         | 0           | 0              | 0            | NA    | MOD  | LSE      | SAT      |               |
| B7-MW7B              | 5          | 2          | 9.00                       | 10.00              | SPS                 | 0                      |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| B7-MW7B              | 6          | 1          | 10.00                      | 12.00              | SPS                 | 0                      |             | 100         | 0           | 0              | 0            | NON   | MOD  | LSE      | SAT      |               |
| B7-MW7B              | 7          | 1          | 12.00                      | 14.00              | SPS                 | 0                      | MF          | 100         | 0           | 0              | 0            | NA    | WEL  | LSE      | SAT      |               |
| B7-MW7B              | 8          | 1          | 14.00                      | 15.00              | NS                  | 0                      |             | 0           | 0           | 0              | 0            |       |      |          |          |               |

**Borehole Location Data****Roy F. WESTON, Inc.**

BOREHOLE ID : B8-MW8B  
BEGIN DATE : 01/10/95

PROJECT NAME: FT. MONMOUTH  
END DATE : 01/10/95

LOGGER/COMPANY : P. THOMAS

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : O

TOTAL DEPTH : 15.00

DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 12.25

INTERVAL: 0.00 ft. to 15.00 ft. BGS

METHOD : HSA

FLUID : WATER

BOREHOLE DIAMETER #2:

INTERVAL:

METHOD :

FLUID :

BOREHOLE DIAMETER #3:

INTERVAL:

METHOD :

FLUID :

DRILLING COMPANY : J.C. ANDERSON

DRILLER : STEVE BURGER

DRILL RIG TYPE : MOBILE B-57

|                        | ESTIMATED | SURVEYED |
|------------------------|-----------|----------|
| SURFACE<br>ELEVATION : | 0.000     | 47.040   |
| N. COORDINATE :        | 0.0000    |          |
| E. COORDINATE :        | 0.0000    |          |

WELL PERMIT.....(Y)es (N)o: N PERMIT # : NJ 29 32598

HOLE ABANDONED....(Y)es (N)o: N

WELL INSTALLED....(Y)es (N)o: Y

WELL CLUSTER.....(Y)es (N)o: N No. OF WELLS : 0

WELL NEST.....(Y)es (N)o: N No. OF WELLS : 0

PUMPS INSTALLED..(Y)es (N)o: N TYPE

DEPTH

PURGE :

0.00

SAMPLE :

0.00

**BOREHOLE TESTING**

BOREHOLE GEOPHYSICS.....(Y)es (N)o: N

SLUG TESTS.....(Y)es (N)o: N

PACKER TESTS.....(Y)es (N)o: N

PUMPING TESTS.....(Y)es (N)o: N

**COMMENTS :**

Latitude-North: 40 deg 17' 35.3"

Longitude-West: 74 deg 05' 01.4"

# Well Completion Summary

Roy F. WESTON, Inc.

**CLIENT** FT. MONMOUTH  
**SITE NAME** CHARLES WOOD AREA

**DRILLING FIRM** J.C. ANDERSON  
**INSPECTOR** P. THOMAS

**WELL ID** B8-MW8B  
**START DATE** 01/10/95  
**COMPLETION DATE** 01/10/95

## WATER LEVELS

|                                           |                                 | DEPTH |    | ELEV. | DRILLING SUMMARY              |                         |
|-------------------------------------------|---------------------------------|-------|----|-------|-------------------------------|-------------------------|
| <p>Protective Casing<br/>4.00 inch</p>    |                                 | 1.86  | TC | 48.90 | <b>Driller</b>                | STEVE BURGER            |
|                                           |                                 | 0.00  | GS | 47.04 | <b>Drilling Fluid</b>         | WATER                   |
|                                           |                                 |       |    |       | <b>Well Type</b>              | SINGLE CASED SCREENED   |
|                                           | <b>WELL DESIGN CONSTRUCTION</b> |       |    |       |                               |                         |
|                                           |                                 |       |    |       | <b>Casing #1 Diameter:</b>    | 4.00 inch               |
|                                           |                                 |       |    |       | <b>Interval:</b>              | 0.00 to 5.00 ft.        |
|                                           |                                 |       |    |       | <b>Type :</b>                 | PVC SCH 40              |
|                                           |                                 |       |    |       | <b>Stick Up Inner Casing:</b> | 1.86 ft.                |
|                                           |                                 |       |    |       | <b>Protective Casing:</b>     | 2.37 ft.                |
|                                           |                                 |       |    |       | <b>Casing Grout:</b>          | CEMT/BENT               |
|                                           |                                 |       |    |       | <b>Interval:</b>              | 0.00 to 0.50 ft.        |
|                                           |                                 |       |    |       | <b>Seal Type:</b>             | BENTONITE SLURRY        |
|                                           |                                 |       |    |       | <b>Interval:</b>              | 0.50 to 3.00 ft.        |
|                                           |                                 |       |    |       | <b>Sand Pack Type :</b>       | NO. 1 SAND MORIE        |
|                                           |                                 |       |    |       | <b>Grain Size :</b>           | UNIFORM                 |
|                                           |                                 |       |    |       | <b>Interval:</b>              | 3.00 to 15.00 ft.       |
|                                           |                                 |       |    |       | <b>Screen Diameter:</b>       | 4.00                    |
|                                           |                                 |       |    |       | <b>Interval:</b>              | 5.00 to 14.54 ft.       |
|                                           |                                 |       |    |       | <b>Type :</b>                 | PVC                     |
|                                           |                                 |       |    |       | <b>Slots:</b>                 | 0.010 inches            |
|                                           |                                 | 0.50  | BN | 46.54 | <b>Silt Trap Interval:</b>    | 14.54 to 15.00 ft.      |
|                                           |                                 |       |    |       | <b>Backfill Type :</b>        |                         |
|                                           |                                 | 3.00  | SP | 44.04 | <b>Interval:</b>              | 0.00 to 0.00 ft.        |
| <b>WELL DEVELOPMENT</b>                   |                                 |       |    |       |                               |                         |
|                                           |                                 | 5.00  | SC | 42.04 | <b>Date</b>                   | 01/24/95                |
|                                           |                                 |       |    |       | <b>Method</b>                 | Surge Blocking/Overpump |
|                                           |                                 |       |    |       | <b>Yield</b>                  | 1-4 gpm                 |
|                                           |                                 |       |    |       | <b>Purged Volume</b>          | 210 gal                 |
| <b>COMMENTS</b>                           |                                 |       |    |       |                               |                         |
|                                           |                                 | 14.54 | BS | 32.50 | TC = Top of Casing            | SP = Top Sand Pack      |
|                                           |                                 |       |    |       | GS = Ground Surface           | SC = Top Screen         |
|                                           |                                 |       |    |       | BN = Top Seal                 | BS = Bottom Screen      |
|                                           |                                 | 15.00 | TD | 47.04 | TD = Total Depth              |                         |
|                                           |                                 |       |    |       | = Grout                       | = Seal                  |
|                                           |                                 |       |    |       | = Sand Pack                   | = Formation             |
| <b>Additional Comments:</b>               |                                 |       |    |       |                               |                         |
| Depths are measured below ground surface. |                                 |       |    |       |                               |                         |

NOTE: Well Diagram not to Scale

Elevations are feet above mean sea level

# Borehole Log

Roy F. WESTON, Inc.

PROJECT : FT. MONMOUTH  
 SITE NAME : CHARLES WOOD AREA  
 BORING ID : B8-MW8B  
 NORTHING : 0.0000 estimated  
 EASTING : 0.0000 estimated  
 ELEVATION : 47.040 surveyed

TOTAL DEPTH : 15.00  
 LOGGER : P. THOMAS  
 DRILLING COMPANY : J.C. ANDERSON  
 DRILLING RIG : MOBILE B-57  
 DATE STARTED : 01/10/95  
 DATE COMPLETED : 01/10/95

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION                      | COLOR        | STRENGTH | MOISTURE | BLOW COUNT | FIELD INSTRUMENT READING | COMMENTS                                                                     |
|-----------|-------|----------|------------|-------------------------------------|--------------|----------|----------|------------|--------------------------|------------------------------------------------------------------------------|
|           |       |          | 50         | Sandy silt, ML                      | BROWN        | SFT      | MST      | 14         | OVM 0.0                  | Topsoil.                                                                     |
|           |       |          |            | Poorly graded sand, SP              | YELLOW BROWN | LSE      | MST      | 15         | OVM 0.0                  | Sharp contact. Sampled 1-2' bgs B8-SB01-A01.                                 |
| 46        | 1     |          |            | No Sample Recovered                 |              |          |          |            |                          |                                                                              |
|           |       |          | 100        | Poorly graded sand, SP              | YELLOW BROWN | LSE      | MST      | 15         | OVM 0.0                  | Same unit as above.                                                          |
| 45        | 2     |          |            |                                     |              |          |          | 15         |                          |                                                                              |
| 44        | 3     |          |            |                                     |              |          |          | 15         |                          |                                                                              |
|           |       |          | 70         | Poorly graded sand with silt, SP-SM | YELLOW BROWN | LSE      | WET      | 11         | OVM 0.0                  | Sat ~5' bgs; Iron (Fe) stained zones throughout. Sampled B8-SB01-A02         |
| 43        | 4     |          |            |                                     |              |          |          | 16         |                          |                                                                              |
| 42        | 5     |          |            | No Sample Recovered                 |              |          |          | 17         |                          |                                                                              |
|           |       |          | 60         | Silty sand, SM                      | YELLOW BROWN | LSE      | SAT      | 16         | OVM 0.0                  |                                                                              |
| 41        | 6     |          |            |                                     |              |          |          | 10         |                          |                                                                              |
| 40        | 7     |          |            | No Sample Recovered                 |              |          |          | 15         |                          |                                                                              |
|           |       |          | 75         | Silty sand, SM                      | YELLOW BROWN | LSE      | SAT      | 15         | OVM 0.0                  |                                                                              |
| 39        | 8     |          |            |                                     |              |          |          | 10         |                          |                                                                              |
| 38        | 9     |          |            | No Sample Recovered                 |              |          |          | 15         |                          |                                                                              |
|           |       |          |            | Interval Not Sampled                |              |          |          |            | OVM 0.0                  | Augered interval to keep sands out of hole. Cutting same lithology as above. |
| 37        | 10    |          |            |                                     |              |          |          |            |                          |                                                                              |

# Borehole Log

Roy F. WESTON, Inc.

|             |                   |                    |               |
|-------------|-------------------|--------------------|---------------|
| PROJECT :   | FT. MONMOUTH      | TOTAL DEPTH :      | 15.00         |
| SITE NAME : | CHARLES WOOD AREA | LOGGER :           | P. THOMAS     |
| BORING ID : | B8-MW8B           | DRILLING COMPANY : | J.C. ANDERSON |
| NORTHING :  | 0.0000 estimated  | DRILLING RIG :     | MOBILE B-57   |
| EASTING :   | 0.0000 estimated  | DATE STARTED :     | 01/10/95      |
| ELEVATION : | 47.040 surveyed   | DATE COMPLETED :   | 01/10/95      |

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION       | COLOR        | STRENGTH | MOISTURE | BLOW COUNT | FIELD INSTRUMENT READING | COMMENTS                                                                     |
|-----------|-------|----------|------------|----------------------|--------------|----------|----------|------------|--------------------------|------------------------------------------------------------------------------|
|           |       |          |            | Interval Not Sampled |              |          |          |            | OVM 0.0                  | Augered interval to keep sands out of hole. Cutting same lithology as above. |
| 36        | 11    |          |            |                      |              |          |          |            |                          |                                                                              |
| 35        | 12    |          | 80         | Silty sand, SM       | YELLOW BROWN | LSE      | SAT      | 6459       | OVM 0.0                  | Iron (Fe) stained zones throughout - dark heavy minerals throughout spoon    |
| 34        | 13    |          |            |                      |              |          |          |            |                          |                                                                              |
|           |       |          |            | No Sample Recovered  |              |          |          |            |                          |                                                                              |
| 33        | 14    |          |            | Interval Not Sampled |              |          |          |            | OVM 0.0                  | Augered interval. Set well at 15' bgs. TD=15' bgs.                           |
| 32        | 15    |          |            |                      |              |          |          |            |                          |                                                                              |
| 31        | 16    |          |            |                      |              |          |          |            |                          |                                                                              |
| 30        | 17    |          |            |                      |              |          |          |            |                          |                                                                              |
| 29        | 18    |          |            |                      |              |          |          |            |                          |                                                                              |
| 28        | 19    |          |            |                      |              |          |          |            |                          |                                                                              |
| 27        | 20    |          |            |                      |              |          |          |            |                          |                                                                              |

| BOREHOLE<br>/WELL ID | SMP<br>NUM | LTH<br>NUM | LITHOLOGY INT.<br>(FT BGS) | SAMPLING<br>METHOD | SIZE<br>GRAVEL PCT. | SIZE<br>SAND | SAND<br>PCT | SILT<br>PCT | CLAY<br>PCT | ORGANIC<br>PCT | ROCK<br>TYPE | PLAST | SORT | STRENGTH | MOISTURE | STRAT<br>UNIT |
|----------------------|------------|------------|----------------------------|--------------------|---------------------|--------------|-------------|-------------|-------------|----------------|--------------|-------|------|----------|----------|---------------|
| B8-MW8B              | 1          | 1          | 0.00                       | 0.40               | SPS                 | 0            | MF          | 40          | 30          | 5              | 25           | NON   | POR  | SFT      | MST      |               |
| B8-MW8B              | 1          | 2          | 0.40                       | 1.50               | SPS                 | 0            | MF          | 95          | 5           | 0              | 0            | NA    | WEL  | LSE      | MST      |               |
| B8-MW8B              | 1          | 3          | 1.50                       | 2.00               | SPS                 | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| B8-MW8B              | 2          | 1          | 2.00                       | 4.00               | SPS                 | 0            | MF          | 95          | 5           | 0              | 0            | NA    | WEL  | LSE      | MST      |               |
| B8-MW8B              | 3          | 1          | 4.00                       | 5.40               | SPS                 | 0            | MF          | 90          | 10          | 0              | 0            | NA    | MOD  | LSE      | WET      |               |
| B8-MW8B              | 3          | 2          | 5.40                       | 6.00               | SPS                 | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| B8-MW8B              | 4          | 1          | 6.00                       | 7.20               | SPS                 | 0            | MF          | 85          | 15          | 0              | 0            | NA    | MOD  | LSE      | SAT      |               |
| B8-MW8B              | 4          | 2          | 7.20                       | 8.00               | SPS                 | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| B8-MW8B              | 5          | 1          | 8.00                       | 9.50               | SPS                 | 0            | MF          | 85          | 15          | 0              | 0            | NA    | MOD  | LSE      | SAT      |               |
| B8-MW8B              | 5          | 2          | 9.50                       | 10.00              | SPS                 | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| B8-MW8B              | 6          | 1          | 10.00                      | 12.00              | NS                  | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| B8-MW8B              | 7          | 1          | 12.00                      | 13.60              | SPS                 | 0            | MF          | 85          | 15          | 0              | 0            | NA    | MOD  | LSE      | SAT      |               |
| B8-MW8B              | 7          | 2          | 13.60                      | 14.00              | SPS                 | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| B8-MW8B              | 8          | 1          | 14.00                      | 15.00              | NS                  | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |



**Borehole Location Data****Roy F. WESTON, Inc.**

BOREHOLE ID : B9-MW9B  
BEGIN DATE : 01/23/95

PROJECT NAME: FT. MONMOUTH  
END DATE : 01/23/95

LOGGER/COMPANY : K. VALENTI

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : 0

TOTAL DEPTH : 0.00

DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 12.00

INTERVAL: 0.00 ft. to 15.00 ft. BGS

METHOD : HSA

FLUID : WATER

BOREHOLE DIAMETER #2:

INTERVAL:

METHOD :

FLUID :

BOREHOLE DIAMETER #3:

INTERVAL:

METHOD :

FLUID :

DRILLING COMPANY : J.C. ANDERSON

DRILLER : STEVE BURGER

DRILL RIG TYPE : ATV

|                        | ESTIMATED | SURVEYED |
|------------------------|-----------|----------|
| SURFACE<br>ELEVATION : | 0.000     | 43.130   |
| N. COORDINATE :        | 0.0000    |          |
| E. COORDINATE :        | 0.0000    |          |

WELL PERMIT.....(Y)es (N)o: N PERMIT # : NJ 29 32603

HOLE ABANDONED... (Y)es (N)o: N

WELL INSTALLED... (Y)es (N)o: Y

WELL CLUSTER.....(Y)es (N)o: N No. OF WELLS : 0

WELL NEST.....(Y)es (N)o: N No. OF WELLS : 0

PUMPS INSTALLED.. (Y)es (N)o: N

PURGE :

DEPTH

0.00

SAMPLE :

0.00

**BOREHOLE TESTING**

BOREHOLE GEOPHYSICS.....(Y)es (N)o: N

SLUG TESTS.....(Y)es (N)o: N

PACKER TESTS.....(Y)es (N)o: N

PUMPING TESTS.....(Y)es (N)o: N

**COMMENTS :**

Water @5'-4" Sampled at 6"-12" B9-SB01/B9-SB01-A01 MS/MSD  
and 4' to 5'4" B9-SB01-A02/B9-SB01-002 Dup. Latitude-North:  
40 deg 17' 55.3"/Longitude-West: 74 deg 04' 54.5".

# Well Completion Summary

Roy F. WESTON, Inc.

**CLIENT** FT. MONMOUTH  
**SITE NAME** CHARLES WOOD AREA

**DRILLING FIRM** J.C. ANDERSON  
**INSPECTOR** K. VALENTI

**WELL ID** B9-MW9B  
**START DATE** 01/23/95  
**COMPLETION DATE** 01/23/95

## WATER LEVELS

|                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | DEPTH | ELEV.                                                                                                                                                                                                                                 | DRILLING SUMMARY            |                       |
|----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|-----------------------|
| <p>Protective Casing<br/>4.00 inch</p> | 2.18                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | TC    | 45.31                                                                                                                                                                                                                                 | <b>Driller</b>              | STEVE BURGER          |
|                                        | 0.00                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | GS    | 43.13                                                                                                                                                                                                                                 | <b>Drilling Fluid</b>       | WATER                 |
|                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |       |                                                                                                                                                                                                                                       | <b>Well Type</b>            | SINGLE CASED SCREENED |
|                                        | <b>WELL DESIGN CONSTRUCTION</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |       |                                                                                                                                                                                                                                       |                             |                       |
|                                        | <p><b>Casing #1 Diameter:</b> 4.00 inch      <b>Interval:</b> 0.00 to 15.00 ft.<br/> <b>Type :</b> PVC SCH 40</p> <p><b>Stick Up Inner Casing:</b> 2.18 ft.      <b>Protective Casing:</b> 2.52 ft.</p> <p><b>Casing Grout:</b> PORTLAND CEMENT      <b>Interval:</b> 0.00 to 1.00 ft.</p> <p><b>Seal Type:</b> BENTONITE      <b>Interval:</b> 1.00 to 3.00 ft.</p> <p><b>Sand Pack Type :</b> #1 MORIE      <b>Interval:</b> 3.00 to 15.00 ft.<br/> <b>Grain Size :</b> UNIFORM      <b>Median Diameter:</b><br/> <b>Screen Diameter:</b> 4.00      <b>Interval:</b> 5.00 to 14.54 ft.<br/> <b>Type :</b> PVC      <b>Slots:</b> 0.010 inches</p> <p><b>Silt Trap Interval:</b> 14.54 to 15.00 ft.<br/> <b>Backfill Type :</b>      <b>Interval:</b> 0.00 to 0.00 ft.</p> |       |                                                                                                                                                                                                                                       |                             |                       |
| 1.00                                   | BN                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 42.13 | <b>WELL DEVELOPMENT</b><br><b>Date</b> 01/25/95<br><b>Method</b> Surge Blocking/Bailing<br><b>Yield</b> <1 gpm <b>Purged Volume</b> 290 gal                                                                                           |                             |                       |
| 3.00                                   | SP                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 40.13 |                                                                                                                                                                                                                                       |                             |                       |
| 5.00                                   | SC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 38.13 | <b>COMMENTS</b><br>TC = Top of Casing      SP = Top Sand Pack       = Grout<br>GS = Ground Surface      SC = Top Screen       = Seal<br>BN = Top Seal      BS = Bottom Screen       = Sand Pack<br>TD = Total Depth       = Formation |                             |                       |
| 14.54                                  | BS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 28.59 |                                                                                                                                                                                                                                       |                             |                       |
| 15.00                                  | TD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 28.13 |                                                                                                                                                                                                                                       |                             |                       |
|                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |       |                                                                                                                                                                                                                                       | <b>Additional Comments:</b> |                       |

NOTE: Well Diagram not to Scale

Elevations are feet above mean sea level

# Borehole Log

Roy F. WESTON, Inc.

PROJECT : FT. MONMOUTH  
SITE NAME : CHARLES WOOD AREA  
BORING ID : B9-MW9B  
NORTHING : 0.0000 estimated  
EASTING : 0.0000 estimated  
ELEVATION : 43.130 surveyed

TOTAL DEPTH : 0.00  
LOGGER : K. VALENTI  
DRILLING COMPANY : J.C. ANDERSON  
DRILLING RIG : ATV  
DATE STARTED : 01/23/95  
DATE COMPLETED : 01/23/95

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION                      | COLOR          | STRENGTH | MOISTURE | BLOW COUNT           | FIELD INSTRUMENT READING | COMMENTS                                                                                        |
|-----------|-------|----------|------------|-------------------------------------|----------------|----------|----------|----------------------|--------------------------|-------------------------------------------------------------------------------------------------|
| 42        | 1     |          | 100        | Silty sand with gravel, SM          | BROWN          | SFT      | MST      | 11<br>12<br>13<br>14 | OVM 0.0                  | Fill-3" SPS used. Top 3"=topsoil. Sampled B-9SB01-A01/B-9SB01-E02.                              |
| 41        | 2     |          | 100        | Poorly graded sand with silt, SP-SM | OLIVE BROWN    | SFT      | WET      | 7<br>9<br>11<br>12   | OVM 0.0                  | Fill. 3" sps used. Heavy iron staining throughout SPS.                                          |
| 40        | 3     |          |            |                                     |                |          |          |                      |                          |                                                                                                 |
| 39        | 4     |          | 100        | Poorly graded sand, SP              | FOREST GRN-BRN | SFT      | WET      | 5<br>9<br>11<br>14   | OVM 0.0                  | Fill. Heavy iron staining throughout SPS (3" sps). Sampled B9-SB01-A02/B9-SB01-C02 Dup.         |
| 38        | 5     |          |            |                                     |                |          |          |                      |                          |                                                                                                 |
| 37        | 6     |          | 100        | Silty sand, SM                      | GREENISH BROWN | SFT      | WET      | 4<br>3<br>4<br>5     | OVM 0.0                  | Fill. 2" SPS to TD of well. SPS saturated. Less sand w/depth, org iron (Fe) banding throughout. |
| 36        | 7     |          |            |                                     |                |          |          |                      |                          |                                                                                                 |
| 35        | 8     |          | 100        | Silty sand, SM                      | GREEN BROWN    | SFT      | SAT      | 5<br>6<br>7<br>8     | OVM 0.0                  | Fill w/heavy iron (Fe) staining bottom 6" of SPS. Sand size black minerals with silt.           |
| 34        | 9     |          |            | Elastic silt, MH                    | DK BROWN-BLACK | FRM      | WET      |                      | OVM 0.0                  | 6" of sand size dk to black minerals w/silt moist to wet throughout spoon.                      |
| 33        | 10    |          | 100        | Elastic silt, MH                    | DK GRAY-BLACK  | SFT      | WET      | 1<br>2<br>1<br>1     | OVM 0.0                  |                                                                                                 |

# Borehole Log

Roy F. WESTON, Inc.

|                               |                                  |
|-------------------------------|----------------------------------|
| PROJECT : FT. MONMOUTH        | TOTAL DEPTH : 0.00               |
| SITE NAME : CHARLES WOOD AREA | LOGGER : K. VALENTI              |
| BORING ID : B9-MW9B           | DRILLING COMPANY : J.C. ANDERSON |
| NORTHING : 0.0000 estimated   | DRILLING RIG : ATV               |
| EASTING : 0.0000 estimated    | DATE STARTED : 01/23/95          |
| ELEVATION : 43.130 surveyed   | DATE COMPLETED : 01/23/95        |

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION       | COLOR          | STRENGTH | MOISTURE | BLOW COUNT | FIELD INSTRUMENT READING | COMMENTS                                                   |
|-----------|-------|----------|------------|----------------------|----------------|----------|----------|------------|--------------------------|------------------------------------------------------------|
| 32        | 11    |          |            | Elastic silt, MH     | DK GRAY-BLACK  | SFT      | WET      |            | OVM 0.0                  |                                                            |
| 31        | 12    |          | 100        | Elastic silt, MH     | DK GRAY TO BLK | FRM      | WET      | 3          | OVM 0.0                  | End B.H. Auger to 15'. Wet well at 15'.                    |
| 30        | 13    |          |            |                      |                |          |          |            |                          |                                                            |
| 29        | 14    |          |            | Interval Not Sampled |                |          |          |            |                          | Augered interval. Set well at 15'. ID of borehole 15' bgs. |
| 28        | 15    |          |            |                      |                |          |          |            |                          |                                                            |
| 27        | 16    |          |            |                      |                |          |          |            |                          |                                                            |
| 26        | 17    |          |            |                      |                |          |          |            |                          |                                                            |
| 25        | 18    |          |            |                      |                |          |          |            |                          |                                                            |
| 24        | 19    |          |            |                      |                |          |          |            |                          |                                                            |
| 23        | 20    |          |            |                      |                |          |          |            |                          |                                                            |

| BOREHOLE<br>/WELL ID | SMP<br>NUM | LTH<br>NUM | LITHOLOGY<br>(FT BGS) | INT.  | SAMPLING<br>METHOD | SIZE<br>GRAVEL PCT. | SIZE<br>SAND | SAND<br>PCT | SILT<br>PCT | CLAY<br>PCT | ORGANIC<br>PCT | ROCK<br>TYPE | PLAST | SORT | STRENGTH | MOISTURE | STRAT<br>UNIT |
|----------------------|------------|------------|-----------------------|-------|--------------------|---------------------|--------------|-------------|-------------|-------------|----------------|--------------|-------|------|----------|----------|---------------|
| B9-MW9B              | 1          | 1          | 0.00                  | 2.00  | SPS                | 15                  |              | 60          | 25          | 0           | 0              |              | NON   | POR  | SFT      | MST      |               |
| B9-MW9B              | 2          | 1          | 2.00                  | 4.00  | SPS                | 0                   | MF           | 90          | 10          | 0           | 0              |              | NON   | MOD  | SFT      | WET      |               |
| B9-MW9B              | 3          | 1          | 4.00                  | 6.00  | SPS                | 0                   | F            | 95          | 5           | 0           | 0              |              | NON   | WEL  | SFT      | WET      |               |
| B9-MW9B              | 4          | 1          | 6.00                  | 8.00  | SPS                | 0                   |              | 65          | 30          | 5           | 0              |              | LOW   | MOD  | SFT      | WET      |               |
| B9-MW9B              | 5          | 1          | 8.00                  | 9.50  | SPS                | 0                   | F            | 75          | 25          | 0           | 0              |              | LOW   | MOD  | SFT      | SAT      |               |
| B9-MW9B              | 5          | 2          | 9.50                  | 10.00 | SPS                | 0                   |              | 5           | 90          | 5           | 0              |              | MOD   | WEL  | FRM      | WET      |               |
| B9-MW9B              | 6          | 1          | 10.00                 | 12.00 | SPS                | 0                   |              | 10          | 80          | 10          | 0              |              | MOD   | WEL  | SFT      | WET      |               |
| B9-MW9B              | 7          | 1          | 12.00                 | 14.00 | SPS                | 0                   |              | 10          | 80          | 10          | 0              |              | MOD   | WEL  | FRM      | WET      |               |
| B9-MW9B              | 8          | 1          | 14.00                 | 15.00 | NS                 | 0                   |              | 0           | 0           | 0           | 0              |              |       |      |          |          |               |

**Borehole Location Data****Roy F. WESTON, Inc.**

BOREHOLE ID : B10MW10B  
BEGIN DATE : 01/10/95

PROJECT NAME: FT. MONMOUTH  
END DATE : 01/10/95

LOGGER/COMPANY : P. THOMAS

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : 0

TOTAL DEPTH : 14.50

DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 12.25

INTERVAL: 0.00 ft. to 14.50 ft. BGS

METHOD : HSA

FLUID : WATER

BOREHOLE DIAMETER #2:

INTERVAL:

METHOD :

FLUID :

BOREHOLE DIAMETER #3:

INTERVAL:

METHOD :

FLUID :

DRILLING COMPANY : J.C. ANDERSON

DRILLER : STEVE BURGER

DRILL RIG TYPE : MOBILE B-57

|                     | ESTIMATED | SURVEYED |
|---------------------|-----------|----------|
| SURFACE ELEVATION : | 0.000     | 51.360   |
| N. COORDINATE :     | 0.0000    |          |
| E. COORDINATE :     | 0.0000    |          |

WELL PERMIT.....(Y)es (N)o: N PERMIT # : NJ 29 32605

HOLE ABANDONED... (Y)es (N)o: N

WELL INSTALLED... (Y)es (N)o: Y

WELL CLUSTER..... (Y)es (N)o: N No. OF WELLS : 0

WELL NEST..... (Y)es (N)o: N No. OF WELLS : 0

PUMPS INSTALLED.. (Y)es (N)o: N TYPE

|          |      |
|----------|------|
| PURGE :  | 0.00 |
| SAMPLE : | 0.00 |

**BOREHOLE TESTING**

BOREHOLE GEOPHYSICS..... (Y)es (N)o: N

SLUG TESTS..... (Y)es (N)o: N

PACKER TESTS..... (Y)es (N)o: N

PUMPING TESTS..... (Y)es (N)o: N

**COMMENTS :**

Latitude-North: 40 deg 17' 52.0"

Longitude-West: 74 deg 05' 16.0"

# Well Completion Summary

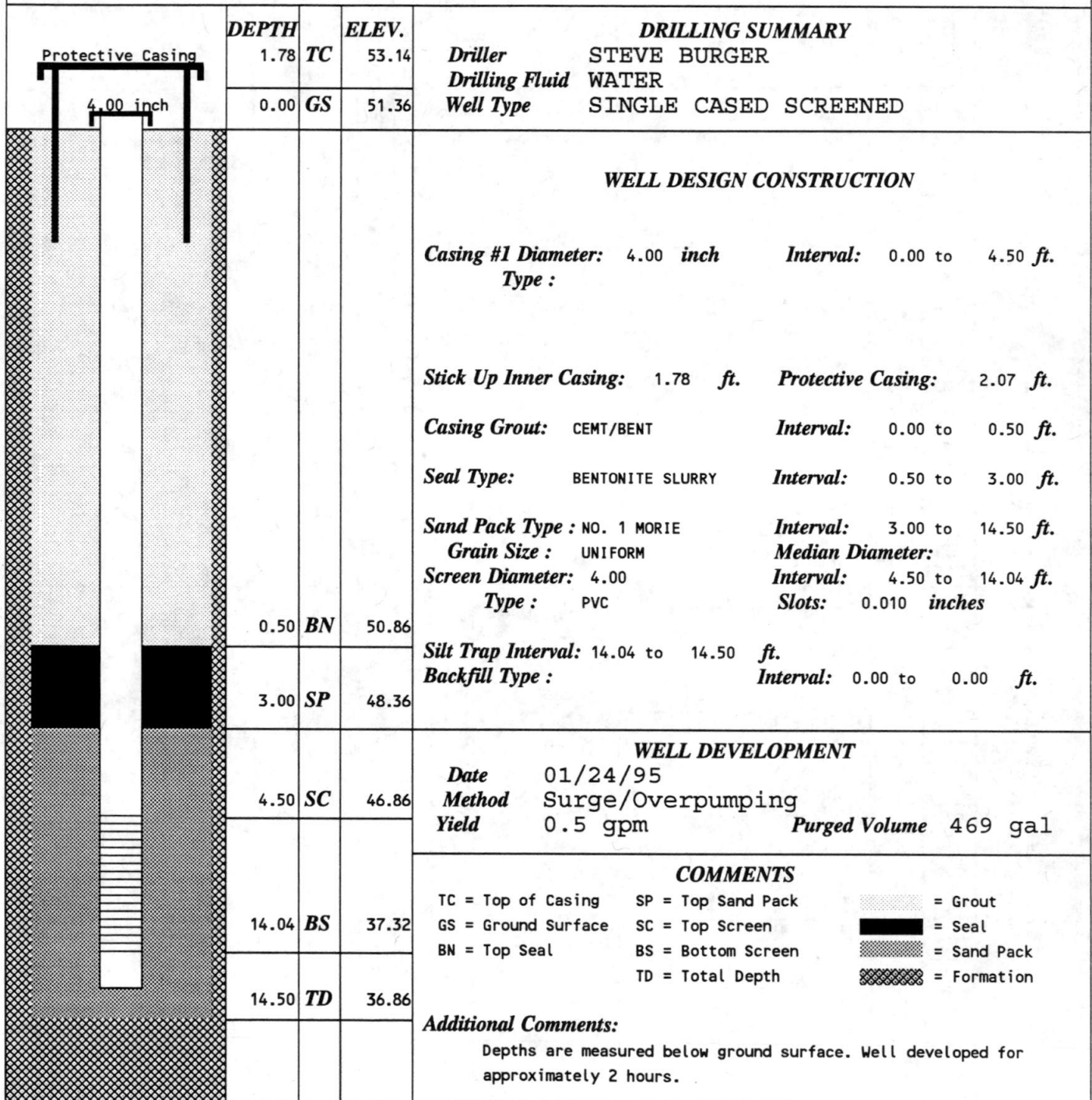
Roy F. WESTON, Inc.

**CLIENT** FT. MONMOUTH  
**SITE NAME** CHARLES WOOD AREA

**DRILLING FIRM** J.C. ANDERSON  
**INSPECTOR** P. THOMAS

**WELL ID** B10MW10B  
**START DATE** 01/10/95  
**COMPLETION DATE** 01/10/95

**WATER LEVELS**  
4.36 FT (TOC) ON 01/24/95



NOTE: Well Diagram not to Scale

Elevations are feet above mean sea level

# Borehole Log

Roy F. WESTON, Inc.

|           |                     |                  |                 |
|-----------|---------------------|------------------|-----------------|
| PROJECT   | : FT. MONMOUTH      | TOTAL DEPTH      | : 14.50         |
| SITE NAME | : CHARLES WOOD AREA | LOGGER           | : P. THOMAS     |
| BORING ID | : B10MW10B          | DRILLING COMPANY | : J.C. ANDERSON |
| NORTHING  | : 0.0000 estimated  | DRILLING RIG     | : MOBILE B-57   |
| EASTING   | : 0.0000 estimated  | DATE STARTED     | : 01/10/95      |
| ELEVATION | : 51.360 surveyed   | DATE COMPLETED   | : 01/10/95      |

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION      | COLOR          | STRENGTH | MOISTURE | BLOW COUNT | FIELD INSTRUMENT READING | COMMENTS                                 |
|-----------|-------|----------|------------|---------------------|----------------|----------|----------|------------|--------------------------|------------------------------------------|
|           |       |          | 75         | Sandy silt, ML      | BROWN          | SFT      | MST      | 3          | OVM 0.0                  | Topsoil; collected sample                |
|           |       |          |            | Silty sand, SM      | OLIVE BROWN    | SFT      | MST      | 10         | OVM 0.0                  | Collected sample 1-2' bgs                |
| 50        | 1     |          |            | No Sample Recovered |                |          |          | 14         |                          | TCL+3/TAL/CN<br>B10-SB01-A01             |
| 49        | 2     |          | 100        | Silty sand, SM      | FE BRN/OLV BRN | LSE      | WET      | 14         | OVM 0.0                  | Fill? Collected                          |
| 48        | 3     |          |            |                     |                |          |          | 19         |                          | TCL+30/TAL/CN                            |
| 47        | 4     |          | 100        | Silty sand, SM      | FE BRN/YLW BRN | SFT      | SAT      | 10         | OVM 0.0                  | Fill? Sat ~4.5' bgs.                     |
| 46        | 5     |          |            | Silty sand, SM      | FE BRN/YLW BRN | SFT      | SAT      | 6          | OVM 0.0                  | Fill? Fines downward.                    |
| 45        | 6     |          | 50         | Silty sand, SM      | GRAY           | SFT      | SAT      | 2          | OVM 0.0                  | Sharp contact due to sand texture, m-f.  |
| 44        | 7     |          |            | No Sample Recovered |                |          |          | 5          |                          | V. micaceous                             |
| 43        | 8     |          | 75         | Silty sand, SM      | GRAY           | SFT      | SAT      | 5          | OVM 0.0                  | V. micaceous.                            |
| 42        | 9     |          |            | No Sample Recovered |                |          |          | 5          |                          |                                          |
| 41        | 10    |          | 70         | Silty sand, SM      | GRAY           | SFT      | SAT      | 5          | OVM 0.0                  | Slightly coarser than previous interval. |



# Borehole Log

Roy F. WESTON, Inc.

|                               |                                  |
|-------------------------------|----------------------------------|
| PROJECT : FT. MONMOUTH        | TOTAL DEPTH : 14.50              |
| SITE NAME : CHARLES WOOD AREA | LOGGER : P. THOMAS               |
| BORING ID : B10MW10B          | DRILLING COMPANY : J.C. ANDERSON |
| NORTHING : 0.0000 estimated   | DRILLING RIG : MOBILE B-57       |
| EASTING : 0.0000 estimated    | DATE STARTED : 01/10/95          |
| ELEVATION : 51.360 surveyed   | DATE COMPLETED : 01/10/95        |

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION      | COLOR | STRENGTH | MOISTURE | BLOW COUNT       | FIELD INSTRUMENT READING | COMMENTS                                 |
|-----------|-------|----------|------------|---------------------|-------|----------|----------|------------------|--------------------------|------------------------------------------|
| 40        | 11    |          |            | Silty sand, SM      | GRAY  | SFT      | SAT      |                  | OVM 0.0                  | Slightly coarser than previous interval. |
|           |       |          |            | No Sample Recovered |       |          |          |                  |                          |                                          |
| 39        | 12    |          | 45         | Silty sand, SM      | GRAY  | SFT      | SAT      | 5<br>9<br>8<br>6 | OVM 0.0                  |                                          |
| 38        | 13    |          |            | No Sample Recovered |       |          |          |                  |                          |                                          |
| 37        | 14    |          |            | No Sample Recovered |       |          |          |                  | OVM 0.0                  | Augered interval. Set well at 14.5' bgs. |
| 36        | 15    |          |            |                     |       |          |          |                  |                          |                                          |
| 35        | 16    |          |            |                     |       |          |          |                  |                          |                                          |
| 34        | 17    |          |            |                     |       |          |          |                  |                          |                                          |
| 33        | 18    |          |            |                     |       |          |          |                  |                          |                                          |
| 32        | 19    |          |            |                     |       |          |          |                  |                          |                                          |
| 31        | 20    |          |            |                     |       |          |          |                  |                          |                                          |

| BOREHOLE<br>/WELL ID | SMP<br>NUM | LTH<br>NUM | LITHOLOGY INT.<br>(FT BGS) | SAMPLING<br>METHOD | SIZE<br>GRAVEL PCT. | GRAVEL<br>PCT. | SIZE<br>SAND | SAND<br>PCT | SILT<br>PCT | CLAY<br>PCT | ORGANIC<br>PCT | ROCK<br>TYPE | PLAST | SORT | STRENGTH | MOISTURE | STRAT.<br>UNIT |
|----------------------|------------|------------|----------------------------|--------------------|---------------------|----------------|--------------|-------------|-------------|-------------|----------------|--------------|-------|------|----------|----------|----------------|
| B10MW10B             | 1          | 1          | 0.00                       | 0.40               | SPS                 | 5              | MF           | 40          | 30          | 5           | 20             |              | NON   | MOD  | SFT      | MST      |                |
| B10MW10B             | 1          | 2          | 0.40                       | 1.50               | SPS                 | 0              | MF           | 60          | 30          | 5           | 5              |              | NON   | MOD  | SFT      | MST      |                |
| B10MW10B             | 1          | 3          | 1.50                       | 2.00               | SPS                 | 0              |              | 0           | 0           | 0           | 0              |              |       |      |          |          |                |
| B10MW10B             | 2          | 1          | 2.00                       | 4.00               | SPS                 | 0              | MF           | 65          | 30          | 5           | 0              |              | NON   | MOD  | LSE      | WET      |                |
| B10MW10B             | 3          | 1          | 4.00                       | 5.00               | SPS                 | 0              | MF           | 65          | 30          | 5           | 0              |              | NON   | MOD  | SFT      | SAT      |                |
| B10MW10B             | 3          | 2          | 5.00                       | 6.00               | SPS                 | 0              | F            | 60          | 35          | 5           | 0              |              | NON   | MOD  | SFT      | SAT      |                |
| B10MW10B             | 4          | 1          | 6.00                       | 7.00               | SPS                 | 0              | FM           | 55          | 35          | 10          | 0              |              | NON   | MOD  | SFT      | SAT      |                |
| B10MW10B             | 4          | 2          | 7.00                       | 8.00               | SPS                 | 0              |              | 0           | 0           | 0           | 0              |              |       |      |          |          |                |
| B10MW10B             | 5          | 1          | 8.00                       | 9.50               | SPS                 | 0              | FM           | 55          | 35          | 10          | 0              |              | NON   | MOD  | SFT      | SAT      |                |
| B10MW10B             | 5          | 2          | 9.50                       | 10.00              | SPS                 | 0              |              | 0           | 0           | 0           | 0              |              |       |      |          |          |                |
| B10MW10B             | 6          | 1          | 10.00                      | 11.40              | SPS                 | 0              | F            | 60          | 35          | 5           | 0              |              | NON   | MOD  | SFT      | SAT      |                |
| B10MW10B             | 6          | 2          | 11.40                      | 12.00              | SPS                 | 0              |              | 0           | 0           | 0           | 0              |              |       |      |          |          |                |
| B10MW10B             | 7          | 1          | 12.00                      | 12.90              | SPS                 | 0              | F            | 55          | 35          | 10          | 0              |              | NON   | MOD  | SFT      | SAT      |                |
| B10MW10B             | 7          | 2          | 12.90                      | 14.00              | SPS                 | 0              |              | 0           | 0           | 0           | 0              |              |       |      |          |          |                |
| B10MW10B             | 8          | 1          | 14.00                      | 14.50              | SPS                 | 0              |              | 0           | 0           | 0           | 0              |              |       |      |          |          |                |

**CHARLES WOOD  
SOIL BORING LOGS**

**Borehole Location Data****Roy F. WESTON, Inc.**

BOREHOLE ID : CW4-SB1  
BEGIN DATE : 12/21/94

PROJECT NAME: FT. MONMOUTH  
END DATE : 12/21/94

LOGGER/COMPANY : K. VALENTI

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : 0

TOTAL DEPTH : 8.00

DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 8.00

INTERVAL: 0.00 ft. to 8.00 ft. BGS

METHOD : HSA

FLUID : AIR

BOREHOLE DIAMETER #2:

INTERVAL:

METHOD :

FLUID :

BOREHOLE DIAMETER #3:

INTERVAL:

METHOD :

FLUID :

DRILLING COMPANY : J.C. ANDERSON

DRILLER : WELLS REEVE

DRILL RIG TYPE : CME-55

**SURFACE**  
**ELEVATION :** ESTIMATED 0.000

**N. COORDINATE :** 0.0000

**E. COORDINATE :** 0.0000

**WELL PERMIT.....(Y)es (N)o: N** PERMIT # :

**HOLE ABANDONED... (Y)es (N)o: Y**

**WELL INSTALLED... (Y)es (N)o: N**

**WELL CLUSTER..... (Y)es (N)o: N** No. OF WELLS : 0

**WELL NEST..... (Y)es (N)o: N** No. OF WELLS : 0

**PUMPS INSTALLED.. (Y)es (N)o: N** TYPE

DEPTH

PURGE :

0.00

SAMPLE :

0.00

**BOREHOLE TESTING**

**BOREHOLE GEOPHYSICS..... (Y)es (N)o: N**

**SLUG TESTS..... (Y)es (N)o: N**

**PACKER TESTS..... (Y)es (N)o: N**

**PUMPING TESTS..... (Y)es (N)o: N**

**COMMENTS :**

Upon completion borehole was abandoned by grouting from TD to ground surface.

# Borehole Log

Roy F. WESTON, Inc.

|                                 |                                  |
|---------------------------------|----------------------------------|
| PROJECT : FT. MONMOUTH          | TOTAL DEPTH : 8.00               |
| SITE NAME : CHARLES WOOD AREA 4 | LOGGER : K. VALENTI              |
| BORING ID : CW4-SB1             | DRILLING COMPANY : J.C. ANDERSON |
| NORTHING : 0.0000 estimated     | DRILLING RIG : CME-55            |
| EASTING : 0.0000 estimated      | DATE STARTED : 12/21/94          |
| ELEVATION : 0.000 estimated     | DATE COMPLETED : 12/21/94        |

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION         | COLOR          | STRENGTH | MOISTURE | BLOW COUNT         | FIELD INSTRUMENT READING | COMMENTS                                                        |
|-----------|-------|----------|------------|------------------------|----------------|----------|----------|--------------------|--------------------------|-----------------------------------------------------------------|
|           |       |          | 75         | Silty sand, SM         | BROWN          | SFT      | MST      | 8<br>15<br>11      | HNU 3.0                  | Fill(?)                                                         |
| -1        | 1     |          |            | Poorly graded sand, SP | LT BROWN       | LSE      | MST      |                    | HNU 0.0                  | Fill(?) Mild iron (Fe) staining in lower portion of SPS.        |
|           |       |          |            | No Sample Recovered    |                |          |          |                    |                          |                                                                 |
| -2        | 2     |          | 50         | Poorly graded sand, SP | FOREST GREEN   | LSE      | MST      | 9<br>22<br>5       | HNU 1.0                  | Fill(?).                                                        |
|           |       |          |            | Silty sand, SM         | DK BRN - BLACK | SFT      | MST      |                    | HNU 1.0                  | Fill(?) Bottom 2" of SPS Soils in spoon are wet.                |
| -3        | 3     |          |            | No Sample Recovered    |                |          |          |                    |                          |                                                                 |
| -4        | 4     |          | 50         | Poorly graded sand, SP | GREEN          | SFT      | MST      | 8<br>9<br>16<br>13 | HNU 1.0                  |                                                                 |
| -5        | 5     |          |            | No Sample Recovered    |                |          |          |                    |                          |                                                                 |
| -6        | 6     |          | 50         | Poorly graded sand, SP | GREEN          | LSE      | WET      | 9<br>11<br>8<br>5  | HNU 0.0                  | Water occurred at 6.1' bgs Collected soil sample CW04-SB01-A02. |
| -7        | 7     |          |            | No Sample Recovered    |                |          |          |                    |                          |                                                                 |
| -8        | 8     |          |            |                        |                |          |          |                    |                          |                                                                 |
| -9        | 9     |          |            |                        |                |          |          |                    |                          |                                                                 |
| -10       | 10    |          |            |                        |                |          |          |                    |                          |                                                                 |

| BOREHOLE<br>/WELL ID | SMP<br>NUM | LTH<br>NUM | LITHOLOGY INT.<br>(FT BGS) | SAMPLING<br>METHOD | SIZE<br>GRAVEL PCT. | SIZE<br>SAND PCT. | SAND<br>PCT. | SILT<br>PCT. | CLAY<br>PCT. | ORGANIC<br>PCT. | ROCK<br>TYPE | PLAST | SORT | STRENGTH | MOISTURE | STRAT<br>UNIT |
|----------------------|------------|------------|----------------------------|--------------------|---------------------|-------------------|--------------|--------------|--------------|-----------------|--------------|-------|------|----------|----------|---------------|
| CW4-SB1              | 1          | 1          | 0.00                       | 1.00               | SPS                 | 10                | 40           | 50           | 0            | 0               |              | NON   | POR  | SFT      | MST      |               |
| CW4-SB1              | 1          | 2          | 1.00                       | 1.50               | SPS                 | 0                 | 95           | 5            | 0            | 0               |              | NON   | MOD  | LSE      | MST      |               |
| CW4-SB1              | 1          | 3          | 1.50                       | 2.00               | SPS                 | 0                 | 0            | 0            | 0            | 0               |              |       |      |          |          |               |
| CW4-SB1              | 2          | 1          | 2.00                       | 2.60               | SPS                 | 0                 | 95           | 5            | 0            | 0               |              | NON   | WEL  | LSE      | MST      |               |
| CW4-SB1              | 2          | 2          | 2.60                       | 3.00               | SPS                 | 0                 | 60           | 40           | 0            | 0               |              | LOW   | WEL  | SFT      | MST      |               |
| CW4-SB1              | 2          | 3          | 3.00                       | 4.00               | SPS                 | 0                 | 0            | 0            | 0            | 0               |              |       |      |          |          |               |
| CW4-SB1              | 3          | 1          | 4.00                       | 5.00               | SPS                 | 0                 | 95           | 5            | 0            | 0               |              | LOW   | MOD  | SFT      | MST      |               |
| CW4-SB1              | 3          | 2          | 5.00                       | 6.00               | SPS                 | 0                 | 0            | 0            | 0            | 0               |              |       |      |          |          |               |
| CW4-SB1              | 4          | 1          | 6.00                       | 7.00               | SPS                 | 0                 | 95           | 5            | 0            | 0               |              | LOW   | MOD  | LSE      | WET      |               |
| CW4-SB1              | 4          | 2          | 7.00                       | 8.00               | SPS                 | 0                 | 0            | 0            | 0            | 0               |              |       |      |          |          |               |

**Borehole Location Data****Roy F. WESTON, Inc.**

BOREHOLE ID : CW5-SB1  
BEGIN DATE : 12/20/94

PROJECT NAME: FT. MONMOUTH  
END DATE : 12/20/94

LOGGER/COMPANY : K. VALENTE

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : 0

TOTAL DEPTH : 8.00

DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 8.00

INTERVAL: 0.00 ft. to 8.00 ft. BGS

METHOD : HSA

FLUID : AIR

BOREHOLE DIAMETER #2:

INTERVAL:

METHOD :

FLUID :

BOREHOLE DIAMETER #3:

INTERVAL:

METHOD :

FLUID :

DRILLING COMPANY : J.C. ANDERSON

DRILLER : WELLS REEVE

DRILL RIG TYPE : CME-55

**ESTIMATED**  
SURFACE  
ELEVATION : 0.000

**SURVEYED**

N. COORDINATE : 0.0000

E. COORDINATE : 0.0000

WELL PERMIT.....(Y)es (N)o: N PERMIT # :

HOLE ABANDONED... (Y)es (N)o: Y

WELL INSTALLED... (Y)es (N)o: N

WELL CLUSTER..... (Y)es (N)o: N No. OF WELLS : 0

WELL NEST..... (Y)es (N)o: N No. OF WELLS : 0

PUMPS INSTALLED.. (Y)es (N)o: N TYPE

DEPTH

PURGE :

0.00

SAMPLE :

0.00

**BOREHOLE TESTING**

BOREHOLE GEOPHYSICS..... (Y)es (N)o: N

SLUG TESTS..... (Y)es (N)o: N

PACKER TESTS..... (Y)es (N)o: N

PUMPING TESTS..... (Y)es (N)o: N

**COMMENTS :**

Upon completion borehole was abandoned by grouting from TD to ground surface.

# Borehole Log

Roy F. WESTON, Inc.

PROJECT : FT. MONMOUTH  
 SITE NAME : CHARLES WOOD AREA 5  
 BORING ID : CW5-SB1  
 NORTHING : 0.0000 estimated  
 EASTING : 0.0000 estimated  
 ELEVATION : 0.000 estimated

TOTAL DEPTH : 8.00  
 LOGGER : K. VALENTE  
 DRILLING COMPANY : J.C. ANDERSON  
 DRILLING RIG : CME-55  
 DATE STARTED : 12/20/94  
 DATE COMPLETED : 12/20/94

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION                   | COLOR           | STRENGTH | MOISTURE | BLOW COUNT           | FIELD INSTRUMENT READING | COMMENTS                                                                                            |
|-----------|-------|----------|------------|----------------------------------|-----------------|----------|----------|----------------------|--------------------------|-----------------------------------------------------------------------------------------------------|
|           |       |          | 50         | Silty sand, SM                   | BROWN           | LSE      | MST      | 12<br>10<br>8<br>8   | HNU 0.0                  | Fill. Top 3" is topsoil. Some gravels (med.-coarse). Color changing at bottom of SPS to grey-brown. |
| -1        | 1     |          |            | No Sample Recovered              |                 |          |          |                      |                          |                                                                                                     |
| -2        | 2     |          | 75         | Silty sand with gravel, SM       | GRAY BROWN      | LSE      | MST      | 12<br>11<br>10<br>11 | HNU 0.0                  | Fill. Gray brown silty sand, some medium gravels                                                    |
| -3        | 3     |          |            | Well-graded sand with gravel, SW | YELLOW-BROWN    | LSE      | MST      |                      | HNU 0.0                  | Fill. Sand, medium to coarse gravels. Some fragments of quartzite.                                  |
|           |       |          |            | No Sample Recovered              |                 |          |          |                      |                          |                                                                                                     |
| -4        | 4     |          | 100        | Well-graded sand with gravel, SW | YELLOWISH BROWN | LSE      | MST      | 12<br>7<br>6<br>7    | HNU 0.0                  | Same lithology as previous interval.                                                                |
| -5        | 5     |          |            |                                  |                 |          |          |                      |                          |                                                                                                     |
| -6        | 6     |          | 100        | Silty sand with gravel, SM       | DK BROWN        | FRM      | MST      | 9<br>12<br>6<br>8    | HNU 0.0                  | 3" SPS used. Mottles noted. 1" of silty sand with organics at 6.6-6.7' bgs. Collected soil samp     |
| -7        | 7     |          |            | Poorly graded sand, SP           | GREENISH GRAY   | LSE      | SAT      |                      | HNU 0.0                  | 3" SPS used. Collected soil sample CW05-SB01-A02                                                    |
| -8        | 8     |          |            |                                  |                 |          |          |                      |                          |                                                                                                     |
| -9        | 9     |          |            |                                  |                 |          |          |                      |                          |                                                                                                     |
| -10       | 10    |          |            |                                  |                 |          |          |                      |                          |                                                                                                     |



| BOREHOLE | SMP | LTH | LITHOLOGY | INT. | SAMPLING | SIZE   | GRAVEL | SIZE | SAND | SILT | CLAY | ORGANIC | ROCK |       |      |          | STRAT         |
|----------|-----|-----|-----------|------|----------|--------|--------|------|------|------|------|---------|------|-------|------|----------|---------------|
| /WELL ID | NUM | NUM | (FT BGS)  |      | METHOD   | GRAVEL | PCT.   | SAND | PCT  | PCT  | PCT  | PCT     | TYPE | PLAST | SORT | STRENGTH | MOISTURE UNIT |
| CW5-SB1  | 1   | 1   | 0.00      | 1.00 | SPS      |        | 10     |      | 50   | 40   | 0    | 0       |      | NON   | POR  | LSE      | MST           |
| CW5-SB1  | 1   | 2   | 1.00      | 2.00 | SPS      |        | 0      |      | 0    | 0    | 0    | 0       |      |       |      |          |               |
| CW5-SB1  | 2   | 1   | 2.00      | 3.00 | SPS      |        | 15     |      | 60   | 25   | 0    | 0       |      | NON   | MOD  | LSE      | MST           |
| CW5-SB1  | 2   | 2   | 3.00      | 3.50 | SPS      |        | 30     |      | 65   | 5    | 0    | 0       |      | NON   | POR  | LSE      | MST           |
| CW5-SB1  | 2   | 3   | 3.50      | 4.00 | SPS      |        | 0      |      | 0    | 0    | 0    | 0       |      |       |      |          |               |
| CW5-SB1  | 3   | 1   | 4.00      | 6.00 | SPS      |        | 25     |      | 70   | 5    | 0    | 0       |      | NON   | POR  | LSE      | MST           |
| CW5-SB1  | 4   | 1   | 6.00      | 6.80 | SPS      |        | 20     |      | 40   | 35   | 5    | 0       |      | LOW   | POR  | FRM      | MST           |
| CW5-SB1  | 4   | 2   | 6.80      | 8.00 | SPS      |        | 5      |      | 95   | 0    | 0    | 0       |      | NON   | MOD  | LSE      | SAT           |

**Borehole Location Data****Roy F. WESTON, Inc.**

BOREHOLE ID : CW5-SB2  
BEGIN DATE : 12/20/94

PROJECT NAME: FT. MONMOUTH  
END DATE : 12/20/94

LOGGER/COMPANY : K. VALENTE

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : 0

TOTAL DEPTH : 6.00

DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 8.00

INTERVAL: 0.00 ft. to 6.00 ft. BGS

METHOD : HSA

FLUID : AIR

BOREHOLE DIAMETER #2:

INTERVAL:

METHOD :

FLUID :

BOREHOLE DIAMETER #3:

INTERVAL:

METHOD :

FLUID :

DRILLING COMPANY : J.C. ANDERSON

DRILLER : WELLS REEVE

DRILL RIG TYPE : CME-55

|                                        | ESTIMATED        | SURVEYED |
|----------------------------------------|------------------|----------|
| SURFACE<br>ELEVATION :                 | 0.000            |          |
| N. COORDINATE :                        | 0.0000           |          |
| E. COORDINATE :                        | 0.0000           |          |
| WELL PERMIT.....(Y)es (N)o: N          | PERMIT # :       |          |
| HOLE ABANDONED... (Y)es (N)o: Y        |                  |          |
| WELL INSTALLED... (Y)es (N)o: N        |                  |          |
| WELL CLUSTER..... (Y)es (N)o: N        | No. OF WELLS : 0 |          |
| WELL NEST..... (Y)es (N)o: N           | No. OF WELLS : 0 |          |
| PUMPS INSTALLED.. (Y)es (N)o: N        | TYPE             | DEPTH    |
|                                        | PURGE :          | 0.00     |
|                                        | SAMPLE :         | 0.00     |
| BOREHOLE TESTING                       |                  |          |
| BOREHOLE GEOPHYSICS..... (Y)es (N)o: N |                  |          |
| SLUG TESTS..... (Y)es (N)o: N          |                  |          |
| PACKER TESTS..... (Y)es (N)o: N        |                  |          |
| PUMPING TESTS..... (Y)es (N)o: N       |                  |          |

**COMMENTS :**

Upon completion the borehole was abandoned by grouting from TD to ground surface.

# Borehole Log

Roy F. WESTON, Inc.

|             |                     |                    |               |
|-------------|---------------------|--------------------|---------------|
| PROJECT :   | FT. MONMOUTH        | TOTAL DEPTH :      | 6.00          |
| SITE NAME : | CHARLES WOOD AREA 5 | LOGGER :           | K. VALENTE    |
| BORING ID : | CW5-SB2             | DRILLING COMPANY : | J.C. ANDERSON |
| NORTHING :  | 0.0000 estimated    | DRILLING RIG :     | CME-55        |
| EASTING :   | 0.0000 estimated    | DATE STARTED :     | 12/20/94      |
| ELEVATION : | 0.000 estimated     | DATE COMPLETED :   | 12/20/94      |

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION                        | COLOR                           | STRENGTH   | MOISTURE   | BLOW COUNT         | FIELD INSTRUMENT READING | COMMENTS                                                                                            |
|-----------|-------|----------|------------|---------------------------------------|---------------------------------|------------|------------|--------------------|--------------------------|-----------------------------------------------------------------------------------------------------|
|           |       |          | 50         | Sandy silt, ML                        | ORANGE-DK BROWN                 | FRM        | MST        | 7<br>5<br>6        | HNU 0.0                  | Fill. Top 4" consists of topsoil. Minor clay content.                                               |
| -1        | 1     |          |            | Silty sand, SM<br>No Sample Recovered | GRAY BROWN                      | SFT        | MST        |                    | HNU 0.0                  | Fill(?)                                                                                             |
| -2        | 2     |          | 75         | Silty sand, SM                        | DK GRAY - BROWN                 | SFT        | MST        | 10<br>9<br>8       | HNU 0.0                  | Some sub-rounded to fragmented quartz sands.                                                        |
| -3        | 3     |          |            | No Sample Recovered                   |                                 |            |            |                    |                          |                                                                                                     |
| -4        | 4     |          | 100        | Silty sand, SM                        | DK BROWN                        | SFT        | MST        | 4<br>5<br>11<br>12 | HNU 0.0                  | Fill. Sandy silt. 3 or 4 pieces of broken bricks (red-orange in color).                             |
| -5        | 5     |          |            | Elastic silt, MH<br>Silty sand, SM    | DK BROWN BLACK<br>GREENISH GRAY | SFT<br>LSE | MST<br>SAT |                    | HNU 0.0<br>HNU 0.0       | Fill. Silt w/some clay.<br>Collected sample CW05-SB02-A02. Water at 5.2' bgs. TD of borehole 6' bgs |
| -6        | 6     |          |            |                                       |                                 |            |            |                    |                          |                                                                                                     |
| -7        | 7     |          |            |                                       |                                 |            |            |                    |                          |                                                                                                     |
| -8        | 8     |          |            |                                       |                                 |            |            |                    |                          |                                                                                                     |
| -9        | 9     |          |            |                                       |                                 |            |            |                    |                          |                                                                                                     |
| -10       | 10    |          |            |                                       |                                 |            |            |                    |                          |                                                                                                     |

DATE: 06/20/95 \*\*\*\* Roy F. WESTON, Inc. LITHOLOGICAL DATA FOR - CLIENT ID: USAC2 \*\*\* PAGE: 18

| BOREHOLE | SMP | LTH | LITHOLOGY | INT. | SAMPLING | SIZE   | GRAVEL | SIZE | SAND | SILT | CLAY | ORGANIC | ROCK | STRAT |      |          |               |
|----------|-----|-----|-----------|------|----------|--------|--------|------|------|------|------|---------|------|-------|------|----------|---------------|
| /WELL ID | NUM | NUM | (FT BGS)  |      | METHOD   | GRAVEL | PCT.   | SAND | PCT  | PCT  | PCT  | PCT     | TYPE | PLAST | SORT | STRENGTH | MOISTURE UNIT |
| CW5-SB2  | 1   | 1   | 0.00      | 0.90 | SPS      |        | 5      |      | 25   | 60   | 10   | 0       |      | LOW   | POR  | FRM      | MST           |
| CW5-SB2  | 1   | 2   | 0.90      | 1.00 | SPS      |        | 0      |      | 85   | 15   | 0    | 0       |      | NON   | MOD  | SFT      | MST           |
| CW5-SB2  | 1   | 3   | 1.00      | 2.00 | SPS      |        | 0      |      | 0    | 0    | 0    | 0       |      |       |      |          |               |
| CW5-SB2  | 2   | 1   | 2.00      | 3.50 | SPS      |        | 5      |      | 75   | 20   | 0    | 0       |      | LOW   | MOD  | SFT      | MST           |
| CW5-SB2  | 2   | 2   | 3.50      | 4.00 | SPS      |        | 0      |      | 0    | 0    | 0    | 0       |      |       |      |          |               |
| CW5-SB2  | 3   | 1   | 4.00      | 5.00 | SPS      |        | 5      |      | 45   | 50   | 0    | 0       |      | NON   | MOD  | SFT      | MST           |
| CW5-SB2  | 3   | 2   | 5.00      | 5.20 | SPS      |        | 0      |      | 0    | 65   | 35   | 0       |      | MOD   | WEL  | SFT      | MST           |
| CW5-SB2  | 3   | 3   | 5.20      | 6.00 | SPS      |        | 0      |      | 85   | 15   | 0    | 0       |      | NON   | WEL  | LSE      | SAT           |

**Borehole Location Data****Roy F. WESTON, Inc.**

BOREHOLE ID : CW7-SB1                      PROJECT NAME: FT. MONMOUTH  
BEGIN DATE : 12/21/94                      END DATE : 12/21/94

LOGGER/COMPANY : P. THOMAS

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : 0

TOTAL DEPTH : 14.00                      DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 8.25  
INTERVAL: 0.00 ft. to 12.00 ft. BGS  
METHOD : HSA                      FLUID : NONE  
BOREHOLE DIAMETER #2: 3.00  
INTERVAL: 12.00 ft. to 14.00 ft. BGS  
METHOD : SPLIT SPOON SAMPLER                      FLUID : NONE  
BOREHOLE DIAMETER #3:  
INTERVAL:  
METHOD :                      FLUID :

DRILLING COMPANY : J.C. ANDERSON  
DRILLER : STEVE BURGER  
DRILL RIG TYPE : MOBILE B-57

|                                 | ESTIMATED        | SURVEYED |
|---------------------------------|------------------|----------|
| SURFACE ELEVATION :             | 0.000            |          |
| N. COORDINATE :                 | 0.0000           |          |
| E. COORDINATE :                 | 0.0000           |          |
| WELL PERMIT..... (Y)es (N)o: N  | PERMIT # :       |          |
| HOLE ABANDONED... (Y)es (N)o: Y |                  |          |
| WELL INSTALLED... (Y)es (N)o: N |                  |          |
| WELL CLUSTER..... (Y)es (N)o: N | No. OF WELLS : 0 |          |
| WELL NEST..... (Y)es (N)o: N    | No. OF WELLS : 0 |          |
| PUMPS INSTALLED.. (Y)es (N)o: N | TYPE             | DEPTH    |
|                                 | PURGE :          | 0.00     |
|                                 | SAMPLE :         | 0.00     |

**BOREHOLE TESTING**

BOREHOLE GEOPHYSICS..... (Y)es (N)o: N  
SLUG TESTS..... (Y)es (N)o: N  
PACKER TESTS..... (Y)es (N)o: N  
PUMPING TESTS..... (Y)es (N)o: N

**COMMENTS :**

Upon completion borehole was grouted with portland cement and bentonite from TD to ground surface.

# Borehole Log

Roy F. WESTON, Inc.

|           |                       |                  |                 |
|-----------|-----------------------|------------------|-----------------|
| PROJECT   | : FT. MONMOUTH        | TOTAL DEPTH      | : 14.00         |
| SITE NAME | : CHARLES WOOD AREA 7 | LOGGER           | : P. THOMAS     |
| BORING ID | : CW7-SB1             | DRILLING COMPANY | : J.C. ANDERSON |
| NORTHING  | : 0.0000 estimated    | DRILLING RIG     | : MOBILE B-57   |
| EASTING   | : 0.0000 estimated    | DATE STARTED     | : 12/21/94      |
| ELEVATION | : 0.000 estimated     | DATE COMPLETED   | : 12/21/94      |

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION                      | COLOR        | STRENGTH | MOISTURE | BLOW COUNT | FIELD INSTRUMENT READING | COMMENTS                                                                                  |
|-----------|-------|----------|------------|-------------------------------------|--------------|----------|----------|------------|--------------------------|-------------------------------------------------------------------------------------------|
|           |       |          | 90         | Sandy silt, ML                      | BROWN        | SFT      | MST      | 4          | HNU 25.9                 | Topsoil: HNU/OVM readings may be from decon solut. no cutting readings for entire boring. |
|           |       |          |            | Silty sand, SM                      | BROWN ORANGE | SFT      | MST      | 5          | HNU 29.0                 |                                                                                           |
| -1        | 1     |          |            |                                     |              |          |          |            |                          |                                                                                           |
|           |       |          |            | No Sample Recovered                 |              |          |          |            |                          |                                                                                           |
|           |       |          | 75         | Silty sand, SM                      | BROWN        | SFT      | MST      | 10         | HNU 25.2                 |                                                                                           |
| -2        | 2     |          |            |                                     |              |          |          | 10         |                          |                                                                                           |
|           |       |          |            |                                     |              |          |          | 10         |                          |                                                                                           |
| -3        | 3     |          |            |                                     |              |          |          | 12         |                          |                                                                                           |
|           |       |          |            | No Sample Recovered                 |              |          |          | 10         |                          |                                                                                           |
|           |       |          |            |                                     |              |          |          |            |                          |                                                                                           |
| -4        | 4     |          | 75         | Silty sand, SM                      | BROWN        | SFT      | WET      | 18         | HNU 5.2                  |                                                                                           |
|           |       |          |            |                                     |              |          |          | 22         |                          |                                                                                           |
|           |       |          |            |                                     |              |          |          | 28         |                          |                                                                                           |
| -5        | 5     |          |            |                                     |              |          |          | 30         |                          |                                                                                           |
|           |       |          |            | No Sample Recovered                 |              |          |          |            |                          |                                                                                           |
|           |       |          |            |                                     |              |          |          | 18         |                          |                                                                                           |
| -6        | 6     |          | 100        | Poorly graded sand, SP              | OLIVE BROWN  | LSE      | MST      | 23         | HNU 0.8                  |                                                                                           |
|           |       |          |            |                                     |              |          |          | 30         |                          |                                                                                           |
|           |       |          |            |                                     |              |          |          | 6          |                          |                                                                                           |
| -7        | 7     |          |            |                                     |              |          |          | 7          |                          |                                                                                           |
|           |       |          |            |                                     |              |          |          | 10         |                          |                                                                                           |
|           |       |          |            |                                     |              |          |          | 10         |                          |                                                                                           |
| -8        | 8     |          | 100        | Poorly graded sand, SP              | OLIVE BROWN  | LSE      | MST      | 10         | HNU 0.0                  | Fe stained laminae.                                                                       |
|           |       |          |            |                                     |              |          |          | 15         |                          |                                                                                           |
|           |       |          |            |                                     |              |          |          | 10         |                          |                                                                                           |
| -9        | 9     |          |            |                                     |              |          |          | 10         |                          |                                                                                           |
|           |       |          |            |                                     |              |          |          |            |                          |                                                                                           |
| -10       | 10    |          | 100        | Poorly graded sand with silt, SP-SM | OLIVE BROWN  | LSE      | MST      | 12         | HNU 0.1                  |                                                                                           |
|           |       |          |            |                                     |              |          |          | 12         |                          |                                                                                           |
|           |       |          |            |                                     |              |          |          | 10         |                          |                                                                                           |
|           |       |          |            |                                     |              |          |          | 5          |                          |                                                                                           |

# Borehole Log

Roy F. WESTON, Inc.

|             |                     |                    |               |
|-------------|---------------------|--------------------|---------------|
| PROJECT :   | FT. MONMOUTH        | TOTAL DEPTH :      | 14.00         |
| SITE NAME : | CHARLES WOOD AREA 7 | LOGGER :           | P. THOMAS     |
| BORING ID : | CW7-SB1             | DRILLING COMPANY : | J.C. ANDERSON |
| NORTHING :  | 0.0000 estimated    | DRILLING RIG :     | MOBILE B-57   |
| EASTING :   | 0.0000 estimated    | DATE STARTED :     | 12/21/94      |
| ELEVATION : | 0.000 estimated     | DATE COMPLETED :   | 12/21/94      |

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION                      | COLOR       | STRENGTH | MOISTURE | BLOW COUNT                       | FIELD INSTRUMENT READING | COMMENTS                                    |
|-----------|-------|----------|------------|-------------------------------------|-------------|----------|----------|----------------------------------|--------------------------|---------------------------------------------|
| -11       | 11    |          |            | Poorly graded sand with silt, SP-SM | OLIVE BROWN | LSE      | MST      |                                  | HNU 0.1                  |                                             |
| -12       | 12    |          | 100        | Poorly graded sand, SP              | OLIVE       | LSE      | WET      | 10<br>12<br>14<br>16<br>18<br>20 | HNU 0.0                  | Fe stained laminae, sat from ~12.5-13' bgs. |
| -13       | 13    |          |            |                                     |             |          |          |                                  |                          |                                             |
| -14       | 14    |          |            |                                     |             |          |          |                                  |                          |                                             |
| -15       | 15    |          |            |                                     |             |          |          |                                  |                          |                                             |
| -16       | 16    |          |            |                                     |             |          |          |                                  |                          |                                             |
| -17       | 17    |          |            |                                     |             |          |          |                                  |                          |                                             |
| -18       | 18    |          |            |                                     |             |          |          |                                  |                          |                                             |
| -19       | 19    |          |            |                                     |             |          |          |                                  |                          |                                             |
| -20       | 20    |          |            |                                     |             |          |          |                                  |                          |                                             |

DATE: 06/20/95 \*\*\*\*\* Roy F. WESTON, Inc. LITHOLOGICAL DATA FOR - CLIENT ID: USAC2 \*\*\* PAGE: 20

| BOREHOLE<br>/WELL ID | SMP<br>NUM | LTH<br>NUM | LITHOLOGY INT.<br>(FT BGS) | SAMPLING<br>METHOD | SIZE<br>GRAVEL PCT. | SIZE<br>SAND | SAND<br>PCT | SILT<br>PCT | CLAY<br>PCT | ORGANIC<br>PCT | ROCK<br>TYPE | PLAST | SORT | STRENGTH | MOISTURE | STRAT<br>UNIT |
|----------------------|------------|------------|----------------------------|--------------------|---------------------|--------------|-------------|-------------|-------------|----------------|--------------|-------|------|----------|----------|---------------|
| CW7-SB1              | 1          | 1          | 0.00                       | 0.40               | SPS                 |              | 0           | MF          | 40          | 30             | 0            | 30    | NON  | POR      | SFT      | MST           |
| CW7-SB1              | 1          | 2          | 0.40                       | 1.80               | SPS                 | F            | 5           | MF          | 60          | 35             | 0            | 0     | NA   | MOD      | SFT      | MST           |
| CW7-SB1              | 1          | 3          | 1.80                       | 2.00               | SPS                 |              | 0           |             | 0           | 0              | 0            | 0     |      |          |          |               |
| CW7-SB1              | 2          | 1          | 2.00                       | 3.50               | SPS                 |              | 0           | MF          | 50          | 35             | 15           | 0     | LOW  | WEL      | SFT      | MST           |
| CW7-SB1              | 2          | 2          | 3.50                       | 4.00               | SPS                 |              | 0           |             | 0           | 0              | 0            | 0     |      |          |          |               |
| CW7-SB1              | 3          | 1          | 4.00                       | 5.50               | SPS                 |              | 0           | MF          | 75          | 20             | 5            | 0     | NON  | WEL      | SFT      | WET           |
| CW7-SB1              | 3          | 2          | 5.50                       | 6.00               | SPS                 |              | 0           |             | 0           | 0              | 0            | 0     |      |          |          |               |
| CW7-SB1              | 4          | 1          | 6.00                       | 8.00               | SPS                 |              | 0           | MFC         | 95          | 5              | 0            | 0     | NA   | MOD      | LSE      | MST           |
| CW7-SB1              | 5          | 1          | 8.00                       | 10.00              | SPS                 |              | 0           | MF          | 95          | 5              | 0            | 0     | NA   | MOD      | LSE      | MST           |
| CW7-SB1              | 6          | 1          | 10.00                      | 12.00              | SPS                 |              | 0           | MF          | 90          | 10             | 0            | 0     | NA   | MOD      | LSE      | MST           |
| CW7-SB1              | 7          | 1          | 12.00                      | 14.00              | SPS                 |              | 0           | MF          | 95          | 5              | 0            | 0     | NA   | MOD      | LSE      | WET           |



**Borehole Location Data****Roy F. WESTON, Inc.**

BOREHOLE ID : CW7-SB2  
BEGIN DATE : 12/21/94

PROJECT NAME: FT. MONMOUTH  
END DATE : 12/21/94

LOGGER/COMPANY : P. THOMAS

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : 0

TOTAL DEPTH : 14.00

DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 8.25

INTERVAL: 0.00 ft. to 12.00 ft. BGS

METHOD : HSA FLUID : NONE

BOREHOLE DIAMETER #2: 3.00

INTERVAL: 12.00 ft. to 14.00 ft. BGS

METHOD : SPLIT SPOON FLUID : NONE

BOREHOLE DIAMETER #3:

INTERVAL:

METHOD : FLUID :

DRILLING COMPANY : J.C. ANDERSON

DRILLER : STEVE BURGER

DRILL RIG TYPE : MOBILE B57

|                        | ESTIMATED | SURVEYED |
|------------------------|-----------|----------|
| SURFACE<br>ELEVATION : | 0.000     |          |
| N. COORDINATE :        | 0.0000    |          |
| E. COORDINATE :        | 0.0000    |          |

WELL PERMIT.....(Y)es (N)o: N PERMIT # :

HOLE ABANDONED... (Y)es (N)o: Y

WELL INSTALLED... (Y)es (N)o: N

WELL CLUSTER.....(Y)es (N)o: N No. OF WELLS : 0

WELL NEST.....(Y)es (N)o: N No. OF WELLS : 0

PUMPS INSTALLED.. (Y)es (N)o: N TYPE

|          |      |
|----------|------|
| PURGE :  | 0.00 |
| SAMPLE : | 0.00 |

**BOREHOLE TESTING**

BOREHOLE GEOPHYSICS.....(Y)es (N)o: N

SLUG TESTS.....(Y)es (N)o: N

PACKER TESTS.....(Y)es (N)o: N

PUMPING TESTS.....(Y)es (N)o: N

**COMMENTS :**

Upon completion borehole was abandoned by grouting from TD to ground surface.

# Borehole Log

Roy F. WESTON, Inc.

|             |                     |                    |               |
|-------------|---------------------|--------------------|---------------|
| PROJECT :   | FT. MONMOUTH        | TOTAL DEPTH :      | 14.00         |
| SITE NAME : | CHARLES WOOD AREA 7 | LOGGER :           | P. THOMAS     |
| BORING ID : | CW7-SB2             | DRILLING COMPANY : | J.C. ANDERSON |
| NORTHING :  | 0.0000 estimated    | DRILLING RIG :     | MOBILE B57    |
| EASTING :   | 0.0000 estimated    | DATE STARTED :     | 12/21/94      |
| ELEVATION : | 0.000 estimated     | DATE COMPLETED :   | 12/21/94      |

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION                      | COLOR          | STRENGTH | MOISTURE | BLOW COUNT | FIELD INSTRUMENT READING | COMMENTS                                            |
|-----------|-------|----------|------------|-------------------------------------|----------------|----------|----------|------------|--------------------------|-----------------------------------------------------|
|           |       |          | 60         | Silty sand, SM                      | BROWN          | SFT      | WET      | 12         | OVM 0.5                  | Topsoil                                             |
|           |       |          |            | Silty sand, SM                      | RED YELLOW BRN | LSE      | WET      | 10         | OVM 0.5                  |                                                     |
| -1        | 1     |          |            | No Sample Recovered                 |                |          |          |            |                          |                                                     |
|           |       |          | 85         | Silty sand, SM                      | BROWN          | SFT      | WET      | 6          | OVM 0.5                  |                                                     |
|           |       |          |            | Silty sand, SM                      | BROWN          | SFT      | MST      | 15         | OVM 0.0                  |                                                     |
| -2        | 2     |          |            |                                     |                |          |          | 21         |                          |                                                     |
|           |       |          |            | Silty sand, SM                      | BROWN          | LSE      | WET      |            | OVM 0.0                  |                                                     |
| -3        | 3     |          |            | No Sample Recovered                 |                |          |          |            |                          |                                                     |
|           |       |          | 90         | Silty sand, SM                      | BROWN          | LSE      | MST      | 14         | OVM 0.0                  |                                                     |
|           |       |          |            |                                     |                |          |          | 15         |                          |                                                     |
| -4        | 4     |          |            |                                     |                |          |          | 15         |                          |                                                     |
|           |       |          |            |                                     |                |          |          | 18         |                          |                                                     |
| -5        | 5     |          |            |                                     |                |          |          |            |                          |                                                     |
|           |       |          | 80         | No Sample Recovered                 |                |          |          |            |                          |                                                     |
|           |       |          |            | Poorly graded sand, SP              | OLIVE/FE BROWN | LSE      | MST      | 9          | OVM 0.0                  |                                                     |
| -6        | 6     |          |            |                                     |                |          |          | 8          |                          | Iron (Fe) colored with olive to brown sand laminae. |
|           |       |          |            |                                     |                |          |          | 9          |                          |                                                     |
| -7        | 7     |          |            |                                     |                |          |          |            |                          |                                                     |
|           |       |          |            | No Sample Recovered                 |                |          |          |            |                          |                                                     |
|           |       |          | 100        | Poorly graded sand, SP              | OLIVE BROWN    | LSE      | MST      | 7          | OVM 0.0                  |                                                     |
| -8        | 8     |          |            |                                     |                |          |          | 10         |                          |                                                     |
|           |       |          |            |                                     |                |          |          | 12         |                          |                                                     |
| -9        | 9     |          |            |                                     |                |          |          |            |                          |                                                     |
|           |       |          | 100        | Poorly graded sand with silt, SP-SM | OLIVE BROWN    | LSE      | MST      | 11         | OVM 0.0                  |                                                     |
| -10       | 10    |          |            |                                     |                |          |          | 13         |                          |                                                     |
|           |       |          |            |                                     |                |          |          | 15         |                          |                                                     |

# Borehole Log

Roy F. WESTON, Inc.

|                                 |                                  |
|---------------------------------|----------------------------------|
| PROJECT : FT. MONMOUTH          | TOTAL DEPTH : 14.00              |
| SITE NAME : CHARLES WOOD AREA 7 | LOGGER : P. THOMAS               |
| BORING ID : CW7-SB2             | DRILLING COMPANY : J.C. ANDERSON |
| NORTHING : 0.0000 estimated     | DRILLING RIG : MOBILE B57        |
| EASTING : 0.0000 estimated      | DATE STARTED : 12/21/94          |
| ELEVATION : 0.000 estimated     | DATE COMPLETED : 12/21/94        |

| ELEVATION | DEPTH | MATERIAL | RECOVERY | CLASSIFICATION                      | COLOR       | STRENGTH | MOISTURE | BLOW COUNT   | FIELD INSTRUMENT READING | COMMENTS                                       |
|-----------|-------|----------|----------|-------------------------------------|-------------|----------|----------|--------------|--------------------------|------------------------------------------------|
| -11       | 11    |          |          | Poorly graded sand with silt, SP-SM | OLIVE BROWN | LSE      | MST      |              | OVM 0.0                  |                                                |
| -12       | 12    |          | 100      | Poorly graded sand, SP              | OLIVE BROWN | LSE      | SAT      | 6<br>10<br>6 | OVM 0.0                  | Collected soil sample. TD of borehole 14' bgs. |
| -13       | 13    |          |          |                                     |             |          |          |              |                          |                                                |
| -14       | 14    |          |          |                                     |             |          |          |              |                          |                                                |
| -15       | 15    |          |          |                                     |             |          |          |              |                          |                                                |
| -16       | 16    |          |          |                                     |             |          |          |              |                          |                                                |
| -17       | 17    |          |          |                                     |             |          |          |              |                          |                                                |
| -18       | 18    |          |          |                                     |             |          |          |              |                          |                                                |
| -19       | 19    |          |          |                                     |             |          |          |              |                          |                                                |
| -20       | 20    |          |          |                                     |             |          |          |              |                          |                                                |

| BOREHOLE<br>/WELL ID | SMP<br>NUM | LTH<br>NUM | LITHOLOGY INT.<br>(FT BGS) | SAMPLING<br>METHOD | SIZE<br>GRAVEL PCT. | GRAVEL<br>PCT. | SIZE<br>SAND | SAND<br>PCT | SILT<br>PCT | CLAY<br>PCT | ORGANIC<br>PCT | ROCK<br>TYPE | PLAST | SORT | STRENGTH | MOISTURE | STRAT<br>UNIT |
|----------------------|------------|------------|----------------------------|--------------------|---------------------|----------------|--------------|-------------|-------------|-------------|----------------|--------------|-------|------|----------|----------|---------------|
| CW7-SB2              | 1          | 1          | 0.00                       | 0.40               | SPS                 | 10             | MF           | 40          | 20          | 0           | 30             |              | NA    | POR  | SFT      | WET      |               |
| CW7-SB2              | 1          | 2          | 0.40                       | 1.20               | SPS                 | 0              | MF           | 80          | 18          | 2           | 0              |              | NON   | MOD  | LSE      | WET      |               |
| CW7-SB2              | 1          | 3          | 1.20                       | 2.00               | SPS                 | 0              |              | 0           | 0           | 0           | 0              |              |       |      |          |          |               |
| CW7-SB2              | 2          | 1          | 2.00                       | 2.30               | SPS                 | 0              | MF           | 80          | 18          | 2           | 0              |              | NON   | MOD  | SFT      | WET      |               |
| CW7-SB2              | 2          | 2          | 2.30                       | 2.95               | SPS                 | 0              | MF           | 55          | 30          | 15          | 0              |              | LOW   | MOD  | SFT      | MST      |               |
| CW7-SB2              | 2          | 3          | 2.95                       | 3.70               | SPS                 | 10             |              | 60          | 28          | 2           | 0              |              | NON   | MOD  | LSE      | WET      |               |
| CW7-SB2              | 2          | 4          | 3.70                       | 4.00               | SPS                 | 0              |              | 0           | 0           | 0           | 0              |              |       |      |          |          |               |
| CW7-SB2              | 3          | 1          | 4.00                       | 5.80               | SPS                 | 0              | MF           | 75          | 25          | 0           | 0              |              | NA    | MOD  | LSE      | MST      |               |
| CW7-SB2              | 3          | 2          | 5.80                       | 6.00               | SPS                 | 0              |              | 0           | 0           | 0           | 0              |              |       |      |          |          |               |
| CW7-SB2              | 4          | 1          | 6.00                       | 7.60               | SPS                 | 0              | MFC          | 95          | 5           | 0           | 0              |              | NA    | MOD  | LSE      | MST      |               |
| CW7-SB2              | 4          | 2          | 7.60                       | 8.00               | SPS                 | 0              |              | 0           | 0           | 0           | 0              |              |       |      |          |          |               |
| CW7-SB2              | 5          | 1          | 8.00                       | 10.00              | SPS                 | 0              | MF           | 95          | 5           | 0           | 0              |              | NA    | WEL  | LSE      | MST      |               |
| CW7-SB2              | 6          | 1          | 10.00                      | 12.00              | SPS                 | 0              | MF           | 90          | 10          | 0           | 0              |              | NON   | MOD  | LSE      | MST      |               |
| CW7-SB2              | 7          | 1          | 12.00                      | 14.00              | SPS                 | 0              | MF           | 95          | 5           | 0           | 0              |              | NA    | MOD  | LSE      | SAT      |               |

**Borehole Location Data****Roy F. WESTON, Inc.**

BOREHOLE ID : CW7-SB3  
BEGIN DATE : 12/21/94

PROJECT NAME: FT. MONMOUTH  
END DATE : 12/21/94

LOGGER/COMPANY : K. VALENTZ

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : 0

TOTAL DEPTH : 12.00

DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 8.00

INTERVAL: 0.00 ft. to 12.00 ft. BGS

METHOD : HSA

FLUID : NONE

BOREHOLE DIAMETER #2:

INTERVAL:

METHOD :

FLUID :

BOREHOLE DIAMETER #3:

INTERVAL:

METHOD :

FLUID :

DRILLING COMPANY : J.C. ANDERSON

DRILLER : WELLS REEVE

DRILL RIG TYPE : CME-55

|                                        | ESTIMATED        | SURVEYED |
|----------------------------------------|------------------|----------|
| SURFACE ELEVATION :                    | 0.000            |          |
| N. COORDINATE :                        | 0.0000           |          |
| E. COORDINATE :                        | 0.0000           |          |
| WELL PERMIT..... (Y)es (N)o: N         | PERMIT # :       |          |
| HOLE ABANDONED... (Y)es (N)o: Y        |                  |          |
| WELL INSTALLED... (Y)es (N)o: N        |                  |          |
| WELL CLUSTER..... (Y)es (N)o: N        | No. OF WELLS : 0 |          |
| WELL NEST..... (Y)es (N)o: N           | No. OF WELLS : 0 |          |
| PUMPS INSTALLED.. (Y)es (N)o: N        | TYPE             | DEPTH    |
|                                        | PURGE :          | 0.00     |
|                                        | SAMPLE :         | 0.00     |
| BOREHOLE TESTING                       |                  |          |
| BOREHOLE GEOPHYSICS..... (Y)es (N)o: N |                  |          |
| SLUG TESTS..... (Y)es (N)o: N          |                  |          |
| PACKER TESTS..... (Y)es (N)o: N        |                  |          |
| PUMPING TESTS..... (Y)es (N)o: N       |                  |          |

**COMMENTS :**

Borehole location grouted to surface level.

# Borehole Log

Roy F. WESTON, Inc.

PROJECT : FT. MONMOUTH  
 SITE NAME : CHARLES WOOD AREA 7  
 BORING ID : CW7-SB3  
 NORTHING : 0.0000 estimated  
 EASTING : 0.0000 estimated  
 ELEVATION : 0.000 estimated

TOTAL DEPTH : 12.00  
 LOGGER : K. VALENTZ  
 DRILLING COMPANY : J.C. ANDERSON  
 DRILLING RIG : CME-55  
 DATE STARTED : 12/21/94  
 DATE COMPLETED : 12/21/94

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION                   | COLOR        | STRENGTH | MOISTURE | BLOW COUNT    | FIELD INSTRUMENT READING | COMMENTS                                                                  |
|-----------|-------|----------|------------|----------------------------------|--------------|----------|----------|---------------|--------------------------|---------------------------------------------------------------------------|
|           |       |          | 50         | Silty sand, SM                   | ORANGE BROWN | LSE      | DRY      | 6<br>5<br>8   | OVM 116.0                | Fill. Some semi-rounded stones, little gravel silty sands.                |
| -1        | 1     |          |            | No Sample Recovered              |              |          |          |               |                          |                                                                           |
| -2        | 2     |          | 100        | Silty sand, SM                   | ORANGE-BROWN | LSE      | MST      | 4<br>5<br>5   | OVM 98.4                 | Same lithology as noted above with less gravel.                           |
| -3        | 3     |          |            |                                  |              |          |          |               |                          |                                                                           |
| -4        | 4     |          | 50         | Silty sand, SM                   | OLIVE BROWN  | SFT      | MST      | 6<br>7<br>4   | OVM 84.3                 |                                                                           |
| -5        | 5     |          |            | No Sample Recovered              |              |          |          |               |                          |                                                                           |
| -6        | 6     |          | 100        | Poorly graded sand, SP           | OLIVE        | LSE      | MST      | 8<br>11<br>13 | OVM 12.3                 | Top of spoon (4") silt with sand, all sand in rest of spoon. 3" sps used. |
| -7        | 7     |          |            |                                  |              |          |          |               |                          |                                                                           |
| -8        | 8     |          | 100        | Poorly graded sand, SP           |              | LSE      | MST      | 6<br>7<br>2   | OVM 2.4                  | 3" sps used. Light orange mottles. Sample CWA7-SB03 A02 collected.        |
| -9        | 9     |          |            |                                  |              |          |          |               |                          |                                                                           |
| -10       | 10    |          | 100        | Not Classified - Incomplete Data |              |          |          | 5<br>6<br>9   | HNU 0.0                  | Water noted at 10'-6" bgs wet sands. Heavier mottling at 11'-2" to 12'    |

**Borehole Log****Roy F. WESTON, Inc.**

|           |                       |                  |                 |
|-----------|-----------------------|------------------|-----------------|
| PROJECT   | : FT. MONMOUTH        | TOTAL DEPTH      | : 12.00         |
| SITE NAME | : CHARLES WOOD AREA 7 | LOGGER           | : K. VALENTZ    |
| BORING ID | : CW7-SB3             | DRILLING COMPANY | : J.C. ANDERSON |
| NORTHING  | : 0.0000 estimated    | DRILLING RIG     | : CME-55        |
| EASTING   | : 0.0000 estimated    | DATE STARTED     | : 12/21/94      |
| ELEVATION | : 0.000 estimated     | DATE COMPLETED   | : 12/21/94      |

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION                   | COLOR | STRENGTH | MOISTURE | BLOW COUNT | FIELD INSTRUMENT READING | COMMENTS                                                                  |
|-----------|-------|----------|------------|----------------------------------|-------|----------|----------|------------|--------------------------|---------------------------------------------------------------------------|
| -11       | 11    |          |            | Not Classified - Incomplete Data |       |          |          |            | HNU 0.0                  | Water noted at 10'-6" bgs<br>Wet sands. Heavier mottling at 11'-2" to 12' |
| -12       | 12    |          |            |                                  |       |          |          |            |                          |                                                                           |
| -13       | 13    |          |            |                                  |       |          |          |            |                          |                                                                           |
| -14       | 14    |          |            |                                  |       |          |          |            |                          |                                                                           |
| -15       | 15    |          |            |                                  |       |          |          |            |                          |                                                                           |
| -16       | 16    |          |            |                                  |       |          |          |            |                          |                                                                           |
| -17       | 17    |          |            |                                  |       |          |          |            |                          |                                                                           |
| -18       | 18    |          |            |                                  |       |          |          |            |                          |                                                                           |
| -19       | 19    |          |            |                                  |       |          |          |            |                          |                                                                           |
| -20       | 20    |          |            |                                  |       |          |          |            |                          |                                                                           |
|           |       |          |            |                                  |       |          |          |            |                          |                                                                           |

| BOREHOLE<br>/WELL ID | SMP<br>NUM | LTH<br>NUM | LITHOLOGY INT.<br>(FT BGS) | SAMPLING<br>METHOD | SIZE<br>GRAVEL PCT. | SIZE<br>SAND | SAND<br>PCT | SILT<br>PCT | CLAY<br>PCT | ORGANIC<br>PCT | ROCK<br>TYPE | PLAST | SORT | STRENGTH | MOISTURE | STRAT<br>UNIT |
|----------------------|------------|------------|----------------------------|--------------------|---------------------|--------------|-------------|-------------|-------------|----------------|--------------|-------|------|----------|----------|---------------|
| CW7-SB3              | 1          | 1          | 0.00                       | 1.00               | SPS                 | 10           | 50          | 40          | 0           | 0              |              | NON   | POR  | LSE      | DRY      |               |
| CW7-SB3              | 1          | 2          | 1.00                       | 2.00               | SPS                 | 0            | 0           | 0           | 0           | 0              |              |       |      |          |          |               |
| CW7-SB3              | 2          | 1          | 2.00                       | 4.00               | SPS                 | 0            | 70          | 30          | 0           | 0              |              | NON   | MOD  | LSE      | MST      |               |
| CW7-SB3              | 3          | 1          | 4.00                       | 5.00               | SPS                 | 0            | F 85        | 15          | 0           | 0              |              | NON   | WEL  | SFT      | MST      |               |
| CW7-SB3              | 3          | 2          | 5.00                       | 6.00               | SPS                 | 0            | 0           | 0           | 0           | 0              |              |       |      |          |          |               |
| CW7-SB3              | 4          | 1          | 6.00                       | 8.00               | SPS                 | 0            | 100         | 0           | 0           | 0              |              | NON   | MOD  | LSE      | MST      |               |
| CW7-SB3              | 5          | 1          | 8.00                       | 10.00              | SPS                 | 0            | 100         | 0           | 0           | 0              |              | NON   | MOD  | LSE      | MST      |               |
| CW7-SB3              | 6          | 1          | 10.00                      | 12.00              | SPS                 | 0            | 0           | 0           | 0           | 0              |              |       |      |          |          |               |



**Borehole Location Data****Roy F. WESTON, Inc.**

BOREHOLE ID : CW7-SB4  
BEGIN DATE : 12/21/94

PROJECT NAME: FT. MONMOUTH  
END DATE : 12/21/94

LOGGER/COMPANY : K. VALELNTI

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : O

TOTAL DEPTH : 12.00

DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 8.00

INTERVAL: 0.00 ft. to 12.00 ft. BGS

METHOD : HSA

FLUID : AIR

BOREHOLE DIAMETER #2:

INTERVAL:

METHOD :

FLUID :

BOREHOLE DIAMETER #3:

INTERVAL:

METHOD :

FLUID :

DRILLING COMPANY : J.C. ANDERSON

DRILLER : WELLS REEVE

DRILL RIG TYPE : CME-55

|                     | ESTIMATED | SURVEYED |
|---------------------|-----------|----------|
| SURFACE ELEVATION : | 0.000     |          |
| N. COORDINATE :     | 0.0000    |          |
| E. COORDINATE :     | 0.0000    |          |

WELL PERMIT.....(Y)es (N)o: N PERMIT # :

HOLE ABANDONED... (Y)es (N)o: Y

WELL INSTALLED... (Y)es (N)o: N

WELL CLUSTER.....(Y)es (N)o: N No. OF WELLS : 0

WELL NEST.....(Y)es (N)o: N No. OF WELLS : 0

PUMPS INSTALLED..(Y)es (N)o: N

PURGE :

DEPTH

0.00

SAMPLE :

0.00

**BOREHOLE TESTING**

BOREHOLE GEOPHYSICS.....(Y)es (N)o: N

SLUG TESTS.....(Y)es (N)o: N

PACKER TESTS.....(Y)es (N)o: N

PUMPING TESTS.....(Y)es (N)o: N

**COMMENTS :**

Upon completion borehole was abandoned by grouting from TD to ground surface.

# Borehole Log

Roy F. WESTON, Inc.

|             |                     |                    |               |
|-------------|---------------------|--------------------|---------------|
| PROJECT :   | FT. MONMOUTH        | TOTAL DEPTH :      | 12.00         |
| SITE NAME : | CHARLES WOOD AREA 7 | LOGGER :           | K. VALENTI    |
| BORING ID : | CW7-SB4             | DRILLING COMPANY : | J.C. ANDERSON |
| NORTHING :  | 0.0000 estimated    | DRILLING RIG :     | CME-55        |
| EASTING :   | 0.0000 estimated    | DATE STARTED :     | 12/21/94      |
| ELEVATION : | 0.000 estimated     | DATE COMPLETED :   | 12/21/94      |

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION                   | COLOR          | STRENGTH | MOISTURE | BLOW COUNT | FIELD INSTRUMENT READING | COMMENTS                                                                               |
|-----------|-------|----------|------------|----------------------------------|----------------|----------|----------|------------|--------------------------|----------------------------------------------------------------------------------------|
|           |       |          | 50         | Well-graded sand with gravel, SW | YELLOW BROWN   | LSE      | DRY      | 6          | HNU 0.0                  | Fill(?). Top 2" consist of topsoil.                                                    |
|           |       |          |            | Silty sand, SM                   | BROWN          | LSE      | MST      | 5          | HNU 0.0                  |                                                                                        |
| -1        | 1     |          |            | No Sample Recovered              |                |          |          |            |                          |                                                                                        |
| -2        | 2     |          | 100        | Silty sand, SM                   | OLIVE BROWN    | SFT      | MST      | 6          | HNU 0.0                  | Fill(?) Sandier with depth.                                                            |
| -3        | 3     |          |            |                                  |                |          |          | 5          |                          |                                                                                        |
| -4        | 4     |          | 100        | Silty sand, SM                   | OLIVE BROWN    | SFT      | MST      | 4          | HNU 0.0                  |                                                                                        |
| -5        | 5     |          |            |                                  |                |          |          | 5          |                          |                                                                                        |
| -6        | 6     |          | 100        | Poorly graded sand, SP           | OLIVE          | LSE      | MST      |            | HNU 0.5                  |                                                                                        |
| -7        | 7     |          |            |                                  |                |          |          |            |                          |                                                                                        |
| -8        | 8     |          | 100        | Poorly graded sand, SP           | OLIVE LT BROWN | LSE      | MST      | 7          | HNU 0.0                  | 3" sps used. Color becomes olive sand color towards bottom of SPS. Iron (Fe) staining. |
| -9        | 9     |          |            |                                  |                |          |          | 10         |                          |                                                                                        |
| -10       | 10    |          | 100        | Poorly graded sand, SP           | OLIVE - LT BRN | LSE      | WET      | 6          | HNU 0.0                  |                                                                                        |
|           |       |          |            |                                  |                |          |          | 7          |                          |                                                                                        |
|           |       |          |            |                                  |                |          |          | 11         |                          |                                                                                        |

# Borehole Log

Roy F. WESTON, Inc.

|                                 |                                  |
|---------------------------------|----------------------------------|
| PROJECT : FT. MONMOUTH          | TOTAL DEPTH : 12.00              |
| SITE NAME : CHARLES WOOD AREA 7 | LOGGER : K. VALENTI              |
| BORING ID : CW7-SB4             | DRILLING COMPANY : J.C. ANDERSON |
| NORTHING : 0.0000 estimated     | DRILLING RIG : CME-55            |
| EASTING : 0.0000 estimated      | DATE STARTED : 12/21/94          |
| ELEVATION : 0.000 estimated     | DATE COMPLETED : 12/21/94        |

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION         | COLOR          | STRENGTH | MOISTURE | BLOW COUNT | FIELD INSTRUMENT READING | COMMENTS                                                      |
|-----------|-------|----------|------------|------------------------|----------------|----------|----------|------------|--------------------------|---------------------------------------------------------------|
| -11       | 11    |          |            | Poorly graded sand, SP | OLIVE - LT BRN | LSE      | WET      |            | HNU 0.0                  | 3" sps used. 1st Water wet sands at 10.2' bgs. ID of borehole |
| -12       | 12    |          |            |                        |                |          |          |            |                          |                                                               |
| -13       | 13    |          |            |                        |                |          |          |            |                          |                                                               |
| -14       | 14    |          |            |                        |                |          |          |            |                          |                                                               |
| -15       | 15    |          |            |                        |                |          |          |            |                          |                                                               |
| -16       | 16    |          |            |                        |                |          |          |            |                          |                                                               |
| -17       | 17    |          |            |                        |                |          |          |            |                          |                                                               |
| -18       | 18    |          |            |                        |                |          |          |            |                          |                                                               |
| -19       | 19    |          |            |                        |                |          |          |            |                          |                                                               |
| -20       | 20    |          |            |                        |                |          |          |            |                          |                                                               |

DATE: 06/20/95 \*\*\*\*\* Roy F. WESTON, Inc. LITHOLOGICAL DATA FOR - CLIENT ID: USAC2 \*\*\* PAGE: 23

| BOREHOLE<br>/WELL ID | SMP<br>NUM | LTH<br>NUM | LITHOLOGY<br>(FT BGS) | INT.<br>METHOD | SAMPLING<br>SIZE | GRAVEL<br>PCT. | SIZE<br>SAND | SAND<br>PCT | SILT<br>PCT | CLAY<br>PCT | ORGANIC<br>PCT | ROCK<br>TYPE | PLAST | SORT | STRENGTH | MOISTURE | STRAT<br>UNIT |
|----------------------|------------|------------|-----------------------|----------------|------------------|----------------|--------------|-------------|-------------|-------------|----------------|--------------|-------|------|----------|----------|---------------|
| CW7-SB4              | 1          | 1          | 0.00                  | 0.40           | SPS              | 30             |              | 70          | 0           | 0           | 0              |              | NON   | POR  | LSE      | DRY      |               |
| CW7-SB4              | 1          | 2          | 0.40                  | 1.00           | SPS              | 0              |              | 80          | 20          | 0           | 0              |              | NON   | MOD  | LSE      | MST      |               |
| CW7-SB4              | 1          | 3          | 1.00                  | 2.00           | SPS              | 0              |              | 0           | 0           | 0           | 0              |              |       |      |          |          |               |
| CW7-SB4              | 2          | 1          | 2.00                  | 4.00           | SPS              | 0              | F            | 85          | 15          | 0           | 0              |              | NON   | WEL  | SFT      | MST      |               |
| CW7-SB4              | 3          | 1          | 4.00                  | 6.00           | SPS              | 0              |              | 85          | 15          | 0           | 0              |              | NON   | WEL  | SFT      | MST      |               |
| CW7-SB4              | 4          | 1          | 6.00                  | 8.00           | SPS              | 0              |              | 100         | 0           | 0           | 0              |              | NON   | WEL  | LSE      | MST      |               |
| CW7-SB4              | 5          | 1          | 8.00                  | 10.00          | SPS              | 0              |              | 100         | 0           | 0           | 0              |              | NON   | WEL  | LSE      | MST      |               |
| CW7-SB4              | 6          | 1          | 10.00                 | 12.00          | SPS              | 0              |              | 100         | 0           | 0           | 0              |              | NON   | WEL  | LSE      | WET      |               |

**Borehole Location Data****Roy F. WESTON, Inc.**

BOREHOLE ID : CW7-SB5 PROJECT NAME: FT. MONMOUTH  
BEGIN DATE : 12/21/94 END DATE : 12/21/94

LOGGER/COMPANY : K. VALENTI

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : O

TOTAL DEPTH : 12.00 DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 8.00  
INTERVAL: 0.00 ft. to 12.00 ft. BGS  
METHOD : HSA FLUID : AIR

BOREHOLE DIAMETER #2:  
INTERVAL:  
METHOD : FLUID :

BOREHOLE DIAMETER #3:  
INTERVAL:  
METHOD : FLUID :

DRILLING COMPANY : J.C. ANDERSON  
DRILLER : WELLS REEVE  
DRILL RIG TYPE : CME-55

|                                 | ESTIMATED        | SURVEYED |
|---------------------------------|------------------|----------|
| SURFACE<br>ELEVATION :          | 0.000            |          |
| N. COORDINATE :                 | 0.0000           |          |
| E. COORDINATE :                 | 0.0000           |          |
| WELL PERMIT.....(Y)es (N)o: N   | PERMIT # :       |          |
| HOLE ABANDONED... (Y)es (N)o: Y |                  |          |
| WELL INSTALLED... (Y)es (N)o: N |                  |          |
| WELL CLUSTER.....(Y)es (N)o: N  | No. OF WELLS : 0 |          |
| WELL NEST.....(Y)es (N)o: N     | No. OF WELLS : 0 |          |
| PUMPS INSTALLED..(Y)es (N)o: N  | TYPE             | DEPTH    |
|                                 | PURGE :          | 0.00     |
|                                 | SAMPLE :         | 0.00     |

**BOREHOLE TESTING**

BOREHOLE GEOPHYSICS.....(Y)es (N)o: N  
SLUG TESTS.....(Y)es (N)o: N  
PACKER TESTS.....(Y)es (N)o: N  
PUMPING TESTS.....(Y)es (N)o: N

**COMMENTS :**

Upon completion the borehole was grouted to surface level.

# Borehole Log

Roy F. WESTON, Inc.

|                                 |                                  |
|---------------------------------|----------------------------------|
| PROJECT : FT. MONMOUTH          | TOTAL DEPTH : 12.00              |
| SITE NAME : CHARLES WOOD AREA 7 | LOGGER : K. VALENTI              |
| BORING ID : CW7-SB5             | DRILLING COMPANY : J.C. ANDERSON |
| NORTHING : 0.0000 estimated     | DRILLING RIG : CME-55            |
| EASTING : 0.0000 estimated      | DATE STARTED : 12/21/94          |
| ELEVATION : 0.000 estimated     | DATE COMPLETED : 12/21/94        |

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION                      | COLOR           | STRENGTH | MOISTURE | BLOW COUNT           | FIELD INSTRUMENT READING | COMMENTS                                                                              |
|-----------|-------|----------|------------|-------------------------------------|-----------------|----------|----------|----------------------|--------------------------|---------------------------------------------------------------------------------------|
| -1        | 1     |          | 100        | Silty sand, SM                      | LT ORANGE BROWN | LSE      | DRY      | 4<br>7<br>9          | OVM 18.1                 | Top 2" sps was topsoil/organics. Some small cobbles noted throughout interval.        |
| -2        | 2     |          | 100        | Sandy silt, ML                      | BROWN           | FRM      | MST      | 5<br>7<br>4          | OVM 12.9                 | Some sand with little clay texture.                                                   |
| -3        | 3     |          |            |                                     |                 |          |          |                      |                          |                                                                                       |
| -4        | 4     |          | 100        | Silty sand, SM                      | OLIVE BROWN     | FRM      | MST      | 8<br>7<br>13         | OVM 2.5                  | Mottling noted in bottom 4" of SPS. Increase in sand % towards bottom of SPS.         |
| -5        | 5     |          |            |                                     |                 |          |          |                      |                          |                                                                                       |
| -6        | 6     |          | 100        | Poorly graded sand with silt, SP-SM | OLIVE           | LSE      | MST      | 5<br>7<br>9          | OVM 3.7                  | Top of sps olive brown color, bottom sps olive color.                                 |
| -7        | 7     |          |            |                                     |                 |          |          |                      |                          |                                                                                       |
| -8        | 8     |          | 100        | Poorly graded sand, SP              | LT BROWN        | LSE      | MST      | 15<br>19<br>16<br>14 | OVM 1.9                  | 3" SPS used. Heavy mottling towards bottom of SPS. Collected sample CWA7-SB05-A02.    |
| -9        | 9     |          |            |                                     |                 |          |          |                      |                          |                                                                                       |
| -10       | 10    |          | 100        | Poorly graded sand, SP              | LT BROWN OLIVE  | LSE      | WET      | 7<br>6<br>4<br>4     | OVM 0.0                  | 3" SPS used. Water at 11'-7" bgs. Fe lamina staining. Collected sample CWA7-SB05-A02. |

**Borehole Log****Roy F. WESTON, Inc.**

|           |                       |                  |                 |
|-----------|-----------------------|------------------|-----------------|
| PROJECT   | : FT. MONMOUTH        | TOTAL DEPTH      | : 12.00         |
| SITE NAME | : CHARLES WOOD AREA 7 | LOGGER           | : K. VALENTI    |
| BORING ID | : CW7-SB5             | DRILLING COMPANY | : J.C. ANDERSON |
| NORTHING  | : 0.0000 estimated    | DRILLING RIG     | : CME-55        |
| EASTING   | : 0.0000 estimated    | DATE STARTED     | : 12/21/94      |
| ELEVATION | : 0.000 estimated     | DATE COMPLETED   | : 12/21/94      |

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION         | COLOR          | STRENGTH | MOISTURE | BLOW COUNT | FIELD INSTRUMENT READING | COMMENTS                                                                              |
|-----------|-------|----------|------------|------------------------|----------------|----------|----------|------------|--------------------------|---------------------------------------------------------------------------------------|
| -11       | 11    |          |            | Poorly graded sand, SP | LT BROWN OLIVE | LSE      | WET      |            | OVM 0.0                  | 3" SPS used. Water at 11'-7" bgs. Fe lamina staining. Collected sample CWA7-SB05-A02. |
| -12       | 12    |          |            |                        |                |          |          |            |                          |                                                                                       |
| -13       | 13    |          |            |                        |                |          |          |            |                          |                                                                                       |
| -14       | 14    |          |            |                        |                |          |          |            |                          |                                                                                       |
| -15       | 15    |          |            |                        |                |          |          |            |                          |                                                                                       |
| -16       | 16    |          |            |                        |                |          |          |            |                          |                                                                                       |
| -17       | 17    |          |            |                        |                |          |          |            |                          |                                                                                       |
| -18       | 18    |          |            |                        |                |          |          |            |                          |                                                                                       |
| -19       | 19    |          |            |                        |                |          |          |            |                          |                                                                                       |
| -20       | 20    |          |            |                        |                |          |          |            |                          |                                                                                       |
|           |       |          |            |                        |                |          |          |            |                          |                                                                                       |

| BOREHOLE | SMP | LTH | LITHOLOGY | INT.  | SAMPLING | SIZE   | GRAVEL | SIZE | SAND | SILT | CLAY | ORGANIC | ROCK | STRAT |      |          |               |
|----------|-----|-----|-----------|-------|----------|--------|--------|------|------|------|------|---------|------|-------|------|----------|---------------|
| /WELL ID | NUM | NUM | (FT BGS)  |       | METHOD   | GRAVEL | PCT.   | SAND | PCT  | PCT  | PCT  | PCT     | TYPE | PLAST | SORT | STRENGTH | MOISTURE UNIT |
| CW7-SB5  | 1   | 1   | 0.00      | 2.00  | SPS      |        | 5      |      | 70   | 25   | 0    | 0       |      | NON   | MOD  | LSE      | DRY           |
| CW7-SB5  | 2   | 1   | 2.00      | 4.00  | SPS      |        | 0      |      | 35   | 60   | 5    | 0       |      | LOW   | MOD  | FRM      | MST           |
| CW7-SB5  | 3   | 1   | 4.00      | 6.00  | SPS      |        | 0      |      | 60   | 40   | 0    | 0       |      | NON   | MOD  | FRM      | MST           |
| CW7-SB5  | 4   | 1   | 6.00      | 8.00  | SPS      |        | 0      |      | 90   | 10   | 0    | 0       |      | NON   | MOD  | LSE      | MST           |
| CW7-SB5  | 5   | 1   | 8.00      | 10.00 | SPS      |        | 0      |      | 100  | 0    | 0    | 0       |      | NON   | MOD  | LSE      | MST           |
| CW7-SB5  | 6   | 1   | 10.00     | 12.00 | SPS      |        | 0      |      | 100  | 0    | 0    | 0       |      | NON   | MOD  | LSE      | WET           |



**Borehole Location Data****Roy F. WESTON, Inc.**

BOREHOLE ID : CW7-SB6 PROJECT NAME: FT. MONMOUTH  
BEGIN DATE : 12/21/94 END DATE : 12/21/94

LOGGER/COMPANY : K. VALENTI

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : 0

TOTAL DEPTH : 14.00 DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 8.00  
INTERVAL: 0.00 ft. to 14.00 ft. BGS  
METHOD : HSA FLUID : AIR

BOREHOLE DIAMETER #2:  
INTERVAL:  
METHOD : FLUID :

BOREHOLE DIAMETER #3:  
INTERVAL:  
METHOD : FLUID :

DRILLING COMPANY : J.C. ANDERSON  
DRILLER : WELLS REEVE  
DRILL RIG TYPE : CME-55

|                                 | ESTIMATED        | SURVEYED |
|---------------------------------|------------------|----------|
| SURFACE<br>ELEVATION :          | 0.000            |          |
| N. COORDINATE :                 | 0.0000           |          |
| E. COORDINATE :                 | 0.0000           |          |
| WELL PERMIT.....(Y)es (N)o: N   | PERMIT # :       |          |
| HOLE ABANDONED... (Y)es (N)o: Y |                  |          |
| WELL INSTALLED... (Y)es (N)o: N |                  |          |
| WELL CLUSTER..... (Y)es (N)o: N | No. OF WELLS : 0 |          |
| WELL NEST..... (Y)es (N)o: N    | No. OF WELLS : 0 |          |
| PUMPS INSTALLED.. (Y)es (N)o: N | TYPE             | DEPTH    |
|                                 | PURGE :          | 0.00     |
|                                 | SAMPLE :         | 0.00     |

**BOREHOLE TESTING**

BOREHOLE GEOPHYSICS..... (Y)es (N)o: N  
SLUG TESTS..... (Y)es (N)o: N  
PACKER TESTS..... (Y)es (N)o: N  
PUMPING TESTS..... (Y)es (N)o: N

**COMMENTS :**

The borehole was abandoned then grouted to surface level.

# Borehole Log

Roy F. WESTON, Inc.

|                                 |                                  |
|---------------------------------|----------------------------------|
| PROJECT : FT. MONMOUTH          | TOTAL DEPTH : 14.00              |
| SITE NAME : CHARLES WOOD AREA 7 | LOGGER : K. VALENTI              |
| BORING ID : CW7-SB6             | DRILLING COMPANY : J.C. ANDERSON |
| NORTHING : 0.0000 estimated     | DRILLING RIG : CME-55            |
| EASTING : 0.0000 estimated      | DATE STARTED : 12/21/94          |
| ELEVATION : 0.000 estimated     | DATE COMPLETED : 12/21/94        |

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION                      | COLOR           | STRENGTH | MOISTURE | BLOW COUNT           | FIELD INSTRUMENT READING | COMMENTS                                                                                          |
|-----------|-------|----------|------------|-------------------------------------|-----------------|----------|----------|----------------------|--------------------------|---------------------------------------------------------------------------------------------------|
| -1        | 1     |          | 100        | Poorly graded sand with silt, SP-SM | ORANGE-BROWN    | LSE      | DRY      | 4                    | OVM 1.5                  | Fill(?)                                                                                           |
| -2        | 2     |          | 100        | Silty sand, SM                      | ORANGE-BROWN    | FRM      | MST      | 5                    | OVM 0.0                  |                                                                                                   |
| -3        | 3     |          |            |                                     |                 |          |          |                      |                          |                                                                                                   |
| -4        | 4     |          | 50         | Poorly graded sand with silt, SP-SM | OLIVE BROWN     | LSE      | MST      | 11<br>13<br>15<br>17 | OVM 0.0                  | Fill(?)                                                                                           |
| -5        | 5     |          |            | No Sample Recovered                 |                 |          |          |                      |                          |                                                                                                   |
| -6        | 6     |          | 100        | Silty sand, SM                      | ORANGE-BROWN    | FRM      | MST      | 12<br>12<br>14<br>17 | OVM 0.0                  | Fill(?)                                                                                           |
| -7        | 7     |          |            |                                     |                 |          |          |                      |                          |                                                                                                   |
| -8        | 8     |          | 100        | Well graded sand with silt, SW-SM   | OLIVE ORANGE/BR | LSE      | MST      | 18<br>18<br>15<br>14 | OVM 0.0                  | 3" sps used. Iron (Fe) laminae staining. Mostly sands towards bottom of sps. More sand with depth |
| -9        | 9     |          |            |                                     |                 |          |          |                      |                          |                                                                                                   |
| -10       | 10    |          | 100        | Poorly graded sand, SP              | ORANGE LT BROWN | LSE      | MST      | 11<br>12<br>12<br>9  | OVM 0.0                  | 3" sps used. Olive in color at top of sps 10-5" color change to orange-lt brown.                  |

# Borehole Log

Roy F. WESTON, Inc.

|             |                     |                    |               |
|-------------|---------------------|--------------------|---------------|
| PROJECT :   | FT. MONMOUTH        | TOTAL DEPTH :      | 14.00         |
| SITE NAME : | CHARLES WOOD AREA 7 | LOGGER :           | K. VALENTI    |
| BORING ID : | CW7-SB6             | DRILLING COMPANY : | J.C. ANDERSON |
| NORTHING :  | 0.0000 estimated    | DRILLING RIG :     | CME-55        |
| EASTING :   | 0.0000 estimated    | DATE STARTED :     | 12/21/94      |
| ELEVATION : | 0.000 estimated     | DATE COMPLETED :   | 12/21/94      |

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION         | COLOR           | STRENGTH | MOISTURE | BLOW COUNT | FIELD INSTRUMENT READING | COMMENTS                                                                         |
|-----------|-------|----------|------------|------------------------|-----------------|----------|----------|------------|--------------------------|----------------------------------------------------------------------------------|
| -11       | 11    |          | 100        | Poorly graded sand, SP | ORANGE LT BROWN | LSE      | MST      |            | OVM 0.0                  | 3" sps used. Olive in color at top of sps 10-5" color change to orange-lt brown. |
| -12       | 12    |          |            | Poorly graded sand, SP | OLIVE BROWN     | LSE      | WET      | 8<br>11-12 | OVM 0.0                  | 3" SPS used. Sample CWA7-SB06-A03 collected. TD of borehole 14' bgs.             |
| -13       | 13    |          |            |                        |                 |          |          |            |                          |                                                                                  |
| -14       | 14    |          |            |                        |                 |          |          |            |                          |                                                                                  |
| -15       | 15    |          |            |                        |                 |          |          |            |                          |                                                                                  |
| -16       | 16    |          |            |                        |                 |          |          |            |                          |                                                                                  |
| -17       | 17    |          |            |                        |                 |          |          |            |                          |                                                                                  |
| -18       | 18    |          |            |                        |                 |          |          |            |                          |                                                                                  |
| -19       | 19    |          |            |                        |                 |          |          |            |                          |                                                                                  |
| -20       | 20    |          |            |                        |                 |          |          |            |                          |                                                                                  |

| BOREHOLE<br>/WELL ID | SMP<br>NUM | LTH<br>NUM | LITHOLOGY INT.<br>(FT BGS) | SAMPLING<br>METHOD | SIZE<br>GRAVEL PCT. | GRAVEL<br>SIZE<br>SAND | SAND<br>PCT | SILT<br>PCT | CLAY<br>PCT | ORGANIC<br>PCT | ROCK<br>TYPE | PLAST | SORT | STRENGTH | MOISTURE | STRAT<br>UNIT |
|----------------------|------------|------------|----------------------------|--------------------|---------------------|------------------------|-------------|-------------|-------------|----------------|--------------|-------|------|----------|----------|---------------|
| CW7-SB6              | 1          | 1          | 0.00                       | 2.00               | SPS                 | 0                      | 90          | 10          | 0           | 0              |              | NON   | MOD  | LSE      | DRY      |               |
| CW7-SB6              | 2          | 1          | 2.00                       | 4.00               | SPS                 | 0                      | 60          | 40          | 0           | 0              |              | NON   | MOD  | FRM      | MST      |               |
| CW7-SB6              | 3          | 1          | 4.00                       | 5.00               | SPS                 | 0                      | 90          | 10          | 0           | 0              |              | NON   | MOD  | LSE      | MST      |               |
| CW7-SB6              | 3          | 2          | 5.00                       | 6.00               | SPS                 | 0                      | 0           | 0           | 0           | 0              |              |       |      |          |          |               |
| CW7-SB6              | 4          | 1          | 6.00                       | 8.00               | SPS                 | 0                      | 70          | 30          | 0           | 0              |              | LOW   | MOD  | FRM      | MST      |               |
| CW7-SB6              | 5          | 1          | 8.00                       | 10.00              | SPS                 | 0                      | 90          | 10          | 0           | 0              |              | NON   | POR  | LSE      | MST      |               |
| CW7-SB6              | 6          | 1          | 10.00                      | 12.00              | SPS                 | 0                      | 100         | 0           | 0           | 0              |              | NON   | MOD  | LSE      | MST      |               |
| CW7-SB6              | 7          | 1          | 12.00                      | 14.00              | SPS                 | 0                      | 100         | 0           | 0           | 0              |              | NON   | MOD  | LSE      | WET      |               |

**Borehole Location Data****Roy F. WESTON, Inc.**

BOREHOLE ID : CW9-SB1  
BEGIN DATE : 01/04/95

PROJECT NAME: FT. MONMOUTH  
END DATE : 01/04/95

LOGGER/COMPANY : K. VALENTI

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) : 0

TOTAL DEPTH : 4.00

DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 2.00

INTERVAL: 0.00 ft. to 4.00 ft. BGS

METHOD :

FLUID : AIR

BOREHOLE DIAMETER #2:

INTERVAL:

METHOD :

FLUID :

BOREHOLE DIAMETER #3:

INTERVAL:

METHOD :

FLUID :

DRILLING COMPANY : J.C. ANDERSON

DRILLER : WELLS REEVE

DRILL RIG TYPE :

|                        | ESTIMATED | SURVEYED |
|------------------------|-----------|----------|
| SURFACE<br>ELEVATION : | 0.000     |          |
| N. COORDINATE :        | 0.0000    |          |
| E. COORDINATE :        | 0.0000    |          |

WELL PERMIT.....(Y)es (N)o: N PERMIT # :

HOLE ABANDONED... (Y)es (N)o: Y

WELL INSTALLED... (Y)es (N)o: N

WELL CLUSTER..... (Y)es (N)o: N No. OF WELLS : 0

WELL NEST..... (Y)es (N)o: N No. OF WELLS : 0

PUMPS INSTALLED.. (Y)es (N)o: N

PURGE :

DEPTH

0.00

SAMPLE :

0.00

**BOREHOLE TESTING**

BOREHOLE GEOPHYSICS..... (Y)es (N)o: N

SLUG TESTS..... (Y)es (N)o: N

PACKER TESTS..... (Y)es (N)o: N

PUMPING TESTS..... (Y)es (N)o: N

**COMMENTS :**

Upon completion the borehole was grouted from TD to ground surface.

# Borehole Log

Roy F. WESTON, Inc.

|           |                       |                  |                 |
|-----------|-----------------------|------------------|-----------------|
| PROJECT   | : FT. MONMOUTH        | TOTAL DEPTH      | : 4.00          |
| SITE NAME | : CHARLES WOOD AREA 9 | LOGGER           | : K. VALENTI    |
| BORING ID | : CW9-SB1             | DRILLING COMPANY | : J.C. ANDERSON |
| NORTHING  | : 0.0000 estimated    | DRILLING RIG     | :               |
| EASTING   | : 0.0000 estimated    | DATE STARTED     | : 01/04/95      |
| ELEVATION | : 0.000 estimated     | DATE COMPLETED   | : 01/04/95      |

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION         | COLOR       | STRENGTH | MOISTURE | BLOW COUNT | FIELD INSTRUMENT READING | COMMENTS                                                                                    |
|-----------|-------|----------|------------|------------------------|-------------|----------|----------|------------|--------------------------|---------------------------------------------------------------------------------------------|
| -1        | 1     |          | 100        | Poorly graded sand, SP | BROWN       | LSE      | MST      |            | HNU 0.0                  | 2" sps driven by sledge hammer. No access for rig olive in color towards bottom tip of sps. |
| -2        | 2     |          | 100        | Well-graded sand, SW   | OLIVE BROWN | LSE      | SAT      |            | HNU 0.0                  | Water occurred at 2.1' bgs. Collected sample, CW9-SB01-A02.                                 |
| -3        | 3     |          |            |                        |             |          |          |            |                          |                                                                                             |
| -4        | 4     |          |            |                        |             |          |          |            |                          |                                                                                             |
| -5        | 5     |          |            |                        |             |          |          |            |                          |                                                                                             |
| -6        | 6     |          |            |                        |             |          |          |            |                          |                                                                                             |
| -7        | 7     |          |            |                        |             |          |          |            |                          |                                                                                             |
| -8        | 8     |          |            |                        |             |          |          |            |                          |                                                                                             |
| -9        | 9     |          |            |                        |             |          |          |            |                          |                                                                                             |
| -10       | 10    |          |            |                        |             |          |          |            |                          |                                                                                             |

DATE: 06/20/95 \*\*\*\* Roy F. WESTON, Inc. LITHOLOGICAL DATA FOR - CLIENT ID: USAC2 \*\*\* PAGE: 28

| BOREHOLE<br>/WELL ID | SMP<br>NUM | LTH<br>NUM | LITHOLOGY<br>(FT BGS) | INT.<br>METHOD | SAMPLING<br>METHOD | SIZE<br>GRAVEL PCT. | GRAVEL<br>PCT. | SIZE<br>SAND | SAND<br>PCT | SILT<br>PCT | CLAY<br>PCT | ORGANIC<br>PCT | ROCK<br>TYPE | PLAST | SORT | STRENGTH | MOISTURE | STRAT<br>UNIT |
|----------------------|------------|------------|-----------------------|----------------|--------------------|---------------------|----------------|--------------|-------------|-------------|-------------|----------------|--------------|-------|------|----------|----------|---------------|
| CW9-SB1              | 1          | 1          | 0.00                  | 2.00           | SPS                |                     | 0              | MF           | 100         | 0           | 0           | 0              |              | NA    | MOD  | LSE      | MST      |               |
| CW9-SB1              | 2          | 1          | 2.00                  | 4.00           | SPS                |                     | 0              | CF           | 100         | 0           | 0           | 0              |              | NA    | POR  | LSE      | SAT      |               |

**Borehole Location Data****Roy F. WESTON, Inc.**

BOREHOLE ID : CW9MW36A  
BEGIN DATE : 01/03/95

PROJECT NAME: FT. MONMOUTH  
END DATE : 01/03/95

LOGGER/COMPANY : P. THOMAS

BOREHOLE COMPLETED IN (<O>verburden <B>edrock) :

TOTAL DEPTH : 6.00

DEPTH TO BEDROCK : 0.00

BOREHOLE DIAMETER #1: 12.00

INTERVAL: 0.00 ft. to 6.00 ft. BGS

METHOD : HSA

FLUID : WATER

BOREHOLE DIAMETER #2:

INTERVAL:

METHOD :

FLUID :

BOREHOLE DIAMETER #3:

INTERVAL:

METHOD :

FLUID :

DRILLING COMPANY : J.C. ANDERSON

DRILLER : STEVE BURGER

DRILL RIG TYPE : ATV-SKID RIG

|                        | ESTIMATED | SURVEYED |
|------------------------|-----------|----------|
| SURFACE<br>ELEVATION : | 0.000     | 31.220   |

N. COORDINATE : 0.0000

E. COORDINATE : 0.0000

WELL PERMIT.....(Y)es (N)o: N PERMIT # : NJ 29 32601

HOLE ABANDONED... (Y)es (N)o: N

WELL INSTALLED... (Y)es (N)o: Y

WELL CLUSTER..... (Y)es (N)o: N No. OF WELLS : 0

WELL NEST..... (Y)es (N)o: N No. OF WELLS : 0

PUMPS INSTALLED.. (Y)es (N)o: N

TYPE

DEPTH

PURGE :

0.00

SAMPLE :

0.00

**BOREHOLE TESTING**

BOREHOLE GEOPHYSICS..... (Y)es (N)o: N

SLUG TESTS..... (Y)es (N)o: N

PACKER TESTS..... (Y)es (N)o: N

PUMPING TESTS..... (Y)es (N)o: N

**COMMENTS :**

Upon finishing with CW09-MW36A (1-3-95) a test borehole, the borehole was abandoned by grouting from TD to ground surface Hole CW09-MW36. Lat.N: 40 deg 17' 47" Long.W: 74 deg 4' 28"



# Borehole Log

Roy F. WESTON, Inc.

|             |                     |                    |               |
|-------------|---------------------|--------------------|---------------|
| PROJECT :   | FT. MONMOUTH        | TOTAL DEPTH :      | 6.00          |
| SITE NAME : | CHARLES WOOD AREA 9 | LOGGER :           | P. THOMAS     |
| BORING ID : | CW9MW36A            | DRILLING COMPANY : | J.C. ANDERSON |
| NORTHING :  | 0.0000 estimated    | DRILLING RIG :     | ATV-SKID RIG  |
| EASTING :   | 0.0000 estimated    | DATE STARTED :     | 01/03/95      |
| ELEVATION : | 31.220 surveyed     | DATE COMPLETED :   | 01/03/95      |

| ELEVATION | DEPTH | MATERIAL | % RECOVERY | CLASSIFICATION                      | COLOR       | STRENGTH | MOISTURE | BLOW COUNT          | FIELD INSTRUMENT READING | COMMENTS                                                                                   |
|-----------|-------|----------|------------|-------------------------------------|-------------|----------|----------|---------------------|--------------------------|--------------------------------------------------------------------------------------------|
|           |       |          | 50         | Silty sand, SM                      | BROWN       | SFT      | MST      | 2<br>4<br>4         | HNU 0.0                  | Fill and topsoil.                                                                          |
| 30        | 1     |          |            | No Sample Recovered                 |             |          |          |                     |                          |                                                                                            |
| 29        | 2     |          | 55         | Silty sand, SM                      | BROWN       | LSE      | WET      | 7<br>10<br>12<br>13 | HNU 0.0                  | Fill/topsoil                                                                               |
|           |       |          |            | Poorly graded sand with silt, SP-SM | OLIVE BROWN | LSE      | WET      |                     | HNU 3.0                  | Sat ~2.8' bgs.                                                                             |
| 28        | 3     |          |            | No Sample Recovered                 |             |          |          |                     |                          |                                                                                            |
| 27        | 4     |          | 75         | Silty sand, SM                      | OLV/GRN/BRN | LSE      | SAT      | 7<br>12<br>16<br>18 | HNU 3.0                  | Note: strong color change to lt Fe brown at 5.2' 5.5 bgs-trace round gravel qtz fragments. |
| 26        | 5     |          |            | No Sample Recovered                 |             |          |          |                     |                          |                                                                                            |
| 25        | 6     |          |            |                                     |             |          |          |                     |                          |                                                                                            |
| 24        | 7     |          |            |                                     |             |          |          |                     |                          |                                                                                            |
| 23        | 8     |          |            |                                     |             |          |          |                     |                          |                                                                                            |
| 22        | 9     |          |            |                                     |             |          |          |                     |                          |                                                                                            |
| 21        | 10    |          |            |                                     |             |          |          |                     |                          |                                                                                            |

| BOREHOLE<br>/WELL ID | SMP<br>NUM | LTH<br>NUM | LITHOLOGY INT.<br>(FT BGS) | SAMPLING<br>METHOD | SIZE<br>GRAVEL | GRAVEL<br>PCT. | SIZE<br>SAND | SAND<br>PCT | SILT<br>PCT | CLAY<br>PCT | ORGANIC<br>PCT | ROCK<br>TYPE | PLAST | SORT | STRENGTH | MOISTURE | STRAT<br>UNIT |
|----------------------|------------|------------|----------------------------|--------------------|----------------|----------------|--------------|-------------|-------------|-------------|----------------|--------------|-------|------|----------|----------|---------------|
| CW9MW36A             | 1          | 1          | 0.00                       | 1.00               | SPS            | CM             | 5            | FM          | 45          | 30          | 10             | 10           | NA    | POR  | SFT      | MST      |               |
| CW9MW36A             | 1          | 2          | 1.00                       | 2.00               | SPS            |                | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| CW9MW36A             | 2          | 1          | 2.00                       | 2.30               | SPS            | M              | 5            | MFC         | 70          | 20          | 0              | 5            | NA    | MOD  | LSE      | WET      |               |
| CW9MW36A             | 2          | 2          | 2.30                       | 3.10               | SPS            |                | 0            | MCF         | 90          | 10          | 0              | 0            |       | MOD  | LSE      | WET      |               |
| CW9MW36A             | 2          | 3          | 3.10                       | 4.00               | SPS            |                | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |
| CW9MW36A             | 3          | 1          | 4.00                       | 5.50               | SPS            |                | 0            | MCF         | 85          | 15          | 0              | 0            | NA    | MOD  | LSE      | SAT      |               |
| CW9MW36A             | 3          | 2          | 5.50                       | 6.00               | SPS            |                | 0            |             | 0           | 0           | 0              | 0            |       |      |          |          |               |

**APPENDIX B**  
**SURVEY DATA**

**Monitoring Well and Tidal Gauge Table**  
**Fort Monmouth, New Jersey**  
**(Continued)**

| <b>Monitoring Well Designation</b> | <b>Outer Casing Elevation</b> | <b>PVC Elevation</b>            | <b>Ground Elevation</b> | <b>Point Number</b> |
|------------------------------------|-------------------------------|---------------------------------|-------------------------|---------------------|
| MP2-MW2                            | 15.72                         | 15.50                           | 13.36                   | 129                 |
| MP2-MW3                            | 13.10                         | 12.63                           | 10.98                   | 130                 |
| MP2-MW1                            | 21.42                         | 21.04                           | 19.44                   | 131                 |
| B2-MW02B                           | 20.45                         | 20.23                           | 18.07                   | 132                 |
| B1-MW01B                           | 25.16                         | 24.59                           | 22.48                   | 133                 |
| B5-MW05B                           | 15.54                         | 15.40                           | 13.40                   | 135                 |
| MP16-MW22                          | 7.54                          | 7.25                            | 5.50                    | 136                 |
| B9-MW09B                           | 45.65                         | 45.31                           | 43.13                   | 137                 |
| CW2-MW31                           | 52.18                         | 51.58                           | 49.67                   | 138                 |
| CW2-MW32                           | 52.08                         | 51.38                           | 49.47                   | 139                 |
| CW2-MW33                           | 51.17                         | 51.09                           | 49.18                   | 140                 |
| CW2-MW30                           | 52.15                         | 51.71                           | 49.47                   | 141                 |
| B10-MW10B                          | 53.43                         | 33.14                           | 51.36                   | 142                 |
| B8-MW08B                           | 49.41                         | 48.09                           | 47.04                   | 143                 |
| CW9-MW35                           | 31.73                         | 31.43                           | 29.27                   | 144                 |
| CW9-MW36                           | 33.60                         | 33.21                           | 31.22                   | 145                 |
| CW6-MW34                           | 34.17                         | 33.76                           | 31.97                   | 146                 |
| B6-MW06B                           | 37.52                         | 37.37                           | 35.19                   | 147                 |
|                                    | <b>Stream Bed Elevation</b>   | <b>Distance to Top of Gauge</b> | <b>Top Elevation</b>    |                     |
| Stilling Well-2                    | 1.28                          | +9.00                           | 10.28                   | 148                 |
| Stilling Well-1                    | 1.37                          | +9.26                           | 10.63                   | 150                 |
| Stilling Well-7                    | -1.02                         | +8.85                           | 7.83                    | 151                 |
| Stilling Well-9                    | -1.63                         | +8.80                           | 7.17                    | 152                 |
| Stilling Well-8                    | -1.71                         | +8.20                           | 6.49                    | 153                 |

**Monitoring Well and Tidal Gauge Table  
Fort Monmouth, New Jersey**

| <b>Monitoring Well Designation</b> | <b>Outer Casing Elevation</b> | <b>PVC Elevation</b> | <b>Ground Elevation</b> | <b>Point Number</b> |
|------------------------------------|-------------------------------|----------------------|-------------------------|---------------------|
| MP4-MW7                            | 17.16                         | 16.75                | 14.83                   | 100                 |
| MP4-MW8                            | 11.05                         | 10.68                | 9.02                    | 101                 |
| MP4-MW9                            | 9.91                          | 9.69                 | 7.77                    | 102                 |
| MP5-MW11                           | 12.21                         | 11.70                | 9.77                    | 103                 |
| MP3-MW4                            | 19.70                         | 19.02                | 17.34                   | 104                 |
| MP3-MW5                            | 13.42                         | 13.30                | 11.28                   | 106                 |
| MP3-MW6                            | 12.61                         | 12.42                | 10.25                   | 107                 |
| MP3-MW12                           | 15.88                         | 15.20                | 13.47                   | 108                 |
| MP5-MW10                           | 7.53                          | 6.91                 | 5.13                    | 109                 |
| MP8-MW14                           | 8.62                          | 8.22                 | 6.19                    | 110                 |
| MP8-MW13                           | 8.23                          | 7.80                 | 6.02                    | 111                 |
| MP8-MW15                           | 7.35                          | 7.01                 | 5.01                    | 112                 |
| MP18-MW24                          | 9.04                          | 8.16                 | 6.78                    | 113                 |
| MP18-MW25                          | 8.64                          | 8.28                 | 6.35                    | 115                 |
| B4-MW04B                           | 12.44                         | 12.08                | 9.78                    | 116                 |
| B7-MW07B                           | 66.74                         | 66.31                | 64.27                   | 117                 |
| CW1-MW-29                          | 62.73                         | 62.44                | 60.41                   | 118                 |
| CW1-MW-26                          | 62.62                         | 62.46                | 60.54                   | 119                 |
| CW1-MW-27                          | 62.76                         | 62.56                | 60.81                   | 120                 |
| CW1-MW-28                          | 63.17                         | 62.89                | 60.73                   | 121                 |
| MP14-MW19                          | 10.47                         | 9.68                 | 7.98                    | 122                 |
| MP14-MW20                          | 9.77                          | 9.29                 | 7.43                    | 123                 |
| MP14-MW21                          | 9.78                          | 9.57                 | 7.50                    | 124                 |
| MP12-MW18                          | 7.04                          | 6.62                 | 4.78                    | 125                 |
| MP12-MW16                          | 8.74                          | 8.35                 | 6.33                    | 126                 |
| MP12-MW17                          | 8.24                          | 7.87                 | 5.90                    | 127                 |
| B3-MW03B                           | 21.53                         | 21.09                | 19.20                   | 128                 |

**APPENDIX C**  
**WELL DEVELOPMENT LOGS**

$$\frac{-\frac{T.O.}{W.L.}}{A} \times \frac{A}{B} \cdot 65 - (4'' \text{ WELZ}) \rightarrow 1 \text{ WELZ Volumen}$$

|                |                          |               |
|----------------|--------------------------|---------------|
| Well Volume    | 2-inch = 0.16            | 6-inch = 1.47 |
| (gallons/foot) | <del>4-inch = 0.65</del> | 8-inch = 2.61 |

\* Well Yield too low to Pump - will develop with  
boiler surge blocker in order to increase yield from

Next Page:

CORRESPONDING DRAWDOWN: Dry FT

COPYRIGHT © 1991 by Roy F. Weston, Inc.

COMPANY: RTW WELL NO.: 4401

CLIENT: USACE DATE: 1-17-93

PROJECT: 03886-076-WF LOGGER: K. Williams

SITE: MP2 SIGNATURE: K. Williams



ONE WELL VOLUME: ~10.4 gallons WELL TD: 24.25' RTOC Well Volume 2-inch = 0.16 6-inch = 1.47  
(gallons/foot) 4-inch = 0.65 8-inch = 2.61

FINAL WELL YIELD: 205 GPM PUMP RATE - ESTIMATED CORRESPONDING DRAWDOWN: 105 FT

| DEVELOPMENT ACTIVITY CODES                            |                             | FIELD MEASUREMENT CODES                                 | TURBIDITY                                                  |
|-------------------------------------------------------|-----------------------------|---------------------------------------------------------|------------------------------------------------------------|
| DBB - Begin Bailing                                   | DBE - End Bailing           | MTP - Temperature                                       | Enter Turbidity Meter Reading<br>(Final should be < 5 NTU) |
| DOB - Begin Overpumping                               | DOE - End Overpumping       | MSC - Specific Conductance                              |                                                            |
| DNR - Begin Rerewinding                               | DRE - End Rerewinding       | MPD - Photolizer (e.g., H <sub>2</sub> O <sub>2</sub> ) | OR                                                         |
| DCB - Begin Recirculation                             | DCE - End Recirculation     | MFD - Flame Ionizer (e.g., OVA)                         | Enter Qualitative Observations                             |
| DHB - Begin Hydraulic Jetting                         | DHE - End Hydraulic Jetting | MPO - Dissolved Oxygen                                  |                                                            |
| DAB - Begin Air Surging                               | DAE - End Air Surging       | MDH - pH                                                | H - High: Opaque/Muddy/Silty                               |
| DSB - Begin Surge Blocking                            | DSE - End Surge Blocking    | MEH - Eh                                                | M - Medium: Translucent/Cloudy                             |
| DXB - Begin Other                                     | DXE - End Other             | MMC - Inflow Cone                                       | L - Low: Transparent/Some Sil                              |
| Specify other method:                                 |                             | MO1 - Other: _____                                      | N - None: Clear/No Visible Sil                             |
| FMT - Field Measurements (select from codes at right) |                             | MO2 - Other: _____                                      |                                                            |



|          |               |            |            |
|----------|---------------|------------|------------|
| COMPANY: | RIFW          | WELL NO.:  | MW02       |
| CLIENT:  | LYAC          | DATE:      | 12-22-94   |
| PROJECT: | C3886-216-03F | LOGGER:    | K. Valenti |
| SITE:    | M02-MW02      | SIGNATURE: | K. Valenti |



ONE WELL VOLUME: ~5.7 gallons WELL TD: 19.26 R TOC

|                |               |               |
|----------------|---------------|---------------|
| Well Volume    | 2-inch = 0.16 | 6-inch = 1.47 |
| (gallons/foot) | 4-inch = 0.65 | 8-inch = 2.61 |

[illegible]

FINAL WELL YIELD: 2.5 (GPM) PUMP RATE - ESTIMATED CORRESPONDING DRAWDOWN: 3 (FT)

| DEVELOPMENT ACTIVITY CODES                            |                             | FIELD MEASUREMENT CODES         | TURBIDITY                      |
|-------------------------------------------------------|-----------------------------|---------------------------------|--------------------------------|
| DBB - Begin Bailing                                   | DSE - End Bailing           | MTP - Temperature               | Enter Turbidity Meter Reading  |
| DOB - Begin Overpumping                               | DOE - End Overpumping       | MSC - Specific Conductance      | (Final should be < 5 NTU)      |
| DRB - Begin Rinswilling                               | DRE - End Rinswilling       | MPD - Phototimizer (e.g., HNA)  | OR                             |
| DCB - Begin Recirculation                             | DCE - End Recirculation     | MFD - Flame Ionizer (e.g., OVA) | Enter Qualitative Observations |
| DHIB - Begin Hydraulic Jetting                        | DHE - End Hydraulic Jetting | MDO - Dissolved Oxygen          |                                |
| DAB - Begin Air Surging                               | DAE - End Air Surging       | MPH - pH                        | H - High: Opaque/Muddy/Silty   |
| DGB - Begin Surge Blocking                            | DGE - End Surge Blocking    | MEH - Eh                        | M - Medium: Translucent/Cloudy |
| DGB - Begin Other                                     | DXE - End Other             | MMC - Inhoff Cone               | L - Low: Transparent/Some Bill |
| Specify other method:                                 |                             | MO1 - Other: _____              | N - None: Clear/No Visible Sol |
| FMT - Field Measurements (select from codes at right) |                             | MO2 - Other: _____              |                                |

|          |                        |            |                      |
|----------|------------------------|------------|----------------------|
| COMPANY: | REF                    | WELL NO.:  | MW03                 |
| CLIENT:  | USACE                  | DATE:      | 12-22-94             |
| PROJECT: | 03856-0710-038-0020-00 | LOGGER:    | K. VALENTI / N. Lutz |
| SITE:    | MP2                    | SIGNATURE: | K. VALENTI           |

[illegible]

| DEVELOPMENT ACTIVITY CODES                            |                             | FIELD MEASUREMENT CODES         | TURBIDITY                                                  |
|-------------------------------------------------------|-----------------------------|---------------------------------|------------------------------------------------------------|
| DBS - Begin Bailing                                   | DSE - End Bailing           | MTP - Temperature               | Enter Turbidity Meter Reading<br>(Final should be < 5 NTU) |
| DOS - Begin Overpumping                               | DOE - End Overpumping       | MSC - Specific Conductance      |                                                            |
| DRB - Begin Rawwhiding                                | DRE - End Rawwhiding        | MPD - Photolizier (e.g., HNU)   | OR                                                         |
| DCB - Begin Recirculation                             | DCE - End Recirculation     | MFD - Flame Ionizer (e.g., OVA) | Enter Qualitative Observations                             |
| DHB - Begin Hydraulic Jetting                         | DHE - End Hydraulic Jetting | MDO - Dissolved Oxygen          |                                                            |
| DAB - Begin Air Surging                               | DAE - End Air Surging       | MPH - pH                        | H - High: Opaque/Muddy/Silty                               |
| DSB - Begin Surge Blocking                            | DSE - End Surge Blocking    | MEH - Eh                        | M - Medium: Translucent/Cloudy                             |
| DXB - Begin Other                                     | DXE - End Other             | MMC - Imhoff Cone               | L - Low: Transparent/Some Silt                             |
| Specify other method:                                 |                             | MO1 - Other:                    | N - None: Clear/No Visible Silt                            |
| FMT - Field Measurements (select from codes at right) |                             | MO2 - Other:                    |                                                            |

|          |               |            |            |                                                                                     |
|----------|---------------|------------|------------|-------------------------------------------------------------------------------------|
| COMPANY: | RFW           | WELL NO.:  | MW04       |  |
| CLIENT:  | USAF          | DATE:      | 1-2-95     |                                                                                     |
| PROJECT: | 03886-076-038 | LOGGER:    | K. VALENTI |                                                                                     |
| SITE:    | MP 3          | SIGNATURE: | K. VALENTI |                                                                                     |

ONE WELL VOLUME: 8.1 gallons WELL TD: 25.10 ft TOC

|                |               |               |
|----------------|---------------|---------------|
| Well Volume    | 2-inch = 0.16 | 6-inch = 1.47 |
| (gallons/foot) | 4-inch = 0.65 | 8-inch = 2.61 |

FINAL WELL YIELD: 1.2 GPM PUMP RATE - ESTIMATED CORRESPONDING DRAWDOWN: 8 FT

| DEVELOPMENT ACTIVITY CODES                            |                             | FIELD MEASUREMENT CODES         | TURBIDITY                                                  |
|-------------------------------------------------------|-----------------------------|---------------------------------|------------------------------------------------------------|
| DBS - Begin Bailing                                   | DSE - End Bailing           | MTP - Temperature               | Enter Turbidity Meter Reading<br>(Final should be < 5 NTU) |
| DOB - Begin Overpumping                               | DOE - End Overpumping       | MSC - Specific Conductance      | OR                                                         |
| DRB - Begin Rerwhiding                                | DRE - End Rerwhiding        | MPD - Phototolizer (e.g., HNA)  | Enter Qualitative Observations                             |
| DCB - Begin Recirculation                             | DCE - End Recirculation     | MFD - Flame Ionizer (e.g., OVA) | H - High: Opaque/Muddy/Silty                               |
| DHS - Begin Hydraulic Jetting                         | DHE - End Hydraulic Jetting | MDO - Dissolved Oxygen          | M - Medium: Translucent/Cloudy                             |
| DAB - Begin Air Surging                               | DAE - End Air Surging       | MPH - pH                        | L - Low: Transparent/Some Silt                             |
| DSB - Begin Surge Blocking                            | DSE - End Surge Blocking    | MEH - Eh                        | N - None: Clear/No Visible Silt                            |
| DGB - Begin Other                                     | DXE - End Other             | MMC - Imhoff Cone               |                                                            |
| Specify other method:                                 |                             | MO1 - Other:                    |                                                            |
| FMT - Field Measurements (select from codes at right) |                             | MO2 - Other:                    |                                                            |

# GEOLIS Well Development Form

|                               |                               |                                                                                     |
|-------------------------------|-------------------------------|-------------------------------------------------------------------------------------|
| COMPANY: <u>PFW</u>           | WELL NO.: <u>MW05</u>         |  |
| CLIENT: <u>USACE</u>          | DATE: <u>1-12-95</u>          |                                                                                     |
| PROJECT: <u>13886-076-038</u> | LOGGER: <u>K. VALIENTE</u>    |                                                                                     |
| SITE: <u>M03</u>              | SIGNATURE: <u>K. VALIENTE</u> |                                                                                     |

ONE WELL VOLUME: 6.40 gallons WELL TD: 18.15 ft TOC Well Volume 2-inch = 0.16 6-inch = 1.47  
(gallons/foot) 4-inch = 0.65 8-inch = 2.61

| TIME | ACTIVITY CODE | DEPTH TO WATER (ft) | PURGE RATE (gpm) | PURGE VOLUME (gal) | FIELD MEASUREMENTS |      |       |      |     |   | TURBIDITY | COMMENTS                                                          |
|------|---------------|---------------------|------------------|--------------------|--------------------|------|-------|------|-----|---|-----------|-------------------------------------------------------------------|
|      |               |                     |                  |                    | MPH                | MTA  | MSC   | MV   | HVU |   |           |                                                                   |
| 0850 | STAT          | 8.30                | <del>4.3</del>   | -                  | -                  | -    | -     | -    | -   | - |           | Top of Pump is at 8.3                                             |
| 0915 | DBB           | 8.30                |                  |                    |                    |      |       |      |     |   |           | Began Surging Blocking. 0905                                      |
| 0925 | DBE           | 17.40               |                  | 20                 |                    |      |       |      |     |   |           | Began Bailing.                                                    |
| 0930 | -             | 15.00               |                  |                    |                    |      |       |      |     |   |           | Bailed Dry.                                                       |
| 0945 | DOB           | 9.20                | 0.5              | 20                 | 6.58               | 12.2 | 1.054 | -039 | 5.0 |   | H         | Recharge ~ 2 hrs per 2 HOURS<br>DK. GRAY SILTY WATER. MILD ODOOR. |
| 0955 | DOB           | 13.40               | 0.5              | 25                 | 6.65               | 15.2 | 1.057 | -063 | 6.5 |   | H         | " " "                                                             |
| 1005 | DOB           | 13.76               | ~0.5             | ~30                | 6.60               | 17.2 | 1.06  | -079 | 7.0 |   | H         | " " "                                                             |
| 1010 | DOB           | 13.70               | ~0.5             | ~32                | 6.66               | 17.8 | 1.076 | -090 | 8.0 |   | M         | Clearing but still ok. 6:24                                       |
| 1015 | DOB           | 13.79               | ~0.5             | ~35                | 6.68               | 18.8 | 1.057 | -093 | 8.0 |   | M         | " " "                                                             |
| 1025 | DBE           | DBE                 | 1.0              | ~37                |                    |      |       |      |     |   |           | INCREASED FLOW RATE<br>WELL WENT DRY.                             |
| 1035 | DOB           | 10.20               | ~0.5             | ~38                | 6.60               | 16.7 | 1.084 | -087 | 7.0 |   | L         | CLEARING - HEAVY Clogging. (1.00)                                 |
| 1040 | DOB           | 12.05               | ~0.3             | ~40                | 6.60               | 15.6 | 1.081 | -080 | 8.5 |   | M         | INCREASED FLOW<br>TO ~0.5                                         |
| 1050 | DOB           | 14.57               | ~0.5             | ~45                | 6.65               | 17.0 | 1.055 | -087 | 9.0 |   | L         |                                                                   |
| 1100 | DOB           | 14.51               | ~0.5             | ~50                | 6.62               | 17.7 | 1.084 | -088 | 8.0 |   | L         | CLEARING                                                          |
| 1110 | DOB           | 14.51               | ~0.5             | ~55                | 6.62               | 17.0 | 1.090 | -088 | 8.0 |   | L         | SAME AS ABOVE                                                     |
| 1120 | DOB           | 14.59               | ~0.5             | ~60                | 6.60               | 17.1 | 1.060 | -086 | 8.0 |   | L         | CLEARING                                                          |
| 1130 | DOB           | ~                   | ~0.5             | ~65                | 6.63               | 16.8 | 1.091 | -083 | 8.0 |   | L         | W.I. HAD TO DETERMINE                                             |
| 1140 | DBE           | -                   | ~0.5             | ~70                | 6.58               | 16.8 | 1.078 | -080 | 8.0 |   | L         |                                                                   |
|      |               |                     |                  |                    |                    |      |       |      |     |   |           |                                                                   |
|      |               |                     |                  |                    |                    |      |       |      |     |   |           |                                                                   |
|      | FINAL         |                     |                  |                    |                    |      |       |      |     |   |           |                                                                   |

FINAL WELL YIELD: 20.5 GPM PUMP RATE - ESTIMATED CORRESPONDING DRAWDOWN: 6 FT

| DEVELOPMENT ACTIVITY CODES                            |                             | FIELD MEASUREMENT CODES         | TURBIDITY                                               |
|-------------------------------------------------------|-----------------------------|---------------------------------|---------------------------------------------------------|
| DBB - Begin Bailing                                   | DBE - End Bailing           | MTA - Temperature               | Enter Turbidity Meter Reading (Final should be < 5 NTU) |
| DOB - Begin Overpumping                               | DOE - End Overpumping       | MSC - Specific Conductance      | OR                                                      |
| DRB - Begin Rawhiding                                 | DRE - End Rawhiding         | MPD - Phototizer (e.g., HNA)    | Enter Qualitative Observations                          |
| DCB - Begin Recirculation                             | DCE - End Recirculation     | MFD - Flame Ionizer (e.g., OVA) | H - High: Opaque/Muddy/Silty                            |
| DHB - Begin Hydraulic Jetting                         | DHE - End Hydraulic Jetting | MDO - Dissolved Oxygen          | M - Medium: Translucent/Cloudy                          |
| DAB - Begin Air Surging                               | DAE - End Air Surging       | MPH - pH                        | L - Low: Transparent/Some Silt                          |
| DSB - Begin Surge Blocking                            | DSE - End Surge Blocking    | MEH - Eh                        | N - None: Clear/No Visible Silt                         |
| DXB - Begin Other                                     | DXE - End Other             | MMC - Imhoff Cone               |                                                         |
| Specify other method:                                 |                             | MO1 - Other:                    |                                                         |
| FMT - Field Measurements (select from codes at right) |                             | MO2 - Other:                    |                                                         |

# GEOLIS Well Development Form

|                               |                              |                                                                                     |
|-------------------------------|------------------------------|-------------------------------------------------------------------------------------|
| COMPANY: <u>RFW</u>           | WELL NO.: <u>MW06</u>        |  |
| CLIENT: <u>USACE</u>          | DATE: <u>1-18-95</u>         |                                                                                     |
| PROJECT: <u>03886-076-038</u> | LOGGER: <u>K. VALENTE</u>    |                                                                                     |
| SITE: <u>MP3-MW06</u>         | SIGNATURE: <u>K. VALENTE</u> |                                                                                     |

ONE WELL VOLUME: ~ 5.8 gallons WELL TD: 17.15 R TOC Well Volume 2-Inch = 0.16 6-Inch = 1.47  
(gallons/foot) 4-Inch = 0.65 8-Inch = 2.61

| TIME | ACTIVITY CODE  | DEPTH TO WATER (ft) | PURGE RATE (gpm) | PURGE VOLUME (gal) | FIELD MEASUREMENTS |      |      |      |     |  | TURBIDITY | COMMENTS                                     |
|------|----------------|---------------------|------------------|--------------------|--------------------|------|------|------|-----|--|-----------|----------------------------------------------|
|      |                |                     |                  |                    | MPH                | MTP  | MSC  | MV   | HNO |  |           |                                              |
| 0830 | STATIC         | 8.25                | -                | -                  |                    |      |      |      |     |  |           |                                              |
| 0845 | ASB            |                     |                  |                    |                    |      |      |      |     |  |           |                                              |
| 0900 | ASE            |                     |                  |                    |                    |      |      |      |     |  |           |                                              |
| 0910 | <del>ASB</del> | 17.71               |                  |                    |                    |      |      |      |     |  |           |                                              |
| 1110 | DBB            | 8.50                | Bailed           | 5.0                | 5.79               | 15.1 | 1340 | 190  | 0.5 |  | H         | GREENISH GRAY SILTY WATER                    |
| 1115 | DBE            | DRY                 | Bailed           | 7.0                | 5.43               | 14.8 | 1261 | 179  | 0.0 |  | H         | " " "                                        |
| 1117 | -              | 15.80               |                  |                    |                    |      |      |      |     |  |           |                                              |
| 1145 | DBB            | 10.20               | Bailed           | 8.0                | 6.06               | 13.6 | 1120 | 040  | 1.0 |  | H         | TRASH 0002                                   |
| 1153 | DBE            | DRY                 |                  | 13.0               | 6.17               | 13.7 | 1124 | 053  | 1.0 |  | H         |                                              |
| 1200 | ASE            |                     |                  |                    |                    |      |      |      |     |  |           |                                              |
| 1210 | DBB            | 11.00               | Bailed           | 14.0               | 6.01               | 12.8 | 1013 | 050  | 0.0 |  | H         |                                              |
| 1215 | DBE            | 16.57               |                  | 20.0               | 6.03               | 13.0 | 1024 | 049  | 0.0 |  | H         |                                              |
| 1330 | DOB            | 8.53                | <del>DBB</del>   | 28.0               | 6.36               | 14.0 | 1097 | 019  | 0.0 |  | H         |                                              |
| 1335 | DBE            | DRY                 |                  | 28.0               |                    |      |      |      |     |  | H         |                                              |
| 1400 | DOB            | 10.60               | <del>DBB</del>   | 30.0               | 6.51               | 13.2 | 947  | 002  | 0.0 |  | H         | CLEARING BUT STILL GREENISH GRAY SILTY WATER |
| 1405 | DBE            | -                   |                  | 34.0               |                    |      |      |      |     |  | H         | W. BELOW GULF IF Pump = 14.95                |
| 1430 | DOB            | 11.00               | <del>DBB</del>   | 35.0               | 6.54               | 11.2 | 1037 | -005 | 0.0 |  | M         | WATER CLEARING BUT STILL SILTY / MUDY        |
| 1455 | DOB            | 13.25               | 20.5             | 41.0               | 6.48               | 16.6 | 958  | -005 | 0.0 |  | M         | clearing                                     |
| 1510 | DOB            | 14.00               | 20.5             | 45.0               | 6.61               | 16.4 | 1001 | -016 | 0.0 |  | L         | CLEARED UP                                   |
|      | FINAL          |                     |                  |                    |                    |      |      |      |     |  |           |                                              |

CONTINUED ON NEXT PAGE →

FINAL WELL YIELD: 10.5 GPM PUMP RATE - ESTIMATED CORRESPONDING DRAWDOWN: DRY FT

| DEVELOPMENT ACTIVITY CODES                            |                             | FIELD MEASUREMENT CODES                                 | TURBIDITY                                               |
|-------------------------------------------------------|-----------------------------|---------------------------------------------------------|---------------------------------------------------------|
| DBB - Begin Bailing                                   | DBE - End Bailing           | MTP - Temperature                                       | Enter Turbidity Meter Reading (Final should be < 5 NTU) |
| DOB - Begin Overpumping                               | DOE - End Overpumping       | MSC - Specific Conductance                              |                                                         |
| DRB - Begin Raveling                                  | DRE - End Raveling          | MPD - Photolysis (e.g., H <sub>2</sub> O <sub>2</sub> ) | OR                                                      |
| DCB - Begin Recirculation                             | DCE - End Recirculation     | MFD - Flame Ionizer (e.g., OVA)                         |                                                         |
| DHB - Begin Hydraulic Jetting                         | DHE - End Hydraulic Jetting | MDO - Dissolved Oxygen                                  | Enter Qualitative Observations                          |
| DAB - Begin Air Surging                               | DAE - End Air Surging       | MPH - pH                                                |                                                         |
| DSB - Begin Surge Blocking                            | DSE - End Surge Blocking    | MEH - Eh                                                | H - High: Opaque/Muddy/Silty                            |
| DOB - Begin Other                                     | DDE - End Other             | MMC - Inhoff Cone                                       | M - Medium: Translucent/Cloudy                          |
| Specify other method:                                 |                             | MO1 - Other:                                            | L - Low: Transparent/Some Silt                          |
| FMT - Field Measurements (select from codes at right) |                             | MO2 - Other:                                            | N - None: Clear/No Visible Silt                         |



COMPANY: RFW WELL NO.: MLW06

CLIENT: USACE DATE: 1-18-95

PROJECT: 03886-076-038 LOGGER: K. V. L. L. L.

SITE: IND 3 SIGNATURE: [Signature]

ONE WELL VOLUME: 5.8 gallons WELL TD: 17.15 ft TOC Well Volume 2-inch = 0.16 6-inch = 1.47  
(gallons/foot) 4-inch = 0.65 8-inch = 2.61

[illegible]

FINAL WELL YIELD: 60.5 GPM PUMP RATE - ESTIMATED CORRESPONDING DRAWDOWN: 22 FT

| DEVELOPMENT ACTIVITY CODES                            |                             | FIELD MEASUREMENT CODES         | TURBIDITY                                                                                                                       |
|-------------------------------------------------------|-----------------------------|---------------------------------|---------------------------------------------------------------------------------------------------------------------------------|
| DBB - Begin Bailing                                   | DSE - End Bailing           | MTP - Temperature               | Enter Turbidity Meter Reading<br>(Final should be < 5 NTU)                                                                      |
| DOB - Begin Overpumping                               | DOE - End Overpumping       | MSC - Specific Conductance      |                                                                                                                                 |
| DDB - Begin Rawhiding                                 | DRE - End Rawhiding         | MPD - Flocculant (e.g., PMA)    | OR<br>Enter Qualitative Observations                                                                                            |
| DCB - Begin Recirculation                             | DCE - End Recirculation     | MPD - Flame Ionizer (e.g., OVA) |                                                                                                                                 |
| DHB - Begin Hydraulic Jetting                         | DHE - End Hydraulic Jetting | MDO - Dissolved Oxygen          | H - High: Opaque/Muddy/Sky<br>M - Medium: Translucent/Cloudy<br>L - Low: Transparent/Some Sol<br>N - None: Clear/No Visible Sol |
| DAB - Begin Air Surging                               | DAE - End Air Surging       | MPH - pH                        |                                                                                                                                 |
| DSB - Begin Surge Blocking                            | DSE - End Surge Blocking    | MEB - BI                        |                                                                                                                                 |
| DDB - Begin Other                                     | DDE - End Other             | MMC - Imhoff Cone               |                                                                                                                                 |
| Specify other method:                                 |                             | MOI - Other: _____              |                                                                                                                                 |
| FMT - Field Measurements (select from codes at right) |                             | MOZ - Other: _____              |                                                                                                                                 |

COMPANY: Western WELL NO.: may mu-07

CLIENT: USACE DATE: 12/22/94

PROJECT: R. Marmarth LOGGER: James

SITE: M-4 SIGNATURE: Thomson

ONE WELL VOLUME: \_\_\_\_\_ gallons WELL TD: \_\_\_\_\_ ft TOC

Well Volume 2-inch = 0.16 6-inch = 1.47  
(gallons/foot) 4-inch = 0.65 8-inch = 2.61

FINAL WELL YIELD: 24 GPM PUMP RATE ESTIMATED CORRESPONDING DRAWDOWN: 6 FT

**COPYRIGHT © 1991 by Roy F. Weston, Inc.**

# GEOLIS Well Development Form

mwo8

COMPANY: Western  
CLIENT: USACE  
PROJECT: F. Man  
SITE: M5

WELL NO.: MP5-MW-12  
DATE: 12/20/94  
LOGGER: P. Thomas  
SIGNATURE: Thomas



ONE WELL VOLUME: \_\_\_\_\_ gallons WELL TD: \_\_\_\_\_ ft TOC Well Volume 2-inch = 0.16 6-inch = 1.47  
(gallons/foot) 4-inch = 0.65 8-inch = 2.61

| TIME                                                      | ACTIVITY CODE | DEPTH TO WATER (ft) | PURGE RATE (gpm) | PURGE VOLUME (gal) | FIELD MEASUREMENTS |       |      |      |          |     | TURBIDITY | COMMENTS  |
|-----------------------------------------------------------|---------------|---------------------|------------------|--------------------|--------------------|-------|------|------|----------|-----|-----------|-----------|
| 1400                                                      | 1355          |                     |                  |                    | ATC                | MT/LM | OC   | MY   | ML       | MPD |           |           |
| 1415                                                      | DBB           | 6.92                |                  |                    | MDH                | MEL   | MTP  | MEH  | ML       | MPD |           |           |
| 1415                                                      | DBB           |                     |                  |                    |                    |       |      |      |          |     |           |           |
| 1415                                                      | DBB           |                     |                  |                    |                    |       |      |      |          |     |           |           |
| 1420                                                      | DOE           |                     |                  |                    |                    |       |      |      |          |     |           |           |
| 1427                                                      | DBB           | 11.29               | 1.0              |                    |                    |       |      |      |          |     |           | De/x 1    |
| 1435                                                      |               | 13.5                | 1.0              |                    | 6.71               | 3.71  | 15.6 | 0.42 | N.d.     | BLK |           | Y. Cloudy |
| 1445                                                      |               |                     |                  |                    | 6.84               | 3.25  | 15.9 | 0.33 | N.d.     | BLK |           |           |
| 1500                                                      |               |                     |                  |                    | 6.68               | 3.75  | 16.1 | 0.94 | St. turb | BLK |           |           |
| 1505                                                      |               | 14.20               | 1.0              |                    | 6.80               | 3.74  | 15.8 | 0.88 | St. turb | BLK |           |           |
| 1525                                                      |               |                     |                  |                    | 6.92               | 3.72  | 16.1 | 0.94 | Clear    | BLK |           |           |
| 1545                                                      | DOE           | 14.05               | 1.0              |                    | 6.81               | 3.86  | 16.2 | 0.92 | Clear    | BLK |           |           |
| * Well Pumped clear after approx 1 1/2 hours of pumping * |               |                     |                  |                    |                    |       |      |      |          |     |           |           |
| FINAL                                                     |               |                     |                  |                    |                    |       |      |      |          |     |           |           |

FINAL WELL YIELD: 240 GPM PUMP RATE - ESTIMATED CORRESPONDING DRAWDOWN: 0.0 - FT

| DEVELOPMENT ACTIVITY CODES                            |                             | FIELD MEASUREMENT CODES         | TURBIDITY                                               |
|-------------------------------------------------------|-----------------------------|---------------------------------|---------------------------------------------------------|
| DBB - Begin Bailing                                   | DSE - End Bailing           | MTP - Temperature               | Enter Turbidity Meter Reading (Final should be < 5 NTU) |
| DOB - Begin Overpumping                               | DOE - End Overpumping       | MSC - Specific Conductance      | OR                                                      |
| DRB - Begin Rawhiding                                 | DRE - End Rawhiding         | MPD - Photometer (e.g., HNU)    | Enter Qualitative Observations                          |
| DCB - Begin Recirculation                             | DCE - End Recirculation     | MFD - Flame Ionizer (e.g., OVA) | H - High: Opaque/Muddy/Silty                            |
| DHB - Begin Hydraulic Jetting                         | DHE - End Hydraulic Jetting | MDO - Dissolved Oxygen          | M - Medium: Translucent/Cloudy                          |
| DAB - Begin Air Surging                               | DAE - End Air Surging       | MPH - pH                        | L - Low: Transparent/Some Silt                          |
| DSB - Begin Surge Blocking                            | DSE - End Surge Blocking    | MEH - Eh                        | N - None: Clear/No Visible Silt                         |
| DXB - Begin Other                                     | DXE - End Other             | MMO - Inhoff Cone               |                                                         |
| Specify other Method:                                 |                             | MO1 - Other:                    |                                                         |
| FMT - Field Measurements (select from codes at right) |                             | MO2 - Other:                    |                                                         |



|          |             |            |           |  |
|----------|-------------|------------|-----------|--|
| COMPANY: | Weston      | WELL NO.:  | MP5-mw-09 |  |
| CLIENT:  | USACE       | DATE:      | 12/20/94  |  |
| PROJECT: | K. monmouth | LOGGER:    | P. Thomas |  |
| SITE:    | M-5         | SIGNATURE: | Thomas    |  |

ONE WELL VOLUME: \_\_\_\_\_ gallons WELL TD: 24.35 RTOC

|                |               |               |
|----------------|---------------|---------------|
| Well Volume    | 2-Inch = 0.16 | 6-Inch = 1.47 |
| (gallons/foot) | 4-Inch = 0.65 | 8-Inch = 2.61 |

[illegible]

FINAL WELL YIELD: 25 GPM PUMP RATE ESTIMATED CORRESPONDING DRAWDOWN: 14 FT

| DEVELOPMENT ACTIVITY CODES                            |                             | FIELD MEASUREMENT CODES         | TURBIDITY                                                  |
|-------------------------------------------------------|-----------------------------|---------------------------------|------------------------------------------------------------|
| DBS - Begin Bailing                                   | DSE - End Bailing           | MTP - Temperature               | Enter Turbidity Meter Reading<br>(Final should be < 5 NTU) |
| DOB - Begin Overpumping                               | DOE - End Overpumping       | MSC - Specific Conductance      |                                                            |
| DRS - Begin Rerwidging                                | DRE - End Rerwidging        | MPD - Photoinizer (e.g., HHz)   | OR                                                         |
| DCS - Begin Recirculation                             | DCE - End Recirculation     | MFD - Flame Ionizer (e.g., OVA) | Enter Qualitative Observations                             |
| DHS - Begin Hydraulic Jetting                         | DHE - End Hydraulic Jetting | MDO - Dissolved Oxygen          |                                                            |
| DAB - Begin Air Surging                               | DAE - End Air Surging       | MPH - pH                        | H - High: Opaque/Muddy/Silty                               |
| DSB - Begin Surge Blocking                            | DAE - End Surge Blocking    | MEH - Eh                        | M - Medium: Translucent/Cloudy                             |
| DCB - Begin Other                                     | DXE - End Other             | MMO - Inhoff Cons               | L - Low: Transparent/Some Silt                             |
| Specify other method:                                 |                             | MO1 - Other:                    | N - None: Clear/No Visible Silt                            |
| FMT - Field Measurements (select from codes at right) |                             | MO2 - Other:                    |                                                            |

# GEOLIS Well Development Form

COMPANY: Western  
CLIENT: USACE  
PROJECT: R. Monmouth  
SITE: M5

WELL NO.: IMP5-mw-10  
DATE: 12/19/94  
LOGGER: P. Thomas  
SIGNATURE: Thomas



ONE WELL VOLUME: \_\_\_\_\_ gallons WELL TD: ~17 ft TOC Well Volume 2-inch = 0.16 6-inch = 1.47  
(gallons/foot) 4-inch = 0.65 8-inch = 2.61

[illegible]

FINAL WELL YIELD: -5 GPM PUMP RATE - ESTIMATED CORRESPONDING DRAWDOWN: 3 FT

| DEVELOPMENT ACTIVITY CODES                            |                             | FIELD MEASUREMENT CODES         | TURBIDITY                       |
|-------------------------------------------------------|-----------------------------|---------------------------------|---------------------------------|
| D8S - Begin Bailing                                   | D8E - End Bailing           | MTP - Temperature               | Enter Turbidity Meter Reading   |
| DOB - Begin Overpumping                               | DOE - End Overpumping       | MSC - Specific Conductance      | (Final should be < 5 NTU)       |
| DRB - Begin Rerwidging                                | DRE - End Rerwidging        | MPD - Photolizer (e.g., HNU)    | OR                              |
| DCB - Begin Recirculation                             | DCE - End Recirculation     | MFD - Flame Ionizer (e.g., OVA) | Enter Qualitative Observations  |
| DHB - Begin Hydraulic Jetting                         | DHE - End Hydraulic Jetting | MDO - Dissolved Oxygen          | H - High: Opaque/Muddy/Silty    |
| DAB - Begin Air Surging                               | DAE - End Air Surging       | MPH - pH                        | M - Medium: Translucent/Cloudy  |
| DSB - Begin Surge Blocking                            | DSE - End Surge Blocking    | MEH - Eh                        | L - Low: Transparent/Some Silt  |
| DCB - Begin Other                                     | DXE - End Other             | MMC - Imhoff Cone               | N - None: Clear/No Visible Silt |
| Specify other method:                                 |                             | MO1 - Other:                    |                                 |
| FMT - Field Measurements (select from codes at right) |                             | MO2 - Other:                    |                                 |

COMPANY: Western  
CLIENT: USACE  
PROJECT:  Ft. Monmouth  
SITE:  M-5

WELL NO.: MP5-MW-10  
DATE: 12/21/94  
LOGGER: P. Thomas  
SIGNATURE: Thomas



ONE WELL VOLUME: \_\_\_\_\_ gallons WELL TD: \_\_\_\_\_ ft TOC

|                |               |               |
|----------------|---------------|---------------|
| Well Volume    | 2-inch = 0.16 | 6-inch = 1.47 |
| (gallons/foot) | 4-inch = 0.63 | 8-inch = 2.61 |

[illegible]

FINAL WELL YIELD: 2.5 GPM PUMP RATE - ESTIMATED CORRESPONDING DRAWDOWN: 3 FT

| DEVELOPMENT ACTIVITY CODES                            |                             | FIELD MEASUREMENT CODES        | TURBIDITY                                                  |
|-------------------------------------------------------|-----------------------------|--------------------------------|------------------------------------------------------------|
| DBS - Begin Bailing                                   | DBE - End Bailing           | MTP - Temperature              | Enter Turbidity Meter Reading<br>(Final should be < 5 NTU) |
| DOB - Begin Overpumping                               | DOE - End Overpumping       | MSC - Specific Conductance     | OR                                                         |
| DRB - Begin Rerwidging                                | DRE - End Rerwidging        | MPD - Photobionizer (e.g. HNA) | Enter Qualitative Observations                             |
| DCB - Begin Recirculation                             | DCE - End Recirculation     | MFD - Flame Ionizer (e.g. OVA) |                                                            |
| DHB - Begin Hydraulic Jetting                         | DHE - End Hydraulic Jetting | MDO - Dissolved Oxygen         |                                                            |
| DAB - Begin Air Surging                               | DAE - End Air Surging       | MPH - pH                       | H - High: Opaque/Muddy/Silty                               |
| DSB - Begin Surge Blocking                            | DSE - End Surge Blocking    | MEH - Eh                       | M - Medium: Translucent/Cloudy                             |
| DGB - Begin Other                                     | DGE - End Other             | MMO - Inhoff Cone              | L - Low: Transparent/Some Sil                              |
| Specify other method:                                 |                             | MO1 - Other:                   | N - None: Clear/No Visible Sil                             |
| FMT - Field Measurements (select from codes at right) |                             | MO2 - Other:                   |                                                            |

$$\begin{array}{r} 1.10 \\ 7.60 \\ .65 \\ \hline 3800 \\ 4560 \end{array}$$

2-inch = 0.16      6-inch = 1.47  
4-inch = 0.65      8-inch = 2.61

FINAL WELL YIELD: 2-3.5 GPM PUMP RATE - ESTIMATED CORRESPONDING DRAWDOWN: 3 FT

COPYRIGHT © 1991 by Roy F. Weston, Inc. G081291T



|          |       |            |               |                                                                                     |
|----------|-------|------------|---------------|-------------------------------------------------------------------------------------|
| COMPANY: | RFW   | WELL NO.:  | MW-13         |  |
| CLIENT:  | USACE | DATE:      | 1/25/95       |                                                                                     |
| PROJECT: | 03886 | LOGGER:    | J. SACCOMANDI |                                                                                     |
| SITE:    | M-8   | SIGNATURE: | J. Saccomandi |                                                                                     |

ONE WELL VOLUME: \_\_\_\_\_ gallons WELL TD: 16.86 RTOC

|                |               |               |
|----------------|---------------|---------------|
| Well Volume    | 2-Inch = 0.18 | 6-Inch = 1.47 |
| (gallons/foot) | 4-Inch = 0.35 | 8-Inch = 2.61 |

FINAL WELL YIELD: 4 GPM PUMP RATE - ESTIMATED CORRESPONDING DRAWDOWN: 1.2 FT

**COPYRIGHT © 1991 by Roy F. Weston, Inc.**

G051291 T

\* 13.90 IS THE TOP OF PUMP  
LOW TIDE

# GEOLIS Well Development Form

|                               |                              |                                                                                     |
|-------------------------------|------------------------------|-------------------------------------------------------------------------------------|
| COMPANY: <u>RFW</u>           | WELL NO.: <u>MW-14</u>       |  |
| CLIENT: <u>USACE</u>          | DATE: <u>1/25/95</u>         |                                                                                     |
| PROJECT: <u>03886-076-038</u> | LOGGER: <u>J. SACCOMANDI</u> |                                                                                     |
| SITE: <u>M-8</u>              | SIGNATURE: <u>Jim W. SQ</u>  |                                                                                     |

ONE WELL VOLUME: \_\_\_\_\_ gallons WELL TD: 16.82 R TOC Well Volume 2-inch = 0.16 6-inch = 1.47  
(gallons/foot) 4-inch = 0.85 8-inch = 2.61

| TIME | ACTIVITY CODE | DEPTH TO WATER (ft)                              | PURGE RATE (gpm) | PURGE VOLUME (gal) | FIELD MEASUREMENTS |      |      |      |     |     | TURBIDITY | COMMENTS                   |
|------|---------------|--------------------------------------------------|------------------|--------------------|--------------------|------|------|------|-----|-----|-----------|----------------------------|
|      |               |                                                  |                  |                    | MDH                | MSC  | MTP  | MEH  | MPD | MDO |           |                            |
| 0920 | DSB           | 7.80                                             | —                | —                  |                    |      |      |      |     |     |           |                            |
| 0925 | DBB           | —                                                | —                | 6                  | BAILED             | DRY  |      |      |     |     | H         | GREEN BROWN SILTY          |
| 0930 | DBE           | —                                                | —                | —                  |                    |      |      |      |     |     | H         | "                          |
| 0945 | DOB           | 11.56                                            | ~0.5             | 6                  | 6.40               | 4.68 | 10.9 | 001  | BKG |     | H         | "                          |
| 0955 | DOB           | 9.95                                             | ~0.5             | 11                 | 6.61               | 4.63 | 14.2 | -077 | BKG |     | H         | "                          |
| 1005 | DOB           | 13.62                                            | ~1               | 21                 | 6.47               | 4.72 | 19.4 | -083 | BKG |     | H         | "                          |
| 1010 | DOE           | *                                                |                  |                    |                    |      |      |      |     |     |           |                            |
| 1025 | DOB           | 8.92                                             | ~0.5             | 21                 | 6.89               | 4.57 | 14.6 | -106 | BKG |     | H         | "                          |
| 1030 | DOB           | 11.85                                            | ~0.5             | 23.5               | 6.92               | 4.65 | 13.2 | -102 | BKG |     | H         | "                          |
| 1035 | DOB           | 11.57                                            | ~0.5             | 25                 | 6.76               | 4.67 | 15.2 | -101 | BKG |     | H         | " CLEARING                 |
| 1040 | DOB           | 11.28                                            | ~0.5             | 27.5               | 6.75               | 4.59 | 16.5 | -102 | BKG |     | H         | " "                        |
| 1045 | DOB           | 11.62                                            | ~0.5             | 29                 | 6.70               | 4.64 | 19.3 | -104 | BKG |     | H         | " "                        |
| 1050 | DOB           | 11.86                                            | ~0.5             | 31.5               | 6.69               | 4.70 | 19.9 | -104 | BKG |     | H         | " "                        |
| 1055 | DOB           | 12.11                                            | ~0.5             | 33                 | 6.71               | 4.62 | 17.2 | -105 | BKG |     | M         | " "                        |
| 1100 | DOB           | 12.43                                            | ~0.5             | 35.5               | 6.82               | 4.51 | 18.2 | -108 | BKG |     | L         | LT GREEN BROWN VERY CLOUDY |
| 1105 | DOB           | 12.65                                            | ~0.5             | 37                 | 6.72               | 4.46 | 18.7 | -105 | BKG |     | L         | CLOUDY                     |
| 1110 | DOB           | 12.85                                            | ~0.5             | 39.5               | 6.69               | 4.53 | 18.9 | -106 | BKG |     | L         | CLOUDY                     |
| 1115 | DOB           | 13.05                                            | ~0.5             | 41                 | 6.74               | 4.42 | 19.6 | -103 | BKG |     | L         | HAZY                       |
|      | * WATER       | LEVEL DROPPED TO TOP OF PUMP / PUMP IS ABOVE BOW |                  |                    |                    |      |      |      |     |     |           |                            |
|      | FINAL         |                                                  |                  |                    |                    |      |      |      |     |     |           |                            |

FINAL WELL YIELD: -0.5 GPM PUMP RATE - ESTIMATED CORRESPONDING DRAWDOWN: 10 FT

| DEVELOPMENT ACTIVITY CODES                            |                             | FIELD MEASUREMENT CODES         | TURBIDITY                                               |
|-------------------------------------------------------|-----------------------------|---------------------------------|---------------------------------------------------------|
| DSB - Begin Bailing                                   | DBE - End Bailing           | MTP - Temperature               | Enter Turbidity Meter Reading (Final should be < 5 NTU) |
| DOB - Begin Overpumping                               | DOE - End Overpumping       | MSC - Specific Conductance      |                                                         |
| DRE - Begin Rinsing                                   | DRE - End Rinsing           | MPD - Photometer (e.g., HNU)    | OR                                                      |
| DCB - Begin Recirculation                             | DCE - End Recirculation     | MFD - Flame Ionizer (e.g., OVA) |                                                         |
| DHB - Begin Hydraulic Jetting                         | DHE - End Hydraulic Jetting | MDO - Dissolved Oxygen          | Enter Qualitative Observations                          |
| DAB - Begin Air Surging                               | DAE - End Air Surging       | MPH - pH                        |                                                         |
| DSB - Begin Surge Blocking                            | DSE - End Surge Blocking    | MEH - Eh                        | H - High: Opaque/Muddy/Silty                            |
| DOE - Begin Other                                     | DOE - End Other             | MMC - Inflow Cone               | M - Medium: Translucent/Cloudy                          |
| Specify other method:                                 |                             | MO1 - Other:                    | L - Low: Transparent/Some Silt                          |
| FMT - Field Measurements (select from codes at right) |                             | MO2 - Other:                    | N - None: Clear/No Visible Silt                         |

LOW TIDE

|          |               |            |          |  |
|----------|---------------|------------|----------|--|
| COMPANY: | RFW           | WELL NO.:  | MW-15    |  |
| CLIENT:  | USACE         | DATE:      | 1/25/95  |  |
| PROJECT: | 03886-076-P3B | LOGGER:    | J. SECOR |  |
| SITE:    | M-8           | SIGNATURE: | J. SECOR |  |

ONE WELL VOLUME: \_\_\_\_\_ gallons WELL TD: 16.65 ft TOC

| Well Volume (gallons/foot) | 2-Inch = 0.16 | 6-Inch = 1.47 |
|----------------------------|---------------|---------------|
| 4-Inch = 0.65              | 8-Inch = 2.81 |               |

[illegible]

FINAL WELL YIELD: 2 GPM PUMP RATE - ESTIMATED

CORRESPONDING DRAWDOWN: 4 FT

| DEVELOPMENT ACTIVITY CODES                            |                             | FIELD MEASUREMENT CODES         | TURBIDITY                                                                                                                           |
|-------------------------------------------------------|-----------------------------|---------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|
| DBS - Begin Bailing                                   | DBE - End Bailing           | MTP - Temperature               | Enter Turbidity Meter Reading<br>(Final should be < 5 NTU)                                                                          |
| DOB - Begin Overpumping                               | DOE - End Overpumping       | MSC - Specific Conductance      |                                                                                                                                     |
| DRB - Begin Rawhiding                                 | DRE - End Rawhiding         | MPD - Protobionizer (e.g., HHA) | OR                                                                                                                                  |
| DCB - Begin Recirculation                             | DCE - End Recirculation     | MFD - Flame Ionizer (e.g., OVA) | Enter Qualitative Observations                                                                                                      |
| DHB - Begin Hydraulic Jetting                         | DHE - End Hydraulic Jetting | MDO - Dissolved Oxygen          | H - High: Opaque/Muddy/Silty<br>M - Medium: Translucent/Cloudy<br>L - Low: Transparent/Some Bill<br>N - None: Clear/No Visible Silt |
| DAB - Begin Air Surging                               | DAE - End Air Surging       | MPH - pH                        |                                                                                                                                     |
| DSB - Begin Surge Blocking                            | DSE - End Surge Blocking    | MEH - Eh                        |                                                                                                                                     |
| DGB - Begin Other                                     | DXE - End Other             | MMC - Inhoff Cone               |                                                                                                                                     |
| Specify other method:                                 |                             | MO1 - Other: _____              |                                                                                                                                     |
| FM1 - Field Measurements (select from codes at right) |                             | MO2 - Other: _____              |                                                                                                                                     |

ALMOST HIGH TIDE



COMPANY: REF WELL NO.: MW-16

CLIENT: USAF DATE: 1-16-55

PROJECT: C3586-076-038 LOGGER: K. Valente

SITE: MP12 SIGNATURE: K. Valente



[illegible]

| DEVELOPMENT ACTIVITY CODES                            |                             | FIELD MEASUREMENT CODES         | TURBIDITY                                                  |
|-------------------------------------------------------|-----------------------------|---------------------------------|------------------------------------------------------------|
| DBB - Begin Bailing                                   | DBE - End Bailing           | MTP - Temperature               | Enter Turbidity Meter Reading<br>(Final should be < 5 NTU) |
| DOB - Begin Overpumping                               | DOE - End Overpumping       | MSC - Specific Conductance      |                                                            |
| DRB - Begin Rerwhiding                                | DRE - End Rerwhiding        | MPD - Photolotizer (e.g., HNU)  | OR                                                         |
| DCB - Begin Recirculation                             | DCE - End Recirculation     | MFD - Flame Ionizer (e.g., OVA) | Enter Qualitative Observations                             |
| DHB - Begin Hydraulic Jetting                         | DHE - End Hydraulic Jetting | MDO - Dissolved Oxygen          |                                                            |
| DAB - Begin Air Surging                               | DAE - End Air Surging       | MPH - pH                        | H - High: Opaque/Muddy/Silty                               |
| DSB - Begin Surge Blocking                            | DSE - End Surge Blocking    | MEH - Eh                        | M - Medium: Translucent/Cloudy                             |
| DGB - Begin Other                                     | DGE - End Other             | MMC - Imhoff Cone               | L - Low: Transparent/Some Silt                             |
| Specify other method:                                 |                             | MO1 - Other: _____              | N - None: Clear/No Visible Silt                            |
| FMT - Field Measurements (select from codes at right) |                             | MO2 - Other: _____              |                                                            |



# GEOLIS Well Development Form

|                               |                               |                                                                                     |
|-------------------------------|-------------------------------|-------------------------------------------------------------------------------------|
| COMPANY: <u>RFW</u>           | WELL NO.: <u>MW-107</u>       |  |
| CLIENT: <u>USACE</u>          | DATE: <u>1-17-95</u>          |                                                                                     |
| PROJECT: <u>03886-076-038</u> | LOGGER: <u>V. Valenti</u>     |                                                                                     |
| SITE: <u>MP12</u>             | SIGNATURE: <u>[Signature]</u> |                                                                                     |

ONE WELL VOLUME: ~8.3 gallons WELL TD: 16.85 ft TOC Well Volume 2-inch = 0.16 8-inch = 1.47  
(gallons/foot) 4-inch = 0.85 8-inch = 2.81

| TIME | ACTIVITY CODE | DEPTH TO WATER (ft) | PURGE RATE (gpm) | PURGE VOLUME (gal) | FIELD MEASUREMENTS |      |      |      |                  |  | TURBIDITY | COMMENTS                                            |
|------|---------------|---------------------|------------------|--------------------|--------------------|------|------|------|------------------|--|-----------|-----------------------------------------------------|
|      |               |                     |                  |                    | MPH                | MTD  | MSC  | MU   | H <sub>2</sub> O |  |           |                                                     |
| 1100 | STATIC        | 4.15                | -                | -                  | -                  | -    | -    | -    | 1.0              |  |           |                                                     |
| 1115 | DBB           | 4.15                | Bailing          |                    |                    |      |      |      |                  |  |           | WILD H <sub>2</sub> O CAP ON WATER.                 |
| 1125 | DBE           | 10.10               | Bailing          | 15.0               |                    |      |      |      |                  |  |           | DEPTH TO TOP OF PUMP = 14.25                        |
| 1130 | DOB           | 6.10                | 0.5              | 16.0               | 5.82               | 12.0 | .276 | 142  | 3.0              |  | H         | DR. Gray silty water                                |
| 1140 | DOB           | 6.02                | 0.5              | 20.0               | 5.82               | 11.9 | .275 | 140  | 3.0              |  | H         |                                                     |
| 1150 | DOB           | 5.70                | 0.5              | 25.0               | 6.58               | 19.1 | .265 | 054  | 2.0              |  | H         |                                                     |
| 1200 | DOB           | 6.15                | 0.5              | 30.0               | 6.54               | 16.6 | .380 | -054 | 1.0              |  | M         | CLEARING BUT STILL A LITTLE SILTY - GPM to 1.0 GPM. |
| 1210 | DOB           | 6.80                | 1.0              | 40.0               | 6.61               | 17.9 | .362 | -068 | 1.0              |  | M         | CLEARING - Hazy                                     |
| 1215 | DOB           | 7.36                | 1.0              | 45.0               | 6.59               | 17.1 | .401 | -076 | 2.0              |  | M         | .. ..                                               |
| 1220 | DOB           | 7.38                | 1.0              | 50.0               | 6.56               | 17.4 | .359 | -079 | 1.0              |  | M         |                                                     |
| 1230 | DOB           | 7.87                | 1.0              | 60.0               | 6.56               | 16.5 | .408 | -085 | 2.0              |  | M         |                                                     |
| 1235 | DOB           | 8.00                | 1.0              | 65.0               | 6.59               | 16.1 | .411 | -083 | 2.0              |  | M         | CLEAR BUT LITTLE Hazy                               |
| 1240 | DOB           | 8.13                | 1.0              | 70.0               | 6.57               | 16.1 | .413 | -083 | 4.0              |  | L         | SEPTIC CODE NOW                                     |
| 1245 | DOB           | 8.24                | 1.5              | 75.0               | 6.57               | 14.9 | .422 | -077 | 3.0              |  | L         | INCREASED Flow to 1.5 GPM                           |
| 1250 | DOB           | 9.51                | 1.5              | 80.5               | 6.54               | 15.9 | .411 | -092 | 2.0              |  | L         | CLEAR BUT Hazy                                      |
| 1255 | DOB           | 9.88                | 1.5              | 90.0               | 6.59               | 16.0 | .382 | -098 | -                |  | L         |                                                     |
| 1300 | DBE           | 9.96                | 1.5              | 98.0               | 6.55               | 16.0 | .391 | -096 | -                |  | L         | CLEAR & Hazy                                        |
|      |               |                     |                  |                    |                    |      |      |      |                  |  |           |                                                     |
|      |               |                     |                  |                    |                    |      |      |      |                  |  |           |                                                     |
|      | FINAL         |                     |                  |                    |                    |      |      |      |                  |  |           |                                                     |

FINAL WELL YIELD: ~1 GPM PUMP RATE: ESTIMATED CORRESPONDING DRAWDOWN: 5 FT

| DEVELOPMENT ACTIVITY CODES                            |                             | FIELD MEASUREMENT CODES         | TURBIDITY                                               |
|-------------------------------------------------------|-----------------------------|---------------------------------|---------------------------------------------------------|
| DBB - Begin Bailing                                   | DBE - End Bailing           | MTP - Temperature               | Enter Turbidity Meter Reading (Final should be < 8 NTU) |
| DOB - Begin Overpumping                               | DOE - End Overpumping       | MSC - Specific Conductance      |                                                         |
| DRB - Begin Rawbailing                                | DRE - End Rawbailing        | MPD - Photometer (e.g., HNU)    | OR                                                      |
| DCB - Begin Recirculation                             | DCE - End Recirculation     | MFD - Flame Ionizer (e.g., OVA) | Enter Qualitative Observations                          |
| DHB - Begin Hydraulic Jetting                         | DHE - End Hydraulic Jetting | MDO - Dissolved Oxygen          |                                                         |
| DAB - Begin Air Surging                               | DAE - End Air Surging       | MPH - pH                        | H - High: Opaque/Muddy/Silty                            |
| DSB - Begin Surge Blocking                            | DSE - End Surge Blocking    | MEH - Eh                        | M - Medium: Translucent/Cloudy                          |
| DXB - Begin Other                                     | DXE - End Other             | MMC - Inhoff Cone               | L - Low: Transparent/Some Bit                           |
| Specify other method:                                 |                             | MO1 - Other:                    | N - None: Clear/No Visible Silt                         |
| FMT - Field Measurements (select from codes at right) |                             | MO2 - Other:                    |                                                         |

# GEOLIS Well Development Form

|                               |                                   |                                                                                     |
|-------------------------------|-----------------------------------|-------------------------------------------------------------------------------------|
| COMPANY: <u>RFW</u>           | WELL NO.: <u>MP-12-MW-18</u>      |  |
| CLIENT: <u>VSACE</u>          | DATE: <u>1/17/95</u>              |                                                                                     |
| PROJECT: <u>FT MOUNTMOUTH</u> | LOGGER: <u>SACCOMANDI/VALENTE</u> |                                                                                     |
| SITE: <u>MP-12</u>            | SIGNATURE: <u>[Signature]</u>     |                                                                                     |

ONE WELL VOLUME: ≈ 9.0 gallons WELL TD: 17.20 R.TOC Well Volume 2-Inch = 0.16 6-Inch = 1.47  
 (gallons/foot) 4-Inch = 0.65 8-Inch = 2.61

| TIME | ACTIVITY CODE | DEPTH TO WATER (ft) | PURGE RATE (gpm) | PURGE VOLUME (gal)                  | FIELD MEASUREMENTS |      |      |     |     |   | TURBIDITY                                                  | COMMENTS                            |
|------|---------------|---------------------|------------------|-------------------------------------|--------------------|------|------|-----|-----|---|------------------------------------------------------------|-------------------------------------|
|      |               |                     |                  |                                     | MPH                | MTP  | MSC  | HV  | HNV |   |                                                            |                                     |
| 0840 | STATIC        | 3.45                |                  |                                     |                    |      |      |     |     |   |                                                            |                                     |
| 0845 | DSB           |                     |                  |                                     |                    |      |      |     |     |   |                                                            |                                     |
| 0855 | DSE           |                     |                  |                                     |                    |      |      |     |     |   |                                                            |                                     |
| 0855 | DOB           |                     |                  |                                     |                    |      |      |     |     |   |                                                            |                                     |
| 0900 | DSE           | DRY                 | —                | RECHARGE RATE APPROX. 0.5' A MINUTE |                    |      |      |     |     | — | WATER CLEAR-GRAY SILTY<br>Well Dry After Bailing 13.0 GAL. |                                     |
| 0915 | DOB           | 9.10                | 0.5              | 0                                   |                    |      |      |     | 0.0 |   | H                                                          | DR. GRAY SILTY WATER                |
| 0917 | DOB           | 9.80                | 0.5              | 1.0                                 | 4.44               | 11.1 | .229 | 247 | 0.0 |   | H                                                          | " " "                               |
| 0930 | DOB           | 10.03               | 0.5              | 7.0                                 | 4.41               | 17.6 | .241 | 245 | 0.0 |   | H                                                          |                                     |
| 0940 | DOB           | 10.08               | 0.5              | 12.0                                | 4.39               | 19.8 | .243 | 245 | 1.0 |   | H                                                          | Cleaning But still Silty            |
| 0950 | DOB           | 10.30               | 0.5              | 17.0                                | 4.54               | 17.7 | .251 | 254 | 2.0 |   | M                                                          | CLEARED UP A LITTLE                 |
| 1000 | DOB           | 10.32               | 0.5              | 22.0                                | 4.97               | 17.1 | .230 | 211 | 2.0 |   | H                                                          | SOME YELLOW-BROWN SILTY WATER AGAIN |
| 1010 | DOB           | 10.35               | 0.5              | 27.0                                | 5.00               | 16.9 | .231 | 216 | 2.0 |   | M                                                          | CLEARED MORE                        |
| 1020 | DOB           | 10.20               | 0.5              | 32.0                                | 4.44               | 18.8 | .229 | 258 | 4.0 |   | M                                                          | Cleaning But Heavy Haze             |
| 1025 | DOB           | 10.09               | 0.5              | 34.5                                | 4.71               | 18.9 | .225 | 254 | 3.0 |   | L                                                          | Cleaning - Hazy                     |
| 1030 | DOB           | 10.07               | 0.5              | 37.0                                | 4.69               | 18.6 | .225 | 254 | 3.0 |   | L                                                          |                                     |
| 1035 | DOB           | 10.03               | 0.5              | 39.5                                | 4.68               | 18.3 | .231 | 252 | 2.0 |   | L                                                          | CLEARED A LITTLE MORE               |
| 1040 | DOB           | 9.97                | 0.5              | 42.0                                | 4.69               | 18.1 | .233 | 252 | 0.0 |   | L                                                          | " " " "                             |
| 1045 | DOB           | 9.95                | 0.5              | 45.0                                | 4.72               | 18.2 | .229 | 243 | 1.0 |   | L                                                          | " " " "                             |
|      |               |                     |                  |                                     |                    |      |      |     |     |   |                                                            |                                     |
|      | FINAL         |                     |                  |                                     |                    |      |      |     |     |   |                                                            |                                     |

FINAL WELL YIELD: 0.5 GPM PUMP RATE - ESTIMATED CORRESPONDING DRAWDOWN: 6 FT

| DEVELOPMENT ACTIVITY CODES                            |                             | FIELD MEASUREMENT CODES         | TURBIDITY                                                                                                                             |
|-------------------------------------------------------|-----------------------------|---------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| DOB - Begin Bailing                                   | DSE - End Bailing           | MTP - Temperature               | Enter Turbidity Meter Reading<br>(Final should be < 5 NTU)                                                                            |
| DOB - Begin Overpumping                               | DOE - End Overpumping       | MSC - Specific Conductance      |                                                                                                                                       |
| DOB - Begin Raveling                                  | DRE - End Raveling          | MPD - Photometer (e.g., HNU)    | OR<br>Enter Qualitative Observations                                                                                                  |
| DCE - Begin Recirculation                             | DCE - End Recirculation     | MPD - Flame Ionizer (e.g., OVA) |                                                                                                                                       |
| DHB - Begin Hydraulic Jetting                         | DHE - End Hydraulic Jetting | MDO - Dissolved Oxygen          | H - High: Opaque/Muddy/Silty<br>M - Medium: Translucent/Cloudy<br>L - Low: Transparent/Some Silty<br>N - None: Clear/No Visible Silty |
| DAB - Begin Air Surging                               | DAE - End Air Surging       | MPH - pH                        |                                                                                                                                       |
| DSB - Begin Surge Blocking                            | DSE - End Surge Blocking    | MEH - Eh                        |                                                                                                                                       |
| DOB - Begin Other                                     | DXE - End Other             | MMC - Inflow Cone               |                                                                                                                                       |
| Specify other method:                                 |                             | MO1 - Other                     |                                                                                                                                       |
| FMT - Field Measurements (select from codes at right) |                             | MO2 - Other                     |                                                                                                                                       |

ONE WELL VOLUME: 7.0 gallons WELL TD: 17.60 ft TOC

|                |               |               |
|----------------|---------------|---------------|
| Well Volume    | 2-inch = 0.16 | 6-inch = 1.47 |
| (gallons/foot) | 4-inch = 0.65 | 8-inch = 2.61 |

[illegible]

FINAL WELL YIELD: 67 GPM PUMP RATE - ESTIMATED CORRESPONDING DRAWDOWN: 3 FT

| DEVELOPMENT ACTIVITY CODES                            |                             | FIELD MEASUREMENT CODES         | TURBIDITY                                                  |
|-------------------------------------------------------|-----------------------------|---------------------------------|------------------------------------------------------------|
| DBS - Begin Bailing                                   | DSE - End Bailing           | MTP - Temperature               | Enter Turbidity Meter Reading<br>(Final should be < 5 NTU) |
| DOB - Begin Overpumping                               | DOE - End Overpumping       | MSC - Specific Conductance      |                                                            |
| DBR - Begin Rerwhiding                                | DRE - End Rerwhiding        | MPD - Photolnizer (e.g., HNU)   | OR                                                         |
| DCB - Begin Rectriculation                            | DCE - End Rectriculation    | MFD - Flame Ionizer (e.g., OVA) | Enter Qualitative Observations                             |
| DHB - Begin Hydraulic Jetting                         | DHE - End Hydraulic Jetting | MDO - Dissolved Oxygen          |                                                            |
| DAB - Begin Air Surging                               | DAE - End Air Surging       | MPH - pH                        | H - High: Opaque/Muddy/Silty                               |
| DSB - Begin Surge Blocking                            | DSE - End Surge Blocking    | MEH - Eh                        | M - Medium: Translucent/Cloudy                             |
| DXB - Begin Other                                     | DXE - End Other             | MMC - Imhoff Cone               | L - Low: Transparent/Some Silt                             |
| Specify other method: _____                           |                             | MO1 - Other: _____              | N - None: Clear/No Visible Silt                            |
| FMT - Field Measurements (select from codes at right) |                             | MO2 - Other: _____              |                                                            |

# GEOLIS Well Development Form

COMPANY: RFW  
 CLIENT: USACE  
 PROJECT: 03886-096-038  
 SITE: MP14

WELL NO.: MW20  
 DATE: 1-18-95  
 LOGGER: K. V. ...  
 SIGNATURE: K. V. ...



ONE WELL VOLUME: ~6.5 gallons WELL TD: 16.87 R TOC Well Volume 2-Inch = 0.16 6-Inch = 1.47  
 (gallons/foot) 4-Inch = 0.65 8-Inch = 2.61

| TIME | ACTIVITY CODE | DEPTH TO WATER (ft) | PURGE RATE (gpm) | PURGE VOLUME (gal) | FIELD MEASUREMENTS |      |     |      |     |   | TURBIDITY | COMMENTS             |
|------|---------------|---------------------|------------------|--------------------|--------------------|------|-----|------|-----|---|-----------|----------------------|
|      |               |                     |                  |                    | MPH                | MTP  | MSC | MV   | HNV |   |           |                      |
| 1250 | Static        | 6.85                | -                | -                  | -                  | -    | -   | -    | -   | - |           |                      |
| 1255 | DSB           |                     |                  |                    |                    |      |     |      |     |   |           |                      |
| 1300 | DSE/DBB       |                     |                  |                    |                    |      |     |      |     |   |           |                      |
| 1305 | DSE           | 12.00               |                  | 10.0               |                    |      |     |      |     |   |           |                      |
| 1310 | DOB           | 7.45                | 0.5              | 16.0               | 7.18               | 17.3 | 246 | -005 | 0.0 |   | H         | Dr. gray silty water |
| 1320 | DOB           | 8.47                | 0.5              | 16.0               | 6.99               | 17.3 | 242 | -010 | 0.0 |   | H         | Dr. gray silty water |
| 1330 | DOB           | 9.40                | 0.5              | 21.0               | 6.50               | 15.5 | 386 | -009 | 2.0 |   | H         | Dr. gray silty water |
| 1340 | DOB           | 10.45               | 0.5              | 26.0               | 6.50               | 15.7 | 378 | -018 | 2.0 |   | H         | Dr. gray silty water |
| 1350 | DOB           | 11.17               | 0.5              | 31.0               | 6.56               | 15.6 | 363 | -015 | -   |   | M         | Dr. gray silty water |
| 1355 | DOB           | 12.00               | 0.5              | 33.5               | 6.50               | 15.7 | 356 | -015 | -   |   | M         | Dr. gray silty water |
| 1400 | DOB           | 12.13               | 0.5              | 36.0               | 6.47               | 15.8 | 354 | -014 | -   |   | M         | Dr. gray silty water |
| 1405 | DOB           | 12.38               | 0.5              | 38.5               | 6.53               | 16.6 | 352 | -020 | -   |   | H         | Dr. gray silty water |
| 1410 | DOB           | 12.39               | 0.5              | 41.0               | 6.51               | 16.5 | 344 | -018 | -   |   | H         | Dr. gray silty water |
| 1415 | DOB           | 12.21               | 0.5              | 43.5               | 6.48               | 15.8 | 364 | -014 | -   |   | M         | Dr. gray silty water |
| 1420 | DOB           | 12.19               | 0.5              | 46.0               | 6.45               | 15.9 | 364 | -013 | -   |   | M         | Dr. gray silty water |
| 1425 | DOB           | 11.71               | 0.5              | 48.5               | 6.46               | 16.1 | 360 | -016 | -   |   | L         | Dr. gray silty water |
| 1430 | DOB           | 11.58               | 0.5              | 51.0               | 6.45               | 16.1 | 360 | -016 | -   |   | L         | Dr. gray silty water |
| 1440 | DOB           | 10.87               | 0.5              | 56.0               | 6.48               | 16.0 | 358 | -016 | -   |   | L         | Dr. gray silty water |
| 1450 | DOE           | 10.10               | 0.5              | 61.0               | 6.44               | 15.9 | 356 | -015 | -   |   | L         | Dr. gray silty water |
|      | FINAL         |                     |                  |                    |                    |      |     |      |     |   |           |                      |

FINAL WELL YIELD: 0.5 GPM PUMP RATE - ESTIMATED

CORRESPONDING DRAWDOWN: 4 FT

| DEVELOPMENT ACTIVITY CODES                            |                             | FIELD MEASUREMENT CODES         | TURBIDITY                       |
|-------------------------------------------------------|-----------------------------|---------------------------------|---------------------------------|
| DSB - Begin Bailing                                   | DSE - End Bailing           | MTP - Temperature               | Enter Turbidity Meter Reading   |
| DOB - Begin Overpumping                               | DOE - End Overpumping       | MSC - Specific Conductance      | (Final should be < 5 NTU)       |
| DHB - Begin Rinsing                                   | DRE - End Rinsing           | MPD - Photometer (e.g., HNA)    | OR                              |
| DCB - Begin Recirculation                             | DCE - End Recirculation     | MFD - Flame Ionizer (e.g., OVA) | Enter Qualitative Observations  |
| DHB - Begin Hydraulic Jetting                         | DHE - End Hydraulic Jetting | MDO - Dissolved Oxygen          | H - High: Opaque/Muddy/Silty    |
| DAB - Begin Air Surging                               | DAE - End Air Surging       | MPH - pH                        | M - Medium: Translucent/Cloudy  |
| DSB - Begin Surge Blocking                            | DSE - End Surge Blocking    | MEH - Eh                        | L - Low: Transparent/Some Silt  |
| DOB - Begin Other                                     | DOE - End Other             | MNO - Inflow Cone               | N - None: Clear/No Visible Silt |
| Specify other method:                                 |                             | MO1 - Other:                    |                                 |
| FMT - Field Measurements (select from codes at right) |                             | MO2 - Other:                    |                                 |



# GEOLIS Well Development Form

COMPANY: RFW  
 CLIENT: USACE  
 PROJECT: 03886-076-038-039  
 SITE: HP-12

WELL NO.: MW21  
 DATE: 1-13-95  
 LOGGER: K. VALENTE  
 SIGNATURE: K. Valente



ONE WELL VOLUME: 7.8 gallons WELL TD: 19.28 ft TOC Well Volume 2-inch = 0.16 6-inch = 1.47  
 (gallons/foot) 4-inch = 0.65 8-inch = 2.61

| TIME | ACTIVITY CODE | DEPTH TO WATER (ft) | PURGE RATE (gpm) | PURGE VOLUME (gal) | FIELD MEASUREMENTS |      |      |      |     |   | TURBIDITY | COMMENTS<br>Top of Pump at 16'-6"              |
|------|---------------|---------------------|------------------|--------------------|--------------------|------|------|------|-----|---|-----------|------------------------------------------------|
|      |               |                     |                  |                    | MPH                | MTP  | MSC  | MV   | HNU |   |           |                                                |
| 0900 | START         | 7.26                | -                | -                  | -                  | -    | -    | -    | -   | - |           |                                                |
| 0910 | DSB           | 7.26                |                  |                    |                    |      |      |      |     |   |           | MILD SAND FILL OCCUR                           |
| 0920 | DSB           | 7.26                | Bailed           |                    |                    |      |      |      |     |   |           | 3' PVC Bailer Used                             |
| 0930 | DSE           | 13.24               | Bailed           | 17.0               |                    |      |      |      |     |   |           | W. RISING, Pump at 1' off bottom               |
| 0950 | DOB           | 7.26                | 0.5              | 3.0                | 6.60               | 14.7 | .375 | 170  | 0.0 |   | H         | Dr. Gray Silty Water                           |
| 1000 | DOB           | 13.20               | 0.5              | 13.0               | 6.82               | 16.5 | .409 | 111  | 0.0 |   | H         | " " "                                          |
| 1010 | DOB           | 13.30               | 0.5              | 18.0               | 6.73               | 19.1 | .359 | 041  | 0.0 |   | H         | " " "                                          |
| 1020 | DOB           | 13.35               | 0.5              | 23.0               | 6.67               | 19.5 | .348 | -002 | -   |   | H         | Beginning to clear but still dr. gray silty    |
| 1030 | DOB           | 13.38               | 0.5              | 28.0               | 6.66               | 19.5 | .350 | -037 | -   |   | M         | Clearing More                                  |
| 1040 | DOB           | 16.40               | 1.0              | 38.0               | 6.60               | 18.1 | .464 | -013 | -   |   | H         | Silty Again                                    |
| 1050 | DOB           | -                   | 1.0              | 48.0               | 6.64               | 18.1 | .320 | -005 | -   |   | H         | " " "                                          |
| 1100 | DOB           | -                   | 0.5              | 53.0               | 6.61               | 19.6 | .302 | -026 | -   |   | H         | Water cleared up a little again - W. R. level. |
| 1110 | DOB           | -                   | 0.5              | 58.0               | 6.65               | 18.4 | .341 | -047 | -   |   | H         | " " "                                          |
| 1120 | DOB           | -                   | 0.5              | 63.0               | 6.55               | 17.6 | .324 | -052 | -   |   | M         | MILD SAND FILL OCCUR ON WATER STILL            |
| 1130 | DOB           | -                   | 0.5              | 68.0               | 6.54               | 17.6 | .336 | -054 | -   |   | L         | Clearup - cloudy                               |
| 1140 | DOB           | -                   | 0.5              | 73.0               | 6.53               | 17.7 | .346 | -053 | -   |   | N         | Clear                                          |
| 1150 | DOB           | -                   | 0.5              | 78.0               | 6.50               | 17.7 | .355 | -055 | -   |   | N         | " " "                                          |
|      | DOE           |                     |                  |                    |                    |      |      |      |     |   |           |                                                |
|      |               |                     |                  |                    |                    |      |      |      |     |   |           |                                                |
|      | FINAL         |                     |                  |                    |                    |      |      |      |     |   |           |                                                |

FINAL WELL YIELD: 0.5 GPM PUMP RATE - ESTIMATED CORRESPONDING DRAWDOWN: 10 FT

| DEVELOPMENT ACTIVITY CODES                            |                             | FIELD MEASUREMENT CODES         | TURBIDITY                                               |
|-------------------------------------------------------|-----------------------------|---------------------------------|---------------------------------------------------------|
| DSB - Begin Bailing                                   | DSE - End Bailing           | MTP - Temperature               | Enter Turbidity Meter Reading (Final should be < 5 NTU) |
| DOB - Begin Overpumping                               | DOE - End Overpumping       | MSC - Specific Conductance      |                                                         |
| DRB - Begin Rinsing                                   | DRE - End Rinsing           | MPD - Photometer (e.g., HNU)    | OR                                                      |
| DCB - Begin Recirculation                             | DCE - End Recirculation     | MFD - Flame Ionizer (e.g., OVA) | Enter Qualitative Observations                          |
| DHB - Begin Hydraulic Jetting                         | DHE - End Hydraulic Jetting | MDO - Dissolved Oxygen          | H - High: Opaque/Muddy/Silty                            |
| DAB - Begin Air Surging                               | DAE - End Air Surging       | MPH - pH                        | M - Medium: Translucent/Cloudy                          |
| DSB - Begin Surge Blocking                            | DSE - End Surge Blocking    | MEH - Eh                        | L - Low: Transparent/Some Silt                          |
| DXB - Begin Other                                     | DXE - End Other             | MMC - Inhoff Cone               | N - None: Clear/No Visible Silt                         |
| Specify other method:                                 |                             | MO1 - Other:                    |                                                         |
| FMT - Field Measurements (select from codes at right) |                             | MO2 - Other:                    |                                                         |

|          |               |            |                    |  |
|----------|---------------|------------|--------------------|--|
| COMPANY: | RFW           | WELL NO.:  | MW-23              |  |
| CLIENT:  | USACE         | DATE:      | 1-19-55            |  |
| PROJECT: | 03886-076-038 | LOGGER:    | K. Valente         |  |
| SITE:    | MP16          | SIGNATURE: | <i>[Signature]</i> |  |

ONE WELL VOLUME ~ 8.64 gallons WELL TD: 16.72 ft TOC Well Volume 2-inch = 0.16 6-inch = 1.47  
(gallons/foot) 4-inch = 0.65 8-inch = 2.61

FINAL WELL YIELD: 1 GPM PUMP RATE - ESTIMATED CORRESPONDING DRAWDOWN: — FT

| DEVELOPMENT ACTIVITY CODES                            |                             | FIELD MEASUREMENT CODES                     | TURBIDITY                                                  |
|-------------------------------------------------------|-----------------------------|---------------------------------------------|------------------------------------------------------------|
| DBS - Begin Bailing                                   | DSE - End Bailing           | MTP - Temperature                           | Enter Turbidity Meter Reading<br>(Final should be < 5 NTU) |
| DOS - Begin Overpumping                               | DOE - End Overpumping       | MSC - Specific Conductance                  |                                                            |
| DRS - Begin Rinsing                                   | DRE - End Rinsing           | MPD - Phosporizer (e.g., HNO <sub>3</sub> ) | OR                                                         |
| DCB - Begin Recirculation                             | DCE - End Recirculation     | MFD - Flame Ionizer (e.g., OVA)             | Enter Qualitative Observations                             |
| DHB - Begin Hydraulic Jetting                         | DHE - End Hydraulic Jetting | MDO - Dissolved Oxygen                      |                                                            |
| DAB - Begin Air Surging                               | DAE - End Air Surging       | MPH - pH                                    | H - High: Opaque/Muddy/Shly                                |
| DSB - Begin Surge Blocking                            | DSE - End Surge Blocking    | MEI - EI                                    | M - Medium: Translucent/Cloudy                             |
| DOB - Begin Other                                     | DOE - End Other             | MMC - Inhoff Cone                           | L - Low: Transparent/Some Sol                              |
| Specify other method:                                 |                             | MO1 - Other:                                | N - None: Clear/No Visible Sol                             |
| FMT - Field Measurements (select from codes at right) |                             | MO2 - Other:                                |                                                            |

# GEOLIS Well Development Form

10.15  
3.45  
13.29  
-65  
66.45

60.75  
79.74  
863.85

COMPANY: RW WELL NO.: MW22  
 CLIENT: USMC DATE: 01-05-95  
 PROJECT: 03386-076-078 LOGGER: K. W. L. / F. L. W.  
 SITE: 7216 SIGNATURE: L. V. L.



ONE WELL VOLUME: 8.64 gallons WELL TD: 16.72 ft TOC Well Volume 2-inch = 0.16 6-inch = 1.47  
 (gallons/foot) 4-inch = 0.65 8-inch = 2.61

| TIME | ACTIVITY CODE                                              | DEPTH TO WATER (ft) | PURGE RATE (gpm) | PURGE VOLUME (gal) | FIELD MEASUREMENTS |            |             |     |     | TURBIDITY | COMMENTS                      |
|------|------------------------------------------------------------|---------------------|------------------|--------------------|--------------------|------------|-------------|-----|-----|-----------|-------------------------------|
|      |                                                            |                     |                  |                    | (MPH) PH           | (MTP) Temp | (MSC) Cond. | MV  |     |           |                               |
| 0840 | STATK                                                      | 3.43                | -                |                    |                    |            |             |     |     |           |                               |
|      |                                                            |                     |                  |                    | 5.16               | 14.4       | 183         | 256 | KSV |           |                               |
| 0855 | DBE                                                        | 16.15               | -                | 3.0                | 6.31               | 10.6       | 547         | 035 |     |           | Stagnant. Slow Pressure. Dry. |
| 1500 | STATK                                                      | 3.45                |                  |                    |                    |            |             |     |     |           |                               |
| 1505 | DSB                                                        |                     |                  |                    |                    |            |             |     |     |           |                               |
| 1518 | DSB                                                        |                     |                  | 10.0               |                    |            |             |     |     |           |                               |
| 1515 | DBE                                                        | 15.2                |                  |                    |                    |            |             |     |     |           |                               |
| 1522 | DSB                                                        |                     |                  |                    |                    |            |             |     |     |           |                               |
| 1525 | DBE                                                        | 6.75                |                  |                    |                    |            |             |     |     |           |                               |
| 1525 | DSB                                                        |                     |                  | 17.0               |                    |            |             |     |     |           |                               |
| 1530 | DBE                                                        |                     |                  |                    |                    |            |             |     |     |           | Water is muddy                |
| 1535 | DSB                                                        |                     |                  |                    |                    |            |             |     |     |           | Let Recirculate               |
| 1537 | DBE                                                        | 15.40               |                  |                    |                    |            |             |     |     |           |                               |
| 1620 | DSB                                                        |                     | 2.0              | 17.0               |                    |            |             |     |     |           |                               |
| 1627 | DSB                                                        |                     | 1.0              | 31.0               |                    |            |             |     |     |           |                               |
| 1645 | DBE                                                        | 14.80               | 1                |                    |                    |            |             |     |     |           | Pump cut                      |
| 1650 | DSB                                                        | 9.80                |                  |                    |                    |            |             |     |     |           | off                           |
| 1700 | DBE                                                        |                     |                  |                    |                    |            |             |     |     |           | Pump Dry                      |
|      | Recommend Further Development - Getting Dark - No Daylight |                     |                  |                    |                    |            |             |     |     |           |                               |
|      | FINAL                                                      |                     |                  |                    |                    |            |             |     |     |           |                               |

FINAL WELL YIELD: \_\_\_\_\_ GPM PUMP RATE - ESTIMATED CORRESPONDING DRAWDOWN: \_\_\_\_\_ FT

| DEVELOPMENT ACTIVITY CODES                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                   | FIELD MEASUREMENT CODES                                                                                                                                                                                                   | TURBIDITY                                                                                                                                                                                                                                   |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DDB - Begin Bailing<br>DOB - Begin Overpumping<br>DRB - Begin Raising<br>DCB - Begin Recirculation<br>DHB - Begin Hydraulic Jetting<br>DAB - Begin Air Surging<br>DSB - Begin Surge Blocking<br>DDB - Begin Other<br>Specify other method:<br>FMT - Field Measurements (select from codes at right) | DSE - End Bailing<br>DOE - End Overpumping<br>DRE - End Raising<br>DCE - End Recirculation<br>DHE - End Hydraulic Jetting<br>DAE - End Air Surging<br>DSE - End Surge Blocking<br>DCE - End Other | MTP - Temperature<br>MSC - Specific Conductance<br>MPD - Photometer (e.g., HNU)<br>MFD - Flame Ionizer (e.g., OVA)<br>MDO - Dissolved Oxygen<br>MPH - pH<br>MEH - Eh<br>MMC - Inhoff Cone<br>MO1 - Other:<br>MO2 - Other: | Enter Turbidity Meter Reading<br>(Final should be < 5 NTU)<br>OR<br>Enter Qualitative Observations<br>H - High: Opaque/Muddy/Silty<br>M - Medium: Translucent/Cloudy<br>L - Low: Transparent/Some Silty<br>N - None: Clear/No Visible Silty |

# GEOLIS Well Development Form

COMPANY: Weston WELL NO.: MW-24  
 CLIENT: USACE DATE: 1/18/85  
 PROJECT: FL. Monmouth LOGGER: P. Thomas  
 SITE: M-18 SIGNATURE: Thomas



ONE WELL VOLUME: \_\_\_\_\_ gallons WELL TD: \_\_\_\_\_ ft TOC Well Volume 2-Inch = 0.16 6-Inch = 1.47  
 (gallons/foot) 4-Inch = 0.65 8-Inch = 2.61

| TIME | ACTIVITY CODE | DEPTH TO WATER (ft) | PURGE RATE (gpm) | PURGE VOLUME (gal) | FIELD MEASUREMENTS |              |           |           |            |        | TURBIDITY | COMMENTS                       |
|------|---------------|---------------------|------------------|--------------------|--------------------|--------------|-----------|-----------|------------|--------|-----------|--------------------------------|
|      |               |                     |                  |                    | ATC<br>MPH         | ml/cm<br>MSC | OC<br>MSP | mv<br>MEH | MPD<br>MFD | ML     |           |                                |
| 0835 | DBB           | 3.16                |                  |                    |                    |              |           |           |            |        |           | Begin Surge Blocking           |
| 0855 | DBB           |                     |                  |                    |                    |              |           |           |            |        |           | Begin Bailing                  |
| 0920 | DOE           | *                   |                  |                    |                    |              |           |           |            |        |           | Generator Not working          |
| 0935 | DBB           | 10.12               |                  |                    | 5.9                | 72           | 10.5      | 0.30      | DBB        |        | 720       | Begin Bailing                  |
| 0937 |               | 17.16               |                  |                    |                    |              |           |           |            |        |           | Move to 25 Allow Pump          |
| 1040 |               | 8.91                |                  |                    |                    |              |           |           |            |        |           |                                |
| 1110 | DBE           | 17.16               |                  |                    |                    |              |           |           |            |        |           | ~ 20-25 gallons TOTAL          |
| 1147 | DBB           | 12.40               |                  |                    |                    |              |           |           |            |        |           |                                |
| 1159 | DBE           | 15.75               |                  |                    | 6.58               | 72           | 11.8      | 0.5       | DBB        | N. set | 720       | Bailed ~ 6 gallons             |
| 1335 |               | 8.92                |                  |                    |                    |              |           |           |            |        |           |                                |
| 1413 | DOE           |                     |                  |                    |                    |              |           |           |            |        |           |                                |
| 1424 |               | 10.35               | 0.25             | 0.5                | 6.57               | 72           | 13.3      | 0.4       | DBB        | Some   | 7200      | low water?                     |
| 1435 |               | 12.08               | 0.25             | 0.5                |                    |              |           |           |            |        | 7200      |                                |
| 1440 |               | 13.47               | 0.25             | 0.5                | 7.27               | 72           | 16.6      | 0.85      | DBB        | Other  | 7200      | Turned Flow up - sandy at pump |
| 1441 | DBB           |                     |                  |                    |                    |              |           |           |            |        |           | Intake Valve                   |
| 1527 |               | 10.04               | 0.25             | 0.5                | 7.37               | 72           | 8.7       | 0.4       | DBB        | Some   | 7200      |                                |
| 1540 |               | 11.51               | 0.25             | 0.5                | 7.20               | 72           | 14.2      | 1.00      | DBB        | Some   | 7200      |                                |
| 1547 |               | 13.35               | 0.25             | 0.5                | 7.28               | 72           | 18.5      | 1.00      | DBB        | Some   | 7200      |                                |
|      | FINAL         |                     |                  |                    |                    |              |           |           |            |        |           |                                |

FINAL WELL YIELD: 60.5 GPM PUMP RATE - ESTIMATED CORRESPONDING DRAWDOWN: DRY

| DEVELOPMENT ACTIVITY CODES                            |                             | FIELD MEASUREMENT CODES                                 | TURBIDITY                                               |
|-------------------------------------------------------|-----------------------------|---------------------------------------------------------|---------------------------------------------------------|
| DBB - Begin Bailing                                   | DBE - End Bailing           | MTP - Temperature                                       | Enter Turbidity Meter Reading (Final should be < 5 NTU) |
| DOB - Begin Overpumping                               | DOE - End Overpumping       | MSC - Specific Conductance                              | OR                                                      |
| DRB - Begin Raising                                   | DRE - End Raising           | MPD - Photolysis (e.g., H <sub>2</sub> O <sub>2</sub> ) | Enter Qualitative Observations                          |
| DCE - Begin Recirculation                             | DCE - End Recirculation     | MFD - Flame Ionizer (e.g., OVA)                         | H - High: Opaque/Muddy/Silty                            |
| DHB - Begin Hydraulic Jetting                         | DHE - End Hydraulic Jetting | MDO - Dissolved Oxygen                                  | M - Medium: Translucent/Cloudy                          |
| DAB - Begin Air Surging                               | DAE - End Air Surging       | MPH - pH                                                | L - Low: Transparent/Some Sil                           |
| DSB - Begin Surge Blocking                            | DSE - End Surge Blocking    | MEH - Eh                                                | N - None: Clear/No Visible Sil                          |
| DXB - Begin Other                                     | DXE - End Other             | MMC - Inhoff Cone                                       |                                                         |
| Specify other method:                                 |                             | MO1 - Other                                             |                                                         |
| FMT - Field Measurements (select from codes at right) |                             | MO2 - Other                                             |                                                         |

Recovery ≈ 1.5' every 10 minutes



COMPANY: WESLEY WELL NO.: MW-25  
 CLIENT: USAF DATE: 11/19/95  
 PROJECT: 1. Hammond LOGGER: Thom  
 SITE: M-15 SIGNATURE: Thom



ONE WELL VOLUME: \_\_\_\_\_ gallons WELL TD: 17.00 ft TOC Well Volume 2-Inch = 0.16 6-Inch = 1.47  
(gallons/foot) 4-Inch = 0.65 8-Inch = 2.61

[illegible]

FINAL WELL YIELD: 60.5 GPM PUMP RATE - ESTIMATED CORRESPONDING DRAWDOWN: 12 FT

| DEVELOPMENT ACTIVITY CODES                            |                             | FIELD MEASUREMENT CODES         | TURBIDITY                                                  |
|-------------------------------------------------------|-----------------------------|---------------------------------|------------------------------------------------------------|
| DBB - Begin Bailing                                   | DSE - End Bailing           | MTP - Temperature               | Enter Turbidity Meter Reading<br>(Final should be < 5 NTU) |
| DOB - Begin Overpumping                               | DOE - End Overpumping       | MSC - Specific Conductance      |                                                            |
| DRB - Begin Rawhiding                                 | DRE - End Rawhiding         | MPD - Photolizer (e.g., HHA)    | OR                                                         |
| DCB - Begin Recirculation                             | DCE - End Recirculation     | MFD - Flame Ionizer (e.g., OVA) | Enter Qualitative Observations                             |
| DHB - Begin Hydraulic Jetting                         | DHE - End Hydraulic Jetting | MDO - Dissolved Oxygen          |                                                            |
| DAB - Begin Air Surging                               | DAE - End Air Surging       | MPH - pH                        | H - High: Opaque/Muddy/Silty                               |
| DSB - Begin Surge Blocking                            | DSE - End Surge Blocking    | MEH - Eh                        | M - Medium: Translucent/Cloudy                             |
| DDB - Begin Other                                     | DDE - End Other             | MMC - Inhoff Cone               | L - Low: Transparent/Some Sil                              |
| Specify other method:                                 |                             | MO1 - Other: _____              | N - None: Clear/No Visible Sil                             |
| FMT - Field Measurements (select from codes at right) |                             | MO2 - Other: _____              |                                                            |

COPYRIGHT © 1991 by Roy F. Weston, Inc.

Recovery  $\cong 0.4'$  every 10 minutes

# 26

# GEOLIS Well Development Form

 COMPANY: RFW  
 CLIENT: USACE  
 PROJECT: 03286-076-037  
 SITE: CU01

 WELL NO.: MW26  
 DATE: 1/20/95  
 LOGGER: S. SACCOMANDI  
 SIGNATURE: Sh W. SE

 ONE WELL VOLUME: \_\_\_\_\_ gallons WELL TD: 16.85 ft TOC Well Volume 2-Inch = 0.16 6-Inch = 1.47  
 (gallons/foot) 4-Inch = 0.65 8-Inch = 2.61
 

| TIME | ACTIVITY CODE | DEPTH TO WATER (ft) | PURGE RATE (gpm)                      | PURGE VOLUME (gal) | FIELD MEASUREMENTS |     |      |      |     |     | TURBIDITY | COMMENTS          |
|------|---------------|---------------------|---------------------------------------|--------------------|--------------------|-----|------|------|-----|-----|-----------|-------------------|
|      |               |                     |                                       |                    | MPH                | MEH | MTP  | MSC  | MEH | MPD |           |                   |
| 0915 |               |                     |                                       |                    |                    |     |      |      |     |     |           |                   |
| 1130 | DSB           | 9.25                |                                       |                    |                    |     |      |      |     |     |           |                   |
| 1140 | DOB           | NR                  |                                       |                    |                    |     |      |      |     |     |           | 10 GALS           |
| 1145 | DOB           | 10.35               | 1.5                                   |                    | 1.46               | 377 | 12.5 | 258  | BKG |     | 29        | HIGH BROWN SLURRY |
| 1250 | DSB           |                     |                                       |                    |                    |     |      |      |     |     |           |                   |
| 1300 | DOB           | NR                  |                                       |                    |                    |     |      |      |     |     |           |                   |
| 1315 | DOB           | 11.98               | ~1                                    | ~10                | 4.92               | 280 | 12.1 | .600 | BKG |     | H         | YELLOW CLOUDY     |
| 1320 | DOB           | 12.25               | ~1                                    | 15                 | 4.75               | 298 | 13.8 | .637 | BKG |     | H         | "                 |
| 1325 | DOB           | 12.73               | ~1                                    | 20                 | 4.72               | 321 | 15.0 | .642 | BKG |     | H         | "                 |
| 1330 | DOB           | 13.70               | ~1                                    | 25                 | 4.82               | 332 | 14.6 | .677 | BKG |     | H         | " CLEARING        |
| 1335 | DOB           | 13.35               | ~1                                    | 30                 | 4.86               | 332 | 14.5 | .758 | BKG |     | H         | " STILL CLEARING  |
| 1340 | DOB           | 14.15               | ~1                                    | 35                 | 4.83               | 336 | 14.0 | .655 | BKG |     | H         | " "               |
| 1345 | DOB           | ~14.40              | ~1                                    | 40                 | 4.86               | 338 | 14.3 | .675 | BKG |     | H         | " "               |
| 1350 | DOB           | ~14.40              | .5-1                                  | 42.5               | 4.92               | 343 | 14.7 | .741 | BKG |     | M         | VERY CLOUDY       |
| 1351 | DOE           | ~14.40              | WATER LEVEL AT PUMP WAIT FOR RECHARGE |                    |                    |     |      |      |     |     |           |                   |
| 1400 | DOB           | 10.10               | ~1                                    | 42.5               | 4.93               | 341 | 13.7 | .738 | BKG |     | L         | HAZY              |
| 1405 | DOB           | 14.20               | ~1                                    | 47.5               | 4.90               | 345 | 14.1 | .646 | BKG |     | M         | VERY CLOUDY       |
| 1410 | DOE           | ~14.40              | ~1                                    | 52.5               | 4.94               | 346 | 14.3 | .755 | BKG |     | L         | HAZY              |
| 1414 | DOB           | 12.60               | ~1                                    | 52.5               | 4.97               | 350 | 14.5 | .768 | BKG |     | L         | CLOUDY            |
| OVER |               | 14.40               | TOP OF PUMP                           |                    |                    |     |      |      |     |     |           |                   |
|      | FINAL         |                     |                                       |                    |                    |     |      |      |     |     |           |                   |

 FINAL WELL YIELD: ~1 GPM PUMP RATE - ESTIMATED CORRESPONDING DRAWDOWN: \_\_\_\_\_ FT
 

| DEVELOPMENT ACTIVITY CODES                            |                             | FIELD MEASUREMENT CODES         | TURBIDITY                                                                                                                         |
|-------------------------------------------------------|-----------------------------|---------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|
| DSB - Begin Bailing                                   | DSE - End Bailing           | MTP - Temperature               | Enter Turbidity Meter Reading<br>(Final should be < 5 NTU)                                                                        |
| DOB - Begin Overpumping                               | DOE - End Overpumping       | MSC - Specific Conductance      |                                                                                                                                   |
| DRB - Begin Rinsing                                   | DRE - End Rinsing           | MPD - Photometer (e.g., HNT)    | OR<br>Enter Qualitative Observations                                                                                              |
| DCE - Begin Recirculation                             | DCE - End Recirculation     | MPD - Flame Ionizer (e.g., OVA) |                                                                                                                                   |
| DHB - Begin Hydraulic Jetting                         | DHE - End Hydraulic Jetting | MDO - Dissolved Oxygen          | H - High: Opaque/Muddy/Silty<br>M - Medium: Translucent/Cloudy<br>L - Low: Transparent/Some Sil<br>N - None: Clear/No Visible Sil |
| DAB - Begin Air Surging                               | DAE - End Air Surging       | MPH - pH                        |                                                                                                                                   |
| DSB - Begin Surge Blocking                            | DSE - End Surge Blocking    | MEH - Eh                        |                                                                                                                                   |
| DXB - Begin Other                                     | DXE - End Other             | MMC - Inflow Cone               |                                                                                                                                   |
| Specify other method:                                 |                             | MO1 - Other                     |                                                                                                                                   |
| FMT - Field Measurements (select from codes at right) |                             | MO2 - Other                     |                                                                                                                                   |

#26 CONTINUED

Well Volume 2-inch = 0.16 6-inch = 1.47  
(gallons/foot) 4-inch = 0.65 8-inch = 2.61

**FINAL**

CORRESPONDING DRAWDOWN: 5 FT

DDB - Begin Drilling  
DOS - Begin Overrumping  
CRB - Begin Reawhiding  
DCB - Begin Recirculation  
DHB - Begin Hydraulic Jetting  
DAB - Begin Air Surging  
DGB - Begin Surge Blocking  
DXB - Begin Other  
Specify other method

DBE - End Bailing  
DOE - End Overpumping  
DRE - End Rerewinding  
DCE - End Recirculation  
DHE - End Hydraulic Jetting  
DAE - End Air Surging  
DSE - End Surge Blocking  
DKE - End Other

MTP - Temperature  
MSC - Specific Conductance  
MPD - Photodiode (e.g., H44)  
MFD - Flame Ionizer (e.g., OVA)  
MDO - Dissolved Oxygen  
MPH - pH  
ME1 - E1  
MMC - Inhoff Cone  
MO1 - Other: \_\_\_\_\_  
MO2 - Other: \_\_\_\_\_

Enter Turbidity Meter Reading  
(Final should be < 5 NTU)  
OR  
Enter Qualitative Observations  
H - High: Opaque/Muddy/Sky  
M - Medium: Translucent/Cloudy  
L - Low: Transparent/Some Silt  
N - None: Clear/No Visible Silt

# GEOLIS Well Development Form

#27

|                               |                              |                                                                                     |
|-------------------------------|------------------------------|-------------------------------------------------------------------------------------|
| COMPANY: <u>RFW</u>           | WELL NO.: <u>MW 27</u>       |  |
| CLIENT: <u>USACE</u>          | DATE: <u>1/20/95</u>         |                                                                                     |
| PROJECT: <u>03886-076-037</u> | LOGGER: <u>J. SACCOMANDI</u> |                                                                                     |
| SITE: <u>CW01</u>             | SIGNATURE: <u>J. W. SO</u>   |                                                                                     |

ONE WELL VOLUME: \_\_\_\_\_ gallons WELL TD: 16.90 R TOC Well Volume 2-Inch = 0.16 6-Inch = 1.47  
(gallons/foot) 4-Inch = 0.65 8-Inch = 2.61

| TIME | ACTIVITY CODE | DEPTH TO WATER (ft) | PURGE RATE (gpm) | PURGE VOLUME (gal) | FIELD MEASUREMENTS |     |      |      |     |  | TURBIDITY | COMMENTS               |
|------|---------------|---------------------|------------------|--------------------|--------------------|-----|------|------|-----|--|-----------|------------------------|
|      |               |                     |                  |                    | MPH                | MEH | MTP  | MSC  | MPD |  |           |                        |
| 0915 |               | 9.31                |                  |                    |                    |     |      |      |     |  |           |                        |
| 1310 | DOB           | 9.39                |                  |                    |                    |     |      |      |     |  |           |                        |
| 1315 | DOB           | NR                  |                  | ~10                |                    |     |      |      |     |  | H         | BAILED DRY (7) BAILERS |
| 1325 | DOB           | 10.41               | ~1               | ~10                | 4.9                | 311 | 11.0 | .361 | BKG |  | M         | YELLOW/BROWN SLT       |
| 1330 | DOB           | 10.46               | ~1               | 1.5                | 4.86               | 325 | 12.8 | .725 | BKG |  | H         | "                      |
| 1335 | DOB           | 10.46               | ~1               | 2.0                | 4.80               | 333 | 15.7 | .777 | BKG |  | H         | "                      |
| 1340 | DOB           | 10.56               | ~1               | 2.5                | 4.82               | 339 | 16.4 | .830 | BKG |  | H         | "                      |
| 1345 | DOB           | 11.25               | ~1.25            | 32.5               | 4.81               | 342 | 16.8 | .815 | BKG |  | H         | " CLEARING             |
| 1350 | DOB           | 11.35               | ~1.25            | 39.5               | 4.85               | 343 | 15.9 | .774 | BKG |  | H         | " STILL CLEARING       |
| 1355 | DOB           | 11.40               | ~1.25            | 47                 | 4.87               | 341 | 16.2 | .815 | BKG |  | M         | " "                    |
| 1400 | DOB           | 11.44               | ~1.25            | 54.5               | 4.77               | 349 | 16.8 | .815 | BKG |  | L         | VERY CLOUDY            |
| 1405 | DOB           | 11.45               | ~1.25            | 62.0               | 4.79               | 351 | 16.8 | .836 | BKG |  | N         | HAZY                   |
| 1410 | DOB           | 11.45               | ~1.25            | 69.5               | 4.82               | 353 | 16.8 | .837 | BKG |  | N         | CLEAR                  |
| 1415 | DOB           | 11.47               | ~1.25            | 75.5               | 4.83               | 355 | 16.9 | .838 | BKG |  | N         | CLEAR                  |
| 1420 | DOB           | 11.47               | ~1.25            | 83                 | 4.82               | 357 | 17.0 | .834 | BKG |  | N         | CLEAR                  |
| 1425 | DOB           | 11.47               | ~1.25            | 90.5               | 4.84               | 359 | 16.9 | .836 | BKG |  | N         | CLEAR                  |
| 1430 | DOB           | 11.50               | ~1.25            | 98                 | 4.82               | 358 | 17.3 | .833 | BKG |  | N         | CLEAR                  |
| 1435 | DOB           | 11.50               | ~1.25            | 105.5              | 4.81               | 361 | 17.3 | .840 | BKG |  | N         | CLEAR                  |
| 1440 | DOB           | 11.50               | ~1.25            | 113                | 4.83               | 364 | 16.9 | .837 | BKG |  | N         | CLEAR                  |
| OVER | FINAL         |                     |                  |                    |                    |     |      |      |     |  |           |                        |

FINAL WELL YIELD: ~1.25 GPM PUMP RATE - ESTIMATED CORRESPONDING DRAWDOWN: 3 FT

| DEVELOPMENT ACTIVITY CODES                            |                             | FIELD MEASUREMENT CODES        | TURBIDITY                                                                                                                                                           |
|-------------------------------------------------------|-----------------------------|--------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DOB - Begin Bailing                                   | DSE - End Bailing           | MTP - Temperature              | Enter Turbidity Meter Reading<br>(Final should be < 5 NTU)<br>OR                                                                                                    |
| DOB - Begin Overpumping                               | DOE - End Overpumping       | MSC - Specific Conductance     |                                                                                                                                                                     |
| DRB - Begin Rawhiding                                 | DRE - End Rawhiding         | MPD - Protolizer (e.g. HNA)    | Enter Qualitative Observations<br>H - High: Opaque/Muddy/Silty<br>M - Medium: Translucent/Cloudy<br>L - Low: Transparent/Some Sil<br>N - None: Clear/No Visible Sil |
| DCB - Begin Recirculation                             | DCE - End Recirculation     | MFD - Flame Ionizer (e.g. OVA) |                                                                                                                                                                     |
| DHB - Begin Hydraulic Jetting                         | DHE - End Hydraulic Jetting | MDO - Dissolved Oxygen         |                                                                                                                                                                     |
| DAB - Begin Air Surging                               | DAE - End Air Surging       | MPH - pH                       |                                                                                                                                                                     |
| DSB - Begin Surge Blocking                            | DSE - End Surge Blocking    | MEH - Eh                       |                                                                                                                                                                     |
| DOB - Begin Other                                     | DXE - End Other             | MMC - Inflow Cone              |                                                                                                                                                                     |
| Specify other method:                                 |                             | MO1 - Other:                   |                                                                                                                                                                     |
| FMT - Field Measurements (select from codes at right) |                             | MO2 - Other:                   |                                                                                                                                                                     |

#27 CONTINUED,

|                |               |               |
|----------------|---------------|---------------|
| Well Volume    | 2-inch = 0.16 | 6-inch = 1.47 |
| (gallons/foot) | 4-inch = 0.65 | 8-inch = 2.61 |

FINAL WELL YIELD: 60.5 GPM PUMP RATE - ESTIMATED CORRESPONDING DRAWDOWN: 3 FT

COPYRIGHT © 1991 by Roy F. Weston, Inc. 0081291T

#28

• TOC

WATER LEVEL WAS NOT DRAWN DOWN ANY FURTHER DUE TO THE PUMP LEVEL

**GPM**

**PUMP RATE .**

**ESTIMATED**

**CORRESPONDING DRAWDOWN:**

2 F

## TURBIDITY



# 29



ONE WELL VOLUME: \_\_\_\_\_ gallons WELL TD: 16.90 ft TOC Well Volume 2-Inch = 0.16 6-Inch = 1.47  
(gallons/foot) 4-Inch = 0.65 8-Inch = 2.61

|       |       |     |      |       |      |     |         |
|-------|-------|-----|------|-------|------|-----|---------|
| WATER | LEVEL | WAS | NOT  | DRAWN | DOWN | ANY | FURTHER |
| DUE   | TO    | THE | PUMP | LEVEL |      |     |         |

FINAL WELL YIELD: 15.2 GPM PUMP RATE - ESTIMATED CORRESPONDING DRAWDOWN: 2

| DEVELOPMENT ACTIVITY CODES                            |                             | FIELD MEASUREMENT CODES         | TURBIDITY                                                  |
|-------------------------------------------------------|-----------------------------|---------------------------------|------------------------------------------------------------|
| D88 - Begin Bailing                                   | D8E - End Bailing           | MTP - Temperature               | Enter Turbidity Meter Reading<br>(Final should be < 5 NTU) |
| D08 - Begin Overpumping                               | DOE - End Overpumping       | MSC - Specific Conductance      |                                                            |
| DR8 - Begin Rawwhiding                                | DRE - End Rawwhiding        | MPD - Photolizer (e.g., HNU)    | OR                                                         |
| DC8 - Begin Recirculation                             | DCE - End Recirculation     | MFD - Flame Ionizer (e.g., OVA) | Enter Qualitative Observations                             |
| DH8 - Begin Hydraulic Jetting                         | DHE - End Hydraulic Jetting | MDO - Dissolved Oxygen          | H - High: Opaque/Muddy/Silty                               |
| DAB - Begin Air Surging                               | DAE - End Air Surging       | MPH - pH                        | M - Medium: Translucent/Cloudy                             |
| DSB - Begin Surge Blocking                            | DSE - End Surge Blocking    | MEH - Eh                        | L - Low: Transparent/Some Silt                             |
| DX8 - Begin Other                                     | DXE - End Other             | MMC - Inhoff Cone               | N - None: Clear/No Visible Silt                            |
| Specify other method: _____                           |                             | MO1 - Other: _____              |                                                            |
| FMT - Field Measurements (select from codes at right) |                             | MO2 - Other: _____              |                                                            |

COPYRIGHT © 1991 by Roy F. Weston, Inc.

# GEOLIS Well Development Form

30

|                               |                              |                                                                                     |
|-------------------------------|------------------------------|-------------------------------------------------------------------------------------|
| COMPANY: <u>REU</u>           | WELL NO.: <u>MW 30</u>       |  |
| CLIENT: <u>USACE</u>          | DATE: <u>01-09-95</u>        |                                                                                     |
| PROJECT: <u>03886-076-037</u> | LOGGER: <u>V. Valente</u>    |                                                                                     |
| SITE: <u>01102</u>            | SIGNATURE: <u>V. Valente</u> |                                                                                     |

ONE WELL VOLUME: 6.9 gallons WELL TD: 17.92 R TOC Well Volume 2-inch = 0.16 6-inch = 1.47  
(gallons/foot) 4-inch = 0.65 8-inch = 2.61

| TIME | ACTIVITY CODE             | DEPTH TO WATER (ft) | PURGE RATE (gpm) | PURGE VOLUME (gal) | FIELD MEASUREMENTS |      |       |      |     |  |  | TURBIDITY | COMMENTS                           |
|------|---------------------------|---------------------|------------------|--------------------|--------------------|------|-------|------|-----|--|--|-----------|------------------------------------|
|      |                           |                     |                  |                    | MPH                | MTP  | MSC   | MV   | HAW |  |  |           |                                    |
| 1330 | Static                    | 7.34                | -                | -                  | -                  | -    | -     | -    | 20  |  |  | -         | MODERATE ROTTEN ODOR IN WELL       |
| 1400 | DBB                       | 7.34                | -                |                    |                    |      |       |      |     |  |  | H         |                                    |
| 1410 | DBE                       |                     | -                |                    |                    |      |       |      |     |  |  |           |                                    |
| 1420 | DBS                       |                     | -                | 25.0               |                    |      |       |      |     |  |  |           |                                    |
| 1430 | DRB                       |                     |                  |                    |                    |      |       |      |     |  |  |           |                                    |
| 1440 | DOB                       |                     |                  |                    | 6.0                | 16.8 | .635  | 015  | 0.0 |  |  | H         | WATER STILL SILTY.                 |
| 1445 | DBE                       |                     |                  | 30.0               |                    |      |       |      |     |  |  |           |                                    |
| 1510 | DBB                       |                     |                  | 32.0               | 6.12               | 15.0 | .623  | 005  | 0.0 |  |  | A         | WATER CLEARING BUT STILL SILTY.    |
| 1520 | DBB                       |                     |                  | 35.5               | 6.06               | 15.0 | .632  | 008  | 0.0 |  |  | H         |                                    |
| 1550 | DOB                       |                     |                  | 38.0               | 5.98               | 15.6 | .641  | 012  | 0.0 |  |  | H         |                                    |
| 1600 | DBE                       | Dry                 |                  | 40.0               | 6.03               | 15.1 | .630  | -004 |     |  |  | L         | WATER CLEARING JUST SLIGHTLY SILTY |
| 1625 | DBE                       |                     |                  |                    |                    |      |       |      |     |  |  |           |                                    |
| 0940 | DSB                       | 6.90                | -                |                    |                    |      |       |      |     |  |  |           |                                    |
| 0945 | DBB                       | Dry                 | -                | 12.0               |                    |      |       |      |     |  |  |           |                                    |
| 1000 | DBB                       | 15.6                | -                | 16.0               | 5.63               | 13.0 | 1.010 | 040  | BKG |  |  | H         | GRAY BROWN SILTY                   |
| 1010 | DBB                       | 14.69               | -                | 20                 | 6.02               | 14.0 | .917  | -026 | BKG |  |  | H         | "                                  |
| 1015 | DBB                       | 15.02               | -                | 22                 | 6.15               | 14.1 | .895  | -32  | BKG |  |  | H         | "                                  |
|      | OVER                      |                     |                  |                    |                    |      |       |      |     |  |  |           |                                    |
|      | Performance Log Book DATA |                     |                  |                    |                    |      |       |      |     |  |  |           |                                    |
|      | FINAL                     |                     |                  |                    |                    |      |       |      |     |  |  |           |                                    |

FINAL WELL YIELD: \_\_\_\_\_ GPM PUMP RATE - ESTIMATED CORRESPONDING DRAWDOWN: \_\_\_\_\_ FT

| DEVELOPMENT ACTIVITY CODES                            |                             | FIELD MEASUREMENT CODES         | TURBIDITY                                               |
|-------------------------------------------------------|-----------------------------|---------------------------------|---------------------------------------------------------|
| DBB - Begin Bailing                                   | DBE - End Bailing           | MTP - Temperature               | Enter Turbidity Meter Reading (Final should be < 5 NTU) |
| DOB - Begin Overpumping                               | DOE - End Overpumping       | MSC - Specific Conductance      |                                                         |
| DRB - Begin Rinsing                                   | DRE - End Rinsing           | MPD - Photometer (e.g., HAN)    | OR                                                      |
| DCB - Begin Recirculation                             | DCE - End Recirculation     | MPD - Flame Ionizer (e.g., OVA) |                                                         |
| DHB - Begin Hydraulic Jetting                         | DHE - End Hydraulic Jetting | MOO - Dissolved Oxygen          | Enter Qualitative Observations                          |
| DAB - Begin Air Surging                               | DAE - End Air Surging       | MPH - pH                        |                                                         |
| DSB - Begin Surge Blocking                            | DSE - End Surge Blocking    | MEH - Eh                        | H - High: Opaque/Muddy/Silty                            |
| DXB - Begin Other                                     | DXE - End Other             | MMC - Inflow Core               | M - Medium: Translucent/Cloudy                          |
| Specify other method:                                 |                             | MOI - Other:                    | L - Low: Transparent/Some Bit                           |
| FMT - Field Measurements (select from codes at right) |                             | MOZ - Other:                    | N - None: Clear/No Visible Bit                          |



|          |               |            |                    |  |
|----------|---------------|------------|--------------------|--|
| COMPANY: | RFW           | WELL NO.:  | MW 30              |  |
| CLIENT:  | USACE         | DATE:      | 1/24/95            |  |
| PROJECT: | 03886-076-037 | LOGGER:    | J. SACCOMANDI      |  |
| SITE:    | CWOZ          | SIGNATURE: | <i>[Signature]</i> |  |

ONE WELL VOLUME: ~ 6.9 gallons WELL TD: 17.92 RTOC Well Volume 2-inch = 0.15 6-inch = 1.47  
(gallons/foot) 4-inch = 0.65 8-inch = 2.61

FINAL WELL YIELD: Baril GPM PUMP RATE - ESTIMATED CORRESPONDING DRAWDOWN: 0.24 FT

COPYRIGHT © 1991 by Roy F. Weston, Inc. G081291 T

# GEOLIS Well Development Form

|                               |                               |                                                                                     |
|-------------------------------|-------------------------------|-------------------------------------------------------------------------------------|
| COMPANY: <u>RFW</u>           | WELL NO.: <u>MW-31</u>        |  |
| CLIENT: <u>USACE</u>          | DATE: <u>01-05-95</u>         |                                                                                     |
| PROJECT: <u>03886-076-037</u> | LOGGER: <u>K. VALENTE</u>     |                                                                                     |
| SITE: <u>CW02</u>             | SIGNATURE: <u>[Signature]</u> |                                                                                     |

ONE WELL VOLUME: ~6.4 gallons WELL TD: 16.90 R TOC Well Volume 2-Inch = 0.16 6-Inch = 1.47  
(gallons/foot) 4-Inch = 0.65 8-Inch = 2.61

| TIME                                                | ACTIVITY CODE | DEPTH TO WATER (ft) | PURGE RATE (gpm) | PURGE VOLUME (gal) | FIELD MEASUREMENTS |      |      |      |     |  | TURBIDITY | COMMENTS                                  |
|-----------------------------------------------------|---------------|---------------------|------------------|--------------------|--------------------|------|------|------|-----|--|-----------|-------------------------------------------|
|                                                     |               |                     |                  |                    | MPH                | MTP  | MSC  | MV   | HMV |  |           |                                           |
| 1150                                                | STATIC        | 7.00                | -                | -                  | -                  | -    | -    | -    | 0.0 |  | -         | BEGAN HAND BAILING - 3"-DIA. Bailor?      |
| 1200                                                | DBB           | 16.00               | Bailed           | 6                  | 6.32               | 12.2 | .412 | -017 | 0.0 |  | H         |                                           |
|                                                     | DBE           | 16.00               |                  |                    |                    |      |      |      |     |  |           | RECHARGE = 2 1/10 of A FOOT EVERY MINUTE. |
| 1300                                                | DSB           | 8.70                |                  |                    |                    |      |      |      |     |  |           |                                           |
| 1305                                                | DBB           | 8.70                |                  |                    |                    |      |      |      |     |  | H         | BEGINNING TO CLEAR BUT STILL SILTY        |
| 1340                                                | DBB           | 16.35               | -                | 31                 | 5.90               | 16.2 | .395 | 040  | 0.0 |  | H         | BEGAN SURGING.                            |
| 1350                                                | DBB           |                     |                  |                    |                    |      |      |      |     |  |           |                                           |
| 1355                                                | DBB           |                     |                  | 32.5               | 6.04               | 15.9 | .395 | 013  | 0.0 |  | N         |                                           |
| 1400                                                | DBE           | 14.30               |                  | <del>44</del>      |                    |      |      |      |     |  |           |                                           |
| 1420                                                |               | 11.30               | BAILED DRY       |                    |                    |      |      |      |     |  |           | PER RECOVERY                              |
| 1055                                                | DBB           | 6.75                | -                | 14                 | 6.08               | 13.7 | .533 | -013 | BKG |  | H         | GRAY BROWN SILTY                          |
| 1100                                                | DBB           | 12.02               | -                | 18                 | 6.16               | 14.2 | .533 | -21  | BKG |  | H         | "                                         |
| 1105                                                | DBB           | 14.30               | -                | 19                 | 6.21               | 14.4 | .534 | -020 | BKG |  | H         | "                                         |
| 1110                                                | DBB           | 14.12               | -                | 20                 | 6.21               | 13.9 | .518 | -018 | BKG |  | H         | "                                         |
| 1115                                                | DBB           | 13.40               | -                | 22                 | 6.21               | 13.7 | .517 | -014 | BKG |  | M         | "                                         |
| 1120                                                | DBB           | 13.24               | -                | 24                 | 6.18               | 13.6 | .525 | -010 | BKG |  | M         | "                                         |
| 1125                                                | DBB           | 13.16               | -                | 25                 | 6.21               | 13.8 | .507 | -003 | BKG |  | M         | "                                         |
| Reference Log Book on THIS DATE For Detailed Notes. |               |                     |                  |                    |                    |      |      |      |     |  |           |                                           |
| FINAL                                               |               |                     |                  |                    |                    |      |      |      |     |  |           |                                           |

FINAL WELL YIELD: 20.5 GPM PUMP RATE ESTIMATED CORRESPONDING DRAWDOWN: \* FT

| DEVELOPMENT ACTIVITY CODES                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                     | FIELD MEASUREMENT CODES                                                                                                                                                                                                  | TURBIDITY                                                                                                                                                                                                                              |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DBB - Begin Bailing<br>DOB - Begin Overpumping<br>DRB - Begin Rawhiding<br>DCB - Begin Recirculation<br>DHB - Begin Hydraulic Jetting<br>DAB - Begin Air Surging<br>DSB - Begin Surge Blocking<br>DXB - Begin Other<br>Specify other method:<br>FMT - Field Measurements (select from codes at right) | DBE - End Bailing<br>DOE - End Overpumping<br>DRE - End Rawhiding<br>DCE - End Recirculation<br>DHE - End Hydraulic Jetting<br>DAE - End Air Surging<br>DSE - End Surge Blocking<br>DXE - End Other | MTP - Temperature<br>MSC - Specific Conductance<br>MPD - Photometer (e.g., HNU)<br>MFD - Flame Ionizer (e.g., OVA)<br>MDO - Dissolved Oxygen<br>MPH - pH<br>MEH - Eh<br>MMC - Marsh Cone<br>MO1 - Other:<br>MO2 - Other: | Enter Turbidity Meter Reading (Final should be < 5 NTU)<br>OR<br>Enter Qualitative Observations<br>H - High: Opaque/Muddy/Silty<br>M - Medium: Translucent/Cloudy<br>L - Low: Transparent/Some Silt<br>N - None: Clear/No Visible Silt |

|          |               |            |               |
|----------|---------------|------------|---------------|
| COMPANY: | RFW           | WELL NO.:  | MN31          |
| CLIENT:  | USACE         | DATE:      | 1/24/95       |
| PROJECT: | D3886-076-037 | LOGGER:    | J. SACCA/MIWI |
| SITE:    | CH02          | SIGNATURE: | CHW SV        |



ONE WELL VOLUME 26.4 gallons WELL TD: 16.90 R TOC

|                |               |               |
|----------------|---------------|---------------|
| Well Volume    | 2-Inch = 0.16 | 6-Inch = 1.47 |
| (gallons/foot) | 4-Inch = 0.65 | 8-Inch = 2.81 |

[illegible]

FINAL WELL YIELD: \_\_\_\_\_ GPM PUMP RATE - ESTIMATED CORRESPONDING DRAWDOWN: \_\_\_\_\_ FT

| DEVELOPMENT ACTIVITY CODES                            |                             | FIELD MEASUREMENT CODES         | TURBIDITY                                                  |
|-------------------------------------------------------|-----------------------------|---------------------------------|------------------------------------------------------------|
| DBS - Begin Bailing                                   | DSE - End Bailing           | MTP - Temperature               | Enter Turbidity Meter Reading<br>(Final should be < 5 NTU) |
| DOS - Begin Overpumping                               | DOE - End Overpumping       | MSC - Specific Conductance      | OR                                                         |
| DPS - Begin Rawwhiding                                | DRE - End Rawwhiding        | MPD - Phosphonizer (e.g., H26)  | Enter Qualitative Observations                             |
| DCB - Begin Recirculation                             | DCE - End Recirculation     | MFD - Flame Ionizer (e.g., OVA) |                                                            |
| DHS - Begin Hydraulic Jetting                         | DHE - End Hydraulic Jetting | MDO - Dissolved Oxygen          | H - High: Opaque/Muddy/Sky                                 |
| DAB - Begin Air Surging                               | DAE - End Air Surging       | MPH - pH                        | M - Medium: Translucent/Cloudy                             |
| DSB - Begin Surge Blocking                            | DSE - End Surge Blocking    | MEH - Eh                        | L - Low: Transparent/Some Silt                             |
| DXB - Begin Other                                     | DXE - End Other             | MMH - Inhoff Cone               | N - None: Clear/No Visible Silt                            |
| Specify other method:                                 |                             | MO1 - Other:                    |                                                            |
| FMT - Field Measurements (select from codes at right) |                             | MO2 - Other:                    |                                                            |

# GEOLIS Well Development Form

|                               |                                |                                                                                     |
|-------------------------------|--------------------------------|-------------------------------------------------------------------------------------|
| COMPANY: <u>REW</u>           | WELL NO.: <u>MW 32</u>         |  |
| CLIENT: <u>USACE</u>          | DATE: <u>04-05-85</u>          |                                                                                     |
| PROJECT: <u>03886-076-031</u> | LOGGER: <u>K. V. MURPHY</u>    |                                                                                     |
| SITE: <u>CWCA</u>             | SIGNATURE: <u>K. V. MURPHY</u> |                                                                                     |

ONE WELL VOLUME: ~5.5 ~~7.45~~ gallons WELL TD: 16.90 R TOC Well Volume 2-Inch = 0.16 6-Inch = 1.47  
(gallons/foot) 4-Inch = 0.65 8-Inch = 2.81

| TIME                                           | ACTIVITY CODE | DEPTH TO WATER (ft) | PURGE RATE (gpm)                     | PURGE VOLUME (gal) | FIELD MEASUREMENTS |      |      |      |     |   | TURBIDITY | COMMENTS                            |
|------------------------------------------------|---------------|---------------------|--------------------------------------|--------------------|--------------------|------|------|------|-----|---|-----------|-------------------------------------|
|                                                |               |                     |                                      |                    | MPH                | MTP  | MSC  | MV   | HAV |   |           |                                     |
| 1155                                           | Static        | 7.45                | -                                    | -                  | -                  | -    | -    | -    | -   | - |           | 3" O.G. Bailer used to bail         |
| 1200                                           | DBB           | 7.45                | -                                    | 2.0                | 6.31               | 15.1 | .521 | 002  | 0.0 |   | H         | DR. GRAY SILTY WATER                |
| 1205                                           | DSE           |                     | RECHARGE ~ 2/10 of A foot per minute |                    |                    |      |      |      |     |   |           |                                     |
| 1300                                           | DSB           | 8.00                |                                      |                    |                    |      |      |      |     |   |           |                                     |
| 1310                                           | DBB           | 8.00                |                                      |                    |                    |      |      |      |     |   |           |                                     |
| 1345                                           | DBE           | 16.45               | -                                    | 27.0               | 5.91               | 15.2 | .499 | 038  | 0.0 |   | H         | WATER clearing BUT STILL VERY SILTY |
| 1350                                           | DSB           |                     |                                      |                    |                    |      |      |      |     |   |           |                                     |
| 1355                                           | DBB           |                     |                                      |                    |                    |      |      |      |     |   |           |                                     |
| 1400                                           | DBE           | 16.30               |                                      | 28.0               | 5.92               | 16.6 | .492 | 020  | 0.0 |   | H         | WATER STILL SILTY                   |
| 1425                                           | DBE           | 13.35               |                                      |                    |                    |      |      |      |     |   |           | POOR RECOVERY                       |
| THIS WELL SHOULD BE FURTHER BAILED / DEVELOPED |               |                     |                                      |                    |                    |      |      |      |     |   |           |                                     |
| 1220                                           | DBB           | 7.15                | -                                    | BAILED 10          |                    |      |      |      |     |   |           |                                     |
| 1225                                           | DBB           | 14.12               | -                                    | 10                 | 5.09               | 13.9 | .647 | 160  | BKG |   | H         | GRAY BROWN SILTY                    |
| 1230                                           | DBB           | 13.83               | -                                    | 11                 | 5.56               | 14.3 | .667 | 051  | BKG |   | H         | "                                   |
| 1235                                           | DBB           | 13.76               | -                                    | 13                 | 6.03               | 14.6 | .645 | 014  | BKG |   | H         | "                                   |
| 1240                                           | DBB           | 14.39               | -                                    | 14                 | 6.13               | 14.7 | .657 | -003 | BKG |   | H         | "                                   |
| 1245                                           | DBB           | 14.67               | -                                    | 15                 | 6.17               | 14.8 | .652 | -009 | BKG |   | H         | "                                   |
| 1250                                           | DBB           | 14.25               | -                                    | 16                 | 6.20               | 15.2 | .651 | -02  | BKG |   | H         | "                                   |
|                                                |               |                     |                                      | OVER               |                    |      |      |      |     |   |           |                                     |
|                                                | FINAL         |                     |                                      |                    |                    |      |      |      |     |   |           |                                     |

FINAL WELL YIELD: 40.5 GPM PUMP RATE - ESTIMATED CORRESPONDING DRAWDOWN: X ~~0.5~~ FT

| DEVELOPMENT ACTIVITY CODES                            |                             | FIELD MEASUREMENT CODES         | TURBIDITY                                               |
|-------------------------------------------------------|-----------------------------|---------------------------------|---------------------------------------------------------|
| DBB - Begin Bailing                                   | DSE - End Bailing           | MTP - Temperature               | Enter Turbidity Meter Reading (Final should be < 5 NTU) |
| DOB - Begin Overpumping                               | DOE - End Overpumping       | MSC - Specific Conductance      |                                                         |
| DAB - Begin Rawhiding                                 | DRE - End Rawhiding         | MPD - Phorbolizer (e.g., HNA)   | OR                                                      |
| DCB - Begin Recirculation                             | DCE - End Recirculation     | MFD - Flame Ionizer (e.g., OVA) |                                                         |
| DHB - Begin Hydraulic Jetting                         | DHE - End Hydraulic Jetting | MDO - Dissolved Oxygen          | Enter Qualitative Observations                          |
| DAB - Begin Air Surging                               | DAE - End Air Surging       | MPH - pH                        |                                                         |
| DSB - Begin Surge Blocking                            | DSE - End Surge Blocking    | MEH - Eh                        | H - High: Opaque/Muddy/Silty                            |
| DXB - Begin Other                                     | DXE - End Other             | MMC - Inhoff Cone               | M - Medium: Translucent/Cloudy                          |
| Specify other method:                                 |                             | MO1 - Other:                    | L - Low: Transparent/Some Silty                         |
| FMT - Field Measurements (select from codes at right) |                             | MO2 - Other:                    | N - None: Clear/No Visible Silty                        |

|          |               |            |               |
|----------|---------------|------------|---------------|
| COMPANY: | RFW           | WELL NO.:  | MW32          |
| CLIENT:  | USACE         | DATE:      | 1/24/95       |
| PROJECT: | 03886-076-037 | LOGGER:    | J. SACCOMANDI |
| SITE:    | CV02          | SIGNATURE: | J. L. SS      |



ONE WELL VOLUME: 25.5 gallons WELL TD: 16.90 ft TOC

|                |               |              |
|----------------|---------------|--------------|
| Well Volume    | 2-inch = 0.16 | 6-inch = 1.4 |
| (gallons/foot) | 4-inch = 0.65 | 8-inch = 2.6 |

Protech  
CO.  
L

gmk.

bent  
5/1

No. 1  
Sara

FINAL WELL YIELD: \_\_\_\_\_ GPM    PUMP RATE - ESTIMATED    CORRESPONDING DRAWDOWN: \_\_\_\_\_ F

| DEVELOPMENT ACTIVITY CODES                            |                             | FIELD MEASUREMENT CODES         | TURBIDITY                         |
|-------------------------------------------------------|-----------------------------|---------------------------------|-----------------------------------|
| DBS - Begin Bailing                                   | DSE - End Bailing           | MTP - Temperature               | Enter Turbidity Meter Reading     |
| DOB - Begin Overpumping                               | DOE - End Overpumping       | MBC - Specific Conductance      | (Final should be < 5 NTU)         |
| DRS - Begin Rerifling                                 | DRE - End Rerifling         | MPD - Photolizer (e.g., HNA)    | OR                                |
| DCB - Begin Recirculation                             | DCE - End Recirculation     | MPD - Flame Ionizer (e.g., OVA) | Enter Qualitative Observation:    |
| DHB - Begin Hydraulic Jetting                         | DHE - End Hydraulic Jetting | MDO - Dissolved Oxygen          |                                   |
| DAB - Begin Air Surging                               | DAE - End Air Surging       | MPH - pH                        | H - High: Opaque/Muddy/Silty      |
| DSB - Begin Surge Blocking                            | DSE - End Surge Blocking    | MEH - Eh                        | M - Medium: Translucent/Cloudy    |
| DXB - Begin Other                                     | DXE - End Other             | MMC - Inhoff Cone               | L - Low: Transparent/Some Silty   |
| Specify other method:                                 |                             | MO1 - Other:                    | N - None: Clear/No Visible Solids |
| FMT - Field Measurements (select from codes at right) |                             | MO2 - Other:                    |                                   |

# GEOLIS Well Development Form

|                               |                             |                                                                                     |
|-------------------------------|-----------------------------|-------------------------------------------------------------------------------------|
| COMPANY: <u>RFW</u>           | WELL NO.: <u>rw-33</u>      |  |
| CLIENT: <u>USACE</u>          | DATE: <u>01-05-95</u>       |                                                                                     |
| PROJECT: <u>03886-076-037</u> | LOGGER: <u>V. VAUGHN</u>    |                                                                                     |
| SITE: <u>Levee</u>            | SIGNATURE: <u>V. VAUGHN</u> |                                                                                     |

ONE WELL VOLUME: ~5.0 gallons WELL TD: 16.07 R TOC Well Volume 2-inch = 0.16 6-inch = 1.47  
(gallons/foot) 4-inch = 0.65 8-inch = 2.61

| TIME | ACTIVITY CODE | DEPTH TO WATER (ft) | PURGE RATE (gpm) | PURGE VOLUME (gal) | FIELD MEASUREMENTS |      |      |       |     |  | TURBIDITY | COMMENTS                                  |
|------|---------------|---------------------|------------------|--------------------|--------------------|------|------|-------|-----|--|-----------|-------------------------------------------|
|      |               |                     |                  |                    | MPH                | MTP  | MSC  | MU    | HM  |  |           |                                           |
| 1335 | START         | 8.53                | -                | -                  | -                  | -    | -    | -     | 0.0 |  |           |                                           |
| 1405 | DSB           | 8.53                |                  |                    |                    |      |      |       |     |  |           | SWAB-SURGE                                |
| 1410 | DBB           | 8.53                | -                | -                  | -                  | -    | -    | -     | -   |  | H         | HAND BAILED-3' DIA.                       |
| 1420 | DBE           | 15.00               | -                | 13.0               |                    |      |      |       |     |  |           |                                           |
| 1425 | DBB           | DRY                 | -                | 16.0               |                    |      |      |       |     |  | H         |                                           |
| 1430 | DSB           | -                   | -                |                    |                    |      |      |       |     |  |           | SWAB SURGE                                |
| 1435 | DBE           | DRY                 | -                | 18.0               |                    |      |      |       |     |  | H         |                                           |
| 1440 | DBB           | DRY                 |                  | 19.0               | 6.14               | 15.7 | .557 | -0.21 | 0.0 |  | H         | WATER BEGINNING TO CLEAR                  |
| 1530 | DBB           |                     |                  | 22.0               | 6.04               | 14.0 | .460 | 0.10  | 0.0 |  | H         | Begin to clear BUT STILL SILTY            |
| 1550 | DBE           | DRY                 |                  |                    |                    |      |      |       |     |  |           |                                           |
| 1600 | DBB           |                     |                  | 25.0               | 6.23               | 14.8 | .478 | -0.21 | 0.0 |  | M         |                                           |
| 1625 | DBB           |                     |                  | 27.5               | 6.10               | 14.0 | .468 | -0.14 | 0.0 |  | L         |                                           |
| 1630 | DBE           |                     |                  |                    |                    |      |      |       |     |  |           | WATER CLEARED LAST BARREL A LITTLE SILTY. |
| 1305 | DBB           | 8.69                |                  | 9                  | 6.15               | 14.5 | .941 | -0.02 | BK6 |  | H         | GRAY BROWN SILTY                          |
| 1310 | DBB           | 10.85               |                  | 12                 | 6.19               | 14.1 | .863 | -0.13 | BK6 |  | H         | " CLEARING                                |
| 1315 | DBB           | 12.41               |                  | 14                 | 6.18               | 14.5 | .861 | -0.12 | BK6 |  | H         | "                                         |
| 1320 | DBB           | 11.42               |                  | 17                 | 6.21               | 13.8 | .821 | -0.12 | BK6 |  | M         | "                                         |
|      |               | OVER                |                  |                    |                    |      |      |       |     |  |           |                                           |
|      |               | Reference Log Book. |                  |                    |                    |      |      |       |     |  |           |                                           |
|      | FINAL         |                     |                  |                    |                    |      |      |       |     |  |           |                                           |

FINAL WELL YIELD: 20.5 GPM PUMP RATE - ESTIMATED CORRESPONDING DRAWDOWN: DRY FT

| DEVELOPMENT ACTIVITY CODES                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                     | FIELD MEASUREMENT CODES                                                                                                                                                                                                   | TURBIDITY                                                                                                                                                                                                                               |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DBB - Begin Bailing<br>DOB - Begin Overpumping<br>DRB - Begin Rerubbing<br>DCB - Begin Recirculation<br>DHB - Begin Hydraulic Jetting<br>DAB - Begin Air Surging<br>DSB - Begin Surge Blocking<br>DDB - Begin Other<br>Specify other method:<br>FMT - Field Measurements (select from codes at right) | DBE - End Bailing<br>DOE - End Overpumping<br>DRE - End Rerubbing<br>DCE - End Recirculation<br>DHE - End Hydraulic Jetting<br>DAE - End Air Surging<br>DSE - End Surge Blocking<br>DDE - End Other | MTP - Temperature<br>MSC - Specific Conductance<br>MPD - Photometer (e.g., HNU)<br>MFD - Flame Ionizer (e.g., OVA)<br>MDO - Dissolved Oxygen<br>MPH - pH<br>MEH - Eh<br>MMC - Inhoff Cone<br>MO1 - Other:<br>MO2 - Other: | Enter Turbidity Meter Reading (Final should be < 5 NTU)<br>OR<br>Enter Qualitative Observations<br>H - High: Opaque/Muddy/Silty<br>M - Medium: Translucent/Cloudy<br>L - Low: Transparent/Some Silty<br>N - None: Clear/No Visible Silt |



COMPANY: RFW WELL NO.: NW33  
 CLIENT: USACE DATE: 1/24/95  
 PROJECT: 03886-076-037 LOGGER: J. SACCOMANDI  
 SITE: CW02 SIGNATURE: [Signature]

ONE WELL VOLUME: 25.0 gallons WELL TD: 16.07 ft TOC Well Volume (gallons/foot) 2-Inch = 0.19 6-Inch = 1.47 4-Inch = 0.95 8-Inch = 2.91

Prolet -  
cas

680.

bent  
ski

No. 1  
Sand  
- Pa

FINAL WELL YIELD: 10.5 GPM PUMP RATE - ESTIMATED CORRESPONDING DRAWDOWN: 0.75 FT

| DEVELOPMENT ACTIVITY CODES                            |                             | FIELD MEASUREMENT CODES         | TURBIDITY                                                  |
|-------------------------------------------------------|-----------------------------|---------------------------------|------------------------------------------------------------|
| DBS - Begin Bailing                                   | DSE - End Bailing           | MTP - Temperature               | Enter Turbidity Meter Reading<br>(Final should be < 5 NTU) |
| DOB - Begin Overpumping                               | DOE - End Overpumping       | MSC - Specific Conductance      |                                                            |
| DRB - Begin Rerhidding                                | DRE - End Rerhidding        | MPD - Photolizer (e.g., HNU)    | OR                                                         |
| DCB - Begin Recirculation                             | DCE - End Recirculation     | MFD - Flame Ionizer (e.g., OVA) | Enter Qualitative Observations                             |
| DHB - Begin Hydraulic Jetting                         | DHE - End Hydraulic Jetting | MDO - Dissolved Oxygen          |                                                            |
| DAB - Begin Air Surging                               | DAE - End Air Surging       | MPH - pH                        | H - High: Opaque/Muddy/Silty                               |
| DSB - Begin Surge Blocking                            | DSE - End Surge Blocking    | MEB - Eh                        | M - Medium: Translucent/Cloudy                             |
| DGB - Begin Other                                     | DGE - End Other             | MMC - Imhoff Cone               | L - Low: Transparent/Some Sol                              |
| Specify other method:                                 |                             | MO1 - Other:                    | N - None: Clear/No Visible Sol                             |
| FMT - Field Measurements (select from codes at right) |                             | MO2 - Other:                    |                                                            |

[illegible]



# GEOLIS Well Development Form

|                               |                              |                                                                                     |
|-------------------------------|------------------------------|-------------------------------------------------------------------------------------|
| COMPANY: <u>RFW</u>           | WELL NO.: <u>MW 35</u>       |  |
| CLIENT: <u>USACE</u>          | DATE: <u>01-06-85</u>        |                                                                                     |
| PROJECT: <u>C3886-076-037</u> | LOGGER: <u>P. VILHUIE</u>    |                                                                                     |
| SITE: <u>Qwe9-</u>            | SIGNATURE: <u>P. VILHUIE</u> |                                                                                     |

ONE WELL VOLUME: \_\_\_\_\_ gallons WELL TD: 16.80 ft TOC Well Volume 2-inch = 0.16 6-inch = 1.47  
(gallons/foot) 4-inch = 0.65 8-inch = 2.61

| TIME | ACTIVITY CODE | DEPTH TO WATER (ft) | PURGE RATE (gpm) | PURGE VOLUME (gal) | FIELD MEASUREMENTS |       |     |     |     |  | TURBIDITY | COMMENTS                |
|------|---------------|---------------------|------------------|--------------------|--------------------|-------|-----|-----|-----|--|-----------|-------------------------|
|      |               |                     |                  |                    | MPH                | MTP   | MSC | MEH | MPD |  |           |                         |
| 1235 | DSB           | 4.97                |                  |                    |                    |       |     |     |     |  |           |                         |
| 1245 | DSE           |                     |                  |                    |                    |       |     |     |     |  |           |                         |
| 1245 | DBB           |                     |                  |                    |                    |       |     |     |     |  |           |                         |
| 1300 | DBB           | 7.49                |                  | 22gal              | 5.18               | 8.7   | 158 | 196 |     |  | H         | DK Greenish brown color |
| 1330 | DBB           |                     |                  | 1100               | 5.20               | 10.0  | 161 | 210 |     |  | M         | " "                     |
| 1330 | DSE           |                     |                  |                    |                    |       |     |     |     |  |           |                         |
| 1400 | DBB           | 5.01                |                  |                    |                    |       |     |     |     |  | H         | Greenish brown          |
| 1410 | DBB           |                     |                  | 115                |                    |       |     |     |     |  | H         | " "                     |
| 1430 | DSE           |                     |                  | 160                |                    |       |     |     |     |  | M         |                         |
| 1435 | DOB           | 5.05                | 3gal             |                    | 5.18               | 11.20 | 150 | 222 | 0   |  | M         | Lt greenish brown       |
| 1455 | DOB           | 6.26                | 4gal             |                    | 5.38               | 10.80 | 148 | 219 | 0   |  | M         | " " "                   |
| 1505 | DOB           | 10.4                | 5.5gal           |                    | 5.44               | 11.80 | 146 | 216 | 0   |  | M         | " " "                   |
| 1515 | DOB           | 8.00                | 4gal             |                    | 5.40               | 12.70 | 145 | 218 | 0   |  | L         |                         |
| 1530 | DOB           | 9.16                | 5.0              |                    | 5.14               | 12.0  | 140 | 252 | 0   |  | N         |                         |
| 1535 | DOB           | 9.04                | 5.0              |                    | 5.10               | 12.50 | 140 | 268 | 0   |  | N         | Clear                   |
| 1545 | DOB           | 9.05                | 5.0              |                    | 4.93               | 12.70 | 141 | 264 | 0   |  | N         |                         |
| 1550 | DOB           | 9.04                | 5.0              |                    | 4.88               | 12.9  | 141 | 274 | 0   |  | N         |                         |
| 1550 | DDE           |                     |                  |                    |                    |       |     |     |     |  |           |                         |
|      |               |                     |                  |                    |                    |       |     |     |     |  |           |                         |
|      |               |                     |                  |                    |                    |       |     |     |     |  |           |                         |
|      | FINAL         |                     |                  |                    |                    |       |     |     |     |  |           |                         |

FINAL WELL YIELD: 4.5 GPM PUMP RATE ESTIMATED CORRESPONDING DRAWDOWN: 4 (FT)

| DEVELOPMENT ACTIVITY CODES                            |                             | FIELD MEASUREMENT CODES         | TURBIDITY                                                  |
|-------------------------------------------------------|-----------------------------|---------------------------------|------------------------------------------------------------|
| DSB - Begin Bailing                                   | DSE - End Bailing           | MTP - Temperature               | Enter Turbidity Meter Reading<br>(Final should be < 5 NTU) |
| DOB - Begin Overpumping                               | DOE - End Overpumping       | MSC - Specific Conductance      |                                                            |
| DRE - Begin Rawhideing                                | DRE - End Rawhideing        | MPD - Photolizer (e.g., HNA)    | OR                                                         |
| DCB - Begin Recirculation                             | DCE - End Recirculation     | MPD - Flame Ionizer (e.g., OVA) | Enter Qualitative Observations                             |
| DHB - Begin Hydraulic Jetting                         | DHE - End Hydraulic Jetting | MDO - Dissolved Oxygen          |                                                            |
| DAB - Begin Air Surging                               | DAE - End Air Surging       | MPH - pH                        | H - High: Opaque/Muddy/Silty                               |
| DSB - Begin Surge Blocking                            | DSE - End Surge Blocking    | MEH - Eh                        | M - Medium: Translucent/Cloudy                             |
| DOB - Begin Other                                     | DDE - End Other             | MMO - Inhoff Cone               | L - Low: Transparent/Some Still                            |
| Specify other method:                                 |                             | MO1 - Other:                    | N - None: Clear/No Visible Silt                            |
| FMT - Field Measurements (select from codes at right) |                             | MO2 - Other:                    |                                                            |

[illegible]

|          |             |            |         |
|----------|-------------|------------|---------|
| COMPANY: | Western     | WELL NO.:  | MW-01B  |
| CLIENT:  | USACE       | DATE:      | 1/1/85  |
| PROJECT: | FL Mammouth | LOGGER:    | P. Hume |
| SITE:    | B-1         | SIGNATURE: | Hume    |



ONE WELL VOLUME: \_\_\_\_\_ gallons WELL TD: 16.30 ft TOC

|                               |               |               |
|-------------------------------|---------------|---------------|
| Well Volume<br>(gallons/foot) | 2-inch = 0.16 | 6-inch = 1.47 |
|                               | 4-inch = 0.65 | 8-inch = 2.61 |

Rumped well Dry - Allow Recovery

FINAL WELL YIELD: 1.5 (GPM) PUMP RATE - ESTIMATED CORRESPONDING DRAWDOWN: 3 FT

| DEVELOPMENT ACTIVITY CODES                            |                             | FIELD MEASUREMENT CODES         | TURBIDITY                                                  |
|-------------------------------------------------------|-----------------------------|---------------------------------|------------------------------------------------------------|
| DBS - Begin Bailing                                   | DSE - End Bailing           | MTP - Temperature               | Enter Turbidity Meter Reading<br>(Final should be < 5 NTU) |
| DOB - Begin Overpumping                               | DOE - End Overpumping       | MSC - Specific Conductance      | OR                                                         |
| DRB - Begin Rawhiding                                 | DRE - End Rawhiding         | MPD - Photolizor (e.g., Hthd)   | Enter Qualitative Observations                             |
| DCB - Begin Recirculation                             | DCE - End Recirculation     | MFD - Flame Ionizer (e.g., OVA) | H - High: Opaque/Muddy/Silty                               |
| DHB - Begin Hydraulic Jetting                         | DHE - End Hydraulic Jetting | MDO - Dissolved Oxygen          | M - Medium: Translucent/Cloudy                             |
| DAB - Begin Air Surging                               | DAE - End Air Surging       | MPH - pH                        | L - Low: Transparent/Some Silt                             |
| DSB - Begin Surge Blocking                            | DSE - End Surge Blocking    | MEH - Eh                        | N - None: Clear/No Visible Silt                            |
| DOS - Begin Other                                     | DOE - End Other             | MMC - Imhoff Cone               |                                                            |
| Specify other method: _____                           |                             | MO1 - Other: _____              |                                                            |
| FMT - Field Measurements (select from codes at right) |                             | MO2 - Other: _____              |                                                            |

|          |               |            |               |                                                                                     |
|----------|---------------|------------|---------------|-------------------------------------------------------------------------------------|
| COMPANY: | RFN           | WELL NO.:  | MW028         |  |
| CIENT:   | USACE         | DATE:      | 1/19/95       |                                                                                     |
| PROJECT: | 03886-076-038 | LOGGER:    | J. SACCOMANDI |                                                                                     |
| SITE:    | B2            | SIGNATURE: | [Signature]   |                                                                                     |

ONE WELL VOLUME: \_\_\_\_\_ gallons WELL TD: 22.0 ft TOC Well Volume 2-inch = 0.16 6-inch = 1.47  
(gallons/foot) 4-inch = 0.85 8-inch = 2.81

[illegible]

FINAL WELL YIELD: 2 GPM PUMP RATE - ESTIMATED CORRESPONDING DRAWDOWN: 26 FT

| DEVELOPMENT ACTIVITY CODES                            |                             | FIELD MEASUREMENT CODES                                   | TURBIDITY                                                  |
|-------------------------------------------------------|-----------------------------|-----------------------------------------------------------|------------------------------------------------------------|
| DBB - Begin Bailing                                   | DSE - End Bailing           | MTP - Temperature                                         | Enter Turbidity Meter Reading<br>(Final should be < 5 NTU) |
| DOB - Begin Overpumping                               | DOE - End Overpumping       | MSC - Specific Conductance                                | OR                                                         |
| DRB - Begin Rerwidging                                | DRE - End Rerwidging        | MPD - Photolitizer (e.g., H <sub>2</sub> O <sub>2</sub> ) | Enter Qualitative Observations                             |
| DCB - Begin Recirculation                             | DCE - End Recirculation     | MFD - Flame Ionizer (e.g., OVA)                           |                                                            |
| DHB - Begin Hydraulic Jetting                         | DHE - End Hydraulic Jetting | MDO - Dissolved Oxygen                                    |                                                            |
| DAB - Begin Air Surging                               | DAE - End Air Surging       | MPH - pH                                                  | H - High: Opaque/Muddy/Silty                               |
| DSB - Begin Surge Blocking                            | DSE - End Surge Blocking    | MEH - Eh                                                  | M - Medium: Translucent/Cloudy                             |
| DXB - Begin Other                                     | DXE - End Other             | MMC - Imhoff Cone                                         | L - Low: Transparent/Some Silt                             |
| Specify other method:                                 |                             | MO1 - Other: _____                                        | N - None: Clear/No Visible Silt                            |
| FMT - Field Measurements (select from codes at right) |                             | MO2 - Other: _____                                        |                                                            |

# GEOLIS Well Development Form

|          |              |            |                    |
|----------|--------------|------------|--------------------|
| COMPANY: | Rfw          | WELL NO.:  | MW33               |
| CLIENT:  | USACE        | DATE:      | 1-19-95            |
| PROJECT: | 03886-04-038 | LOGGER:    | VNA/mjs            |
| SITE:    | B3           | SIGNATURE: | <i>[Signature]</i> |

ONE WELL VOLUME: ~11.1 gallons WELL TD: 28.55 ft TOC

Well Volume 2-inch = 0.16 6-inch = 1.47  
(gallons/foot) 4-inch = 0.65 8-inch = 2.61

[illegible]

Continues on next page

FINAL WELL YIELD: \_\_\_\_\_ GPM , PUMP RATE - ESTIMATED      CORRESPONDING DRAWDOWN: \_\_\_\_\_ FT

| DEVELOPMENT ACTIVITY CODES                            |                             | FIELD MEASUREMENT CODES         | TURBIDITY                       |
|-------------------------------------------------------|-----------------------------|---------------------------------|---------------------------------|
| DBS - Begin Bailing                                   | DBE - End Bailing           | MTP - Temperature               | Enter Turbidity Meter Reading   |
| DOB - Begin Overpumping                               | DOE - End Overpumping       | MSC - Specific Conductance *    | (Final should be < 5 NTU)       |
| DRB - Begin Rerwidging                                | DRE - End Rerwidging        | MPD - Probiolizer (e.g., HMR)   | OR                              |
| DCB - Begin Recirculation                             | DCE - End Recirculation     | MPD - Flame Ionizer (e.g., OVA) | Enter Qualitative Observations  |
| DHB - Begin Hydraulic Jetting                         | DHE - End Hydraulic Jetting | MDO - Dissolved Oxygen          |                                 |
| DAB - Begin Air Surging                               | DAE - End Air Surging       | MPH - pH                        | H - High: Opaque/Muddy/Shy      |
| DSB - Begin Surge Blocking                            | DSE - End Surge Blocking    | MEH - Eh                        | M - Medium: Translucent/Cloudy  |
| DOS - Begin Other                                     | DXE - End Other             | MMC - Intuff Cone               | L - Low: Transparent/Some Silt  |
| Specify other method:                                 |                             | MO1 - Other:                    | N - None: Clear/No Visible Silt |
| FMT - Field Measurements (select from codes at right) |                             | MO2 - Other:                    |                                 |



**GEOLIS Well Development Form**

|          |               |            |                  |
|----------|---------------|------------|------------------|
| COMPANY: | RFW           | WELL NO.:  | MW03B            |
| CLIENT:  | USACE         | DATE:      | 1-24-95          |
| PROJECT: | C3886-076-03F | LOGGER:    | KVA (CMT)        |
| SITE:    | B3            | SIGNATURE: | K.V. [Signature] |



ONE WELL VOLUME 11.1 gallons WELL TD: 28.55 R TOC

|                |               |               |
|----------------|---------------|---------------|
| Well Volume    | 2-inch = 0.16 | 6-inch = 1.47 |
| (gallons/foot) | 4-inch = 0.65 | 8-inch = 2.61 |

[illegible]

FINAL WELL YIELD: 10.5 GPM PUMP RATE - ESTIMATED CORRESPONDING DRAWDOWN: 10.5 - FT

| DEVELOPMENT ACTIVITY CODES                            |                             | FIELD MEASUREMENT CODES        | TURBIDITY                                                  |
|-------------------------------------------------------|-----------------------------|--------------------------------|------------------------------------------------------------|
| D&S - Begin Bailing                                   | DSE - End Bailing           | MTP - Temperature              | Enter Turbidity Meter Reading<br>(Final should be < 5 NTU) |
| DOS - Begin Overpumping                               | DOE - End Overpumping       | MSC - Specific Conductance     | OR                                                         |
| DRS - Begin Rinsing                                   | DRE - End Rinsing           | MPD - Photometer (e.g. HND)    | Enter Qualitative Observations                             |
| DCB - Begin Recirculation                             | DCE - End Recirculation     | MPD - Flame Ionizer (e.g. OVA) |                                                            |
| DHB - Begin Hydraulic Jetting                         | DHE - End Hydraulic Jetting | MDO - Dissolved Oxygen         | H - High: Opaque/Muddy/Silty                               |
| DAB - Begin Air Surging                               | DAE - End Air Surging       | MPH - pH                       | M - Medium: Translucent/Cloudy                             |
| DSB - Begin Surge Blocking                            | DGE - End Surge Blocking    | MEH - Eh                       | L - Low: Transparent/Some Still                            |
| DXB - Begin Other                                     | DXE - End Other             | MMC - Imhoff Cone              | N - None: Clear/No Visible Solids                          |
| Specify other method:                                 |                             | MO1 - Other: _____             |                                                            |
| FMT - Field Measurements (select from codes at right) |                             | MO2 - Other: _____             |                                                            |

# GEOLIS Well Development Form

|                               |                                  |                                                                                     |
|-------------------------------|----------------------------------|-------------------------------------------------------------------------------------|
| COMPANY: <u>RFW</u>           | WELL NO.: <u>MWC4B</u>           |  |
| CLIENT: <u>USACE</u>          | DATE: <u>1-19-95</u>             |                                                                                     |
| PROJECT: <u>03886-076-038</u> | LOGGER: <u>K. V. L. W. T. E.</u> |                                                                                     |
| SITE: <u>B4</u>               | SIGNATURE: <u>[Signature]</u>    |                                                                                     |

ONE WELL VOLUME: ~6.8 gallons WELL TD: 17.10 ft TOC Well Volume 2-Inch = 0.16 6-Inch = 1.47  
(gallons/foot) 4-Inch = 0.65 8-Inch = 2.61

| TIME | ACTIVITY CODE | DEPTH TO WATER (ft) | PURGE RATE (gpm) | PURGE VOLUME (gal) | FIELD MEASUREMENTS            |      |      |     |     |  | TURBIDITY | COMMENTS                                      |
|------|---------------|---------------------|------------------|--------------------|-------------------------------|------|------|-----|-----|--|-----------|-----------------------------------------------|
|      |               |                     |                  |                    | MPH                           | MTP  | MSC  | MV  | HMV |  |           |                                               |
| 0900 | Static        | 6.71                | -                | -                  | -                             | -    | -    | -   | -   |  |           |                                               |
| 0910 | DSB           |                     |                  |                    |                               |      |      |     |     |  |           |                                               |
| 0920 | DSE/DSB       | 6.71                | Bailed           |                    |                               |      |      |     |     |  | H         | Greenish Silty Water.                         |
| 0927 | DSB           | Deq                 | -                | ~12.0              |                               |      |      |     |     |  |           | Well went Deq.                                |
| 0929 | -             | 13.10               |                  |                    |                               |      |      |     |     |  |           | Let Recharge                                  |
| 0930 | -             | 11.40               |                  |                    |                               |      |      |     |     |  |           |                                               |
| 0935 |               | 10.10               |                  |                    |                               |      |      |     |     |  |           | Set pump down well 6" off bottom              |
| 0940 | DOB           | 8.00                | ~0.5             | 13.0               | 4.09                          | 8.2  | .271 | 316 | 0.0 |  | H         | Greenish Silty Water                          |
| 0950 | DOB           | 14.31               | ~0.5             | ~20.0              | 3.85                          | 11.7 | .285 | 335 | 0.0 |  | H         | Increased Flow Rate                           |
| 1000 | DOB           | 10.80               | ~0.5             | ~22.5              | 4.11                          | 12.2 | .285 | 339 | 0.0 |  | H         | W.L. coming back up.                          |
| 1010 | DOB           | 9.14                | ~0.5             | 25.0               | 3.91                          | 13.1 | .282 | 359 | 0.0 |  | H         | Clearing but still silty                      |
| 1020 | DOB           | 8.80                | ~0.5             | 27.5               | 4.35                          | 13.2 | .287 | 331 | 0.0 |  | M         | Increased Flow Rate. Water beginning to clear |
| 1030 | DOB           | 9.32                | ~0.5             | 33.0               | 3.80                          | 14.5 | .285 | 363 | 0.0 |  | M         |                                               |
| 1035 | DOB           | 9.91                | ~0.5             | ~35.5              | 4.00                          | 14.3 | .280 | 359 | 0.0 |  | M         |                                               |
| 1040 | DOB           | 10.40               | ~0.5             | 38.0               | 4.35                          | 13.0 | .270 | 335 | 0.0 |  | M         |                                               |
| 1045 | DOB           | 10.08               | ~0.5             | 40.5               | 4.39                          | 12.0 | .276 | 337 | 0.0 |  | M         |                                               |
| 1050 | DOB           | 11.50               | ~0.5             | 43.0               | 4.27                          | 13.7 | .296 | 351 | 0.0 |  | M         |                                               |
| 1055 | DOB           | 11.91               | ~0.5             | 45.5               | 4.17                          | 13.3 | .288 | 353 | 0.0 |  | M         |                                               |
|      |               |                     |                  |                    | Continued on Following Page → |      |      |     |     |  |           |                                               |
|      | FINAL         |                     |                  |                    |                               |      |      |     |     |  |           |                                               |

FINAL WELL YIELD: \_\_\_\_\_ GPM PUMP RATE - ESTIMATED CORRESPONDING DRAWDOWN: \_\_\_\_\_ FT

| DEVELOPMENT ACTIVITY CODES                            |                             | FIELD MEASUREMENT CODES         | TURBIDITY                                               |
|-------------------------------------------------------|-----------------------------|---------------------------------|---------------------------------------------------------|
| DSB - Begin Bedding                                   | DSE - End Bedding           | MTP - Temperature               | Enter Turbidity Meter Reading (Final should be < 5 NTU) |
| DOB - Begin Overpumping                               | DOE - End Overpumping       | MSC - Specific Conductance      |                                                         |
| DHB - Begin Flushing                                  | DRE - End Flushing          | MPD - Photometer (e.g., HNA)    | OR                                                      |
| DCB - Begin Recirculation                             | DCE - End Recirculation     | MFD - Flame Ionizer (e.g., OVA) | Enter Qualitative Observations                          |
| DHB - Begin Hydraulic Jetting                         | DHE - End Hydraulic Jetting | MDO - Dissolved Oxygen          | H - High: Opaque/Muddy/Silty                            |
| DAB - Begin Air Surging                               | DAE - End Air Surging       | MPH - pH                        | M - Medium: Translucent/Cloudy                          |
| DSB - Begin Surge Blocking                            | DSE - End Surge Blocking    | MEH - Eh                        | L - Low: Transparent/Some Silt                          |
| DXB - Begin Other                                     | DXE - End Other             | MMC - Inhoff Cone               | N - None: Clear/No Visible Silt                         |
| Specify other method:                                 |                             | MO1 - Other: _____              |                                                         |
| FMT - Field Measurements (select from codes at right) |                             | MO2 - Other: _____              |                                                         |

[illegible]



|          |               |            |               |                                                                                     |
|----------|---------------|------------|---------------|-------------------------------------------------------------------------------------|
| COMPANY: | RFW           | WELL NO.:  | MW05B         |  |
| CLIENT:  | USACE         | DATE:      | VIP/85        |                                                                                     |
| PROJECT: | 03886-076-038 | LOGGER:    | J. SACCOMANDI |                                                                                     |
| SITE:    | B5            | SIGNATURE: | [Signature]   |                                                                                     |

ONE WELL VOLUME: \_\_\_\_\_ gallons WELL TD: 17.31 ft TOC Well Volume 2-inch = 0.18 6-inch = 1.47  
(gallons/foot) 4-inch = 0.65 8-inch = 2.61

FINAL WELL YIELD: Bailed - 205 GPM PUMP RATE - ESTIMATED CORRESPONDING DRAWDOWN: 20.5 FT

| DEVELOPMENT ACTIVITY CODES                            |                             | FIELD MEASUREMENT CODES         | TURBIDITY                                                  |
|-------------------------------------------------------|-----------------------------|---------------------------------|------------------------------------------------------------|
| DDB - Begin Bailing                                   | DDE - End Bailing           | MTP - Temperature               | Enter Turbidity Meter Reading<br>(Final should be < 3 NTU) |
| DOS - Begin Overpumping                               | DOE - End Overpumping       | MSC - Specific Conductance      |                                                            |
| DDB - Begin Rawwhiding                                | DRE - End Rawwhiding        | MPD - Photolizor (e.g., Hite)   | OR                                                         |
| DCB - Begin Recirculation                             | DCE - End Recirculation     | MFD - Flame Ionizer (e.g., OVA) | Enter Qualitative Observations                             |
| DHB - Begin Hydraulic Jetting                         | DHE - End Hydraulic Jetting | MDO - Dissolved Oxygen          |                                                            |
| DAB - Begin Air Surging                               | DAE - End Air Surging       | MPH - pH                        | H - High: Opaque/Muddy/Silty                               |
| DSB - Begin Surge Blocking                            | DSE - End Surge Blocking    | MEH - Eh                        | M - Medium: Translucent/Cloudy                             |
| DXB - Begin Other                                     | DXE - End Other             | MMC - Inhoff Cone               | L - Low: Transparent/Some Silt                             |
| Specify other method:                                 |                             | MO1 - Other:                    | N - None: Clear/No Visible Silt                            |
| FMT - Field Measurements (select from codes at right) |                             | MO2 - Other:                    |                                                            |

# GEOLIS Well Development Form

|                           |                               |                                                                                     |
|---------------------------|-------------------------------|-------------------------------------------------------------------------------------|
| COMPANY: <u>RFW</u>       | WELL NO.: <u>MW06B</u>        |  |
| CLIENT: <u>USACE</u>      | DATE: <u>1/24/95</u>          |                                                                                     |
| PROJECT: <u>03956-037</u> | LOGGER: <u>J. SARCOMINI</u>   |                                                                                     |
| SITE: <u>B-6</u>          | SIGNATURE: <u>[Signature]</u> |                                                                                     |

ONE WELL VOLUME: ~7 gallons WELL TD: 16.66 ft TOC Well Volume 2-inch = 0.16 6-inch = 1.47  
(gallons/foot) 4-inch = 0.85 8-inch = 2.61

| TIME | ACTIVITY CODE | DEPTH TO WATER (ft) | PURGE RATE (gpm)                               | PURGE VOLUME (gal) | FIELD MEASUREMENTS |      |      |     |     |  | TURBIDITY | COMMENTS              |
|------|---------------|---------------------|------------------------------------------------|--------------------|--------------------|------|------|-----|-----|--|-----------|-----------------------|
|      |               |                     |                                                |                    | MPH                | MTF  | MSC  | MEH | MPD |  |           |                       |
| 1605 | BSB           | 4.64                | —                                              | —                  |                    |      |      |     | BKG |  |           |                       |
| 1610 | DBB           | N/A                 | —                                              | 9                  |                    |      |      |     |     |  | H         | GRAY GREEN VERY SILTY |
| 1615 | DBE           | 8.47                | —                                              | 9                  |                    |      |      |     |     |  | H         | "                     |
| 1620 | DOB           | 8.47                | 0.5                                            | 9                  | 5.25               | 5.1  | .160 | 274 | BKG |  | H         | "                     |
| 1625 | DOB           | 8.87                | 0.5                                            | 11.5               | 5.02               | 6.2  | .194 | 272 | BKG |  | H         | "                     |
| 1630 | DOB           | 9.18                | 0.5                                            | 13                 | 7.88               | 7.0  | .204 | 257 | BKG |  | H         | "                     |
| 1635 | DOB           | 9.21                | ~0.5                                           | 15.5               | 4.86               | 8.5  | .204 | 249 | BKG |  | H         | "                     |
| 1640 | DOB           | 9.26                | ~0.5                                           | 17.0               | 5.00               | 10.3 | .203 | 245 | BKG |  | H         | "                     |
| 1645 | DOB           | 9.30                | ~0.5                                           | 19.5               | 5.00               | 11.7 | .201 | 244 | BKG |  | H         | " CLEARING            |
| 1650 | DOB           | 9.33                | ~0.5                                           | 21.0               | 5.08               | 12.6 | .197 | 229 | BKG |  | H         | " "                   |
| 1655 | DOB           | 9.36                | ~0.5                                           | 23.5               | 5.13               | 13.0 | .197 | 223 | BKG |  | M         | DK BROWN CLOUDY       |
| 1700 | DOB           | 9.39                | ~0.5                                           | 25.0               | 5.15               | 13.7 | .196 | 221 | BKG |  | M         | BROWN CLOUDY          |
| 1705 | DOB           | 9.42                | ~0.5                                           | 27.5               | 5.26               | 14.4 | .192 | 218 | BKG |  | L         | CLOUDY                |
| 1710 | DOB           | 9.48                | ~0.5                                           | 30.0               | 5.20               | 14.4 | .194 | 217 | BKG |  | L         | SLIGHTLY CLOUDY       |
| 1715 | DOB           | 9.53                | ~0.5                                           | 32.5               | 5.17               | 14.6 | .192 | 217 | BKG |  | N         | CLEAR                 |
| 1720 | DOB           | 9.61                | ~0.5                                           | 35.0               | 5.22               | 14.7 | .194 | 216 | BKG |  | N         | CLEAR                 |
| 1730 | DOE           | 10.29               | ~0.5                                           | 37.5               | 5.28               | 14.5 | .197 | 216 | BKG |  | N         | CLEAR                 |
|      |               |                     |                                                |                    |                    |      |      |     |     |  |           |                       |
|      |               | 13.40               | IS DEPTH TO TOP OF PUMP/PUMP IS .5' OFF BOTTOM |                    |                    |      |      |     |     |  |           |                       |
|      | FINAL         |                     |                                                |                    |                    |      |      |     |     |  |           |                       |

FINAL WELL YIELD: ~0.5 GPM PUMP RATE: ESTIMATED CORRESPONDING DRAWDOWN: 6 FT

| DEVELOPMENT ACTIVITY CODES                            |                             | FIELD MEASUREMENT CODES         | TURBIDITY                                               |
|-------------------------------------------------------|-----------------------------|---------------------------------|---------------------------------------------------------|
| DBB - Begin Bailing                                   | DBE - End Bailing           | MTP - Temperature               | Enter Turbidity Meter Reading (Final should be < 5 NTU) |
| DOB - Begin Overpumping                               | DOE - End Overpumping       | MSC - Specific Conductance      |                                                         |
| DRB - Begin Rinsing                                   | DRE - End Rinsing           | MPD - Photometer (e.g., HNU)    | OR                                                      |
| DCB - Begin Recirculation                             | DCE - End Recirculation     | MFD - Flame Ionizer (e.g., OVA) | Enter Qualitative Observations                          |
| DHB - Begin Hydraulic Jetting                         | DHE - End Hydraulic Jetting | MDO - Dissolved Oxygen          |                                                         |
| DAB - Begin Air Surging                               | DAE - End Air Surging       | MPH - pH                        | H - High: Opaque/Muddy/Silty                            |
| DSB - Begin Surge Blocking                            | DSE - End Surge Blocking    | MEH - Eh                        | M - Medium: Translucent/Cloudy                          |
| DXB - Begin Other                                     | DXE - End Other             | MMC - Imhoff Cone               | L - Low: Transparent/Some Silty                         |
| Specify other method:                                 |                             | MO1 - Other:                    | N - None: Clear/No Visible Silt                         |
| FMT - Field Measurements (select from codes at right) |                             | MO2 - Other:                    |                                                         |



# GEOLIS Well Development Form

COMPANY: RFW  
 CLIENT: SAFEC  
 PROJECT: C3816-076-037  
 SITE: B-8

WELL NO.: MW08B  
 DATE: 1-24-95  
 LOGGER: K. J. L. L. L.  
 SIGNATURE: [Signature]



ONE WELL VOLUME: 8.0 gallons WELL TD: 17.10 ft TOC Well Volume 2-inch = 0.16 6-inch = 1.47  
 (gallons/foot) 4-inch = 0.65 8-inch = 2.61

| TIME | ACTIVITY CODE | DEPTH TO WATER (ft) | PURGE RATE (gpm) | PURGE VOLUME (gal) | FIELD MEASUREMENTS |      |      |     |     |  | TURBIDITY | COMMENTS                            |
|------|---------------|---------------------|------------------|--------------------|--------------------|------|------|-----|-----|--|-----------|-------------------------------------|
|      |               |                     |                  |                    | MPH                | MTP  | MSC  | MEH | QUM |  |           |                                     |
| 0945 | Static        | 4.82                |                  |                    |                    |      |      |     | 0.0 |  |           |                                     |
| 0950 | DSB           | 4.82                |                  |                    |                    |      |      |     |     |  |           |                                     |
| 0955 | DSE/DBB       | 4.82                |                  |                    |                    |      |      |     | 0.0 |  | H         | Yellow-brown silty water            |
| 1000 | DBE           | 7.30                | Bailed           | 15.0               |                    |      |      |     | 0.0 |  | H         | Well Recirculate's                  |
| 1005 | DSB           | 4.74                | 1.0              | 16.0               | 4.26               | 9.70 | .148 | 267 | 0.0 |  | H         | Decrease pump 6" w/ bottom of well  |
| 1010 | DSB           | 5.45                | 1.0              | 20.0               | 4.27               | 9.60 | .140 | 278 | 0.0 |  | H         | Surge Pump                          |
| 1015 | DSB           | 5.69                | 1.0              | 25.0               | 4.34               | 9.90 | .159 | 274 | 0.0 |  | H         | Surge Pump                          |
| 1020 | DSB           | 5.55                | 1.0              | 30.0               | 4.23               | 13.8 | .133 | 336 | 0.0 |  | H         | Increased Flow to 1.5 GPM           |
| 1030 | DSB           | 6.20                | 1.5              | 45.0               | 4.57               | 12.4 | .137 | 334 | 0.0 |  | H         |                                     |
| 1040 | DSB           | 6.13                | 1.5              | 60.0               | 4.69               | 13.0 | .135 | 336 | 0.0 |  | H         | Beginning to clear, but still silty |
| 1045 | DSB           | 6.71                | 2.0              | 70.0               | 4.84               | 12.7 | .133 | 338 | 0.0 |  | M         | Flow to 2 GPM                       |
| 1055 | DSB           | 6.72                | 2.0              | 90.0               | 4.87               | 12.9 | .134 | 338 | 0.0 |  | M         | Flow to 2.5 GPM                     |
| 1100 | DSB           | 7.09                | 2.5              | 103.0              | 4.98               | 12.2 | .131 | 335 | 0.0 |  | M         | Flow to 3.0 GPM Surge Pump          |
| 1110 | DSB           | 8.21                | 3.0              | 133.0              | 4.98               | 11.4 | .130 | 337 | 0.0 |  | M         | Flow to 3.5 GPM                     |
| 1115 | DSB           | 8.70                | 3.5              | 151.0              | 4.94               | 10.7 | .132 | 347 | 0.0 |  | M         |                                     |
| 1120 | DSB           | 8.70                | 3.5              | 169.0              | 4.96               | 11.6 | .129 | 349 | 0.0 |  | N         | Flow to 4 GPM Increased up          |
| 1125 | DSB           | 9.68                | 4.0              | 189.0              | 4.96               | 11.5 | .128 | 350 | 0.0 |  | N         |                                     |
| 1130 | DOE           | 9.70                | 4.0              | 209.0              | 4.95               | 11.6 | .128 | 351 | 0.0 |  | N         |                                     |
|      |               |                     |                  |                    |                    |      |      |     |     |  |           |                                     |
|      |               |                     |                  |                    |                    |      |      |     |     |  |           |                                     |
|      | FINAL         |                     |                  |                    |                    |      |      |     |     |  |           |                                     |

FINAL WELL YIELD: 1-4 GPM PUMP RATE - ESTIMATED CORRESPONDING DRAWDOWN: 5 FT

| DEVELOPMENT ACTIVITY CODES                            |                             | FIELD MEASUREMENT CODES         | TURBIDITY                                               |
|-------------------------------------------------------|-----------------------------|---------------------------------|---------------------------------------------------------|
| DSB - Begin Bailing                                   | DSE - End Bailing           | MTP - Temperature               | Enter Turbidity Meter Reading (Final should be < 5 NTU) |
| DOS - Begin Overpumping                               | DOE - End Overpumping       | MSC - Specific Conductance      |                                                         |
| DRB - Begin Rawhiding                                 | DRE - End Rawhiding         | MPD - Photometer (e.g., HNU)    | OR                                                      |
| DCB - Begin Recirculation                             | DCE - End Recirculation     | MFD - Flame Ionizer (e.g., OVA) | Enter Qualitative Observations                          |
| DHB - Begin Hydraulic Jetting                         | DHE - End Hydraulic Jetting | MDO - Dissolved Oxygen          | H - High: Opaque/Muddy/Silty                            |
| DAB - Begin Air Surging                               | DAE - End Air Surging       | MPH - pH                        | M - Medium: Translucent/Cloudy                          |
| DSB - Begin Surge Blocking                            | DSE - End Surge Blocking    | MEH - Eh                        | L - Low: Transparent/Some Silt                          |
| DSB - Begin Other                                     | DSE - End Other             | MMC - Imhoff Cone               | N - None: Clear/No Visible Silt                         |
| Specify other method:                                 |                             | MO1 - Other:                    |                                                         |
| FMT - Field Measurements (select from codes at right) |                             | MO2 - Other:                    |                                                         |



# GEOLIS Well Development Form

COMPANY: RFW  
 CLIENT: USA CE  
 PROJECT: 03866-076-037  
 SITE: B-9

WELL NO.: MW07B  
 DATE: 1-25-95  
 LOGGER: B. Thomas  
 SIGNATURE: B. Thomas



ONE WELL VOLUME: 5 gallons WELL TD: 13.34 R TOC Well Volume 2-inch = 0.16 6-inch = 1.47  
 (gallons/foot) 4-inch = 0.65 8-inch = 2.61

| TIME  | ACTIVITY CODE | DEPTH TO WATER (ft) | PURGE RATE (gpm) | PURGE VOLUME (gal) | FIELD MEASUREMENTS |      |      |     |     |  | TURBIDITY | COMMENTS         |
|-------|---------------|---------------------|------------------|--------------------|--------------------|------|------|-----|-----|--|-----------|------------------|
|       |               |                     |                  |                    | MTH                | MTP  | MSL  | MEH | MPD |  |           |                  |
| 0921  | DSB           | 6.38                |                  |                    |                    |      |      |     |     |  |           |                  |
| 0930  | DSB           |                     | 1.14             | 3.6                |                    |      |      |     |     |  |           | 13.34            |
| 0930  | DSB           | 8.90                |                  |                    | 4.15               | 8.6  | 171  | 293 | R/L |  |           | -6.38            |
| 0950  | DSB           | 8.12                |                  |                    |                    |      |      |     |     |  |           | 6.96             |
| 1000  | DSB           | 8.12                | 1.14             | 5.6                | 4.10               | 8.6  | 1083 | 278 | R/L |  |           | 6.96             |
| 1030  | DSB           | 9.58                |                  |                    | 4.78               | 10.4 | 161  | 290 | R/L |  |           | 2.45             |
| 1040  | DSB           | 12.41               |                  |                    | 4.91               | 11.2 | 162  | 227 | R/L |  |           | 34.80            |
| 1042  | DSB           |                     |                  |                    |                    |      |      |     |     |  |           | 4176             |
| 1045  | DSB           | 11.54               |                  |                    |                    |      |      |     |     |  |           | 45240            |
| 055   | DSB           |                     |                  |                    |                    |      |      |     |     |  |           | w/ pump DTW 8.12 |
| 1100  | DSB           | 10.22               | 1.14             | 18.4               | 4.84               | 10.1 | 126  | 270 | R/L |  |           | DT top of pump   |
| 1110  | DSB           | 9.50                | 1.14             | 12.7               | 4.77               | 10.2 | 103  | 232 | R/L |  |           |                  |
| 1115  | DSB           | 11.12               | 1.14             | 24.4               | 4.78               | 10.5 | 134  | 272 | R/L |  |           |                  |
| 1120  | DSB           | 11.68               | 1.14             | 29.4               | 4.78               | 10.3 | 122  | 270 | R/L |  |           |                  |
| 1130  | DSB           | 11.52               | 1.14             | 34.4               | 4.83               | 10.1 | 171  | 224 | R/L |  |           |                  |
| 1140  | DSB           | 12.52               | 1.14             | 34.4               | 4.89               | 10.1 | 171  | 224 | R/L |  |           |                  |
| 1150  | DSB           | 11.12               | 1.14             | 34.4               | 4.83               | 10.3 | 171  | 224 | R/L |  |           |                  |
| 1200  | DSB           | 10.6                | 1.14             | 34.4               | 4.85               | 10.3 | 171  | 224 | R/L |  |           |                  |
|       |               |                     |                  |                    |                    |      |      |     |     |  |           |                  |
|       |               |                     |                  |                    |                    |      |      |     |     |  |           |                  |
| FINAL |               |                     |                  |                    |                    |      |      |     |     |  |           |                  |

FINAL WELL YIELD: 205 GPM PUMP RATE - ESTIMATED CORRESPONDING DRAWDOWN: 0.05 FT

| DEVELOPMENT ACTIVITY CODES                            |                             | FIELD MEASUREMENT CODES         | TURBIDITY                                               |
|-------------------------------------------------------|-----------------------------|---------------------------------|---------------------------------------------------------|
| DSB - Begin Bailing                                   | DSE - End Bailing           | MTP - Temperature               | Enter Turbidity Meter Reading (Final should be < 5 NTU) |
| DOB - Begin Overpumping                               | DOE - End Overpumping       | MSC - Specific Conductance      |                                                         |
| DRB - Begin Rinsing                                   | DRE - End Rinsing           | MPD - Photometer (e.g., HNA)    | OR                                                      |
| DOS - Begin Recirculation                             | DCE - End Recirculation     | MFD - Flame Ionizer (e.g., OVA) | Enter Qualitative Observations                          |
| DHB - Begin Hydraulic Jetting                         | DHE - End Hydraulic Jetting | MDO - Dissolved Oxygen          |                                                         |
| DAB - Begin Air Surging                               | DAE - End Air Surging       | MPH - pH                        | H - High: Opaque/Muddy/Silty                            |
| DSB - Begin Surge Blocking                            | DSE - End Surge Blocking    | MEH - Eh                        | M - Medium: Translucent/Cloudy                          |
| DXB - Begin Other                                     | DXE - End Other             | MMC - Inhoff Cone               | L - Low: Transparent/Some Still                         |
| Specify other method:                                 |                             | MO1 - Other:                    | N - None: Clear/No Visible Still                        |
| FMT - Field Measurements (select from codes at right) |                             | MO2 - Other:                    |                                                         |

# GEOLIS Well Development Form

COMPANY: RFW  
 CLIENT: USACE  
 PROJECT: 05882-076-034  
 SITE: B-10

WELL NO.: MW10B  
 DATE: 1-24-95  
 LOGGER: K. VAILLANT  
 SIGNATURE: K. Vailant



ONE WELL VOLUME: ~8.0 gallons WELL TD: 16.45 RTOC Well Volume 2-inch = 0.16 6-inch = 1.47  
 (gallons/foot) 4-inch = 0.65 8-inch = 2.61

| TIME | ACTIVITY CODE | DEPTH TO WATER (ft) | PURGE RATE (gpm) | PURGE VOLUME (gal) | FIELD MEASUREMENTS |       |      |     |     |  | TURBIDITY | COMMENTS                         |
|------|---------------|---------------------|------------------|--------------------|--------------------|-------|------|-----|-----|--|-----------|----------------------------------|
|      |               |                     |                  |                    | MPH                | MTP   | MSC  | MEH | OM  |  |           |                                  |
| 1215 | STATIC        | 4.36                |                  |                    |                    |       |      |     |     |  |           |                                  |
| 1215 | DSB           | 4.36                |                  |                    |                    |       |      |     |     |  |           |                                  |
| 1225 | DSE/DSB       | 4.36                |                  |                    |                    |       |      |     |     |  |           |                                  |
| 1230 | DSE           | 15.85               | DAILED           | 12.0               |                    | (3.9) |      |     | 0.0 |  | H         | Dr. Gray Stry water              |
| 1240 | DDB           | 5.55                | 0.5              | 13.0               | 5.01               | 9.9   | .128 | 351 | 0.0 |  | H         |                                  |
| 1245 | DDB           | 6.49                | 0.5              | 14.5               | 4.94               | 8.1   | .130 | 350 | 0.0 |  | H         | cleared up some.                 |
| 1255 | DDB           | 6.50                | 0.5              | 17.0               | 5.00               | 10.0  | .150 | 314 | 0.0 |  | H         | Slightly more Surged Pump        |
| 1300 | DDB           | 6.64                | 0.5              | 19.5               | 5.01               | 10.4  | .155 | 307 | 0.0 |  | H         |                                  |
| 1305 | DDB           | 6.87                | 0.5              | ~22.0              | 5.12               | 11.9  | .151 | 295 | 0.0 |  | H         | Surged Pump.                     |
| 1315 | DDB           | 7.62                | 0.5              | ~27.0              | 5.21               | 10.6  | .158 | 286 | 0.0 |  | H         |                                  |
| 1320 | DDB           | 8.22                | 0.5              | ~29.5              | 5.32               | 11.0  | .161 | 284 | 0.0 |  | H         |                                  |
| 1330 | DDB           | 9.14                | 0.5              | ~35.0              | 5.29               | 11.5  | .159 | 279 | 0.0 |  | H         | Surged Pump. Cleared a little.   |
| 1340 | DDB           | 9.21                | 0.5              | ~40.0              | 5.26               | 12.8  | .150 | 278 | 0.0 |  | M         |                                  |
| 1350 | DDB           | 9.40                | 0.5              | ~45.0              | 5.17               | 12.9  | .150 | 275 | 0.0 |  | L         | Clear but still slightly cloudy. |
| 1355 | DDB           | 9.39                | 0.5              | ~47.5              | 5.46               | 13.0  | .152 | 259 | 0.0 |  | L         |                                  |
| 1400 | DDB           | 9.39                | 0.5              | ~50.0              | 5.41               | 13.0  | .152 | 263 | 0.0 |  | L         |                                  |
| 1405 | DDB           | 9.34                | 0.5              | ~52.5              | 5.57               | 11.9  | .155 | 250 | 0.0 |  | N         | clear?                           |
| 1410 | DDB           | 9.53                | 0.5              | ~55.0              | 5.59               | 12.4  | .153 | 255 | 0.0 |  | N         | clear?                           |
|      |               |                     |                  |                    |                    |       |      |     |     |  |           |                                  |
|      | FINAL         |                     |                  |                    |                    |       |      |     |     |  |           |                                  |

FINAL WELL YIELD: 0.5 GPM PUMP RATE ESTIMATED CORRESPONDING DRAWDOWN: 5 FT

| DEVELOPMENT ACTIVITY CODES                            |                             | FIELD MEASUREMENT CODES         | TURBIDITY                                               |
|-------------------------------------------------------|-----------------------------|---------------------------------|---------------------------------------------------------|
| DSB - Begin Bailing                                   | DSE - End Bailing           | MTP - Temperature               | Enter Turbidity Meter Reading (Final should be < 5 NTU) |
| DOB - Begin Overpumping                               | DOE - End Overpumping       | MSC - Specific Conductance      | OR                                                      |
| DRB - Begin Rinsing                                   | DRE - End Rinsing           | MFD - Fluorimeter (e.g., H&P)   | Enter Qualitative Observations                          |
| DCB - Begin Recirculation                             | DCE - End Recirculation     | MFD - Flame Ionizer (e.g., OVA) |                                                         |
| DHB - Begin Hydraulic Jetting                         | DHE - End Hydraulic Jetting | MDO - Dissolved Oxygen          |                                                         |
| DAB - Begin Air Surging                               | DAE - End Air Surging       | MPH - pH                        | H - High: Opaque/Muddy/Sky                              |
| DSB - Begin Surge Blocking                            | DSE - End Surge Blocking    | MEH - Eh                        | M - Medium: Translucent/Cloudy                          |
| DXB - Begin Other                                     | DXE - End Other             | MHC - Inflow Cone               | L - Low: Transparent/Some Sil                           |
| Specify other method:                                 |                             | MO1 - Other                     | N - None: Clear/No Visible Sil                          |
| FMT - Field Measurements (select from codes at right) |                             | MO2 - Other                     |                                                         |

C-1  
Groundwater Elevation Summary  
Main Post  
March, 1995

| Well ID                     | Total Dept (ft) | Depth to Water (TOIC) | (TOIC) Elevation (ft, MSL) | Water Level Elevation (ft, MSL) |
|-----------------------------|-----------------|-----------------------|----------------------------|---------------------------------|
| <b>Site- M2</b>             |                 |                       |                            |                                 |
| MW-01                       | 24.60           | 7.54                  | 21.04                      | 13.50                           |
| MW-02                       | 19.64           | 10.43                 | 15.50                      | 5.07                            |
| MW-03                       | 17.28           | 8.15                  | 12.63                      | 4.48                            |
| <b>Site- M3</b>             |                 |                       |                            |                                 |
| MW-04                       | 25.43           | 12.06                 | 19.02                      | 6.96                            |
| MW-05                       | 18.50           | 8.40                  | 13.30                      | 4.90                            |
| MW-06                       | 17.50           | 8.23                  | 12.42                      | 4.19                            |
| <b>Site- M4</b>             |                 |                       |                            |                                 |
| MW-07                       | 17.97           | 7.81                  | 16.75                      | 8.94                            |
| MW-08                       | 20.30           | 6.84                  | 10.68                      | 3.84                            |
| MW-09                       | 24.63           | 5.93                  | 9.69                       | 3.76                            |
| <b>Site- M5</b>             |                 |                       |                            |                                 |
| MW-10                       | 17.62           | 4.15                  | 6.91                       | 2.76                            |
| MW-11                       | 17.12           | 7.04                  | 11.70                      | 4.66                            |
| <b>Site- M8</b>             |                 |                       |                            |                                 |
| MW-12                       | 17.67           | 9.26                  | 15.20                      | 5.94                            |
| MW-13                       | 17.20           | 5.68                  | 7.80                       | 2.12                            |
| MW-14                       | 17.23           | 7.78                  | 14.91                      | 7.13                            |
| MW-15                       | 17.01           | 4.52                  | 7.01                       | 2.49                            |
| <b>Site- M12</b>            |                 |                       |                            |                                 |
| MW-16                       | 17.14           | 3.64                  | 8.35                       | 4.71                            |
| MW-17                       | 17.21           | 4.42                  | 7.87                       | 3.45                            |
| MW-18                       | 17.10           | 3.59                  | 6.62                       | 3.03                            |
| <b>Site- M14</b>            |                 |                       |                            |                                 |
| MW-19                       | 17.96           | 7.95                  | 9.68                       | 1.73                            |
| MW-20                       | 17.25           | 6.78                  | 9.29                       | 2.51                            |
| MW-21                       | 19.68           | 6.68                  | 9.57                       | 2.89                            |
| <b>Site- M16</b>            |                 |                       |                            |                                 |
| MW-22                       | 17.02           | 2.75                  | 7.25                       | 4.50                            |
| <b>Site- M18</b>            |                 |                       |                            |                                 |
| MW-24                       | 17.25           | 3.52                  | 8.16                       | 4.64                            |
| MW-25                       | 17.06           | 4.62                  | 8.28                       | 3.66                            |
| <b>Background Locations</b> |                 |                       |                            |                                 |
| MW-01B                      | 16.35           | 4.13                  | 24.59                      | 20.46                           |
| MW-02B                      | 22.30           | 12.49                 | 20.23                      | 7.74                            |
| MW-03B                      | 28.87           | 11.88                 | 21.09                      | 9.21                            |
| MW-04B                      | 17.45           | 6.57                  | 12.08                      | 5.51                            |
| MW-05B                      | 17.62           | 5.11                  | 15.40                      | 10.29                           |

(TOIC) - Top of inner casing  
MSL - Mean Sea Level

C-2  
Groundwater Elevation Summary  
Charles Wood  
March, 1995

| Well ID                     | Total Dept (ft) | Depth to Water (TOIC) | (TOIC) Elevation (ft, MSL) | Water Level Elevation (ft, MSL) |
|-----------------------------|-----------------|-----------------------|----------------------------|---------------------------------|
| <b>Site- CW-1</b>           |                 |                       |                            |                                 |
| MW-26                       | 17.18           | 9.08                  | 62.46                      | 53.38                           |
| MW-27                       | 17.19           | 9.11                  | 62.56                      | 53.45                           |
| MW-28                       | 17.19           | 9.60                  | 62.89                      | 53.29                           |
| MW-29                       | 17.17           | 9.32                  | 62.44                      | 53.12                           |
| <b>Site- CW-2</b>           |                 |                       |                            |                                 |
| MW-30                       | 18.22           | 6.90                  | 51.71                      | 44.81                           |
| MW-31                       | 17.20           | 6.75                  | 51.58                      | 44.83                           |
| MW-32                       | 17.17           | 7.04                  | 51.38                      | 44.34                           |
| MW-33                       | 16.36           | 8.64                  | 51.09                      | 42.45                           |
| <b>Site- CW-6</b>           |                 |                       |                            |                                 |
| MW-34                       | 17.19           | 4.05                  | 33.76                      | 29.71                           |
| <b>Site- CW-9</b>           |                 |                       |                            |                                 |
| MW-35                       | 17.17           | 4.37                  | 31.43                      | 27.06                           |
| MW-36                       | 16.96           | 5.97                  | 33.21                      | 27.24                           |
| <b>Background Locations</b> |                 |                       |                            |                                 |
| MW-06B                      | 16.94           | 4.67                  | 37.37                      | 32.70                           |
| MW-07B                      | 17.21           | 9.21                  | 66.31                      | 57.10                           |
| MW-08B                      | 17.37           | 4.79                  | 48.90                      | 44.11                           |
| MW-09B                      | 14.18           | 6.63                  | 45.31                      | 38.68                           |
| MW-10B                      | 16.75           | 4.60                  | 53.14                      | 48.54                           |

(TOIC) - Top of Inner Casing  
MSL - Mean Sea Level



**APPENDIX D**  
**SAMPLING RESULTS**

## ORGANIC GLOSSARY OF DATA QUALIFIERS AND ABBREVIATIONS

### Organic Data Qualifiers

- A TIC is a suspected aldol-condensation product
- B Compound was found in the blank and the sample
- C Pesticide identification was confirmed by GC/MS
- D Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis
- E Concentration exceeds the instrument calibration range and was subsequently diluted
- I Appears on the "results spreadsheet" and "quant reports" to indicate an interference, or it appears on pesticide Form 8 to indicate an instrument blank without a surrogate
- J Result is an estimated value below the reporting limit or a tentatively identified compound (TIC)
- NQ Result was qualitatively confirmed, but not quantified
- P The percent difference between the results from two GC columns is greater than 25%, the lower of the two values is reported
- SP Blank Spike, Blank Spike Duplicate, Matrix Spike or Matrix Spike Duplicate
- T Compound was found in the TCLP extraction blank and the sample
- U Compound was not detected at or above the reporting limit
- X Other specific flags may be required to properly qualify the result
- \* QC result was outside the laboratory control limits

### Abbreviations

- BS Blank Spike analysis was conducted on reagent grade water or a matrix free from the analyte(s) of interest
- BSD Blank Spike Duplicate
- BRL Below Reporting Limit
- Batch Identifies a specific extraction, digestion or preparation set (equivalent to Prep Batch)
- CD Calculation Factor used by the laboratory's Information Management System (LIMS)
- Contract Contract Laboratory Identification Code
- DF Dilution Factor
- DL Appears in the sample ID to indicate a secondary dilution
- LCS/LC Denotes Laboratory Control Standard
- LAB ID The full 12 character WESTON Laboratory Identification Number (equivalent to RFW#)
- MB Method Blank or (PB) preparation blank
- MS Matrix Spike
- MSD Matrix Spike Duplicate
- NA Not Applicable
- NR Not Required
- NS Not Spiked
- RE Appears in the sample ID to indicate a Re-analysis
- REP Replicate analysis
- Reprep Sample was reprepared and then reanalyzed
- RFW# The full 12 character WESTON Laboratory Identification Number (equivalent to LAB ID)
- RFW Lot The first 8 characters of the RFW#
- RPD Relative Percent Difference of duplicate analyses
- RRF Relative Response Factor
- RT Retention Time/Retention Time Window
- WO# Work Order No. Weston Code used to define a specific client, job phase and task

### NOTES:

- One or a combination of these data qualifiers and abbreviations may appear in the analytical report.
- Soil, sediment and sludge results are reported on a dry weight basis except when analyzed for landfill disposal or incineration parameters. All other results on a solid matrix are reported on an "as received" basis unless noted differently.
- Reporting limits are adjusted for preparation sample size, sample dilutions, and sample moisture content if analyzed on a dry weight basis.

## INORGANIC GLOSSARY OF DATA QUALIFIERS AND ABBREVIATIONS

### Inorganic Data Qualifiers

- B Result is less than the CRDL, but greater than or equal to the instrument detection limit  
E Result is estimated due to interference  
M Analyte concentrations are greater than the CRDL, and the RSD of duplicate injections was greater than 20%  
N Matrix Spike recovery was outside the control limits  
S Result was determined by the Method of Standard Additions (MSA)  
T Analyte was found in the TCLP extraction blank and sample  
U Analyte was not detected at or above the reporting limit  
W Post-digestion spike was outside 85-115% control limits, sample absorbance is less than 50% of spike absorbance  
+ MSA correlation coefficient is less than 0.995  
\* Duplicate analysis was outside the control limits

### Abbreviations

- A Analyzed by flame A.A. direct aspiration  
Batch Identifies a specific extraction, digestion or preparation set (equivalent to Prep Batch)  
BS Blank Spike analysis was conducted on reagent grade water or a matrix free from the analyte(s) of interest  
BSD Blank Spike Duplicate  
BRL Below Reporting Limit  
C Cyanide analyte flag on CLP forms  
CCV Continuing Calibration Verification  
CCB Continuing Calibration Blank  
CD Calculation Factor used by the laboratory's Information Management System (LIMS)  
CV Analyzed by the cold vapor generation method for Mercury  
Contract Contract Laboratory Identification Code  
DF Dilution Factor  
F Analyzed by graphite furnace atomic absorption spectroscopy  
ICV Initial Calibration Verification  
ICB Initial Calibration Blank  
LCS/LC Denotes Laboratory Control Standard  
LAB ID The full 12 character WESTON Laboratory Identification Number (equivalent to RFW#)  
MB Method Blank or (PB) for Preparation Blank  
MS Matrix Spike  
MSD Matrix Spike Duplicate  
NA Not Applicable  
NC Non-calculable precision due to insufficient concentration of analyte present in the sample  
NR Not Required  
NS Not Spiked  
P Analyzed by inductively coupled argon plasma  
REP Replicate analysis  
RFW# The full 12 character WESTON Laboratory Identification number (equivalent to LAB ID)  
RFW Lot The first 8 characters of the RFW#  
RPD Relative Percent Difference of duplicate analyses  
X Result obtained indirectly through calculation based on results from other analyses  
WO# Work Order No. Weston Code used to define a specific client, job phase and task

### NOTES:

- One or a combination of these data qualifiers and abbreviations may appear in the analytical report.
- Soil, sediment and sludge results are reported on a dry weight basis except when analyzed for landfill disposal or incineration parameters. All other results on a solid matrix are reported on an "as received" basis unless noted differently.
- Reporting limits are adjusted for preparation sample size, sample dilutions, and sample moisture content if analyzed on a dry weight basis.

## MAIN POST

**MAIN POST  
SEDIMENT VOLATILES**

| Geographical Location      |             |            |        | AOC3          |       | AOC3          |       | AOC3          |      | AOC3                |      |
|----------------------------|-------------|------------|--------|---------------|-------|---------------|-------|---------------|------|---------------------|------|
| Sample                     |             |            |        | MP08-SD01-A01 |       | MP08-SD01-C01 |       | MP08-SD01-D01 |      | MP08-SD01-E01       |      |
| Sample Type                |             |            |        |               |       | Duplicate     |       | Trip Blank    |      | Field Rinsate Blank |      |
| Batch#                     |             |            |        | 9412G921      |       | 9412G921      |       | 9412G921      |      | 9412G921            |      |
| Prep#                      |             |            |        | 94GVT028      |       | 94GVT028      |       | 94GVE348      |      | 94GVE348            |      |
| RFW#                       |             |            |        | 013           |       | 014           |       | 016           |      | 017                 |      |
| Sample Depth               |             |            |        | 0-6"          |       | 0-6"          |       | 0-6"          |      | 0-6"                |      |
| Dilution Factor            |             |            |        | 1.00          |       | 1.00          |       | 1.00          |      | 1.00                |      |
| Matrix                     |             |            |        | soil          |       | soil          |       | water         |      | water               |      |
| Units                      | mg/kg       | mg/kg      | mg/kg  | mg/kg         |       | mg/kg         |       | mg/l          |      | mg/l                |      |
| Sampling Date              |             |            |        | 12/1/94       |       | 12/1/94       |       | 12/1/94       |      | 12/1/94             |      |
| Analysis Date              |             |            |        | 12/6/94       |       | 12/6/94       |       | 12/9/94       |      | 12/9/94             |      |
| Analysis                   | Standard    | Standard   | MDL    | Analytical    | CRQL  | Analytical    | CRQL  | Analytical    | CRQL | Analytical          | CRQL |
|                            | fresh water | salt water |        | Result        |       | Result        |       | Result        |      | Result              |      |
| Chloromethane              |             |            | 0.0073 | 0.018 U       | 0.018 | 0.017 U       | 0.017 | 0.01 U        | 0.01 | 0.01 U              | 0.01 |
| Bromomethane               |             |            | 0.0067 | 0.018 U       | 0.018 | 0.017 U       | 0.017 | 0.01 U        | 0.01 | 0.01 U              | 0.01 |
| Vinyl Chloride             |             |            | 0.0079 | 0.018 U       | 0.018 | 0.017 U       | 0.017 | 0.01 U        | 0.01 | 0.01 U              | 0.01 |
| Chloroethane               |             |            | 0.0091 | 0.018 U       | 0.018 | 0.017 U       | 0.017 | 0.01 U        | 0.01 | 0.01 U              | 0.01 |
| Methylene Chloride         |             |            | 0.0027 | 0.018 U       | 0.018 | 0.017 U       | 0.017 | 0.01 U        | 0.01 | 0.01 U              | 0.01 |
| Acetone                    |             |            | 0.0069 | 0.1 B         | 0.018 | 0.14 B        | 0.017 | 0.01 U        | 0.01 | 0.01 U              | 0.01 |
| Carbon Disulfide           |             |            | 0.0044 | 0.018 U       | 0.018 | 0.017 U       | 0.017 | 0.01 U        | 0.01 | 0.01 U              | 0.01 |
| 1,1-Dichloroethene         |             |            | 0.0049 | 0.018 U       | 0.018 | 0.017 U       | 0.017 | 0.01 U        | 0.01 | 0.01 U              | 0.01 |
| 1,1-Dichloroethane         |             |            | 0.003  | 0.018 U       | 0.018 | 0.017 U       | 0.017 | 0.01 U        | 0.01 | 0.01 U              | 0.01 |
| 1,2-Dichloroethene (total) |             |            | 0.0044 | 0.018 U       | 0.018 | 0.017 U       | 0.017 | 0.01 U        | 0.01 | 0.01 U              | 0.01 |
| Chloroform                 |             |            | 0.0029 | 0.018 U       | 0.018 | 0.017 U       | 0.017 | 0.01 U        | 0.01 | 0.01 U              | 0.01 |
| 1,2-Dichloroethane         |             |            | 0.0024 | 0.018 U       | 0.018 | 0.017 U       | 0.017 | 0.01 U        | 0.01 | 0.01 U              | 0.01 |
| 2-Butanone                 |             |            | 0.0041 | 0.02          | 0.018 | 0.014 J       | 0.017 | 0.01 U        | 0.01 | 0.01 U              | 0.01 |
| 1,1,1-Trichloroethane      |             |            | 0.0017 | 0.018 U       | 0.018 | 0.017 U       | 0.017 | 0.01 U        | 0.01 | 0.01 U              | 0.01 |
| Carbon Tetrachloride       |             |            | 0.0015 | 0.018 U       | 0.018 | 0.017 U       | 0.017 | 0.01 U        | 0.01 | 0.01 U              | 0.01 |
| Bromodichloromethane       |             |            | 0.002  | 0.018 U       | 0.018 | 0.017 U       | 0.017 | 0.01 U        | 0.01 | 0.01 U              | 0.01 |
| 1,2-Dichloropropane        |             |            | 0.0017 | 0.018 U       | 0.018 | 0.017 U       | 0.017 | 0.01 U        | 0.01 | 0.01 U              | 0.01 |
| cis-1,3-Dichloropropene    |             |            | 0.003  | 0.018 U       | 0.018 | 0.017 U       | 0.017 | 0.01 U        | 0.01 | 0.01 U              | 0.01 |
| Trichloroethene            |             |            | 0.002  | 0.018 U       | 0.018 | 0.017 U       | 0.017 | 0.01 U        | 0.01 | 0.01 U              | 0.01 |
| Dibromochloromethane       |             |            | 0.0024 | 0.018 U       | 0.018 | 0.017 U       | 0.017 | 0.01 U        | 0.01 | 0.01 U              | 0.01 |
| 1,1,2-Trichloroethane      |             |            | 0.0043 | 0.018 U       | 0.018 | 0.017 U       | 0.017 | 0.01 U        | 0.01 | 0.01 U              | 0.01 |
| Benzene                    |             |            | 0.0033 | 0.018 U       | 0.018 | 0.017 U       | 0.017 | 0.01 U        | 0.01 | 0.01 U              | 0.01 |
| trans-1,3-Dichloropropene  |             |            | 0.0024 | 0.018 U       | 0.018 | 0.017 U       | 0.017 | 0.01 U        | 0.01 | 0.01 U              | 0.01 |
| Bromoform                  |             |            | 0.0031 | 0.018 U       | 0.018 | 0.017 U       | 0.017 | 0.01 U        | 0.01 | 0.01 U              | 0.01 |
| 4-Methyl-2-pentanone       |             |            | 0.0055 | 0.018 U       | 0.018 | 0.017 U       | 0.017 | 0.01 U        | 0.01 | 0.01 U              | 0.01 |
| 2-Hexanone                 |             |            | 0.0039 | 0.018 U       | 0.018 | 0.017 U       | 0.017 | 0.01 U        | 0.01 | 0.01 U              | 0.01 |
| Tetrachloroethene          |             |            | 0.004  | 0.018 U       | 0.018 | 0.017 U       | 0.017 | 0.01 U        | 0.01 | 0.01 U              | 0.01 |
| 1,1,2,2-Tetrachloroethane  |             |            | 0.0042 | 0.018 U       | 0.018 | 0.017 U       | 0.017 | 0.01 U        | 0.01 | 0.01 U              | 0.01 |
| Toluene                    |             |            | 0.0027 | 0.018 U       | 0.018 | 0.017 U       | 0.017 | 0.01 U        | 0.01 | 0.01 U              | 0.01 |
| Chlorobenzene              |             |            | 0.0027 | 0.018 U       | 0.018 | 0.017 U       | 0.017 | 0.01 U        | 0.01 | 0.01 U              | 0.01 |
| Ethylbenzene               |             |            | 0.0031 | 0.018 U       | 0.018 | 0.017 U       | 0.017 | 0.01 U        | 0.01 | 0.01 U              | 0.01 |
| Styrene                    |             |            | 0.0038 | 0.018 U       | 0.018 | 0.017 U       | 0.017 | 0.01 U        | 0.01 | 0.01 U              | 0.01 |
| Xylene (total)             |             |            | 0.0038 | 0.018 U       | 0.018 | 0.017 U       | 0.017 | 0.01 U        | 0.01 | 0.01 U              | 0.01 |
| Method:TCL Volatiles       |             |            |        |               |       |               |       |               |      |                     |      |

**MAIN POST  
SEDIMENT VOLATILES (OFFSITE DATA)**

| Geographical Location      |             |            |        | Background SS01 |        | Background SS01 |       | Background SS02 |        |
|----------------------------|-------------|------------|--------|-----------------|--------|-----------------|-------|-----------------|--------|
| Sample                     |             |            |        | SS01-SD02-A01   |        | SS01-SD01-A01DL |       | SS01-SD02-A01   |        |
| Batch#                     |             |            |        | 9412G922        |        | 9412G922        |       | 9412G922        |        |
| Prep#                      |             |            |        | 94GVT028 & 29   |        | 94GVT029        |       | 94GVT028 & 29   |        |
| RFW#                       |             |            |        | 005             |        | 005             |       | 005             |        |
| Sample Depth               |             |            |        | 0-6"            |        | 0-6"            |       | 0-6"            |        |
| Dilution Factor            |             |            |        | 1.00            |        | 1.00            |       | 1.00            |        |
| Matrix                     |             |            |        | soil            |        | soil            |       | soil            |        |
| Units                      | mg/kg       | mg/kg      | mg/kg  | mg/kg           |        | mg/kg           |       | mg/kg           |        |
| Sampling Date              |             |            |        | 12/1/94         |        | 12/1/94         |       | 12/1/94         |        |
| Analysis Date              |             |            |        | 12/6/94         |        | 12/17/94        |       | 12/6/94         |        |
| Analysis                   | Standard    | Standard   | MDL    | Analytical      | CRQL   | Analytical      | CRQL  | Analytical      | CRQL   |
|                            | fresh water | salt water |        | Result          |        | Result          |       | Result          |        |
| Chloromethane              |             |            | 0.0073 | 0.015 U         | 0.015  | 0.035 U         | 0.035 | 0.015 U         | 0.015  |
| Bromomethane               |             |            | 0.0067 | 0.015 U         | 0.015  | 0.035 U         | 0.035 | 0.015 U         | 0.015  |
| Vinyl Chloride             |             |            | 0.0079 | 0.015 U         | 0.015  | 0.035 U         | 0.035 | 0.015 U         | 0.015  |
| Chloroethane               |             |            | 0.0091 | 0.015 U         | 0.015  | 0.035 U         | 0.035 | 0.015 U         | 0.015  |
| Methylene Chloride         |             |            | 0.0027 | 0.015 U         | 0.015  | 0.035 U         | 0.035 | 0.015 U         | 0.015  |
| Acetone                    |             |            | 0.0069 | 0.47 B          | .074 * | 0.17 B          | 0.035 | 0.47 B          | .074 * |
| Carbon Disulfide           |             |            | 0.0044 | 0.015 U         | 0.015  | 0.035 U         | 0.035 | 0.015 U         | 0.015  |
| 1,1-Dichloroethene         |             |            | 0.0049 | 0.015 U         | 0.015  | 0.035 U         | 0.035 | 0.015 U         | 0.015  |
| 1,1-Dichloroethane         |             |            | 0.003  | 0.015 U         | 0.015  | 0.035 U         | 0.035 | 0.015 U         | 0.015  |
| 1,2-Dichloroethene (total) |             |            | 0.0044 | 0.015 U         | 0.015  | 0.035 U         | 0.035 | 0.015 U         | 0.015  |
| Chloroform                 |             |            | 0.0029 | 0.015 U         | 0.015  | 0.035 U         | 0.035 | 0.015 U         | 0.015  |
| 1,2-Dichloroethane         |             |            | 0.0024 | 0.015 U         | 0.015  | 0.035 U         | 0.035 | 0.015 U         | 0.015  |
| 2-Butanone                 |             |            | 0.0041 | 0.1             | 0.015  | 0.041           | 0.035 | 0.1             | 0.015  |
| 1,1,1-Trichloroethane      |             |            | 0.0017 | 0.015 U         | 0.015  | 0.035 U         | 0.035 | 0.015 U         | 0.015  |
| Carbon Tetrachloride       |             |            | 0.0015 | 0.015 U         | 0.015  | 0.035 U         | 0.035 | 0.015 U         | 0.015  |
| Bromodichloromethane       |             |            | 0.002  | 0.015 U         | 0.015  | 0.035 U         | 0.035 | 0.015 U         | 0.015  |
| 1,2-Dichloropropane        |             |            | 0.0017 | 0.015 U         | 0.015  | 0.035 U         | 0.035 | 0.015 U         | 0.015  |
| cis-1,3-Dichloropropene    |             |            | 0.003  | 0.015 U         | 0.015  | 0.035 U         | 0.035 | 0.015 U         | 0.015  |
| Trichloroethene            |             |            | 0.002  | 0.015 U         | 0.015  | 0.035 U         | 0.035 | 0.015 U         | 0.015  |
| Dibromochloromethane       |             |            | 0.0024 | 0.015 U         | 0.015  | 0.035 U         | 0.035 | 0.015 U         | 0.015  |
| 1,1,2-Trichloroethane      |             |            | 0.0043 | 0.015 U         | 0.015  | 0.035 U         | 0.035 | 0.015 U         | 0.015  |
| Benzene                    |             |            | 0.0033 | 0.015 U         | 0.015  | 0.035 U         | 0.035 | 0.015 U         | 0.015  |
| trans-1,3-Dichloropropene  |             |            | 0.0024 | 0.015 U         | 0.015  | 0.035 U         | 0.035 | 0.015 U         | 0.015  |
| Bromoform                  |             |            | 0.0031 | 0.015 U         | 0.015  | 0.035 U         | 0.035 | 0.015 U         | 0.015  |
| 4-Methyl-2-pentanone       |             |            | 0.0055 | 0.015 U         | 0.015  | 0.035 U         | 0.035 | 0.015 U         | 0.015  |
| 2-Hexanone                 |             |            | 0.0039 | 0.015 U         | 0.015  | 0.035 U         | 0.035 | 0.015 U         | 0.015  |
| Tetrachloroethene          |             |            | 0.004  | 0.015 U         | 0.015  | 0.035 U         | 0.035 | 0.015 U         | 0.015  |
| 1,1,2,2-Tetrachloroethane  |             |            | 0.0042 | 0.015 U         | 0.015  | 0.035 U         | 0.035 | 0.015 U         | 0.015  |
| Toluene                    |             |            | 0.0027 | 0.015 U         | 0.015  | 0.035 U         | 0.035 | 0.015 U         | 0.015  |
| Chlorobenzene              |             |            | 0.0027 | 0.015 U         | 0.015  | 0.035 U         | 0.035 | 0.015 U         | 0.015  |
| Ethylbenzene               |             |            | 0.0031 | 0.015 U         | 0.015  | 0.035 U         | 0.035 | 0.015 U         | 0.015  |
| Styrene                    |             |            | 0.0038 | 0.015 U         | 0.015  | 0.035 U         | 0.035 | 0.015 U         | 0.015  |
| Xylene (total)             |             |            | 0.0038 | 0.015 U         | 0.015  | 0.035 U         | 0.035 | 0.015 U         | 0.015  |
| Total Est. Conc. of TIC.   |             |            |        | .05 *           |        |                 |       | .05 *           |        |
| Dilution Factor            |             |            |        | * = 5.00        |        |                 |       | * = 5.00        |        |
| Method:TCL Volatiles       |             |            |        |                 |        |                 |       |                 |        |

**MAIN POST  
SEDIMENT SEMIVOLATILES**

| Geographical Location        |             |            |       | AOC3          |      | AOC3            |      | AOC3          |      |
|------------------------------|-------------|------------|-------|---------------|------|-----------------|------|---------------|------|
| Sample                       |             |            |       | MP08-SD01-A01 |      | MP08-SD01-A01RE |      | MP08-SD01-C01 |      |
| Sample Type                  |             |            |       |               |      |                 |      | Duplicate     |      |
| Batch#                       |             |            |       | 9412G921      |      | 9412G921        |      | 941G9213      |      |
| Prep#                        |             |            |       | 94GBO809      |      | 94GBO809        |      | 94GBO809      |      |
| RFW#                         |             |            |       | 013           |      | 013RE           |      | 014           |      |
| Sample Depth                 |             |            |       | 0-6"          |      | 0-6"            |      | 0-6"          |      |
| Dilution Factor              |             |            |       | 1.00          |      | 1.00            |      | 1.00          |      |
| Matrix                       |             |            |       | soil          |      | soil            |      | soil          |      |
| Units                        | mg/kg       | mg/kg      | mg/kg | mg/kg         |      | mg/kg           |      | mg/kg         |      |
| Sampling Date                |             |            |       | 12/1/94       |      | 12/1/94         |      | 12/1/94       |      |
| Analysis Date                |             |            |       | 12/22/94      |      | 12/22/94        |      | 12/22/94      |      |
| Analysis                     | Standard    | Standard   | MDL   | Analytical    | CRQL | Analytical      | CRQL | Analytical    | CRQL |
|                              | fresh water | salt water |       | Result        |      | Result          |      | Result        |      |
| Phenol                       |             |            | 0.234 | 0.58 U        | 0.58 | 0.57 U          | 0.57 | 0.54 U        | 0.54 |
| bis(2-Chloroethyl) ether     |             |            | 0.32  | 0.58 U        | 0.58 | 0.57 U          | 0.57 | 0.54 U        | 0.54 |
| 2-Chlorophenol               |             |            | 0.241 | 0.58 U        | 0.58 | 0.57 U          | 0.57 | 0.54 U        | 0.54 |
| 1,3-Dichlorobenzene          |             |            | 0.175 | 0.58 U        | 0.58 | 0.57 U          | 0.57 | 0.54 U        | 0.54 |
| 1,4-Dichlorobenzene          |             |            | 0.158 | 0.58 U        | 0.58 | 0.57 U          | 0.57 | 0.54 U        | 0.54 |
| 1,2-Dichlorobenzene          |             |            | 0.188 | 0.58 U        | 0.58 | 0.57 U          | 0.57 | 0.54 U        | 0.54 |
| 2-Methylphenol               |             |            | 0.221 | 0.58 U        | 0.58 | 0.57 U          | 0.57 | 0.54 U        | 0.54 |
| 2,2'-oxybis(1-Chloropropane) |             |            | 0.231 | 0.58 U        | 0.58 | 0.57 U          | 0.57 | 0.061 J       | 0.54 |
| 4-Methylphenol               |             |            | 0.426 | 0.58 U        | 0.58 | 0.57 U          | 0.57 | 0.54 U        | 0.54 |
| N-Nitroso-di-n-propylamine   |             |            | 0.264 | 0.58 U        | 0.58 | 0.57 U          | 0.57 | 0.54 U        | 0.54 |
| Hexachloroethane             |             |            | 0.175 | 0.58 U        | 0.58 | 0.57 U          | 0.57 | 0.54 U        | 0.54 |
| Nitrobenzene                 |             |            | 0.244 | 0.58 U        | 0.58 | 0.57 U          | 0.57 | 0.54 U        | 0.54 |
| Isophorone                   |             |            | 0.129 | 0.58 U        | 0.58 | 0.57 U          | 0.57 | 0.54 U        | 0.54 |
| 2-Nitrophenol                |             |            | 0.231 | 0.58 U        | 0.58 | 0.57 U          | 0.57 | 0.54 U        | 0.54 |
| 2,4-Dimethylphenol           |             |            | 0.158 | 0.58 U        | 0.58 | 0.57 U          | 0.57 | 0.54 U        | 0.54 |
| bis(2-Chloroethoxy) methane  |             |            | 0.201 | 0.58 U        | 0.58 | 0.57 U          | 0.57 | 0.54 U        | 0.54 |
| 2,4-Dichlorophenol           |             |            | 0.145 | 0.58 U        | 0.58 | 0.57 U          | 0.57 | 0.54 U        | 0.54 |
| 1,2,4-Trichlorobenzene       |             |            | 0.317 | 0.58 U        | 0.58 | 0.57 U          | 0.57 | 0.54 U        | 0.54 |
| Naphthalene                  |             |            | 0.277 | 0.58 U        | 0.58 | 0.57 U          | 0.57 | 0.54 U        | 0.54 |
| 4-Chloroaniline              |             |            | 0.096 | 0.58 U        | 0.58 | 0.57 U          | 0.57 | 0.54 U        | 0.54 |
| Hexachlorobutadiene          |             |            | 0.152 | 0.58 U        | 0.58 | 0.57 U          | 0.57 | 0.54 U        | 0.54 |
| 4-Chloro-3-methylphenol      |             |            | 0.102 | 0.58 U        | 0.58 | 0.57 U          | 0.57 | 0.54 U        | 0.54 |
| 2-Methylnaphthalene          |             |            | 0.287 | 0.58 U        | 0.58 | 0.57 U          | 0.57 | 0.54 U        | 0.54 |
| Hexachlorocyclopentadiene    |             |            | 0.119 | 0.58 U        | 0.58 | 0.57 U          | 0.57 | 0.54 U        | 0.54 |
| 2,4,6-Trichlorophenol        |             |            | 0.185 | 0.58 U        | 0.58 | 0.57 U          | 0.57 | 0.54 U        | 0.54 |
| 2,4,5-Trichlorophenol        |             |            | 0.155 | 1.5 U         | 1.5  | 1.4 U           | 1.4  | 1.4 U         | 1.4  |
| 2-Chloronaphthalene          |             |            | 0.271 | 0.58 U        | 0.58 | 0.57 U          | 0.57 | 0.54 U        | 0.54 |
| 2-Nitroaniline               |             |            | 0.201 | 1.5 U         | 1.5  | 1.4 U           | 1.4  | 1.4 U         | 1.4  |
| Dimethylphthalate            |             |            | 0.145 | 0.58 U        | 0.58 | 0.57 U          | 0.57 | 0.54 U        | 0.54 |
| Acenaphthylene               |             |            | 0.198 | 0.58 U        | 0.58 | 0.57 U          | 0.57 | 0.54 U        | 0.54 |
| 2,6-Dinitrotoluene           |             |            | 0.172 | 0.58 U        | 0.58 | 0.57 U          | 0.57 | 0.54 U        | 0.54 |
| 3-Nitroaniline               |             |            | 0.172 | 1.5 U         | 1.5  | 1.4 U           | 1.4  | 1.4 U         | 1.4  |
| Acenaphthene                 |             |            | 0.221 | 0.58 U        | 0.58 | 0.57 U          | 0.57 | 0.54 U        | 0.54 |
| 2,4-Dinitrophenol            |             |            | 0.152 | 1.5 U         | 1.5  | 1.4 U           | 1.4  | 1.4 U         | 1.4  |
| 4-Nitrophenol                |             |            | 0.248 | 1.5 U         | 1.5  | 1.4 U           | 1.4  | 1.4 U         | 1.4  |

**MAIN POST  
SEDIMENT SEMIVOLATILES**

| Geographical Location      |             |            |       | AOC3          |      | AOC3            |      | AOC3          |      |
|----------------------------|-------------|------------|-------|---------------|------|-----------------|------|---------------|------|
| Sample                     |             |            |       | MP08-SD01-A01 |      | MP08-SD01-A01RE |      | MP08-SD01-C01 |      |
| Sample Type                |             |            |       |               |      |                 |      | Duplicate     |      |
| Batch#                     |             |            |       | 9412G921      |      | 9412G921        |      | 941G9213      |      |
| Prep#                      |             |            |       | 94GBO809      |      | 94GBO809        |      | 94GBO809      |      |
| RFW#                       |             |            |       | 013           |      | 013RE           |      | 014           |      |
| Sample Depth               |             |            |       | 0-6"          |      | 0-6"            |      | 0-6"          |      |
| Dilution Factor            |             |            |       | 1.00          |      | 1.00            |      | 1.00          |      |
| Matrix                     |             |            |       | soil          |      | soil            |      | soil          |      |
| Units                      | mg/kg       | mg/kg      | mg/kg | mg/kg         |      | mg/kg           |      | mg/kg         |      |
| Sampling Date              |             |            |       | 12/1/94       |      | 12/1/94         |      | 12/1/94       |      |
| Analysis Date              |             |            |       | 12/22/94      |      | 12/22/94        |      | 12/22/94      |      |
| Analysis                   | Standard    | Standard   | MDL   | Analytical    | CRQL | Analytical      | CRQL | Analytical    | CRQL |
|                            | fresh water | salt water |       | Result        |      | Result          |      | Result        |      |
| Dibenzofuran               |             |            | 0.215 | 0.58 U        | 0.58 | 0.57 U          | 0.57 | 0.54 U        | 0.54 |
| 2,4-Dinitrotoluene         |             |            | 0.191 | 0.58 U        | 0.58 | 0.57 U          | 0.57 | 0.54 U        | 0.54 |
| Diethylphthalate           |             |            | 0.178 | 0.58 U        | 0.58 | 0.57 U          | 0.57 | 0.54 U        | 0.54 |
| 4-Chlorophenyl-phenylether |             |            | 0.231 | 0.58 U        | 0.58 | 0.57 U          | 0.57 | 0.54 U        | 0.54 |
| Fluorene                   |             |            | 0.208 | 0.58 U        | 0.58 | 0.57 U          | 0.57 | 0.54 U        | 0.54 |
| 4-Nitroaniline             |             |            | 0.211 | 1.5 U         | 1.5  | 1.4 U           | 1.4  | 1.4 U         | 1.4  |
| 4,6-Dinitro-2-methylphenol |             |            | 0.175 | 1.5 U         | 1.5  | 1.4 U           | 1.4  | 1.4 U         | 1.4  |
| N-Nitrosodiphenylamine (1) |             |            | 0.139 | 0.58 U        | 0.58 | 0.57 U          | 0.57 | 0.54 U        | 0.54 |
| 4-Bromophenyl-phenylether  |             |            | 0.175 | 0.58 U        | 0.58 | 0.57 U          | 0.57 | 0.54 U        | 0.54 |
| Hexachlorobenzene          |             |            | 0.182 | 0.58 U        | 0.58 | 0.57 U          | 0.57 | 0.54 U        | 0.54 |
| Pentachlorophenol          |             |            | 0.132 | 1.5 U         | 1.5  | 1.4 U           | 1.4  | 1.4 U         | 1.4  |
| Phenanthrene               | 0.225       | 0.74       | 0.165 | 0.58 U        | 0.58 | 0.57 U          | 0.57 | 0.54 U        | 0.54 |
| Anthracene                 |             |            | 0.152 | 0.58 U        | 0.58 | 0.57 U          | 0.57 | 0.54 U        | 0.54 |
| Carbazole                  |             |            | 0.145 | 0.58 U        | 0.58 | 0.57 U          | 0.57 | 0.54 U        | 0.54 |
| Di-n-butylphthalate        |             |            | 0.215 | 0.098 J       | 0.58 | 0.68 J          | 0.57 | 0.1 J         | 0.54 |
| Fluoranthene               | 0.6         | 0.6        | 0.198 | 0.58 U        | 0.58 | 0.57 U          | 0.57 | 0.54 U        | 0.54 |
| Pyrene                     | 0.35        | 0.665      | 0.178 | 0.58 U        | 0.58 | 0.57 U          | 0.57 | 0.54 U        | 0.54 |
| Butylbenzylphthalate       |             |            | 0.175 | 0.58 U        | 0.58 | 0.57 U          | 0.57 | 0.54 U        | 0.54 |
| 3,3'-Dichlorobenzidine     |             |            | 0.092 | 0.58 U        | 0.58 | 0.57 U          | 0.57 | 0.54 U        | 0.54 |
| Benzo(a)anthracene         | 0.23        | 0.261      | 0.162 | 0.58 U        | 0.58 | 0.57 U          | 0.57 | 0.54 U        | 0.54 |
| Chrysene                   | 0.4         | 0.984      | 0.145 | 0.58 U        | 0.58 | 0.57 U          | 0.57 | 0.54 U        | 0.54 |
| bis(2-Ethylhexy)phthalate  |             |            | 0.32  | 0.58 U        | 0.58 | 0.57 U          | 0.57 | 0.54 U        | 0.54 |
| Di-n-octyl phthalate       |             |            | 0.185 | 0.58 U        | 0.58 | 0.57 U          | 0.57 | 0.54 U        | 0.54 |
| Benzo(b)fluoranthene       |             |            | 0.188 | 0.58 U        | 0.58 | 0.57 U          | 0.57 | 0.54 U        | 0.54 |
| Benzo(k)fluoranthene       |             |            | 0.205 | 0.58 U        | 0.58 | 0.57 U          | 0.57 | 0.54 U        | 0.54 |
| Benzo(a)pyrene             | 0.4         | 0.43       | 0.162 | 0.58 U        | 0.58 | 0.57 U          | 0.57 | 0.079 J       | 0.54 |
| Indeno(1,2,3-cd)pyrene     |             |            | 0.234 | 0.58 U        | 0.58 | 0.57 U          | 0.57 | 0.54 U        | 0.54 |
| Dibenzo(a,h)anthracene     |             |            | 0.198 | 0.58 U        | 0.58 | 0.57 U          | 0.57 | 0.54 U        | 0.54 |
| Benzo(g,h,i)perylene       |             |            | 0.224 | 0.58 U        | 0.58 | 0.57 U          | 0.57 | 0.54 U        | 0.54 |
| Petroleum hydrocarbons     |             |            |       |               |      |                 |      |               |      |
| Total Est. Conc. of TIC    |             |            |       | 21.4 J        |      | 23.5 J          |      | 16.2 J        |      |
| Method: TCL Semivolatiles  |             |            |       |               |      |                 |      |               |      |



**MAIN POST**  
**SEDIMENT SEMIVOLATILES (OFFSITE DATA)**

| Geographical Location        |                         |                        |       | Background SS01      | Background SS02 |                      |      |
|------------------------------|-------------------------|------------------------|-------|----------------------|-----------------|----------------------|------|
| Sample                       |                         |                        |       | SS01-SD01-A01        | SS01-SD02-A01   |                      |      |
| Batch#                       |                         |                        |       | 9412G922             | 9412G922        |                      |      |
| Prep#                        |                         |                        |       | 94GBO809             | 94GBO809        |                      |      |
| RFW#                         |                         |                        |       | 006                  | 005             |                      |      |
| Sample Depth                 |                         |                        |       | 0-6"                 | 0-6"            |                      |      |
| Dilution Factor              |                         |                        |       | 1.00                 | 1.00            |                      |      |
| Matrix                       |                         |                        |       | soil                 | soil            |                      |      |
| Units                        | mg/kg                   | mg/kg                  | mg/kg | mg/kg                | mg/kg           |                      |      |
| Sampling Date                |                         |                        |       | 12/2/94              | 12/2/94         |                      |      |
| Analysis Date                |                         |                        |       | 12/22/94             | 12/22/94        |                      |      |
| Analysis                     | Standard<br>fresh water | Standard<br>salt water | MDL   | Analytical<br>Result | CRQL            | Analytical<br>Result | CRQL |
| Phenol                       |                         |                        | 0.234 | 1.1 U                | 1.1             | 0.48 U               | 0.48 |
| bis(2-Chloroethyl) ether     |                         |                        | 0.32  | 1.1 U                | 1.1             | 0.48 U               | 0.48 |
| 2-Chlorophenol               |                         |                        | 0.241 | 1.1 U                | 1.1             | 0.48 U               | 0.48 |
| 1,3-Dichlorobenzene          |                         |                        | 0.175 | 1.1 U                | 1.1             | 0.48 U               | 0.48 |
| 1,4-Dichlorobenzene          |                         |                        | 0.158 | 1.1 U                | 1.1             | 0.48 U               | 0.48 |
| 1,2-Dichlorobenzene          |                         |                        | 0.188 | 1.1 U                | 1.1             | 0.48 U               | 0.48 |
| 2-Methylphenol               |                         |                        | 0.221 | 1.1 U                | 1.1             | 0.48 U               | 0.48 |
| 2,2'-oxybis(1-Chloropropane) |                         |                        | 0.231 | 1.1 U                | 1.1             | 0.48 U               | 0.48 |
| 4-Methylphenol               |                         |                        | 0.426 | 1.1 U                | 1.1             | 0.48 U               | 0.48 |
| N-Nitroso-di-n-propylamine   |                         |                        | 0.264 | 1.1 U                | 1.1             | 0.48 U               | 0.48 |
| Hexachloroethane             |                         |                        | 0.175 | 1.1 U                | 1.1             | 0.48 U               | 0.48 |
| Nitrobenzene                 |                         |                        | 0.244 | 1.1 U                | 1.1             | 0.48 U               | 0.48 |
| Isophorone                   |                         |                        | 0.129 | 1.1 U                | 1.1             | 0.48 U               | 0.48 |
| 2-Nitrophenol                |                         |                        | 0.231 | 1.1 U                | 1.1             | 0.48 U               | 0.48 |
| 2,4-Dimethylphenol           |                         |                        | 0.158 | 1.1 U                | 1.1             | 0.48 U               | 0.48 |
| bis(2-Chloroethoxy) methane  |                         |                        | 0.201 | 1.1 U                | 1.1             | 0.48 U               | 0.48 |
| 2,4-Dichlorophenol           |                         |                        | 0.145 | 1.1 U                | 1.1             | 0.48 U               | 0.48 |
| 1,2,4-Trichlorobenzene       |                         |                        | 0.317 | 1.1 U                | 1.1             | 0.48 U               | 0.48 |
| Naphthalene                  |                         |                        | 0.277 | 1.1 U                | 1.1             | 0.48 U               | 0.48 |
| 4-Chloroaniline              |                         |                        | 0.096 | 1.1 U                | 1.1             | 0.48 U               | 0.48 |
| Hexachlorobutadiene          |                         |                        | 0.152 | 1.1 U                | 1.1             | 0.48 U               | 0.48 |
| 4-Chloro-3-methylphenol      |                         |                        | 0.102 | 1.1 U                | 1.1             | 0.48 U               | 0.48 |
| 2-Methylnaphthalene          |                         |                        | 0.287 | 1.1 U                | 1.1             | 0.48 U               | 0.48 |
| Hexachlorocyclopentadiene    |                         |                        | 0.119 | 1.1 U                | 1.1             | 0.48 U               | 0.48 |
| 2,4,6-Trichlorophenol        |                         |                        | 0.185 | 1.1 U                | 1.1             | 0.48 U               | 0.48 |
| 2,4,5-Trichlorophenol        |                         |                        | 0.155 | 2.9 U                | 2.9             | 1.2 U                | 1.2  |
| 2-Chloronaphthalene          |                         |                        | 0.271 | 1.1 U                | 1.1             | 0.48 U               | 0.48 |
| 2-Nitroaniline               |                         |                        | 0.201 | 2.9 U                | 2.9             | 1.2 U                | 1.2  |
| Dimethylphthalate            |                         |                        | 0.145 | 1.1 U                | 1.1             | 0.48 U               | 0.48 |
| Acenaphthylene               |                         |                        | 0.198 | 1.1 U                | 1.1             | 0.48 U               | 0.48 |
| 2,6-Dinitrotoluene           |                         |                        | 0.172 | 1.1 U                | 1.1             | 0.48 U               | 0.48 |
| 3-Nitroaniline               |                         |                        | 0.172 | 2.9 U                | 2.9             | 1.2 U                | 1.2  |
| Acenaphthene                 |                         |                        | 0.221 | 1.1 U                | 1.1             | 0.48 U               | 0.48 |
| 2,4-Dinitrophenol            |                         |                        | 0.152 | 2.9 U                | 2.9             | 1.2 U                | 1.2  |
| 4-Nitrophenol                |                         |                        | 0.248 | 2.9 U                | 2.9             | 1.2 U                | 1.2  |

**MAIN POST**  
**SEDIMENT SEMIVOLATILES (OFFSITE DATA)**

|                            |             |            |       |                 |                 |            |      |
|----------------------------|-------------|------------|-------|-----------------|-----------------|------------|------|
| Geographical Location      |             |            |       | Background SS01 | Background SS02 |            |      |
| Sample                     |             |            |       | SS01-SD01-A01   | SS01-SD02-A01   |            |      |
| Batch#                     |             |            |       | 9412G922        | 9412G922        |            |      |
| Prep#                      |             |            |       | 94GBO809        | 94GBO809        |            |      |
| RFW#                       |             |            |       | 006             | 005             |            |      |
| Sample Depth               |             |            |       | 0-6"            | 0-6"            |            |      |
| Dilution Factor            |             |            |       | 1.00            | 1.00            |            |      |
| Matrix                     |             |            |       | soil            | soil            |            |      |
| Units                      | mg/kg       | mg/kg      | mg/kg | mg/kg           | mg/kg           |            |      |
| Sampling Date              |             |            |       | 12/2/94         | 12/2/94         |            |      |
| Analysis Date              |             |            |       | 12/22/94        | 12/22/94        |            |      |
| Analysis                   | Standard    | Standard   | MDL   | Analytical      | CRQL            | Analytical | CRQL |
|                            | fresh water | salt water |       | Result          |                 | Result     |      |
| Dibenzofuran               |             |            | 0.215 | 1.1 U           | 1.1             | 0.48 U     | 0.48 |
| 2,4-Dinitrotoluene         |             |            | 0.191 | 1.1 U           | 1.1             | 0.48 U     | 0.48 |
| Diethylphthalate           |             |            | 0.178 | 1.1 U           | 1.1             | 0.48 U     | 0.48 |
| 4-Chlorophenyl-phenylether |             |            | 0.231 | 1.1 U           | 1.1             | 0.48 U     | 0.48 |
| Fluorene                   |             |            | 0.208 | 1.1 U           | 1.1             | 0.48 U     | 0.48 |
| 4-Nitroaniline             |             |            | 0.211 | 2.9 U           | 2.9             | 1.2 U      | 1.2  |
| 4,6-Dinitro-2-methylphenol |             |            | 0.175 | 2.9 U           | 2.9             | 1.2 U      | 1.2  |
| N-Nitrosodiphenylamine (1) |             |            | 0.139 | 1.1 U           | 1.1             | 0.48 U     | 0.48 |
| 4-Bromophenyl-phenylether  |             |            | 0.175 | 1.1 U           | 1.1             | 0.48 U     | 0.48 |
| Hexachlorobenzene          |             |            | 0.182 | 1.1 U           | 1.1             | 0.48 U     | 0.48 |
| Pentachlorophenol          |             |            | 0.132 | 2.9 U           | 2.9             | 1.2 U      | 1.2  |
| Phenanthrene               | 0.225       | 0.74       | 0.165 | 1.1 U           | 1.1             | 0.39 J     | 0.48 |
| Anthracene                 |             |            | 0.152 | 1.1 U           | 1.1             | 0.061 J    | 0.48 |
| Carbazole                  |             |            | 0.145 | 1.1 U           | 1.1             | 0.051 J    | 0.48 |
| Di-n-butylphthalate        |             |            | 0.215 | 0.26 JB         | 1.1             | 0.086 JB   | 0.48 |
| Fluoranthene               | 0.6         | 0.6        | 0.198 | 0.44 J          | 1.1             | 1.5        | 0.48 |
| Pyrene                     | 0.35        | 0.665      | 0.178 | 0.66 J          | 1.1             | 2          | 0.48 |
| Butylbenzylphthalate       |             |            | 0.175 | 1.1 U           | 1.1             | 0.48 U     | 0.48 |
| 3,3'-Dichlorobenzidine     |             |            | 0.092 | 1.1 U           | 1.1             | 0.48 U     | 0.48 |
| Benzo(a)anthracene         | 0.23        | 0.261      | 0.162 | 0.34 J          | 1.1             | 1.3        | 0.48 |
| Chrysene                   | 0.4         | 0.984      | 0.145 | 0.37 J          | 1.1             | 0.13 J     | 0.48 |
| bis(2-Ethylhexy)phthalate  |             |            | 0.32  | 0.43 J          | 1.1             | 0.23 J     | 0.48 |
| Di-n-octyl phthalate       |             |            | 0.185 | 1.1 U           | 1.1             | 0.48 U     | 0.48 |
| Benzo(b)fluoranthene       |             |            | 0.188 | 0.59 J          | 1.1             | 1.8        | 0.48 |
| Benzo(k)fluoranthene       |             |            | 0.205 | 0.21 J          | 1.1             | 0.58       | 0.48 |
| Benzo(a)pyrene             | 0.4         | 0.43       | 0.162 | 0.27 J          | 1.1             | 1.2        | 0.48 |
| Indeno(1,2,3-cd)pyrene     |             |            | 0.234 | 0.19 J          | 1.1             | 0.7        | 0.48 |
| Dibenzo(a,h)anthracene     |             |            | 0.198 | 1.1 U           | 1.1             | 0.12 J     | 0.48 |
| Benzo(g,h,i)perylene       |             |            | 0.224 | 0.19 J          | 1.1             | 0.67       | 0.48 |
| Petroleum hydrocarbons     |             |            |       |                 |                 |            |      |
| Total Organic Carbon       |             |            |       | 5.7             | 0.10            | 3.7        | 0.11 |
| Total Est. Conc. of TIC    |             |            |       | 71.5            |                 | 15.9       |      |
| Method:TCL Semivolatiles   |             |            |       |                 |                 |            |      |

**MAIN POST  
SEDIMENT INORGANICS**

|                            |             |            |                    |           |                     |           |                     |           |
|----------------------------|-------------|------------|--------------------|-----------|---------------------|-----------|---------------------|-----------|
| Geographical Location      |             |            | Pre-1941 STP       |           | AOC3                |           | AOC3                |           |
| Sample                     |             |            | MPST-SD01-A01      |           | MP08-SD01-A01       |           | MP08-SD01-C01       |           |
| Sample Type                |             |            |                    |           |                     |           | Duplicate           |           |
| Batch#                     |             |            | 9412G921           |           | 9412G921            |           | 9412G921            |           |
| Prep#                      |             |            | 94GTS473           |           | 94GTS473            |           | 94GTS473            |           |
| RFW#                       |             |            | 015                |           | 013                 |           | 014                 |           |
| Sample Depth               |             |            | 0-6"               |           | 0-6"                |           | 0-6"                |           |
| Dilution Factor            |             |            | 1.00               |           | 1.00                |           | 1.00                |           |
| Matrix                     |             |            | soil               |           | soil                |           | soil                |           |
| Units                      | mg/kg       | mg/kg      | mg/kg              |           | mg/kg               |           | mg/kg               |           |
| Sampling Date              |             |            | 12/1/94            |           | 12/1/94             |           | 12/1/94             |           |
| Analysis Date              |             |            | 12/19/94           |           | 12/19/94            |           | 12/19/94            |           |
| Analysis                   | Standard    | Standard   | Analytical         | Reporting | Analytical          | Reporting | Analytical          | Reporting |
|                            | fresh water | salt water | Result             | Limit     | Result              | Limit     | Result              | Limit     |
| % Solids                   |             |            | 50.4               | 0.10      | 56.5                | 0.10      | 60.1                | 0.10      |
| Silver                     | 1           | 1          | 5.2                | 0.97      | 0.78 U              | 0.78      | 0.96 U              | 0.96      |
| Aluminum                   |             |            | 9240               | 8.3       | 8830                | 6.7       | 8170                | 8.2       |
| Arsenic                    | 33          | 8.2        | 24.2               | 2.5 *     | 13.2                | 1.1 *     | 14.3                | 0.87 *    |
| Barium                     |             |            | 27.6               | 0.66      | 13.0                | 0.53      | 12.6                | 0.65      |
| Beryllium                  |             |            | 1.3                | 0.47      | 1.4                 | 0.38      | 1.3                 | 0.46      |
| Calcium                    |             |            | 1010               | 3.8       | 1290                | 3.0       | 1240                | 3.7       |
| Cadmium                    | 5           | 1.2        | 4.2                | 1.1       | 0.86 U              | 0.86      | 1.0 U               | 1.0       |
| Cobalt                     |             |            | 13.5               | 0.88      | 5.5                 | 0.71      | 4.7                 | 0.86      |
| Chromium                   | 80          | 81         | 93.5               | 2.0       | 74.0                | 1.6       | 66.3                | 2.0       |
| Copper                     | 70          | 34         | 35.2               | 0.75      | 3.1                 | 0.61      | 3.2                 | 0.74      |
| Iron                       |             |            | 49200              | 1.5       | 40300               | 1.2       | 37600               | 1.4       |
| Mercury                    | 0.15        | 0.15       | 0.57               | 0.20      | 0.13 U              | 0.13      | 0.17 U              | 0.17      |
| Potassium                  |             |            | 6760               | 256       | 6640                | 207       | 5550                | 253       |
| Magnesium                  |             |            | 3390               | 11.9      | 3670                | 9.7       | 3070                | 11.8      |
| Manganese                  |             |            | 39.5               | 0.62      | 51.7                | 0.51      | 46.6                | 0.62      |
| Sodium                     |             |            | 2330               | 4.8       | 3090                | 3.9       | 2160                | 4.7       |
| Nickel                     | 30          | 20.9       | 26.5               | 4.0       | 14.0                | 3.2       | 11.8                | 3.9       |
| Lead                       | 35          | 46.7       | 59.0               | 9.9 **    | 6.5                 | 2.1 **    | 5.7                 | 1.7 **    |
| Antimony                   |             |            | 6.7 U              | 6.7       | 5.4 U               | 5.4       | 6.6 U               | 6.6       |
| Selenium                   |             |            | 0.88               | 0.28      | 0.42                | 0.30      | 0.58                | 0.25      |
| Thallium                   |             |            | 0.34 U             | 0.34      | 0.37 U              | 0.37      | 0.30 U              | 0.30      |
| Vanadium                   |             |            | 49.5               | 0.91      | 39.3                | 0.73      | 38.2                | 0.89      |
| Zinc                       | 120         | 150        | 386                | 0.88      | 68.8                | 0.71      | 57.8                | 0.86      |
| Cyanide                    |             |            | 0.96               | 0.59      | 0.81 U              | 0.81      | 0.71 U              | 0.71      |
| Dilution Factor            |             |            | * = 5.0, ** = 20.0 |           | * = 2.00, ** = 4.00 |           | * = 2.00, ** = 4.00 |           |
| Method:TAL Metals, Cyanide |             |            |                    |           |                     |           |                     |           |

**MAIN POST  
SEDIMENT INORGANICS (OFFSITE DATA)**

|                            |             |            |                     |           |                     |           |
|----------------------------|-------------|------------|---------------------|-----------|---------------------|-----------|
| Geographical Location      |             |            | Background SS01     |           | Background SS02     |           |
| Sample                     |             |            | SS01-SD01-A01       |           | SS01-SD02-A01       |           |
| Batch#                     |             |            | 9412G922            |           | 9412G922            |           |
| Prep#                      |             |            | 94GTS473            |           | 94GTS473            |           |
| RFW#                       |             |            | 006                 |           | 005                 |           |
| Sample Depth               |             |            | 0-6"                |           | 0-6"                |           |
| Dilution Factor            |             |            | 1.00                |           | 1.00                |           |
| Matrix                     |             |            | soil                |           | soil                |           |
| Units                      | mg/kg       | mg/kg      | mg/kg               |           | mg/kg               |           |
| Sampling Date              |             |            | 12/1/94             |           | 12/1/94             |           |
| Analysis Date              |             |            | 12/9/94             |           | 12/9/94             |           |
| Analysis                   | Standard    | Standard   | Analytical          | Reporting | Analytical          | Reporting |
|                            | fresh water | salt water | Result              | Limit     | Result              | Limit     |
|                            |             |            |                     |           |                     |           |
| % Solids                   |             |            | 28.7                | 0.10      | 68.1                | 0.10      |
| Silver                     | 1           | 1          | 2.1 U               | 2.1       | 0.80 U              | 0.80      |
| Aluminum                   |             |            | 9060                | 18.1      | 8200                | 6.9       |
| Arsenic                    | 33          | 8.2        | 13.6                | 2.0 *     | 14.5                | 1.8 *     |
| Barium                     |             |            | 87.6                | 1.4       | 76.6                | 0.54      |
| Beryllium                  |             |            | 3.2                 | 1.0       | 1.4                 | 0.39      |
| Calcium                    |             |            | 2060                | 8.1       | 3180                | 3.1       |
| Cadmium                    | 5           | 1.2        | 2.3 U               | 2.3       | 0.88 U              | 0.88      |
| Cobalt                     |             |            | 119                 | 1.9       | 5.7                 | 0.72      |
| Chromium                   | 80          | 81         | 88.1                | 4.3       | 85.8                | 1.6       |
| Copper                     | 70          | 34         | 48.4                | 1.6       | 5.5                 | 0.62      |
| Iron                       |             |            | 26500               | 3.2       | 61900               | 1.2       |
| Mercury                    | 0.15        | 0.15       | 1.7                 | 0.32      | 0.14 U              | 0.14      |
| Potassium                  |             |            | 3410                | 555       | 10200               | 211       |
| Magnesium                  |             |            | 1470                | 25.8      | 3280                | 9.8       |
| Manganese                  |             |            | 67.4                | 1.4       | 70.2                | 0.52      |
| Sodium                     |             |            | 189                 | 10.4      | 77.5                | 4.0       |
| Nickel                     | 30          | 20.9       | 131                 | 8.7       | 11.8                | 3.3       |
| Lead                       | 35          | 46.7       | 64.1                | 5.0 **    | 21.2                | 3.6 **    |
| Antimony                   |             |            | 14.5 U              | 14.5      | 5.5 U               | 5.5       |
| Selenium                   |             |            | 1.7                 | 0.56      | 0.21                | 0.20      |
| Thallium                   |             |            | 0.68 U              | 0.68      | 0.25 U              | 0.25      |
| Vanadium                   |             |            | 49.1                | 2.0       | 47.0                | 0.75      |
| Zinc                       | 120         | 150        | 162                 | 1.9       | 117                 | 0.72      |
| Cyanide                    |             |            | 3.1                 | 1.7       | 0.49 U              | 0.49      |
| Dilution Factor            |             |            | * = 2.00, ** = 5.00 |           | * = 5.00, ** = 10.0 |           |
| Method:TAL Metals, Cyanide |             |            |                     |           |                     |           |

**MAIN POST  
SEDIMENT PESTICIDES/PCBS**

|                            |             |            |               |           |                 |           |               |           |
|----------------------------|-------------|------------|---------------|-----------|-----------------|-----------|---------------|-----------|
| Geographical Location      |             |            | AOC3          |           | AOC3            |           | AOC3          |           |
| Sample                     |             |            | MP08-SD01-A01 |           | MP08-SD01-A01RE |           | MP08-SD01-C01 |           |
| Sample Type                |             |            |               |           |                 |           | Duplicate     |           |
| Batch#                     |             |            | 9412G921      |           | 9412G921        |           | 9412G921      |           |
| Prep#                      |             |            | 94GP1049      |           | 95GP0044        |           | 94GP1049      |           |
| RFW#                       |             |            | 013           |           | 013RE           |           | 014           |           |
| Sample Depth               |             |            | 0-6"          |           | 0-6"            |           | 0-6"          |           |
| Dilution Factor            |             |            | 1.00          |           | 1.00            |           | 1.00          |           |
| Matrix                     |             |            | soil          |           | soil            |           | soil          |           |
| Units                      | mg/kg       | mg/kg      | mg/kg         |           | mg/kg           |           | mg/kg         |           |
| Sampling Date              |             |            | 12/1/94       |           | 12/1/94         |           | 12/1/94       |           |
| Analysis Date              |             |            | 1/11/95       |           | 1/17/95         |           | 1/11/95       |           |
| Analysis                   | Standard    | Standard   | Analytical    | Reporting | Analytical      | Reporting | Analytical    | Reporting |
|                            | fresh water | salt water | Result        | Limit     | Result          | Limit     | Result        | Limit     |
| alpha-BHC                  |             |            | 0.0029 U      | 0.0029    | 0.0029 U        | 0.0029    | 0.0028 U      | 0.0028    |
| beta-BHC                   |             |            | 0.0029 U      | 0.0029    | 0.0029 U        | 0.0029    | 0.0028 U      | 0.0028    |
| delta-BHC                  |             |            | 0.0029 U      | 0.0029    | 0.0029 U        | 0.0029    | 0.0028 U      | 0.0028    |
| gamma-BHC (Lindane)        |             |            | 0.0029 U      | 0.0029    | 0.0029 U        | 0.0029    | 0.0028 U      | 0.0028    |
| Heptachlor                 |             |            | 0.0029 U      | 0.0029    | 0.0029 U        | 0.0029    | 0.0028 U      | 0.0028    |
| Aldrin                     |             |            | 0.0029 U      | 0.0029    | 0.0029 U        | 0.0029    | 0.0028 U      | 0.0028    |
| Heptachlor epoxide         |             |            | 0.0029 U      | 0.0029    | 0.0029 U        | 0.0029    | 0.0028 U      | 0.0028    |
| Endosulfan I               |             |            | 0.0029 U      | 0.0029    | 0.0029 U        | 0.0029    | 0.0028 U      | 0.0028    |
| Dieldrin                   |             |            | 0.0059 U      | 0.0059    | 0.0058 U        | 0.0058    | 0.0055 U      | 0.0055    |
| 4,4'-DDE                   | 0.002       | 0.0022     | 0.0059 U      | 0.0059    | 0.0058 U        | 0.0058    | 0.0055 U      | 0.0055    |
| Endrin                     |             |            | 0.0059 U      | 0.0059    | 0.0058 U        | 0.0058    | 0.0055 U      | 0.0055    |
| Endosulfan II              |             |            | 0.0059 U      | 0.0059    | 0.0058 U        | 0.0058    | 0.0055 U      | 0.0055    |
| 4,4'-DDD                   | 0.002       |            | 0.0059 U      | 0.0059    | 0.0058 U        | 0.0058    | 0.0055 U      | 0.0055    |
| Endosulfan sulfate         |             |            | 0.0059 U      | 0.0059    | 0.0058 U        | 0.0058    | 0.0055 U      | 0.0055    |
| 4,4'-DDT                   | 0.00183     | 0.00158    | 0.0059 U      | 0.0059    | 0.0058 U        | 0.0058    | 0.0055 U      | 0.0055    |
| Methoxychlor               |             |            | 0.029 U       | 0.029     | 0.029 U         | 0.029     | 0.028 U       | 0.028     |
| Endrin ketone              |             |            | 0.0059 U      | 0.0059    | 0.0058 U        | 0.0058    | 0.0055 U      | 0.0055    |
| Endrin aldehyde            |             |            | 0.0059 U      | 0.0059    | 0.0058 U        | 0.0058    | 0.0055 U      | 0.0055    |
| alpha-Chlordane            |             |            | 0.0029 U      | 0.0029    | 0.0029 U        | 0.0029    | 0.0028 U      | 0.0028    |
| gamma-Chlordane            |             |            | 0.0029 U      | 0.0029    | 0.0029 U        | 0.0029    | 0.0028 U      | 0.0028    |
| Toxaphene                  |             |            | 0.29 U        | 0.29      | 0.29 U          | 0.29      | 0.28 U        | 0.28      |
| Aroclor-1016               |             |            | 0.059 U       | 0.059     | 0.058 U         | 0.058     | 0.055 U       | 0.055     |
| Aroclor-1221               |             |            | 0.12 U        | 0.12      | 0.12 U          | 0.12      | 0.11 U        | 0.11      |
| Aroclor-1232               |             |            | 0.059 U       | 0.059     | 0.058 U         | 0.058     | 0.055 U       | 0.055     |
| Aroclor-1242               |             |            | 0.059 U       | 0.059     | 0.058 U         | 0.058     | 0.055 U       | 0.055     |
| Aroclor-1248               |             |            | 0.059 U       | 0.059     | 0.058 U         | 0.058     | 0.055 U       | 0.055     |
| Aroclor-1254               |             |            | 0.059 U       | 0.059     | 0.058 U         | 0.058     | 0.055 U       | 0.055     |
| Aroclor-1260               |             |            | 0.059 U       | 0.059     | 0.058 U         | 0.058     | 0.055 U       | 0.055     |
| Method:TCL Pesticides/PCBs |             |            |               |           |                 |           |               |           |

**MAIN POST  
SEDIMENT PESTICIDES/PCBS (OFFSITE DATA)**

|                            |             |            |                 |           |                 |           |
|----------------------------|-------------|------------|-----------------|-----------|-----------------|-----------|
| Geographical Location      |             |            | Background SS01 |           | Background SS02 |           |
| Sample                     |             |            | SS01-SD01-A01   |           | SS01-SD02-A01   |           |
| Batch#                     |             |            | 9412G922        |           | 9412G922        |           |
| Prep#                      |             |            | 94GP1049        |           | 94GP1049        |           |
| RFW#                       |             |            | 006             |           | 005             |           |
| Sample Depth               |             |            | 0-6"            |           | 0-6"            |           |
| Dilution Factor            |             |            | 1.00            |           | 1.00            |           |
| Matrix                     |             |            | soil            |           | soil            |           |
| Units                      | mg/kg       | mg/kg      | mg/kg           |           | mg/kg           |           |
| Sampling Date              |             |            | 12/2/94         |           | 12/2/94         |           |
| Analysis Date              |             |            | 1/12/95         |           | 1/12/95         |           |
| Analysis                   | Standard    | Standard   | Analytical      | Reporting | Analytical      | Reporting |
|                            | fresh water | salt water | Result          | Limit     | Result          | Limit     |
| alpha-BHC                  |             |            | 0.0057 U        | 0.0057    | 0.0024 U        | 0.0024    |
| beta-BHC                   |             |            | 0.0057 U        | 0.0057    | 0.0024 U        | 0.0024    |
| delta-BHC                  |             |            | 0.0057 U        | 0.0057    | 0.0024 U        | 0.0024    |
| gamma-BHC (Lindane)        |             |            | 0.0057 U        | 0.0057    | 0.0024 U        | 0.0024    |
| Heptachlor                 |             |            | 0.0057 U        | 0.0057    | 0.0024 U        | 0.0024    |
| Aldrin                     |             |            | 0.0057 U        | 0.0057    | 0.0024 U        | 0.0024    |
| Heptachlor epoxide         |             |            | 0.0057 U        | 0.0057    | 0.014 P         | 0.0024    |
| Endosulfan I               |             |            | 0.0057 U        | 0.0057    | 0.0024 J        | 0.0024    |
| Dieldrin                   |             |            | 0.011 U         | 0.011     | 0.0049 U        | 0.0049    |
| 4,4'-DDE                   | 0.002       | 0.0022     | 0.0092 J        | 0.011     | 0.002 JP        | 0.0049    |
| Endrin                     |             |            | 0.011 U         | 0.011     | 0.0049 U        | 0.0049    |
| Endosulfan II              |             |            | 0.011 U         | 0.011     | 0.0049 U        | 0.0049    |
| 4,4'-DDD                   | 0.002       |            | 0.013           | 0.011     | 0.0049 U        | 0.0049    |
| Endosulfan sulfate         |             |            | 0.011 U         | 0.011     | 0.0049 U        | 0.0049    |
| 4,4'-DDT                   | 0.00183     | 0.00158    | 0.0057 JP       | 0.011     | 0.0024 JP       | 0.0049    |
| Methoxychlor               |             |            | 0.057 U         | 0.057     | 0.024 U         | 0.024     |
| Endrin ketone              |             |            | 0.011 U         | 0.011     | 0.0049 U        | 0.0049    |
| Endrin aldehyde            |             |            | 0.011 U         | 0.011     | 0.0049 U        | 0.0049    |
| alpha-Chlordane            |             |            | 0.011 P         | 0.0057    | 0.0024 P        | 0.0024    |
| gamma-Chlordane            |             |            | 0.0092 P        | 0.0057    | 0.0015 JP       | 0.0024    |
| Toxaphene                  |             |            | 0.57 U          | 0.57      | 0.24 U          | 0.24      |
| Aroclor-1016               |             |            | 0.11 U          | 0.11      | 0.049 U         | 0.049     |
| Aroclor-1221               |             |            | 0.23 U          | 0.23      | 0.098 U         | 0.098     |
| Aroclor-1232               |             |            | 0.11 U          | 0.11      | 0.049 U         | 0.049     |
| Aroclor-1242               |             |            | 0.11 U          | 0.11      | 0.049 U         | 0.049     |
| Aroclor-1248               |             |            | 0.11 U          | 0.11      | 0.049 U         | 0.049     |
| Aroclor-1254               |             |            | 0.11 U          | 0.11      | 0.049 U         | 0.049     |
| Aroclor-1260               |             |            | 0.11 U          | 0.11      | 0.049 U         | 0.049     |
| Method:TCL Pesticides/PCBs |             |            |                 |           |                 |           |

**MAIN POST  
SURFACE WATER VOLATILES**

| Geographical Location      |             |            |      | M2            |               | M2            |               | M3            |               | M3            |      | M3         |      | M14        |      | M14        |      |
|----------------------------|-------------|------------|------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|------|------------|------|------------|------|------------|------|
| Sample                     |             |            |      | MP02-SW01-A01 | MP02-SW02-A01 | MP06-SW01-A01 | MP06-SW01-C01 | MP10-SW01-A01 | MP14-SW01-A01 | MP14-SW02-A01 |      |            |      |            |      |            |      |
| Sample Type                |             |            |      |               |               |               | Duplicate     |               |               |               |      |            |      |            |      |            |      |
| Batch#                     |             |            |      | 9412G921      | 9412G921      | 9412G921      | 9412G921      | 9412G922      | 9412G921      | 9412G921      |      |            |      |            |      |            |      |
| Prep#                      |             |            |      | 94GVE343      | 94GVE343      | 94GVE343      | 94GVE343      | 94GVE348      | 94GVE348      | 94GVE343      |      |            |      |            |      |            |      |
| RFW#                       |             |            |      | 007           | 009           | 003           | 005           | 001           | 018           | 011           |      |            |      |            |      |            |      |
| Dilution Factor            |             |            |      | 1.00          | 1.00          | 1.00          | 1.00          | 1.00          | 1.00          | 1.00          |      |            |      |            |      |            |      |
| Matrix                     |             |            |      | water         | water         | water         | water         | water         | water         | water         |      |            |      |            |      |            |      |
| Units                      | ug/l        | ug/l       | ug/l | ug/l          | ug/l          | ug/l          | ug/l          | ug/l          | ug/l          | ug/l          |      |            |      |            |      |            |      |
| Sampling Date              |             |            |      | 12/1/94       | 12/1/94       | 12/1/94       | 12/1/94       | 12/1/94       | 12/1/94       | 12/1/94       |      |            |      |            |      |            |      |
| Analysis Date              |             |            |      | 12/7/94       | 12/7/94       | 12/7/94       | 12/7/94       | 12/9/94       | 12/9/94       | 12/7/94       |      |            |      |            |      |            |      |
| Analysis                   | Standard    | Standard   | MDL  | Analytical    | CRQL          | Analytical    | CRQL          | Analytical    | CRQL          | Analytical    | CRQL | Analytical | CRQL | Analytical | CRQL | Analytical | CRQL |
|                            | fresh water | salt water |      | Result        |               | Result        |               | Result        |               | Result        |      | Result     |      | Result     |      | Result     |      |
| Chloromethane              | 5.7         |            | 7.3  | 10 U          | 10            | 10 U          | 10            | 10 U          | 10            | 10 U          | 10   | 10 U       | 10   | 10 U       | 10   | 10 U       | 10   |
| Bromomethane               | 48.4        | 4000       | 6.7  | 10 U          | 10            | 10 U          | 10            | 10 U          | 10            | 10 U          | 10   | 10 U       | 10   | 10 U       | 10   | 10 U       | 10   |
| Vinyl Chloride             | 0.083       | 525        | 7.9  | 10 U          | 10            | 10 U          | 10            | 10 U          | 10            | 10 U          | 10   | 10 U       | 10   | 10 U       | 10   | 10 U       | 10   |
| Chloroethane               |             |            | 9.1  | 10 U          | 10            | 10 U          | 10            | 10 U          | 10            | 10 U          | 10   | 10 U       | 10   | 10 U       | 10   | 10 U       | 10   |
| Methylene Chloride         | 2.49        | 1600       | 2.7  | 10 U          | 10            | 10 U          | 10            | 10 U          | 10            | 10 U          | 10   | 10 U       | 10   | 10 U       | 10   | 10 U       | 10   |
| Acetone                    |             |            | 6.9  | 10 U          | 10            | 10 U          | 10            | 10 U          | 10            | 10 U          | 10   | 10 U       | 10   | 10 U       | 10   | 10 U       | 10   |
| Carbon Disulfide           |             |            | 4.4  | 10 U          | 10            | 10 U          | 10            | 10 U          | 10            | 10 U          | 10   | 10 U       | 10   | 10 U       | 10   | 10 U       | 10   |
| 1,1-Dichloroethene         | 4.81        |            | 4.9  | 10 U          | 10            | 10 U          | 10            | 10 U          | 10            | 10 U          | 10   | 10 U       | 10   | 10 U       | 10   | 10 U       | 10   |
| 1,1-Dichloroethane         |             |            | 3.0  | 10 U          | 10            | 10 U          | 10            | 10 U          | 10            | 10 U          | 10   | 10 U       | 10   | 10 U       | 10   | 10 U       | 10   |
| 1,2-Dichloroethene (total) |             |            | 4.4  | 3 J           | 10            | 2 J           | 10            | 10 U          | 10            | 10 U          | 10   | 10 U       | 10   | 4 J        | 10   | 5 J        | 10   |
| Chloroform                 | 5.67        | 470        | 2.9  | 10 U          | 10            | 10 U          | 10            | 10 U          | 10            | 10 U          | 10   | 10 U       | 10   | 10 U       | 10   | 10 U       | 10   |
| 1,2-Dichloroethane         | 0.291       | 99         | 2.4  | 10 U          | 10            | 10 U          | 10            | 10 U          | 10            | 10 U          | 10   | 10 U       | 10   | 10 U       | 10   | 10 U       | 10   |
| 2-Butanone                 |             |            | 4.1  | 10 U          | 10            | 10 U          | 10            | 10 U          | 10            | 10 U          | 10   | 10 U       | 10   | 10 U       | 10   | 10 U       | 10   |
| 1,1,1-Trichloroethane      | 127         |            | 1.7  | 10 U          | 10            | 10 U          | 10            | 10 U          | 10            | 10 U          | 10   | 10 U       | 10   | 10 U       | 10   | 10 U       | 10   |
| Carbon Tetrachloride       | 0.363       | 6.31       | 1.5  | 10 U          | 10            | 10 U          | 10            | 10 U          | 10            | 10 U          | 10   | 10 U       | 10   | 10 U       | 10   | 10 U       | 10   |
| Bromodichloromethane       | 0.266       | 22         | 2.0  | 10 U          | 10            | 10 U          | 10            | 10 U          | 10            | 10 U          | 10   | 10 U       | 10   | 10 U       | 10   | 10 U       | 10   |
| 1,2-Dichloropropane        |             |            | 1.7  | 10 U          | 10            | 10 U          | 10            | 10 U          | 10            | 10 U          | 10   | 10 U       | 10   | 10 U       | 10   | 10 U       | 10   |
| cis-1,3-Dichloropropene    |             |            | 3.0  | 10 U          | 10            | 10 U          | 10            | 10 U          | 10            | 10 U          | 10   | 10 U       | 10   | 10 U       | 10   | 10 U       | 10   |
| Trichloroethene            | 1.09        | 81         | 2.0  | 2 J           | 10            | 2 J           | 10            | 10 U          | 10            | 10 U          | 10   | 10 U       | 10   | 10 U       | 10   | 10 U       | 10   |
| Dibromochloromethane       | 72.6        |            | 2.4  | 10 U          | 10            | 10 U          | 10            | 10 U          | 10            | 10 U          | 10   | 10 U       | 10   | 10 U       | 10   | 10 U       | 10   |
| 1,1,2-Trichloroethane      | 13.5        |            | 4.3  | 10 U          | 10            | 10 U          | 10            | 10 U          | 10            | 10 U          | 10   | 10 U       | 10   | 10 U       | 10   | 10 U       | 10   |
| Benzene                    | 0.15        | 71         | 3.3  | 10 U          | 10            | 10 U          | 10            | 10 U          | 10            | 10 U          | 10   | 10 U       | 10   | 10 U       | 10   | 10 U       | 10   |
| trans-1,3-Dichloropropene  | 0.193       | 1700       | 2.4  | 10 U          | 10            | 10 U          | 10            | 10 U          | 10            | 10 U          | 10   | 10 U       | 10   | 10 U       | 10   | 10 U       | 10   |
| Bromoform                  | 4.38        | 360        | 3.1  | 10 U          | 10            | 10 U          | 10            | 10 U          | 10            | 10 U          | 10   | 10 U       | 10   | 10 U       | 10   | 10 U       | 10   |
| 4-Methyl-2-pentanone       |             |            | 5.5  | 10 U          | 10            | 10 U          | 10            | 10 U          | 10            | 10 U          | 10   | 10 U       | 10   | 10 U       | 10   | 10 U       | 10   |
| 2-Hexanone                 |             |            | 3.9  | 10 U          | 10            | 10 U          | 10            | 10 U          | 10            | 10 U          | 10   | 10 U       | 10   | 10 U       | 10   | 10 U       | 10   |
| Tetrachloroethene          | 0.388       | 4.29       | 4.0  | 5 J           | 10            | 5 J           | 10            | 10 U          | 10            | 10 U          | 10   | 10 U       | 10   | 10 U       | 10   | 10 U       | 10   |
| 1,1,2,2-Tetrachloroethane  | 1.72        |            | 4.2  | 10 U          | 10            | 10 U          | 10            | 10 U          | 10            | 10 U          | 10   | 10 U       | 10   | 10 U       | 10   | 10 U       | 10   |
| Toluene                    | 7440        | 200000     | 2.7  | 10 U          | 10            | 10 U          | 10            | 10 U          | 10            | 10 U          | 10   | 10 U       | 10   | 10 U       | 10   | 10 U       | 10   |
| Chlorobenzene              | 22          | 21000      | 2.7  | 10 U          | 10            | 10 U          | 10            | 10 U          | 10            | 10 U          | 10   | 10 U       | 10   | 10 U       | 10   | 10 U       | 10   |
| Ethylbenzene               | 3030        | 27900      | 3.1  | 10 U          | 10            | 10 U          | 10            | 10 U          | 10            | 10 U          | 10   | 10 U       | 10   | 10 U       | 10   | 10 U       | 10   |
| Styrene                    |             |            | 3.8  | 10 U          | 10            | 10 U          | 10            | 10 U          | 10            | 10 U          | 10   | 10 U       | 10   | 10 U       | 10   | 10 U       | 10   |
| Xylene (total)             |             |            | 3.8  | 10 U          | 10            | 10 U          | 10            | 10 U          | 10            | 10 U          | 10   | 10 U       | 10   | 10 U       | 10   | 10 U       | 10   |
| Method:TCL Volatiles       |             |            |      |               |               |               |               |               |               |               |      |            |      |            |      |            |      |

**MAIN POST**  
**SURFACE WATER VOLATILES (OFFSITE DATA)**

| Geographical Location      |             |            |      | Background SS01 | Background SS02 |            |      |
|----------------------------|-------------|------------|------|-----------------|-----------------|------------|------|
| Sample                     |             |            |      | SS01-SW01-A01   | SS01-SW02-A01   |            |      |
| Batch#                     |             |            |      | 9412G922        | 9412G922        |            |      |
| Prep#                      |             |            |      | 94GGVE348       | 94GGVE348       |            |      |
| RFW#                       |             |            |      | 001             | 003             |            |      |
| Dilution Factor            |             |            |      | 1.00            | 1.00            |            |      |
| Matrix                     |             |            |      | water           | water           |            |      |
| Units                      | ug/l        | ug/l       | ug/l | ug/l            | ug/l            |            |      |
| Sampling Date              |             |            |      | 12/1/94         | 12/1/94         |            |      |
| Analysis Date              |             |            |      | 12/9/94         | 12/9/94         |            |      |
| Analysis                   | Standard    | Standard   | MDL  | Analytical      | CRQL            | Analytical | CRQL |
|                            | fresh water | salt water |      | Result          |                 | Result     |      |
| Chloromethane              | 5.7         |            | 7.3  | 10 U            | 10              | 10 U       | 10   |
| Bromomethane               | 48.4        | 4000       | 6.7  | 10 U            | 10              | 10 U       | 10   |
| Vinyl Chloride             | 0.083       | 525        | 7.9  | 10 U            | 10              | 10 U       | 10   |
| Chloroethane               |             |            | 9.1  | 10 U            | 10              | 10 U       | 10   |
| Methylene Chloride         | 2.49        | 1600       | 2.7  | 10 U            | 10              | 10 U       | 10   |
| Acetone                    |             |            | 6.9  | 10 U            | 10              | 10 U       | 10   |
| Carbon Disulfide           |             |            | 4.4  | 10 U            | 10              | 10 U       | 10   |
| 1,1-Dichloroethene         | 4.81        |            | 4.9  | 10 U            | 10              | 10 U       | 10   |
| 1,1-Dichloroethane         |             |            | 3.0  | 10 U            | 10              | 10 U       | 10   |
| 1,2-Dichloroethene (total) |             |            | 4.4  | 10 U            | 10              | 10 U       | 10   |
| Chloroform                 | 5.67        | 470        | 2.9  | 10 U            | 10              | 10 U       | 10   |
| 1,2-Dichloroethane         | 0.291       | 99         | 2.4  | 10 U            | 10              | 10 U       | 10   |
| 2-Butanone                 |             |            | 4.1  | 10 U            | 10              | 10 U       | 10   |
| 1,1,1-Trichloroethane      | 127         |            | 1.7  | 10 U            | 10              | 10 U       | 10   |
| Carbon Tetrachloride       | 0.363       | 6.31       | 1.5  | 10 U            | 10              | 10 U       | 10   |
| Bromodichloromethane       | 0.266       | 22         | 2.0  | 10 U            | 10              | 10 U       | 10   |
| 1,2-Dichloropropane        |             |            | 1.7  | 10 U            | 10              | 10 U       | 10   |
| cis-1,3-Dichloropropene    |             |            | 3.0  | 10 U            | 10              | 10 U       | 10   |
| Trichloroethene            | 1.09        | 81         | 2.0  | 10 U            | 10              | 10 U       | 10   |
| Dibromochloromethane       | 72.6        |            | 2.4  | 10 U            | 10              | 10 U       | 10   |
| 1,1,2-Trichloroethane      | 13.5        |            | 4.3  | 10 U            | 10              | 10 U       | 10   |
| Benzene                    | 0.15        | 71         | 3.3  | 10 U            | 10              | 10 U       | 10   |
| trans-1,3-Dichloropropene  | 0.193       | 1700       | 2.4  | 10 U            | 10              | 10 U       | 10   |
| Bromoform                  | 4.38        | 360        | 3.1  | 10 U            | 10              | 10 U       | 10   |
| 4-Methyl-2-pentanone       |             |            | 5.5  | 10 U            | 10              | 10 U       | 10   |
| 2-Hexanone                 |             |            | 3.9  | 10 U            | 10              | 10 U       | 10   |
| Tetrachloroethene          | 0.388       | 4.29       | 4.0  | 10 U            | 10              | 10 U       | 10   |
| 1,1,2,2-Tetrachloroethane  | 1.72        |            | 4.2  | 10 U            | 10              | 10 U       | 10   |
| Toluene                    | 7440        | 200000     | 2.7  | 10 U            | 10              | 10 U       | 10   |
| Chlorobenzene              | 22          | 21000      | 2.7  | 10 U            | 10              | 10 U       | 10   |
| Ethylbenzene               | 3030        | 27900      | 3.1  | 10 U            | 10              | 10 U       | 10   |
| Styrene                    |             |            | 3.8  | 10 U            | 10              | 10 U       | 10   |
| Xylene (total)             |             |            | 3.8  | 10 U            | 10              | 10 U       | 10   |
| Total Est. Conc. of TIC.   |             |            |      |                 |                 |            |      |
| Method: TCL Volatiles      |             |            |      |                 |                 |            |      |



**MAIN POST**  
**SURFACE WATER SEMIVOLATILES**

| Geographical Location        |             |            |      | M2            |      | M2            |      | M3            |      | M3            |      | M3            |      | M14           |      | M14           |      |
|------------------------------|-------------|------------|------|---------------|------|---------------|------|---------------|------|---------------|------|---------------|------|---------------|------|---------------|------|
| Sample                       |             |            |      | MP02-SW01-A01 |      | MP02-SW02-A01 |      | MP06-SW01-A01 |      | MP06-SW01-C01 |      | MP10-SW01-A01 |      | MP14-SW01-A01 |      | MP14-SW02-A01 |      |
| Sample Type                  |             |            |      |               |      |               |      |               |      | Duplicate     |      |               |      |               |      |               |      |
| Batch#                       |             |            |      | 9412G921      |      | 9412G921      |      | 9412G921      |      | 9412G921      |      | 9412G922      |      | 9412G921      |      | 9412G921      |      |
| Prep#                        |             |            |      | 94GBO800      |      | 94GBO800      |      | 94GBO800      |      | 94GBO800      |      | 94GBO800      |      | 94GBO809      |      | 94GBO800      |      |
| RFW#                         |             |            |      | 007           |      | 009           |      | 003           |      | 005           |      | 001           |      | 018           |      | 011           |      |
| Dilution Factor              |             |            |      | 1.00          |      | 1.00          |      | 1.00          |      | 1.00          |      | 1.00          |      | 1.00          |      | 1.00          |      |
| Matrix                       |             |            |      | water         |      | water         |      | water         |      | water         |      | water         |      | water         |      | water         |      |
| Units                        | ug/l        | ug/l       | ug/l | ug/l          |      | ug/l          |      | ug/l          |      | ug/l          |      | ug/l          |      | ug/l          |      | ug/l          |      |
| Sampling Date                |             |            |      | 12/1/94       |      | 12/1/94       |      | 12/1/94       |      | 12/1/94       |      | 12/1/94       |      | 12/1/94       |      | 12/1/94       |      |
| Analysis Date                |             |            |      | 12/22/94      |      | 12/22/94      |      | 12/22/94      |      | 12/22/94      |      | 12/22/94      |      | 12/22/94      |      | 12/22/94      |      |
| Analysis                     | Standard    | Standard   | MDL  | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL |
|                              | fresh water | salt water |      | Result        |      | Result        |      | Result        |      | Result        |      | Result        |      | Result        |      | Result        |      |
| Phenol                       | 20900       | 4600000    | 7.1  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| bis(2-Chloroethyl) ether     | 0.0311      | 1.4        | 9.7  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| 2-Chlorophenol               | 122         | 402        | 7.3  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| 1,3-Dichlorobenzene          | 2620        | 22200      | 5.3  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| 1,4-Dichlorobenzene          | 343         | 3159       | 4.8  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| 1,2-Dichlorobenzene          | 2520        | 16500      | 5.7  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| 2-Methylphenol               |             |            | 6.7  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| 2,2'-oxybis(1-Chloropropane) |             |            | 7.0  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| 4-Methylphenol               |             |            | 12.9 | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| N-Nitroso-di-n-propylamine   |             |            | 8.0  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Hexachloroethane             | 2.73        | 12.4       | 5.3  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Nitrobenzene                 | 16          | 1900       | 7.4  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Isophorone                   | 552         |            | 3.9  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| 2-Nitrophenol                |             |            | 7.0  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| 2,4-Dimethylphenol           |             |            | 4.8  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| bis(2-Chloroethoxy) methane  |             |            | 6.1  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| 2,4-Dichlorophenol           | 92.7        | 794        | 4.4  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| 1,2,4-Trichlorobenzene       | 30.6        | 113        | 9.6  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Naphthalene                  |             |            | 8.4  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| 4-Chloroaniline              |             |            | 2.9  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Hexachlorobutadiene          | 6.94        |            | 4.6  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| 4-Chloro-3-methylphenol      |             |            | 3.1  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| 2-Methylnaphthalene          |             |            | 8.7  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Hexachlorocyclopentadiene    | 245         | 17000      | 3.6  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| 2,4,6-Trichlorophenol        | 2.14        | 6.53       | 5.6  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| 2,4,5-Trichlorophenol        | 2580        | 9790       | 4.7  | 25 U          | 25   | 25 U          | 25   | 25 U          | 25   | 25 U          | 25   | 25 U          | 25   | 25 U          | 25   | 25 U          | 25   |
| 2-Chloronaphthalene          |             |            | 8.2  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| 2-Nitroaniline               |             |            | 6.1  | 25 U          | 25   | 25 U          | 25   | 25 U          | 25   | 25 U          | 25   | 25 U          | 25   | 25 U          | 25   | 25 U          | 25   |
| Dimethyl phthalate           | 313000      | 2900000    | 4.4  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Acenaphthylene               |             |            | 6.0  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| 2,6-Dinitrotoluene           |             |            | 5.2  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| 3-Nitroaniline               |             |            | 5.2  | 25 U          | 25   | 25 U          | 25   | 25 U          | 25   | 25 U          | 25   | 25 U          | 25   | 25 U          | 25   | 25 U          | 25   |
| Acenaphthene                 |             |            | 6.7  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| 2,4-Dinitrophenol            | 69.7        | 14000      | 4.6  | 25 U          | 25   | 25 U          | 25   | 25 U          | 25   | 25 U          | 25   | 25 U          | 25   | 25 U          | 25   | 25 U          | 25   |
| 4-Nitrophenol                |             |            | 7.5  | 25 U          | 25   | 25 U          | 25   | 25 U          | 25   | 25 U          | 25   | 25 U          | 25   | 25 U          | 25   | 25 U          | 25   |

**MAIN POST**  
**SURFACE WATER SEMIVOLATILES**

| Geographical Location      |             |            |      | M2            |      | M2            |      | M3            |      | M3            |      | M3            |      | M14           |      | M14           |      |
|----------------------------|-------------|------------|------|---------------|------|---------------|------|---------------|------|---------------|------|---------------|------|---------------|------|---------------|------|
| Sample                     |             |            |      | MP02-SW01-A01 |      | MP02-SW02-A01 |      | MP06-SW01-A01 |      | MP06-SW01-C01 |      | MP10-SW01-A01 |      | MP14-SW01-A01 |      | MP14-SW02-A01 |      |
| Sample Type                |             |            |      |               |      |               |      |               |      | Duplicate     |      |               |      |               |      |               |      |
| Batch#                     |             |            |      | 9412G921      |      | 9412G921      |      | 9412G921      |      | 9412G921      |      | 9412G922      |      | 9412G921      |      | 9412G921      |      |
| Prep#                      |             |            |      | 94GBO800      |      | 94GBO800      |      | 94GBO800      |      | 94GBO800      |      | 94GBO800      |      | 94GBO809      |      | 94GBO800      |      |
| RFW#                       |             |            |      | 007           |      | 009           |      | 003           |      | 005           |      | 001           |      | 018           |      | 011           |      |
| Dilution Factor            |             |            |      | 1.00          |      | 1.00          |      | 1.00          |      | 1.00          |      | 1.00          |      | 1.00          |      | 1.00          |      |
| Matrix                     |             |            |      | water         |      | water         |      | water         |      | water         |      | water         |      | water         |      | water         |      |
| Units                      | ug/l        | ug/l       | ug/l | ug/l          |      | ug/l          |      | ug/l          |      | ug/l          |      | ug/l          |      | ug/l          |      | ug/l          |      |
| Sampling Date              |             |            |      | 12/1/94       |      | 12/1/94       |      | 12/1/94       |      | 12/1/94       |      | 12/1/94       |      | 12/1/94       |      | 12/1/94       |      |
| Analysis Date              |             |            |      | 12/22/94      |      | 12/22/94      |      | 12/22/94      |      | 12/22/94      |      | 12/22/94      |      | 12/22/94      |      | 12/22/94      |      |
| Analysis                   | Standard    | Standard   | MDL  | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL |
|                            | fresh water | salt water |      | Result        |      | Result        |      | Result        |      | Result        |      | Result        |      | Result        |      | Result        |      |
| Dibenzofuran               |             |            | 6.5  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| 2,4-Dinitrotoluene         | 0.11        | 9.1        | 5.8  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Diethyl phthalate          | 21200       | 111000     | 5.4  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| 4-Chlorophenyl-phenylether |             |            | 7.0  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Fluorene                   | 1340        |            | 6.3  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| 4-Nitroaniline             |             |            | 6.4  | 25 U          | 25   | 25 U          | 25   | 25 U          | 25   | 25 U          | 25   | 25 U          | 25   | 25 U          | 25   | 25 U          | 25   |
| 4,6-Dinitro-2-methylphenol |             |            | 5.3  | 25 U          | 25   | 25 U          | 25   | 25 U          | 25   | 25 U          | 25   | 25 U          | 25   | 25 U          | 25   | 25 U          | 25   |
| N-Nitrosodiphenylamine (1) |             |            | 4.2  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| 4-Bromophenyl-phenylether  |             |            | 5.3  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Hexachlorobenzene          | 0.000748    | 0.000775   | 5.5  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Pentachlorophenol          | 0.282       | 7.9        | 4.0  | 25 U          | 25   | 25 U          | 25   | 25 U          | 25   | 25 U          | 25   | 25 U          | 25   | 25 U          | 25   | 25 U          | 25   |
| Phenanthrene               |             |            | 5.0  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Anthracene                 | 9570        | 108000     | 4.6  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Carbazole                  |             |            | 4.4  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Di-n-butylphthalate        | 3530        | 15700      | 6.5  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Fluoranthene               | 310         | 393        | 6.0  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Pyrene                     | 797         | 8970       | 5.4  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Butylbenzylphthalate       | 239         | 416        | 5.3  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| 3,3'-Dichlorobenzidine     | 0.0386      | 0.0767     | 2.8  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Benzo(a)anthracene         | 0.0028      | 0.031      | 4.9  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Chrysene                   | 0.0028      | 0.031      | 4.4  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| bis(2-Ethylhexyl)phthalate | 1.76        | 5.92       | 9.7  | 10 U          | 10   | 4 J           | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 2 J           | 10   |
| Di-n-octyl phthalate       |             |            | 5.6  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Benzo(b)fluoranthene       | 0.0028      | 0.031      | 5.7  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Benzo(k)fluoranthene       | 0.0028      | 0.031      | 6.2  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Benzo(a)pyrene             | 0.0028      | 0.031      | 4.9  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Indeno(1,2,3-cd)pyrene     | 0.0028      | 0.031      | 7.1  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Dibenz(a,h)anthracene      | 0.0028      | 0.031      | 6.0  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Benzo(g,h,i)perylene       |             |            | 6.8  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Total Est. Conc. of TIC    |             |            |      | 11            |      | 17            |      | 28            |      | 3             |      | 10            |      | 11            |      | 2             |      |
| Method:TCL Semivolatiles   |             |            |      |               |      |               |      |               |      |               |      |               |      |               |      |               |      |

**MAIN POST**  
**SURFACE WATER SEMIVOLATILES (OFFSITE DATA)**

|                              |             |            |      |                 |                 |            |      |
|------------------------------|-------------|------------|------|-----------------|-----------------|------------|------|
| Geographical Location        |             |            |      | Background SS01 | Background SS02 |            |      |
| Sample                       |             |            |      | SS01-SW01-A01   | SS01-SW02-A01   |            |      |
| Batch#                       |             |            |      | 9412G921†       | 9412G922        |            |      |
| Prep#                        |             |            |      | 94GBO800        | 94GBO800        |            |      |
| RFW#                         |             |            |      | 001             | 003             |            |      |
| Dilution Factor              |             |            |      | 1.00            | 1.00            |            |      |
| Matrix                       |             |            |      | water           | water           |            |      |
| Units                        | ug/l        | ug/l       | ug/l | ug/l            | ug/l            |            |      |
| Sampling Date                |             |            |      | 12/1/94         | 12/1/94         |            |      |
| Analysis Date                |             |            |      | 12/22/94        | 12/22/94        |            |      |
| Analysis                     | Standard    | Standard   | MDL  | Analytical      | CRQL            | Analytical | CRQL |
|                              | fresh water | salt water |      | Result          |                 | Result     |      |
| Phenol                       | 20900       | 4600000    | 7.1  | 10 U            | 10              | 10 U       | 10   |
| bis(2-Chloroethyl) ether     | 0.0311      | 1.4        | 9.7  | 10 U            | 10              | 10 U       | 10   |
| 2-Chlorophenol               | 122         | 402        | 7.3  | 10 U            | 10              | 10 U       | 10   |
| 1,3-Dichlorobenzene          | 2620        | 22200      | 5.3  | 10 U            | 10              | 10 U       | 10   |
| 1,4-Dichlorobenzene          | 343         | 3159       | 4.8  | 10 U            | 10              | 10 U       | 10   |
| 1,2-Dichlorobenzene          | 2520        | 16500      | 5.7  | 10 U            | 10              | 10 U       | 10   |
| 2-Methylphenol               |             |            | 6.7  | 10 U            | 10              | 10 U       | 10   |
| 2,2'-oxybis(1-Chloropropane) |             |            | 7.0  | 10 U            | 10              | 10 U       | 10   |
| 4-Methylphenol               |             |            | 12.9 | 10 U            | 10              | 10 U       | 10   |
| N-Nitroso-di-n-propylamine   |             |            | 8.0  | 10 U            | 10              | 10 U       | 10   |
| Hexachloroethane             | 2.73        | 12.4       | 5.3  | 10 U            | 10              | 10 U       | 10   |
| Nitrobenzene                 | 16          | 1900       | 7.4  | 10 U            | 10              | 10 U       | 10   |
| Isophorone                   | 552         |            | 3.9  | 10 U            | 10              | 10 U       | 10   |
| 2-Nitrophenol                |             |            | 7.0  | 10 U            | 10              | 10 U       | 10   |
| 2,4-Dimethylphenol           |             |            | 4.8  | 10 U            | 10              | 10 U       | 10   |
| bis(2-Chloroethoxy) methane  |             |            | 6.1  | 10 U            | 10              | 10 U       | 10   |
| 2,4-Dichlorophenol           | 92.7        | 794        | 4.4  | 10 U            | 10              | 10 U       | 10   |
| 1,2,4-Trichlorobenzene       | 30.6        | 113        | 9.6  | 10 U            | 10              | 10 U       | 10   |
| Naphthalene                  |             |            | 8.4  | 10 U            | 10              | 10 U       | 10   |
| 4-Chloroaniline              |             |            | 2.9  | 10 U            | 10              | 10 U       | 10   |
| Hexachlorobutadiene          | 6.94        |            | 4.6  | 10 U            | 10              | 10 U       | 10   |
| 4-Chloro-3-methylphenol      |             |            | 3.1  | 10 U            | 10              | 10 U       | 10   |
| 2-Methylnaphthalene          |             |            | 8.7  | 10 U            | 10              | 10 U       | 10   |
| Hexachlorocyclopentadiene    | 245         | 17000      | 3.6  | 10 U            | 10              | 10 U       | 10   |
| 2,4,6-Trichlorophenol        | 2.14        | 6.53       | 5.6  | 10 U            | 10              | 10 U       | 10   |
| 2,4,5-Trichlorophenol        | 2580        | 9790       | 4.7  | 25 U            | 25              | 25 U       | 25   |
| 2-Chloronaphthalene          |             |            | 8.2  | 10 U            | 10              | 10 U       | 10   |
| 2-Nitroaniline               |             |            | 6.1  | 25 U            | 25              | 25 U       | 25   |
| Dimethylphthalate            | 313000      | 2900000    | 4.4  | 10 U            | 10              | 10 U       | 10   |
| Acenaphthylene               |             |            | 6.0  | 10 U            | 10              | 10 U       | 10   |
| 2,6-Dinitrotoluene           |             |            | 5.2  | 10 U            | 10              | 10 U       | 10   |
| 3-Nitroaniline               |             |            | 5.2  | 25 U            | 25              | 25 U       | 25   |
| Acenaphthene                 |             |            | 6.7  | 10 U            | 10              | 10 U       | 10   |
| 2,4-Dinitrophenol            | 69.7        | 14000      | 4.6  | 25 U            | 25              | 25 U       | 25   |
| 4-Nitrophenol                |             |            | 7.5  | 25 U            | 25              | 25 U       | 25   |

**MAIN POST**  
**SURFACE WATER SEMIVOLATILES (OFFSITE DATA)**

| Geographical Location      |             |            |      | Background SS01 |      | Background SS02 |      |
|----------------------------|-------------|------------|------|-----------------|------|-----------------|------|
| Sample                     |             |            |      | SS01-SW01-A01   |      | SS01-SW02-A01   |      |
| Batch#                     |             |            |      | 9412G921        |      | 9412G922        |      |
| Prep#                      |             |            |      | 94GBO800        |      | 94GBO800        |      |
| RFW#                       |             |            |      | 001             |      | 003             |      |
| Dilution Factor            |             |            |      | 1.00            |      | 1.00            |      |
| Matrix                     |             |            |      | water           |      | water           |      |
| Units                      | ug/l        | ug/l       | ug/l | ug/l            |      | ug/l            |      |
| Sampling Date              |             |            |      | 12/1/94         |      | 12/1/94         |      |
| Analysis Date              |             |            |      | 12/22/94        |      | 12/22/94        |      |
| Analysis                   | Standard    | Standard   | MDL  | Analytical      | CRQL | Analytical      | CRQL |
|                            | fresh water | salt water |      | Result          |      | Result          |      |
| Dibenzofuran               |             |            | 6.5  | 10 U            | 10   | 10 U            | 10   |
| 2,4-Dinitrotoluene         | 0.11        | 9.1        | 5.8  | 10 U            | 10   | 10 U            | 10   |
| Diethylphthalate           | 21200       | 111000     | 5.4  | 10 U            | 10   | 10 U            | 10   |
| 4-Chlorophenyl-phenylether |             |            | 7.0  | 10 U            | 10   | 10 U            | 10   |
| Fluorene                   | 1340        |            | 6.3  | 10 U            | 10   | 10 U            | 10   |
| 4-Nitroaniline             |             |            | 6.4  | 25 U            | 25   | 25 U            | 25   |
| 4,6-Dinitro-2-methylphenol |             |            | 5.3  | 25 U            | 25   | 25 U            | 25   |
| N-Nitrosodiphenylamine (1) |             |            | 4.2  | 10 U            | 10   | 10 U            | 10   |
| 4-Bromophenyl-phenylether  |             |            | 5.3  | 10 U            | 10   | 10 U            | 10   |
| Hexachlorobenzene          | 0.000748    | 0.000775   | 5.5  | 10 U            | 10   | 10 U            | 10   |
| Pentachlorophenol          | 0.282       | 7.9        | 4.0  | 25 U            | 25   | 25 U            | 25   |
| Phenanthrene               |             |            | 5.0  | 10 U            | 10   | 10 U            | 10   |
| Anthracene                 | 9570        | 108000     | 4.6  | 10 U            | 10   | 10 U            | 10   |
| Carbazole                  |             |            | 4.4  | 10 U            | 10   | 10 U            | 10   |
| Di-n-butylphthalate        | 3530        | 15700      | 6.5  | 10 U            | 10   | 10 U            | 10   |
| Fluoranthene               | 310         | 393        | 6.0  | 10 U            | 10   | 10 U            | 10   |
| Pyrene                     | 797         | 8970       | 5.4  | 10 U            | 10   | 10 U            | 10   |
| Butylbenzylphthalate       | 239         | 416        | 5.3  | 10 U            | 10   | 10 U            | 10   |
| 3,3'-Dichlorobenzidine     | 0.0386      | 0.0767     | 2.8  | 10 U            | 10   | 10 U            | 10   |
| Benzo(a)anthracene         | 0.0028      | 0.031      | 4.9  | 10 U            | 10   | 10 U            | 10   |
| Chrysene                   | 0.0028      | 0.031      | 4.4  | 10 U            | 10   | 10 U            | 10   |
| bis(2-Ethylhexyl)phthalate | 1.76        | 5.92       | 9.7  | 10 U            | 10   | 10 U            | 10   |
| Di-n-octyl phthalate       |             |            | 5.6  | 10 U            | 10   | 10 U            | 10   |
| Benzo(b)fluoranthene       | 0.0028      | 0.031      | 5.7  | 10 U            | 10   | 10 U            | 10   |
| Benzo(k)fluoranthene       | 0.0028      | 0.031      | 6.2  | 10 U            | 10   | 10 U            | 10   |
| Benzo(a)pyrene             | 0.0028      | 0.031      | 4.9  | 10 U            | 10   | 10 U            | 10   |
| Indeno(1,2,3-cd)pyrene     | 0.0028      | 0.031      | 7.1  | 10 U            | 10   | 10 U            | 10   |
| Dibenz(a,h)anthracene      | 0.0028      | 0.031      | 6.0  | 10 U            | 10   | 10 U            | 10   |
| Benzo(g,h,i)perylene       |             |            | 6.8  | 10 U            | 10   | 10 U            | 10   |
| Petroleum hydrocarbons     |             |            |      | 0.26 U          | 0.26 | 0.27 U          | 0.27 |
| Total Est. Conc. of TIC    |             |            |      | 13              |      | 15              |      |
| Method: TCL Semivolatiles  |             |            |      |                 |      |                 |      |

**MAIN POST  
SURFACE WATER INORGANICS**

| Geographical Location      |             |            | M2            |      | M2                |      | M2            |        | M2               |      | M3            |      | M3                |      |
|----------------------------|-------------|------------|---------------|------|-------------------|------|---------------|--------|------------------|------|---------------|------|-------------------|------|
| Sample                     |             |            | MP02-SW01-A01 |      | MP02-SW01-A01 SOL |      | MP02-SW02-A01 |        | MP02-SW02-A01SOL |      | MP06-SW01-A01 |      | MP06-SW01-A01 SOL |      |
| Sample Type                |             |            |               |      |                   |      |               |        |                  |      |               |      |                   |      |
| Batch#                     |             |            | 9412G921      |      | 9412G921          |      | 9412G921      |        | 9412G921         |      | 9412G921      |      | 9412G921          |      |
| Prep#                      |             |            | 94GCN260      |      | 94GI180           |      | 94GCN260      |        | 94GI180          |      | 94GCN264      |      | 94GI180           |      |
| RFW#                       |             |            | 007           |      | 008               |      | 009           |        | 010              |      | 003           |      | 004               |      |
| Dilution Factor            |             |            | 1.00          |      | 1.00              |      | 1.00          |        | 1.00             |      | 1.00          |      | 1.00              |      |
| Matrix                     |             |            | water         |      | water, filtered   |      | water         |        | water, filtered  |      | water         |      | water, filtered   |      |
| Units                      | ug/l        | ug/l       | ug/l          |      | ug/l              |      | ug/l          |        | ug/l             |      | ug/l          |      | ug/l              |      |
| Sampling Date              |             |            | 12/1/94       |      | 12/1/94           |      | 12/1/94       |        | 12/1/94          |      | 12/1/94       |      | 12/1/94           |      |
| Analysis Date              |             |            | 12/13/94      |      | 12/19/94          |      | 12/13/94      |        | 12/19/94         |      | 12/14/94      |      | 12/19/94          |      |
| Analysis                   | Standard    | Standard   | Analytical    | MDL  | Analytical        | MDL  | Analytical    | MDL    | Analytical       | MDL  | Analytical    | MDL  | Analytical        | MDL  |
|                            | fresh water | salt water | Result        |      | Result            |      | Result        |        | Result           |      | Result        |      | Result            |      |
| Silver                     | 164         |            | 3.1 U         | 3.1  | 3.1 U             | 3.1  | 3.1 U         | 3.1    | 3.1 U            | 3.1  | 3.1 U         | 3.1  | 3.1 U             | 3.1  |
| Aluminum                   |             |            | 258           | 26.7 | 26.7 U            | 26.7 | 263           | 26.7   | 26.7 U           | 26.7 | 155           | 26.7 | 26.7 U            | 26.7 |
| Arsenic                    | 0.017       | 0.136      | 1.6 U         | 1.6  | 1.6 U             | 1.6  | 1.6 U         | 1.6    | 1.6 U            | 1.6  | 1.6 U         | 1.6  | 1.6 U             | 1.6  |
| Barium                     | 2000        |            | 42.7          | 2.1  | 38.2              | 2.1  | 47            | 2.1    | 41.8             | 2.1  | 32.6          | 2.1  | 27.7              | 2.1  |
| Beryllium                  |             |            | 1.5 U         | 1.5  | 1.5 U             | 1.5  | 1.5 U         | 1.5    | 1.5 U            | 1.5  | 1.5 U         | 1.5  | 1.5 U             | 1.5  |
| Calcium                    |             |            | 18000         | 12.0 | 17700             | 12.0 | 19400         | 12.0   | 19000            | 12.0 | 32100         | 12.0 | 30400             | 12.0 |
| Cadmium                    | .10         |            | 3.4 U         | 3.4  | 3.4 U             | 3.4  | 3.4 U         | 3.4    | 3.4 U            | 3.4  | 3.4 U         | 3.4  | 3.4 U             | 3.4  |
| Cobalt                     |             |            | 4.5           | 2.8  | 4.1               | 2.8  | 4.8           | 2.8    | 2.8 U            | 2.8  | 2.8 U         | 2.8  | 2.8 U             | 2.8  |
| Chromium                   | 160         | 3230       | 6.4 U         | 6.4  | 6.4 U             | 6.4  | 6.4 U         | 6.4    | 6.4 U            | 6.4  | 6.4 U         | 6.4  | 6.4 U             | 6.4  |
| Copper                     |             |            | 3.1           | 2.4  | 4.2               | 2.4  | 2.9           | 2.4    | 4.9              | 2.4  | 2.4 U         | 2.4  | 2.4 U             | 2.4  |
| Iron                       |             |            | 2760          | 4.7  | 493               | 4.7  | 3020          | 4.7    | 681              | 4.7  | 2850          | 4.7  | 412               | 4.7  |
| Mercury                    | 0.144       | 0.146      | 0.20 U        | 0.20 | 0.20 U            | 0.20 | 0.20 U        | 0.20 U | 0.20 U           | 0.20 | 0.20 U        | 0.20 | 0.20 U            | 0.20 |
| Potassium                  |             |            | 2840          | 821  | 2860              | 821  | 2980          | 821    | 3180             | 821  | 5630          | 821  | 5170              | 821  |
| Magnesium                  |             |            | 2930          | 38.2 | 2860              | 38.2 | 3170          | 38.2   | 3070             | 38.2 | 9360          | 38.2 | 8840              | 38.2 |
| Manganese                  | 100         |            | 89.9          | 2.0  | 86.1              | 2.0  | 97.6          | 2.0    | 92.8             | 2.0  | 101           | 2.0  | 94.3              | 2.0  |
| Sodium                     |             |            | 25400         | 15.4 | 25200             | 15.4 | 27500         | 15.4   | 26900            | 15.4 | 52800         | 15.4 | 49800             | 15.4 |
| Nickel                     | 516         | 3900       | 12.8 U        | 12.8 | 14.7              | 12.8 | 12.8 U        | 12.8   | 12.8 U           | 12.8 | 12.8 U        | 12.8 | 12.8 U            | 12.8 |
| Lead                       | 5           |            | 3.1           | 1.6  | 7.6               | 1.6  | 2.3           | 1.6    | 1.6 U            | 1.6  | 4             | 1.6  | 1.6 U             | 1.6  |
| Antimony                   | 12.2        | 4300       | 21.5 U        | 21.5 | 21.5 U            | 21.5 | 21.5 U        | 21.5   | 21.5 U           | 21.5 | 21.5 U        | 21.5 | 21.5 U            | 21.5 |
| Selenium                   | 10          | 71         | 0.90 U        | 0.90 | 0.90 U            | 0.90 | 0.90 U        | 0.90 U | 0.90 U           | 0.90 | 1.1           | 0.90 | 0.90 U            | 0.90 |
| Thallium                   | 1.7         | 6.22       | 1.1 U         | 1.1  | 1.1 U             | 1.1  | 1.1 U         | 1.1    | 1.1 U            | 1.1  | 1.1 U         | 1.1  | 1.1 U             | 1.1  |
| Vanadium                   |             |            | 2.9 U         | 2.9  | 2.9 U             | 2.9  | 2.9 U         | 2.9    | 2.9 U            | 2.9  | 2.9 U         | 2.9  | 2.9 U             | 2.9  |
| Zinc                       |             |            | 29.1          | 2.8  | 19.4              | 2.8  | 32.9          | 2.8    | 21.1             | 2.8  | 12.1          | 2.8  | 7.8               | 2.8  |
| Cyanide                    | 5.2         | 1          | 10 U          | 10   |                   |      | 10 U          | 10     |                  |      | 10 U          | 10.0 |                   |      |
| Method:TAL Metals, Cyanide |             |            |               |      |                   |      |               |        |                  |      |               |      |                   |      |

**MAIN POST  
SURFACE WATER INORGANICS**

| Geographical Location      |             |            | M3            |      | M3                |      | M3            |      | M3                |      | M14           |      | M14               |      |
|----------------------------|-------------|------------|---------------|------|-------------------|------|---------------|------|-------------------|------|---------------|------|-------------------|------|
| Sample                     |             |            | MP06-SW01-C01 |      | MP06-SW01-C01 SOL |      | MP10-SW01-A01 |      | MP10-SW01-A01 SOL |      | MP14-SW01-A01 |      | MP14-SW01-A01 SOL |      |
| Sample Type                |             |            | Duplicate     |      | Duplicate         |      |               |      |                   |      |               |      |                   |      |
| Batch#                     |             |            | 9412G921      |      | 9412G921          |      | 9412G922      |      | 9412G922          |      | 9412G921      |      | 9412G921          |      |
| Prep#                      |             |            | 94GCN260      |      | 94GI180           |      | 94GCN264      |      | 94GI186           |      | 94GCN260      |      | 94GI180           |      |
| RFW#                       |             |            | 005           |      | 006               |      | 001           |      | 002               |      | 018           |      | 019               |      |
| Dilution Factor            |             |            | 1.00          |      | 1.00              |      | 1.00          |      | 1.00              |      | 1.00          |      | 1.00              |      |
| Matrix                     |             |            | water         |      | water, filtered   |      | water         |      | water, filtered   |      | water         |      | water             |      |
| Units                      | ug/l        | ug/l       | ug/l          |      | ug/l              |      | ug/l          |      | ug/l              |      | ug/l          |      | ug/l              |      |
| Sampling Date              |             |            | 12/1/94       |      | 12/1/94           |      | 12/1/94       |      | 12/1/94           |      | 12/1/94       |      | 12/1/94           |      |
| Analysis Date              |             |            | 12/13/94      |      | 12/13/94          |      | 12/14/94      |      | 12/21/94          |      | 12/13/94      |      | 12/19/94          |      |
| Analysis                   | Standard    | Standard   | Analytical    | MDL  | Analytical        | MDL  | Analytical    | MDL  | Analytical        | MDL  | Analytical    | MDL  | Analytical        | MDL  |
|                            | fresh water | salt water | Result        |      | Result            |      | Result        |      | Result            |      | Result        |      | Result            |      |
| Silver                     | 164         |            | 3.1 U         | 3.1  | 3.1 U             | 3.1  | 3.1 U         | 3.1  | 3.1 U             | 3.1  | 3.1 U         | 3.1  | 3.1 U             | 3.1  |
| Aluminum                   |             |            | 179           | 26.7 | 26.7 U            | 26.7 | 69.0          | 26.7 | 26.7 U            | 26.7 | 188           | 26.7 | 26.7 U            | 26.7 |
| Arsenic                    | 0.017       | 0.136      | 1.6 U         | 1.6  | 1.6 U             | 1.6  | 1.6 U         | 1.6  | 1.6 U             | 1.6  | 1.6 U         | 1.6  | 1.6 U             | 1.6  |
| Barium                     | 2000        |            | 33.3          | 2.1  | 27.6              | 2.1  | 34.6          | 2.1  | 29.1              | 2.1  | 30.0          | 2.1  | 27.2              | 2.1  |
| Beryllium                  |             |            | 1.5 U         | 1.5  | 1.5 U             | 1.5  | 1.5 U         | 1.5  | 1.5 U             | 1.5  | 1.5 U         | 1.5  | 1.5 U             | 1.5  |
| Calcium                    |             |            | 32100         | 12.0 | 30300             | 12.0 | 30000         | 12.0 | 29400             | 12.0 | 16200         | 12.0 | 16300             | 12.0 |
| Cadmium                    | 10          |            | 3.4 U         | 3.4  | 3.4 U             | 3.4  | 3.4 U         | 3.4  | 3.4 U             | 3.4  | 3.4 U         | 3.4  | 3.4 U             | 3.4  |
| Cobalt                     |             |            | 2.8 U         | 2.8  | 2.8 U             | 2.8  | 2.8 U         | 2.8  | 2.8 U             | 2.8  | 2.8 U         | 2.8  | 2.8 U             | 2.8  |
| Chromium                   | 160         | 3230       | 6.4 U         | 6.4  | 6.4 U             | 6.4  | 6.4 U         | 6.4  | 6.4 U             | 6.4  | 6.4 U         | 6.4  | 6.4 U             | 6.4  |
| Copper                     |             |            | 2.4 U         | 2.4  | 4.3               | 2.4  | 2.4 U         | 2.4  | 3.9               | 2.4  | 2.9           | 2.4  | 5.6               | 2.4  |
| Iron                       |             |            | 2940          | 4.7  | 465               | 4.7  | 2180          | 4.7  | 355               | 4.7  | 1920          | 4.7  | 839               | 4.7  |
| Mercury                    | 0.144       | 0.146      | 0.20 U        | 0.20 | 0.20 U            | 0.20 | 0.20 U        | 0.20 | 0.20 U            | 0.20 | 0.20 U        | 0.20 | 0.20 U            | 0.20 |
| Potassium                  |             |            | 6260          | 821  | 5840              | 821  | 4320          | 821  | 4280              | 821  | 4840          | 821  | 4240              | 821  |
| Magnesium                  |             |            | 9790          | 38.2 | 9030              | 38.2 | 5340          | 38.2 | 5160              | 38.2 | 9770          | 38.2 | 9540              | 38.2 |
| Manganese                  | 100         |            | 102           | 2.0  | 94.1              | 2.0  | 98.7          | 2.0  | 96.2              | 2.0  | 65.6          | 2.0  | 63.6              | 2.0  |
| Sodium                     |             |            | 56500         | 15.4 | 52300             | 15.4 | 18200         | 15.4 | 17700             | 15.4 | 70100         | 15.4 | 69100             | 15.4 |
| Nickel                     | 516         | 3900       | 12.8 U        | 12.8 | 12.8 U            | 12.8 | 12.8 U        | 12.8 | 12.8 U            | 12.8 | 14.2          | 12.8 | 12.8 U            | 12.8 |
| Lead                       | 5           |            | 4.8           | 1.6  | 1.6 U             | 1.6  | 1.6           | 1.6  | 1.6 U             | 1.6  | 3.4           | 1.6  | 3.1               | 1.6  |
| Antimony                   | 12.2        | 4300       | 21.5 U        | 21.5 | 21.5 U            | 21.5 | 21.5 U        | 21.5 | 21.5 U            | 21.5 | 21.5 U        | 21.5 | 21.5 U            | 21.5 |
| Selenium                   | 10          | 71         | 0.90 U        | 0.90 | 0.90 U            | 0.90 | 0.90 U        | 0.90 | 0.90 U            | 0.90 | 0.90 U        | 0.90 | 0.90 U            | 0.90 |
| Thallium                   | 1.7         | 6.22       | 1.1 U         | 1.1  | 1.1 U             | 1.1  | 1.1 U         | 1.1  | 1.1 U             | 1.1  | 1.1 U         | 1.1  | 1.1 U             | 1.1  |
| Vanadium                   |             |            | 2.9 U         | 2.9  | 2.9 U             | 2.9  | 2.9 U         | 2.9  | 2.9 U             | 2.9  | 2.9 U         | 2.9  | 2.9 U             | 2.9  |
| Zinc                       |             |            | 12.2          | 2.8  | 2.8               | 2.8  | 16            | 2.8  | 7.9               | 2.8  | 23.7          | 2.8  | 14.4              | 2.8  |
| Cyanide                    | 5.2         | 1          | 10 U          | 10   |                   |      | 10 U          | 10   |                   |      | 10 U          | 10   |                   |      |
| Method:TAL Metals, Cyanide |             |            |               |      |                   |      |               |      |                   |      |               |      |                   |      |

**MAIN POST**  
**SURFACE WATER INORGANICS**

| Geographical Location      |             |            | M14           |      | M14              |      |
|----------------------------|-------------|------------|---------------|------|------------------|------|
| Sample                     |             |            | MP14-SW02-A01 |      | MP14-SW02-A01SOL |      |
| Sample Type                |             |            |               |      |                  |      |
| Batch#                     |             |            | 9412G921      |      | 9412G921         |      |
| Prep#                      |             |            | 94GCN260      |      | 94GI180          |      |
| RFW#                       |             |            | 011           |      | 012              |      |
| Dilution Factor            |             |            | 1.00          |      | 1.00             |      |
| Matrix                     |             |            | water         |      | water, filtered  |      |
| Units                      | ug/l        | ug/l       | ug/l          |      | ug/l             |      |
| Sampling Date              |             |            | 12/1/94       |      | 12/1/94          |      |
| Analysis Date              |             |            | 12/13/94      |      | 12/19/94         |      |
| Analysis                   | Standard    | Standard   | Analytical    | MDL  | Analytical       | MDL  |
|                            | fresh water | salt water | Result        |      | Result           |      |
| Silver                     | 164         |            | 3.1 U         | 3.1  | 3.1 U            | 3.1  |
| Aluminum                   |             |            | 205           | 26.7 | 26.7             | 26.7 |
| Arsenic                    | 0.017       | 0.136      | 1.6 U         | 1.6  | 1.6 U            | 1.6  |
| Barium                     | 2000        |            | 33.1          | 2.1  | 31.2             | 2.1  |
| Beryllium                  |             |            | 1.5 U         | 1.5  | 1.5 U            | 1.5  |
| Calcium                    |             |            | 20400         | 12.0 | 20300            | 12.0 |
| Cadmium                    | 10          |            | 3.4 U         | 3.4  | 3.4 U            | 3.4  |
| Cobalt                     |             |            | 2.8 U         | 2.8  | 2.8 U            | 2.8  |
| Chromium                   | 160         | 3230       | 6.4 U         | 6.4  | 6.4 U            | 6.4  |
| Copper                     |             |            | 5.3           | 2.4  | 4.9              | 2.4  |
| Iron                       |             |            | 2070          | 4.7  | 999              | 4.7  |
| Mercury                    | 0.144       | 0.146      | 0.20 U        | 0.20 | 0.20 U           | 0.20 |
| Potassium                  |             |            | 8320          | 821  | 8220             | 821  |
| Magnesium                  |             |            | 21400         | 38.2 | 21600            | 38.2 |
| Manganese                  | 100         |            | 68.4          | 2.0  | 66.1             | 2.0  |
| Sodium                     |             |            | 168000        | 15.4 | 171000           | 15.4 |
| Nickel                     | 516         | 3900       | 12.8 U        | 12.8 | 12.8 U           | 12.8 |
| Lead                       | 5           |            | 2.8           | 1.6  | 3.2              | 1.6  |
| Antimony                   | 12.2        | 4300       | 21.5 U        | 21.5 | 21.5 U           | 21.5 |
| Selenium                   | 10          | 71         | 0.90 U        | 0.90 | 0.90 U           | 0.90 |
| Thallium                   | 1.7         | 6.22       | 1.1 U         | 1.1  | 1.1 U            | 1.1  |
| Vanadium                   |             |            | 2.9 U         | 2.9  | 2.9 U            | 2.9  |
| Zinc                       |             |            | 23.4          | 2.8  | 13.2             | 2.8  |
| Cyanide                    | 5.2         | 1          | 10 U          | 10   |                  |      |
| Method:TAL Metals, Cyanide |             |            |               |      |                  |      |

**MAIN POST**  
**SURFACE WATER INORGANICS (OFFSITE DATA)**

| Geographical Location       |             |            | Background SS01 |      | Background SS01   |      | Background SS02 |      | Background SS02   |      |
|-----------------------------|-------------|------------|-----------------|------|-------------------|------|-----------------|------|-------------------|------|
| Sample                      |             |            | SS01-SW01-A01   |      | SS01-SW01-A01 SOL |      | SS01-SW02-A01   |      | SS01-SW02-A01 SOL |      |
| Batch#                      |             |            | 9412G921        |      | 9412G921          |      | 9412G922        |      | 9412G922          |      |
| Prep#                       |             |            | 94GCN260        |      | 94GI180           |      | 94GCN264        |      | 94GI186           |      |
| RFW#                        |             |            | 001             |      | 002               |      | 003             |      | 004               |      |
| Dilution Factor             |             |            | 1.00            |      | 1.00              |      | 1.00            |      | 1.00              |      |
| Matrix                      |             |            | water           |      | water, filtered   |      | water           |      | water, filtered   |      |
| Units                       | ug/l        | ug/l       | ug/l            |      | ug/l              |      | ug/l            |      | ug/l              |      |
| Sampling Date               |             |            | 12/1/94         |      | 12/1/94           |      | 12/1/94         |      | 12/1/94           |      |
| Analysis Date               |             |            | 12/13/94        |      | 12/19/94          |      | 12/14/94        |      | 12/21/94          |      |
| Analysis                    | Standard    | Standard   | Analytical      | MDL  | Analytical        | MDL  | Analytical      | MDL  | Analytical        | MDL  |
|                             | fresh water | salt water | Result          |      | Result            |      | Result          |      | Result            |      |
| Silver                      | 164         |            | 3.1 U           | 3.1  | 3.1 U             | 3.1  | 3.1 U           | 3.1  | 3.1 U             | 3.1  |
| Aluminum                    |             |            | 388             | 26.7 | 26.7 U            | 26.7 | 748             | 26.7 | 26.7 U            | 26.7 |
| Arsenic                     | 0.017       | 0.136      | 1.6 U           | 1.6  | 1.6 U             | 1.6  | 2.6             | 1.6  | 1.6 U             | 1.6  |
| Barium                      | 2000        |            | 44.7            | 2.1  | 39.4              | 2.1  | 42.3            | 2.1  | 31.3              | 2.1  |
| Beryllium                   |             |            | 1.5 U           | 1.5  | 1.5 U             | 1.5  | 1.5 U           | 1.5  | 1.5 U             | 1.5  |
| Calcium                     |             |            | 17300           | 12.0 | 17400             | 12.0 | 31600           | 12.0 | 30900             | 12.0 |
| Cadmium                     | 10          |            | 3.4 U           | 3.4  | 3.4 U             | 3.4  | 3.4 U           | 3.4  | 3.4 U             | 3.4  |
| Cobalt                      |             |            | 8.1             | 2.8  | 4.1               | 2.8  | 2.8 U           | 2.8  | 2.8 U             | 2.8  |
| Chromium                    | 160         | 3230       | 6.4 U           | 6.4  | 6.4 U             | 6.4  | 7.5             | 6.4  | 6.4 U             | 6.4  |
| Copper                      |             |            | 3.2             | 2.4  | 4                 | 2.4  | 3.1             | 2.4  | 3.1               | 2.4  |
| Iron                        |             |            | 3010            | 4.7  | 405               | 4.7  | 6210            | 4.7  | 335               | 4.7  |
| Mercury                     | 0.144       | 0.146      | 0.20 U          | 0.20 | 0.20 U            | 0.20 | 0.20 U          | 0.20 | 0.20 U            | 0.20 |
| Potassium                   |             |            | 2990            | 821  | 2670              | 821  | 5060            | 821  | 4280              | 821  |
| Magnesium                   |             |            | 2880            | 38.2 | 2860              | 38.2 | 5440            | 38.2 | 5120              | 38.2 |
| Manganese                   | 100         |            | 93.3            | 2.0  | 90.7              | 2.0  | 113             | 2.0  | 98.6              | 2.0  |
| Sodium                      |             |            | 26700           | 15.4 | 26200             | 15.4 | 17600           | 15.4 | 17400             | 15.4 |
| Nickel                      | 516         | 3900       | 22.9            | 12.8 | 16.1              | 12.8 | 12.8            | 12.8 | 12.8 U            | 12.8 |
| Lead                        | 5           |            | 2.4             | 1.6  | 1.6 U             | 1.6  | 10.0            | 1.6  | 1.6 U             | 1.6  |
| Antimony                    | 12.2        | 4300       | 21.5 U          | 21.5 | 21.5 U            | 21.5 | 21.5 U          | 21.5 | 21.5 U            | 21.5 |
| Selenium                    | 10          | 71         | 0.90 U          | 0.90 | 0.90 U            | 0.90 | 0.90 U          | 0.90 | 0.90 U            | 0.90 |
| Thallium                    | 1.7         | 6.22       | 1.1 U           | 1.1  | 1.1 U             | 1.1  | 1.1 U           | 1.1  | 1.1 U             | 1.1  |
| Vanadium                    |             |            | 2.9 U           | 2.8  | 2.9 U             | 2.8  | 5.8             | 2.9  | 2.9 U             | 2.9  |
| Zinc                        |             |            | 35.1            | 2.9  | 23.8              | 2.9  | 31.8            | 2.8  | 8.8               | 2.8  |
| Cyanide                     | 5.2         | 1          | 10 U            | 10.0 |                   |      | 10 U            | 10   |                   |      |
| Method: TAL Metals, Cyanide |             |            |                 |      |                   |      |                 |      |                   |      |



**MAIN POST**  
**SURFACE WATER PESTICIDES/PCBS**

| Geographical Location      |             |            | M2            |           | M2            |           | M3            |           | M3            |           | M3            |           | M14           |           | M14           |           |
|----------------------------|-------------|------------|---------------|-----------|---------------|-----------|---------------|-----------|---------------|-----------|---------------|-----------|---------------|-----------|---------------|-----------|
| Sample                     |             |            | MP02-SW01-A01 |           | MP02-SW02-A01 |           | MP06-SW01-A02 |           | MP06-SW01-C01 |           | MP10-SW01-A01 |           | MP14-SW01-A01 |           | MP14-SW02-A01 |           |
| Sample Type                |             |            |               |           |               |           |               |           | Duplicate     |           |               |           |               |           |               |           |
| Batch#                     |             |            | 9412G921      |           | 9412G921      |           | 9412G921      |           | 9412G921      |           | 9412G922      |           | 9412G921      |           | 9412G921      |           |
| Prep#                      |             |            | 94GP1038      |           | 94GP1038      |           | 94GP1038      |           | 94GP1038      |           | 94GP1038      |           | 94GP1038      |           | 94GP1038      |           |
| RFW#                       |             |            | 007           |           | 009           |           | 003           |           | 005           |           | 001           |           | 018           |           | 011           |           |
| Dilution Factor            |             |            | 1.00          |           | 1.00          |           | 1.00          |           | 1.00          |           | 1.00          |           | 1.00          |           | 1.00          |           |
| Matrix                     |             |            | water         |           | water         |           | water         |           | water         |           | water         |           | water         |           | water         |           |
| Units                      | ug/l        | ug/l       | ug/l          |           | ug/l          |           | ug/l          |           | ug/l          |           | ug/l          |           | ug/l          |           | ug/l          |           |
| Sampling Date              |             |            | 12/1/94       |           | 12/1/94       |           | 12/1/94       |           | 12/1/94       |           | 12/1/94       |           | 12/1/94       |           | 12/1/94       |           |
| Analysis Date              |             |            | 12/16/94      |           | 12/16/94      |           | 12/16/94      |           | 12/16/94      |           | 12/16/94      |           | 12/16/94      |           | 12/16/94      |           |
| Analysis                   | Standard    | Standard   | Analytical    | Reporting | Analytical    | Reporting | Analytical    | Reporting | Analytical    | Reporting | Analytical    | Reporting | Analytical    | Reporting | Analytical    | Reporting |
|                            | fresh water | salt water | Result        | Limit     | Result        | Limit     | Result        | Limit     | Result        | Limit     | Result        | Limit     | Result        | Limit     | Result        | Limit     |
| alpha-BHC                  | 0.00391     | 0.0131     | 0.050 U       | 0.050     | 0.050 U       | 0.050     | 0.054 U       | 0.054     | 0.050 U       | 0.050     | 0.054 U       | 0.054     | 0.049 U       | 0.049     | 0.053 U       | 0.053     |
| beta-BHC                   | 0.137       | 0.460      | 0.050 U       | 0.050     | 0.050 U       | 0.050     | 0.054 U       | 0.054     | 0.050 U       | 0.050     | 0.054 U       | 0.054     | 0.049 U       | 0.049     | 0.053 U       | 0.053     |
| delta-BHC                  |             |            | 0.050 U       | 0.050     | 0.050 U       | 0.050     | 0.054 U       | 0.054     | 0.050 U       | 0.050     | 0.054 U       | 0.054     | 0.049 U       | 0.049     | 0.053 U       | 0.053     |
| gamma-BHC (Lindane)        | 0.08        | 0.16       | 0.050 U       | 0.050     | 0.050 U       | 0.050     | 0.054 U       | 0.054     | 0.050 U       | 0.050     | 0.054 U       | 0.054     | 0.049 U       | 0.049     | 0.053 U       | 0.053     |
| Heptachlor                 | 0.000208    | 0.000214   | 0.050 U       | 0.050     | 0.050 U       | 0.050     | 0.054 U       | 0.054     | 0.050 U       | 0.050     | 0.054 U       | 0.054     | 0.049 U       | 0.049     | 0.053 U       | 0.053     |
| Aldrin                     | 0.000135    | 0.000144   | 0.050 U       | 0.050     | 0.050 U       | 0.050     | 0.054 U       | 0.054     | 0.050 U       | 0.050     | 0.054 U       | 0.054     | 0.049 U       | 0.049     | 0.053 U       | 0.053     |
| Heptachlor epoxide         | 0.000103    | 0.000106   | 0.050 U       | 0.050     | 0.050 U       | 0.050     | 0.054 U       | 0.054     | 0.050 U       | 0.050     | 0.054 U       | 0.054     | 0.049 U       | 0.049     | 0.053 U       | 0.053     |
| Endosulfan I               |             |            | 0.050 U       | 0.050     | 0.050 U       | 0.050     | 0.054 U       | 0.054     | 0.050 U       | 0.050     | 0.054 U       | 0.054     | 0.049 U       | 0.049     | 0.053 U       | 0.053     |
| Dieldrin                   | 0.000135    | 0.000144   | 0.10 U        | 0.10      | 0.099 U       | 0.099     | 0.11 U        | 0.11      | 0.10 U        | 0.10      | 0.11 U        | 0.11      | 0.098 U       | 0.098     | 0.11 U        | 0.11      |
| 4,4'-DDE                   | 0.000588    | 0.000591   | 0.10 U        | 0.10      | 0.099 U       | 0.099     | 0.11 U        | 0.11      | 0.10 U        | 0.10      | 0.11 U        | 0.11      | 0.098 U       | 0.098     | 0.11 U        | 0.11      |
| Endrin                     | 0.0023      | 0.0023     | 0.10 U        | 0.10      | 0.099 U       | 0.099     | 0.11 U        | 0.11      | 0.10 U        | 0.10      | 0.11 U        | 0.11      | 0.098 U       | 0.098     | 0.11 U        | 0.11      |
| Endosulfan II              |             |            | 0.10 U        | 0.10      | 0.099 U       | 0.099     | 0.11 U        | 0.11      | 0.10 U        | 0.10      | 0.11 U        | 0.11      | 0.098 U       | 0.098     | 0.11 U        | 0.11      |
| 4,4'-DDD                   | 0.000832    | 0.000837   | 0.10 U        | 0.10      | 0.099 U       | 0.099     | 0.11 U        | 0.11      | 0.10 U        | 0.10      | 0.11 U        | 0.11      | 0.098 U       | 0.098     | 0.11 U        | 0.11      |
| Endosulfan sulfate         | 0.93        | 2.0        | 0.10 U        | 0.10      | 0.099 U       | 0.099     | 0.11 U        | 0.11      | 0.10 U        | 0.10      | 0.11 U        | 0.11      | 0.098 U       | 0.098     | 0.11 U        | 0.11      |
| 4,4'-DDT                   | 0.000588    | 0.000591   | 0.10 U        | 0.10      | 0.099 U       | 0.099     | 0.11 U        | 0.11      | 0.10 U        | 0.10      | 0.11 U        | 0.11      | 0.098 U       | 0.098     | 0.11 U        | 0.11      |
| Methoxychlor               | 0.03        | 0.03       | 0.50 U        | 0.50      | 0.50 U        | 0.50      | 0.05 U        | 0.05      | 0.50 U        | 0.50      | 0.54 U        | 0.54      | 0.49 U        | 0.49      | 0.53 U        | 0.53      |
| Endrin ketone              |             |            | 0.10 U        | 0.10      | 0.099 U       | 0.099     | 0.11 U        | 0.11      | 0.10 U        | 0.10      | 0.11 U        | 0.11      | 0.098 U       | 0.098     | 0.11 U        | 0.11      |
| Endrin aldehyde            | 0.76        | 0.81       | 0.10 U        | 0.10      | 0.099 U       | 0.099     | 0.11 U        | 0.11      | 0.10 U        | 0.10      | 0.11 U        | 0.11      | 0.098 U       | 0.098     | 0.11 U        | 0.11      |
| alpha-Chlordane            | 0.000277    | 0.000283   | 0.050 U       | 0.050     | 0.050 U       | 0.050     | 0.054 U       | 0.054     | 0.050 U       | 0.050     | 0.054 U       | 0.054     | 0.049 U       | 0.049     | 0.053 U       | 0.053     |
| gamma-Chlordane            |             |            | 0.050 U       | 0.050     | 0.050 U       | 0.050     | 0.054 U       | 0.054     | 0.050 U       | 0.050     | 0.054 U       | 0.054     | 0.049 U       | 0.049     | 0.053 U       | 0.053     |
| Toxaphene                  | 0.00073     | 0.000747   | 5.0 U         | 5.0       | 5.0 U         | 5.0       | 5.4 U         | 5.4       | 5.0 U         | 5.0       | 5.4 U         | 5.4       | 4.9 U         | 4.9       | 5.3 U         | 5.3       |
| Aroclor-1016               | 0.000244    | 0.000247   | 1.0 U         | 1.0       | 0.99 U        | 0.10      | 1.1 U         | 1.1       | 1.0 U         | 1.0       | 1.1 U         | 1.1       | 0.98 U        | 0.98      | 1.1 U         | 1.1       |
| Aroclor-1221               | 0.000244    | 0.000247   | 2.0 U         | 2.0       | 2.0 U         | 2.0       | 2.2 U         | 2.2       | 2.0 U         | 2.0       | 2.2 U         | 2.2       | 2.0 U         | 2.0 U     | 2.1 U         | 2.1       |
| Aroclor-1232               | 0.000244    | 0.000247   | 1.0 U         | 1.0       | 0.99 U        | 0.10      | 1.1 U         | 1.1       | 1.0 U         | 1.0       | 1.1 U         | 1.1       | 0.98 U        | 0.98      | 1.1 U         | 1.1       |
| Aroclor-1242               | 0.000244    | 0.000247   | 1.0 U         | 1.0       | 0.99 U        | 0.10      | 1.1 U         | 1.1       | 1.0 U         | 1.0       | 1.1 U         | 1.1       | 0.98 U        | 0.98      | 1.1 U         | 1.1       |
| Aroclor-1248               | 0.000244    | 0.000247   | 1.0 U         | 1.0       | 0.99 U        | 0.10      | 1.1 U         | 1.1       | 1.0 U         | 1.0       | 1.1 U         | 1.1       | 0.98 U        | 0.98      | 1.1 U         | 1.1       |
| Aroclor-1254               | 0.000244    | 0.000247   | 1.0 U         | 1.0       | 0.99 U        | 0.10      | 1.1 U         | 1.1       | 1.0 U         | 1.0       | 1.1 U         | 1.1       | 0.98 U        | 0.98      | 1.1 U         | 1.1       |
| Aroclor-1260               | 0.000244    | 0.000247   | 1.0 U         | 1.0       | 0.99 U        | 0.10      | 1.1 U         | 1.1       | 1.0 U         | 1.0       | 1.1 U         | 1.1       | 0.98 U        | 0.98      | 1.1 U         | 1.1       |
| Method:TCL Pesticides/PCBs |             |            |               |           |               |           |               |           |               |           |               |           |               |           |               |           |

**MAIN POST**  
**SURFACE WATER PESTICIDES/PCBS (OFFSITE DATA)**

|                          |             |            |                 |                 |            |           |
|--------------------------|-------------|------------|-----------------|-----------------|------------|-----------|
| Geographical Location    |             |            | Background SS01 | Background SS02 |            |           |
| Sample                   |             |            | SS01-SW01-A01   | SS01-SW02-A01   |            |           |
| Batch#                   |             |            | 9412G921        | 9412G922        |            |           |
| Prep#                    |             |            | 94GP1038        | 94GP1038        |            |           |
| RFW#                     |             |            | 001             | 003             |            |           |
| Dilution Factor          |             |            | 1.00            | 1.00            |            |           |
| Matrix                   |             |            | water           | water           |            |           |
| Units                    | ug/l        | ug/l       | ug/l            | ug/l            |            |           |
| Sampling Date            |             |            | 12/1/94         | 12/1/94         |            |           |
| Analysis Date            |             |            | 12/16/94        | 1/17/95         |            |           |
| Analysis                 | Standard    | Standard   | Analytical      | Reporting       | Analytical | Reporting |
|                          | fresh water | salt water | Result          | Limit           | Result     | Limit     |
| alpha-BHC                | 0.00391     | 0.0131     | 0.046 U         | 0.046           | 0.053 U    | 0.053     |
| beta-BHC                 | 0.137       | 0.460      | 0.046 U         | 0.046           | 0.053 U    | 0.053     |
| delta-BHC                |             |            | 0.046 U         | 0.046           | 0.053 U    | 0.053     |
| gamma-BHC (Lindane)      | 0.08        | 0.16       | 0.046 U         | 0.046           | 0.053 U    | 0.053     |
| Heptachlor               | 0.000208    | 0.000214   | 0.046 U         | 0.046           | 0.053 U    | 0.053     |
| Aldrin                   | 0.000135    | 0.000144   | 0.046 U         | 0.046           | 0.053 U    | 0.053     |
| Heptachlor epoxide       | 0.000103    | 0.000106   | 0.046 U         | 0.046           | 0.053 U    | 0.053     |
| Endosulfan I             |             |            | 0.046 U         | 0.046           | 0.053 U    | 0.053     |
| Dieldrin                 | 0.000135    | 0.000144   | 0.091 U         | 0.091           | 0.11 U     | 0.11      |
| 4,4'-DDE                 | 0.000588    | 0.000591   | 0.091 U         | 0.091           | 0.11 U     | 0.11      |
| Endrin                   | 0.0023      | 0.0023     | 0.091 U         | 0.091           | 0.11 U     | 0.11      |
| Endosulfan II            |             |            | 0.091 U         | 0.091           | 0.11 U     | 0.11      |
| 4,4'-DDD                 | 0.000832    | 0.000837   | 0.091 U         | 0.091           | 0.11 U     | 0.11      |
| Endosulfan sulfate       | 0.93        | 2.0        | 0.091 U         | 0.091           | 0.11 U     | 0.11      |
| 4,4'-DDT                 | 0.000588    | 0.000591   | 0.091 U         | 0.091           | 0.11 U     | 0.11      |
| Methoxychlor             | 0.03        | 0.03       | 0.46 U          | 0.46            | 0.53 U     | 0.53      |
| Endrin ketone            |             |            | 0.091 U         | 0.091           | 0.11 U     | 0.11      |
| Endrin aldehyde          | 0.76        | 0.81       | 0.091 U         | 0.091           | 0.11 U     | 0.11      |
| alpha-Chlordane          | 0.000277    | 0.000283   | 0.046 U         | 0.046           | 0.053 U    | 0.053     |
| gamma-Chlordane          |             |            | 0.046 U         | 0.046           | 0.053 U    | 0.053     |
| Toxaphene                | 0.00073     | 0.000747   | 4.6 U           | 4.6             | 5.3 U      | 5.3       |
| Aroclor-1016             | 0.000244    | 0.000247   | 0.91 U          | 0.09            | 1.1 U      | 1.1       |
| Aroclor-1221             | 0.000244    | 0.000247   | 1.8 U           | 1.8             | 2.1 U      | 2.1       |
| Aroclor-1232             | 0.000244    | 0.000247   | 0.91 U          | 0.09            | 1.1 U      | 1.1       |
| Aroclor-1242             | 0.000244    | 0.000247   | 0.91 U          | 0.09            | 1.1 U      | 1.1       |
| Aroclor-1248             | 0.000244    | 0.000247   | 0.91 U          | 0.09            | 1.1 U      | 1.1       |
| Aroclor-1254             | 0.000244    | 0.000247   | 0.91 U          | 0.09            | 1.1 U      | 1.1       |
| Aroclor-1260             | 0.000244    | 0.000247   | 0.91 U          | 0.09            | 1.1 U      | 1.1       |
| Method:TCL Semivolatiles |             |            |                 |                 |            |           |

**MAIN POST  
SURFACE SOIL VOLATILES**

| Geographical Location      |          |        | M16           |       | M16           |      | M16                 |      | M16           |       | M16           |       | M16           |       |
|----------------------------|----------|--------|---------------|-------|---------------|------|---------------------|------|---------------|-------|---------------|-------|---------------|-------|
| Sample                     |          |        | MP16-SS01-A01 |       | MP16-SS01-D01 |      | MP16-SS01-E01       |      | MP16-SS02-A01 |       | MP16-SS03-A01 |       | MP16-SS04-A01 |       |
| Sample Type                |          |        |               |       | Trip Blank    |      | Field Rinsate Blank |      |               |       |               |       |               |       |
| Batch#                     |          |        | 9411G832      |       | 9411G832      |      | 9411G832            |      | 9411G832      |       | 9411G832      |       | 9411G832      |       |
| Prep#                      |          |        | 94GVT027      |       | 94GVE343      |      | 94GVE343            |      | 94GVT028      |       | 94GVT027      |       | 94GVT027      |       |
| RFW#                       |          |        | 012           |       | 016           |      | 017                 |      | 013           |       | 015           |       | 014           |       |
| Sample Depth               |          |        | 0-6"          |       | 0-6"          |      | 0-6"                |      | 0-6"          |       | 0-6"          |       | 0-6"          |       |
| Dilution Factor            |          |        | 1.00          |       | 1.00          |      | 1.00                |      | 1.00          |       | 1.00          |       | 1.00          |       |
| Matrix                     |          |        | soil          |       | water         |      | water               |      | soil          |       | soil          |       | soil          |       |
| Units                      | mg/kg    | mg/kg  | mg/kg         |       | mg/l          |      | mg/l                |      | mg/kg         |       | mg/kg         |       | mg/kg         |       |
| Sampling Date              |          |        | 11/29/94      |       | 11/29/94      |      | 11/29/94            |      | 11/29/94      |       | 11/29/94      |       | 11/29/94      |       |
| Analysis Date              |          |        | 12/5/94       |       | 12/6/94       |      | 12/6/94             |      | 12/6/94       |       | 12/5/94       |       | 12/5/94       |       |
| Analysis                   | Standard | MDL    | Analytical    | CRQL  | Analytical    | CRQL | Analytical          | CRQL | Analytical    | CRQL  | Analytical    | CRQL  | Analytical    | CRQL  |
|                            |          |        | Result        |       | Result        |      | Result              |      | Result        |       | Result        |       | Result        |       |
| Chloromethane              | 520      | 0.0073 | 0.011 U       | 0.011 | 0.01 U        | 0.01 | 0.01 U              | 0.01 | 0.012 U       | 0.012 | 0.011 U       | 0.011 | 0.012 U       | 0.012 |
| Bromomethane               | 79       | 0.0067 | 0.011 U       | 0.011 | 0.01 U        | 0.01 | 0.01 U              | 0.01 | 0.012 U       | 0.012 | 0.011 U       | 0.011 | 0.012 U       | 0.012 |
| Vinyl Chloride             | 2        | 0.0079 | 0.011 U       | 0.011 | 0.01 U        | 0.01 | 0.01 U              | 0.01 | 0.012 U       | 0.012 | 0.011 U       | 0.011 | 0.012 U       | 0.012 |
| Chloroethane               |          | 0.0091 | 0.011 U       | 0.011 | 0.01 U        | 0.01 | 0.01 U              | 0.01 | 0.012 U       | 0.012 | 0.011 U       | 0.011 | 0.012 U       | 0.012 |
| Methylene Chloride         | 49       | 0.0027 | 0.011 U       | 0.011 | 0.01 U        | 0.01 | 0.01 U              | 0.01 | 0.012 U       | 0.012 | 0.011 U       | 0.011 | 0.012 U       | 0.012 |
| Acetone                    | 1000     | 0.0069 | 0.011 U       | 0.011 | 0.01 U        | 0.01 | 0.01 U              | 0.01 | 0.018 B       |       | 0.011 U       | 0.011 | 0.012 U       | 0.012 |
| Carbon Disulfide           |          | 0.0044 | 0.011 U       | 0.011 | 0.01 U        | 0.01 | 0.01 U              | 0.01 | 0.012 U       | 0.012 | 0.011 U       | 0.011 | 0.012 U       | 0.012 |
| 1,1-Dichloroethene         | 8        | 0.0049 | 0.011 U       | 0.011 | 0.01 U        | 0.01 | 0.01 U              | 0.01 | 0.012 U       | 0.012 | 0.011 U       | 0.011 | 0.012 U       | 0.012 |
| 1,1-Dichloroethane         | 570      | 0.003  | 0.011 U       | 0.011 | 0.01 U        | 0.01 | 0.01 U              | 0.01 | 0.012 U       | 0.012 | 0.011 U       | 0.011 | 0.012 U       | 0.012 |
| 1,2-Dichloroethene (total) | 79       | 0.0044 | 0.011 U       | 0.011 | 0.01 U        | 0.01 | 0.01 U              | 0.01 | 0.012 U       | 0.012 | 0.011 U       | 0.011 | 0.012 U       | 0.012 |
| Chloroform                 | 19       | 0.0029 | 0.011 U       | 0.011 | 0.01 U        | 0.01 | 0.01 U              | 0.01 | 0.012 U       | 0.012 | 0.011 U       | 0.011 | 0.012 U       | 0.012 |
| 1,2-Dichloroethane         | 6        | 0.0024 | 0.011 U       | 0.011 | 0.01 U        | 0.01 | 0.01 U              | 0.01 | 0.012 U       | 0.012 | 0.011 U       | 0.011 | 0.012 U       | 0.012 |
| 2-Butanone                 | 1000     | 0.0041 | 0.011 U       | 0.011 | 0.01 U        | 0.01 | 0.01 U              | 0.01 | 0.012 U       | 0.012 | 0.011 U       | 0.011 | 0.012 U       | 0.012 |
| 1,1,1-Trichloroethane      | 210      | 0.0017 | 0.011 U       | 0.011 | 0.01 U        | 0.01 | 0.01 U              | 0.01 | 0.012 U       | 0.012 | 0.011 U       | 0.011 | 0.012 U       | 0.012 |
| Carbon Tetrachloride       | 2        | 0.0015 | 0.011 U       | 0.011 | 0.01 U        | 0.01 | 0.01 U              | 0.01 | 0.012 U       | 0.012 | 0.011 U       | 0.011 | 0.012 U       | 0.012 |
| Bromodichloromethane       | 11       | 0.002  | 0.011 U       | 0.011 | 0.01 U        | 0.01 | 0.01 U              | 0.01 | 0.012 U       | 0.012 | 0.011 U       | 0.011 | 0.012 U       | 0.012 |
| 1,2-Dichloropropane        | 10       | 0.0017 | 0.011 U       | 0.011 | 0.01 U        | 0.01 | 0.01 U              | 0.01 | 0.012 U       | 0.012 | 0.011 U       | 0.011 | 0.012 U       | 0.012 |
| cis-1,3-Dichloropropene    | 4        | 0.003  | 0.011 U       | 0.011 | 0.01 U        | 0.01 | 0.01 U              | 0.01 | 0.012 U       | 0.012 | 0.011 U       | 0.011 | 0.012 U       | 0.012 |
| Trichloroethene            | 23       | 0.002  | 0.011 U       | 0.011 | 0.01 U        | 0.01 | 0.01 U              | 0.01 | 0.012 U       | 0.012 | 0.011 U       | 0.011 | 0.012 U       | 0.012 |
| Dibromochloromethane       | 110      | 0.0024 | 0.011 U       | 0.011 | 0.01 U        | 0.01 | 0.01 U              | 0.01 | 0.012 U       | 0.012 | 0.011 U       | 0.011 | 0.012 U       | 0.012 |
| 1,1,2-Trichloroethane      | 22       | 0.0043 | 0.011 U       | 0.011 | 0.01 U        | 0.01 | 0.01 U              | 0.01 | 0.012 U       | 0.012 | 0.011 U       | 0.011 | 0.012 U       | 0.012 |
| Benzene                    | 3        | 0.0033 | 0.011 U       | 0.011 | 0.01 U        | 0.01 | 0.01 U              | 0.01 | 0.012 U       | 0.012 | 0.011 U       | 0.011 | 0.012 U       | 0.012 |
| trans-1,3-Dichloropropene  | 4        | 0.0024 | 0.011 U       | 0.011 | 0.01 U        | 0.01 | 0.01 U              | 0.01 | 0.012 U       | 0.012 | 0.011 U       | 0.011 | 0.012 U       | 0.012 |
| Bromoform                  | 86       | 0.0031 | 0.011 U       | 0.011 | 0.01 U        | 0.01 | 0.01 U              | 0.01 | 0.012 U       | 0.012 | 0.011 U       | 0.011 | 0.012 U       | 0.012 |
| 4-Methyl-2-pentanone       | 1000     | 0.0055 | 0.011 U       | 0.011 | 0.01 U        | 0.01 | 0.01 U              | 0.01 | 0.012 U       | 0.012 | 0.011 U       | 0.011 | 0.012 U       | 0.012 |
| 2-Hexanone                 |          | 0.0039 | 0.011 U       | 0.011 | 0.01 U        | 0.01 | 0.01 U              | 0.01 | 0.012 U       | 0.012 | 0.011 U       | 0.011 | 0.012 U       | 0.012 |
| Tetrachloroethene          | 4        | 0.004  | 0.011 U       | 0.011 | 0.01 U        | 0.01 | 0.01 U              | 0.01 | 0.012 U       | 0.012 | 0.011 U       | 0.011 | 0.012 U       | 0.012 |
| 1,1,2,2-Tetrachloroethane  | 34       | 0.0042 | 0.011 U       | 0.011 | 0.01 U        | 0.01 | 0.01 U              | 0.01 | 0.012 U       | 0.012 | 0.011 U       | 0.011 | 0.012 U       | 0.012 |
| Toluene                    | 1000     | 0.0027 | 0.011 U       | 0.011 | 0.01 U        | 0.01 | 0.01 U              | 0.01 | 0.012 U       | 0.012 | 0.011 U       | 0.011 | 0.012 U       | 0.012 |
| Chlorobenzene              | 37       | 0.0027 | 0.011 U       | 0.011 | 0.01 U        | 0.01 | 0.01 U              | 0.01 | 0.012 U       | 0.012 | 0.011 U       | 0.011 | 0.012 U       | 0.012 |
| Ethylbenzene               | 1000     | 0.0031 | 0.011 U       | 0.011 | 0.01 U        | 0.01 | 0.01 U              | 0.01 | 0.012 U       | 0.012 | 0.011 U       | 0.011 | 0.012 U       | 0.012 |
| Styrene                    | 23       | 0.0038 | 0.011 U       | 0.011 | 0.01 U        | 0.01 | 0.01 U              | 0.01 | 0.012 U       | 0.012 | 0.011 U       | 0.011 | 0.012 U       | 0.012 |
| Xylene (total)             | 410      | 0.0038 | 0.011 U       | 0.011 | 0.01 U        | 0.01 | 0.01 U              | 0.01 | 0.012 U       | 0.012 | 0.011 U       | 0.011 | 0.012 U       | 0.012 |
| Method:TCL Volatiles       |          |        |               |       |               |      |                     |      |               |       |               |       |               |       |

**MAIN POST  
SURFACE SOIL SEMIVOLATILES**

| Geographical Location        |          |       | M15           |      | M15           |      | M16           |      | M16           |      | M16           |      | M16           |      |
|------------------------------|----------|-------|---------------|------|---------------|------|---------------|------|---------------|------|---------------|------|---------------|------|
| Sample                       |          |       | MP15-SS01-A01 |      | MP15-SS02-A01 |      | MP16-SS01-A01 |      | MP16-SS02-A01 |      | MP16-SS03-A01 |      | MP16-SS04-A01 |      |
| Batch#                       |          |       | 9411G832      |      | 9411G832      |      | 9411G832      |      | 9411G832      |      | 9411G832      |      | 9411G832      |      |
| Prep#                        |          |       | 94GB0796      |      | 94GB0796      |      | 94GB0796      |      | 94GB0796      |      | 94GB0796      |      | 94GB0796      |      |
| RFW#                         |          |       | 010           |      | 011           |      | 012           |      | 013           |      | 015           |      | 014           |      |
| Sample Depth                 |          |       | 0-6"          |      | 0-6"          |      | 0-6"          |      | 0-6"          |      | 0-6"          |      | 0-6"          |      |
| Dilution Factor              |          |       | 1.00          |      | 1.00          |      | 1.00          |      | 25.0          |      | 1.00          |      | 1.00          |      |
| Matrix                       |          |       | soil          |      | soil          |      | soil          |      | soil          |      | soil          |      | soil          |      |
| Units                        | mg/kg    | mg/kg | mg/kg         |      | mg/kg         |      | mg/kg         |      | mg/kg         |      | mg/kg         |      | mg/kg         |      |
| Sampling Date                |          |       | 11/29/94      |      | 11/29/94      |      | 11/29/94      |      | 11/29/94      |      | 11/29/94      |      | 11/29/94      |      |
| Analysis Date                |          |       | 12/21/94      |      | 12/21/94      |      | 12/21/94      |      | 12/21/94      |      | 12/21/94      |      | 12/21/94      |      |
| Analysis                     | Standard | MDL   | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL |
|                              |          |       | Result        |      | Result        |      | Result        |      | Result        |      | Result        |      | Result        |      |
| Phenol                       | 10000    | 0.234 | 0.39 U        | 0.39 | 0.41 U        | 0.41 | 0.37 U        | 0.37 | 9.9 U         | 9.9  | 0.37 U        | 0.37 | 0.38 U        | 0.38 |
| bis(2-Chloroethyl) ether     | 0.66     | 0.32  | 0.39 U        | 0.39 | 0.41 U        | 0.41 | 0.37 U        | 0.37 | 9.9 U         | 9.9  | 0.37 U        | 0.37 | 0.38 U        | 0.38 |
| 2-Chlorophenol               | 280      | 0.241 | 0.39 U        | 0.39 | 0.41 U        | 0.41 | 0.37 U        | 0.37 | 9.9 U         | 9.9  | 0.37 U        | 0.37 | 0.38 U        | 0.38 |
| 1,3-Dichlorobenzene          | 5100     | 0.175 | 0.39 U        | 0.39 | 0.41 U        | 0.41 | 0.37 U        | 0.37 | 9.9 U         | 9.9  | 0.37 U        | 0.37 | 0.38 U        | 0.38 |
| 1,4-Dichlorobenzene          | 570      | 0.158 | 0.39 U        | 0.39 | 0.41 U        | 0.41 | 0.37 U        | 0.37 | 9.9 U         | 9.9  | 0.37 U        | 0.37 | 0.38 U        | 0.38 |
| 1,2-Dichlorobenzene          | 5100     | 0.188 | 0.39 U        | 0.39 | 0.41 U        | 0.41 | 0.37 U        | 0.37 | 9.9 U         | 9.9  | 0.37 U        | 0.37 | 0.38 U        | 0.38 |
| 2-Methylphenol               | 2800     | 0.221 | 0.39 U        | 0.39 | 0.41 U        | 0.41 | 0.37 U        | 0.37 | 9.9 U         | 9.9  | 0.37 U        | 0.37 | 0.38 U        | 0.38 |
| 2,2'-oxybis(1-Chloropropane) |          | 0.231 | 0.39 U        | 0.39 | 0.41 U        | 0.41 | 0.37 U        | 0.37 | 9.9 U         | 9.9  | 0.37 U        | 0.37 | 0.38 U        | 0.38 |
| 4-Methylphenol               | 2800     | 0.426 | 0.39 U        | 0.39 | 0.41 U        | 0.41 | 0.37 U        | 0.37 | 9.9 U         | 9.9  | 0.37 U        | 0.37 | 0.38 U        | 0.38 |
| N-Nitroso-di-n-propylamine   | 0.66     | 0.264 | 0.39 U        | 0.39 | 0.41 U        | 0.41 | 0.37 U        | 0.37 | 9.9 U         | 9.9  | 0.37 U        | 0.37 | 0.38 U        | 0.38 |
| Hexachloroethane             | 6        | 0.175 | 0.39 U        | 0.39 | 0.41 U        | 0.41 | 0.37 U        | 0.37 | 9.9 U         | 9.9  | 0.37 U        | 0.37 | 0.38 U        | 0.38 |
| Nitrobenzene                 | 28       | 0.244 | 0.39 U        | 0.39 | 0.41 U        | 0.41 | 0.37 U        | 0.37 | 9.9 U         | 9.9  | 0.37 U        | 0.37 | 0.38 U        | 0.38 |
| Isophorone                   | 1100     | 0.129 | 0.39 U        | 0.39 | 0.41 U        | 0.41 | 0.37 U        | 0.37 | 9.9 U         | 9.9  | 0.37 U        | 0.37 | 0.38 U        | 0.38 |
| 2-Nitrophenol                |          | 0.231 | 0.39 U        | 0.39 | 0.41 U        | 0.41 | 0.37 U        | 0.37 | 9.9 U         | 9.9  | 0.37 U        | 0.37 | 0.38 U        | 0.38 |
| 2,4-Dimethylphenol           | 1100     | 0.158 | 0.39 U        | 0.39 | 0.41 U        | 0.41 | 0.37 U        | 0.37 | 9.9 U         | 9.9  | 0.37 U        | 0.37 | 0.38 U        | 0.38 |
| bis(2-Chloroethoxy) methane  |          | 0.201 | 0.39 U        | 0.39 | 0.41 U        | 0.41 | 0.37 U        | 0.37 | 9.9 U         | 9.9  | 0.37 U        | 0.37 | 0.38 U        | 0.38 |
| 2,4-Dichlorophenol           | 170      | 0.145 | 0.39 U        | 0.39 | 0.41 U        | 0.41 | 0.37 U        | 0.37 | 9.9 U         | 9.9  | 0.37 U        | 0.37 | 0.38 U        | 0.38 |
| 1,2,4-Trichlorobenzene       | 68       | 0.317 | 0.39 U        | 0.39 | 0.41 U        | 0.41 | 0.37 U        | 0.37 | 9.9 U         | 9.9  | 0.37 U        | 0.37 | 0.38 U        | 0.38 |
| Naphthalene                  | 230      | 0.277 | 0.39 U        | 0.39 | 0.41 U        | 0.41 | 0.37 U        | 0.37 | 9.9 U         | 9.9  | 0.37 U        | 0.37 | 0.38 U        | 0.38 |
| 4-Chloroaniline              | 230      | 0.096 | 0.39 U        | 0.39 | 0.41 U        | 0.41 | 0.37 U        | 0.37 | 9.9 U         | 9.9  | 0.37 U        | 0.37 | 0.38 U        | 0.38 |
| Hexachlorobutadiene          | 1        | 0.152 | 0.39 U        | 0.39 | 0.41 U        | 0.41 | 0.37 U        | 0.37 | 9.9 U         | 9.9  | 0.37 U        | 0.37 | 0.38 U        | 0.38 |
| 4-Chloro-3-methylphenol      | 10000    | 0.102 | 0.39 U        | 0.39 | 0.41 U        | 0.41 | 0.37 U        | 0.37 | 9.9 U         | 9.9  | 0.37 U        | 0.37 | 0.38 U        | 0.38 |
| 2-Methylnaphthalene          |          | 0.287 | 0.39 U        | 0.39 | 0.41 U        | 0.41 | 0.37 U        | 0.37 | 9.9 U         | 9.9  | 0.37 U        | 0.37 | 0.38 U        | 0.38 |
| Hexachlorocyclopentadiene    | 400      | 0.119 | 0.39 U        | 0.39 | 0.41 U        | 0.41 | 0.37 U        | 0.37 | 9.9 U         | 9.9  | 0.37 U        | 0.37 | 0.38 U        | 0.38 |
| 2,4,6-Trichlorophenol        | 62       | 0.185 | 0.39 U        | 0.39 | 0.41 U        | 0.41 | 0.37 U        | 0.37 | 9.9 U         | 9.9  | 0.37 U        | 0.37 | 0.38 U        | 0.38 |
| 2,4,5-Trichlorophenol        | 5600     | 0.155 | 0.96 U        | 0.96 | 1 U           | 1    | 0.92 U        | 0.92 | 25 U          | 25   | 0.92 U        | 0.92 | 0.94 U        | 0.94 |
| 2-Chloronaphthalene          |          | 0.271 | 0.39 U        | 0.39 | 0.41 U        | 0.41 | 0.37 U        | 0.37 | 9.9 U         | 9.9  | 0.37 U        | 0.37 | 0.38 U        | 0.38 |
| 2-Nitroaniline               |          | 0.201 | 0.96 U        | 0.96 | 1 U           | 1    | 0.92 U        | 0.92 | 25 U          | 25   | 0.92 U        | 0.92 | 0.94 U        | 0.94 |
| Dimethylphthalate            | 10000    | 0.145 | 0.39 U        | 0.39 | 0.41 U        | 0.41 | 0.37 U        | 0.37 | 9.9 U         | 9.9  | 0.37 U        | 0.37 | 0.38 U        | 0.38 |
| Acenaphthylene               |          | 0.198 | 0.39 U        | 0.39 | 0.41 U        | 0.41 | 0.37 U        | 0.37 | 9.9 U         | 9.9  | 0.37 U        | 0.37 | 0.38 U        | 0.38 |
| 2,6-Dinitrotoluene           | 1        | 0.172 | 0.39 U        | 0.39 | 0.41 U        | 0.41 | 0.37 U        | 0.37 | 9.9 U         | 9.9  | 0.37 U        | 0.37 | 0.38 U        | 0.38 |
| 3-Nitroaniline               |          | 0.172 | 0.96 U        | 0.96 | 1 U           | 1    | 0.92 U        | 0.92 | 25 U          | 25   | 0.92 U        | 0.92 | 0.94 U        | 0.94 |
| Acenaphthene                 | 3400     | 0.221 | 0.39 U        | 0.39 | 0.41 U        | 0.41 | 0.37 U        | 0.37 | 9.9 U         | 9.9  | 0.37 U        | 0.37 | 0.38 U        | 0.38 |
| 2,4-Dinitrophenol            | 110      | 0.152 | 0.96 U        | 0.96 | 1 U           | 1    | 0.92 U        | 0.92 | 25 U          | 25   | 0.92 U        | 0.92 | 0.94 U        | 0.94 |
| 4-Nitrophenol                |          | 0.248 | 0.96 U        | 0.96 | 1 U           | 1    | 0.92 U        | 0.92 | 25 U          | 25   | 0.92 U        | 0.92 | 0.94 U        | 0.94 |
| Dibenzofuran                 |          | 0.215 | 0.39 U        | 0.39 | 0.41 U        | 0.41 | 0.37 U        | 0.37 | 9.9 U         | 9.9  | 0.37 U        | 0.37 | 0.38 U        | 0.38 |

**MAIN POST  
SURFACE SOIL SEMIVOLATILES**

| Geographical Location      |          |       | M15           |      | M15           |      | M16           |      | M16           |      | M16           |      | M16           |      |
|----------------------------|----------|-------|---------------|------|---------------|------|---------------|------|---------------|------|---------------|------|---------------|------|
| Sample                     |          |       | MP15-SS01-A01 |      | MP15-SS02-A01 |      | MP16-SS01-A01 |      | MP16-SS02-A01 |      | MP16-SS03-A01 |      | MP16-SS04-A01 |      |
| Batch#                     |          |       | 9411G832      |      | 9411G832      |      | 9411G832      |      | 9411G832      |      | 9411G832      |      | 9411G832      |      |
| Prep#                      |          |       | 94GB0796      |      | 94GB0796      |      | 94GB0796      |      | 94GB0796      |      | 94GB0796      |      | 94GB0796      |      |
| RFW#                       |          |       | 010           |      | 011           |      | 012           |      | 013           |      | 015           |      | 014           |      |
| Sample Depth               |          |       | 0-6"          |      | 0-6"          |      | 0-6"          |      | 0-6"          |      | 0-6"          |      | 0-6"          |      |
| Dilution Factor            |          |       | 1.00          |      | 1.00          |      | 1.00          |      | 25.0          |      | 1.00          |      | 1.00          |      |
| Matrix                     |          |       | soil          |      | soil          |      | soil          |      | soil          |      | soil          |      | soil          |      |
| Units                      | mg/kg    | mg/kg | mg/kg         |      | mg/kg         |      | mg/kg         |      | mg/kg         |      | mg/kg         |      | mg/kg         |      |
| Sampling Date              |          |       | 11/29/94      |      | 11/29/94      |      | 11/29/94      |      | 11/29/94      |      | 11/29/94      |      | 11/29/94      |      |
| Analysis Date              |          |       | 12/21/94      |      | 12/21/94      |      | 12/21/94      |      | 12/21/94      |      | 12/21/94      |      | 12/21/94      |      |
| Analysis                   | Standard | MDL   | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL |
|                            |          |       | Result        |      | Result        |      | Result        |      | Result        |      | Result        |      | Result        |      |
| 2,4-Dinitrotoluene         | 1        | 0.191 | 0.39 U        | 0.39 | 0.41 U        | 0.41 | 0.37 U        | 0.37 | 9.9 U         | 9.9  | 0.37 U        | 0.37 | 0.38 U        | 0.38 |
| Diethylphthalate           | 10000    | 0.178 | 0.39 U        | 0.39 | 0.41 U        | 0.41 | 0.37 U        | 0.37 | 9.9 U         | 9.9  | 0.37 U        | 0.37 | 0.38 U        | 0.38 |
| 4-Chlorophenyl-phenylether |          | 0.231 | 0.39 U        | 0.39 | 0.41 U        | 0.41 | 0.37 U        | 0.37 | 9.9 U         | 9.9  | 0.37 U        | 0.37 | 0.38 U        | 0.38 |
| Fluorene                   | 2300     | 0.208 | 0.39 U        | 0.39 | 0.41 U        | 0.41 | 0.37 U        | 0.37 | 9.9 U         | 9.9  | 0.37 U        | 0.37 | 0.38 U        | 0.38 |
| 4-Nitroaniline             |          | 0.211 | 0.96 U        | 0.96 | 1 U           | 1    | 0.92 U        | 0.92 | 25 U          | 25   | 0.92 U        | 0.92 | 0.94 U        | 0.94 |
| 4,6-Dinitro-2-methylphenol |          | 0.175 | 0.96 U        | 0.96 | 1 U           | 1    | 0.92 U        | 0.92 | 25 U          | 25   | 0.92 U        | 0.92 | 0.94 U        | 0.94 |
| N-Nitrosodiphenylamine (1) | 140      | 0.139 | 0.39 U        | 0.39 | 0.41 U        | 0.41 | 0.37 U        | 0.37 | 9.9 U         | 9.9  | 0.37 U        | 0.37 | 0.38 U        | 0.38 |
| 4-Bromophenyl-phenylether  |          | 0.175 | 0.39 U        | 0.39 | 0.41 U        | 0.41 | 0.37 U        | 0.37 | 9.9 U         | 9.9  | 0.37 U        | 0.37 | 0.38 U        | 0.38 |
| Hexachlorobenzene          | 0.66     | 0.182 | 0.39 U        | 0.39 | 0.41 U        | 0.41 | 0.37 U        | 0.37 | 9.9 U         | 9.9  | 0.37 U        | 0.37 | 0.38 U        | 0.38 |
| Pentachlorophenol          | 6        | 0.132 | 0.96 U        | 0.96 | 1 U           | 1    | 0.92 U        | 0.92 | 25 U          | 25   | 0.92 U        | 0.92 | 0.94 U        | 0.94 |
| Phenanthrene               |          | 0.165 | 0.37 J        |      | 0.17 J        |      | 0.37 U        | 0.37 | 9.9 U         | 9.9  | 0.045 J       |      | 0.38 U        | 0.38 |
| Anthracene                 | 10000    | 0.152 | 0.041 J       |      | 0.41 U        | 0.41 | 0.37 U        | 0.37 | 9.9 U         | 9.9  | 0.37 U        | 0.37 | 0.38 U        | 0.38 |
| Carbazole                  |          | 0.145 | 0.39 U        | 0.39 | 0.41 U        | 0.41 | 0.37 U        | 0.37 | 9.9 U         | 9.9  | 0.37 U        | 0.37 | 0.38 U        | 0.38 |
| Di-n-butylphthalate        | 5700     | 0.215 | 0.1 JB        |      | 0.13 JB       |      | 0.086 JB      |      | 9.9 U         | 9.9  | 0.088 JB      |      | 0 JB          |      |
| Fluoranthene               | 2300     | 0.198 | 0.53          |      | 0.36 J        |      | 0.046 J       |      | 9.9 U         | 9.9  | 0.1 J         |      | 0.073 J       |      |
| Pyrene                     | 1700     | 0.178 | 0.72          |      | 0.43          |      | 0.06 J        |      | 9.9 U         | 9.9  | 0.14 J        |      | 0.096 J       |      |
| Butylbenzylphthalate       | 1100     | 0.175 | 0.39 U        | 0.39 | 0.41 U        | 0.41 | 0.37 U        | 0.37 | 9.9 U         | 9.9  | 0.37 U        | 0.37 | 0.38 U        | 0.38 |
| 3,3'-Dichlorobenzidine     | 2        | 0.092 | 0.39 U        | 0.39 | 0.41 U        | 0.41 | 0.37 U        | 0.37 | 9.9 U         | 9.9  | 0.37 U        | 0.37 | 0.38 U        | 0.38 |
| Benzo(a)anthracene         | 0.9      | 0.162 | 0.31 J        |      | 0.18 J        |      | 0.37 U        | 0.37 | 9.9 U         | 9.9  | 0.069 J       |      | 0.039 J       |      |
| Chrysene                   | 9        | 0.145 | 0.33 J        |      | 0.23 J        |      | 0.37 U        | 0.37 | 9.9 U         | 9.9  | 0.063 J       |      | 0.043 J       |      |
| bis(2-Ethylhexy)phthalate  | 49       | 0.32  | 0.069 J       |      | 0.077 J       |      | 0.084 J       |      | 1.1 J         |      | 0.26 J        |      | 0.64          |      |
| Di-n-octyl phthalate       | 1100     | 0.185 | 0.39 U        | 0.39 | 0.41 U        | 0.41 | 0.37 U        | 0.37 | 9.9 U         | 9.9  | 0.37 U        | 0.37 | 0.38 U        | 0.38 |
| Benzo(b)fluoranthene       | 0.9      | 0.188 | 0.45          |      | 0.35 J        |      | 0.37 U        | 0.37 | 9.9 U         | 9.9  | 0.12 J        |      | 0.065 J       |      |
| Benzo(k)fluoranthene       | 0.9      | 0.205 | 0.13 J        |      | 0.11 J        |      | 0.37 U        | 0.37 | 9.9 U         | 9.9  | 0.37 U        | 0.37 | 0.38 U        | 0.38 |
| Benzo(a)pyrene             | 0.66     | 0.162 | 0.27 J        |      | 0.2 J         |      | 0.37 U        | 0.37 | 9.9 U         | 9.9  | 0.057 J       |      | 0.046 J       |      |
| Indeno(1,2,3-cd)pyrene     | 0.9      | 0.234 | 0.16 J        |      | 0.12 J        |      | 0.37 U        | 0.37 | 9.9 U         | 9.9  | 0.049 J       |      | 0.04 J        |      |
| Dibenzo(a,h)anthracene     | 0.66     | 0.198 | 0.041 J       |      | 0.41 U        | 0.41 | 0.37 U        | 0.37 | 9.9 U         | 9.9  | 0.37 U        | 0.37 | 0.38 U        | 0.38 |
| Benzo(g,h,i)perylene       |          | 0.224 | 0.16 J        |      | 0.11 J        |      | 0.37 U        | 0.37 | 9.9 U         | 9.9  | 0.37 U        | 0.37 | 0.38 U        | 0.38 |
| Method: TCL Semivolatiles  |          |       |               |      |               |      |               |      |               |      |               |      |               |      |

**MAIN POST  
SURFACE SOIL INORGANICS**

|                       |          |               |           |               |           |
|-----------------------|----------|---------------|-----------|---------------|-----------|
| Geographical Location |          | MP15          |           | MP15          |           |
| Sample                |          | MP15-SS01-A01 |           | MP15-SS02-A01 |           |
| Batch#                |          | 9411G832      |           | 9411G832      |           |
| Prep#                 |          | 94GTS468      |           | 94GTS468      |           |
| RFW#                  |          | 010           |           | 011           |           |
| Sample Depth          |          | 0-6"          |           | 0-6"          |           |
| Dilution Factor       |          | 1.00          |           | 1.00          |           |
| Matrix                |          | soil          |           | soil          |           |
| Units                 | mg/kg    | mg/kg         |           | mg/kg         |           |
| Sampling Date         |          | 11/29/94      |           | 11/29/94      |           |
| Analysis Date         |          | 12/6/94       |           | 12/6/94       |           |
| Analysis              | Standard | Analytical    | Reporting | Analytical    | Reporting |
|                       |          | Result        | Limit     | Result        | Limit     |
| % Solids              |          | 86.2          | 0.10      | 81.3          | 0.10      |
| Silver                | 110      | 1.4           | 0.56      | 1.5           | 0.61      |
| Aluminum              |          | 5300          | 4.8       | 5030          | 5.2       |
| Arsenic               | 20       | 8.3           | 0.6 *     | 8.9           | 0.38      |
| Barium                | 700      | 68.4          | 0.38      | 101           | 0.41      |
| Beryllium             | 1        | 0.6           | 0.27      | 0.69          | 0.29      |
| Calcium               |          | 815           | 2.2       | 1860          | 2.4       |
| Cadmium               | 1        | 2.9           | 0.51      | 4.5           | 0.55      |
| Cobalt                |          | 6.1           | 0.49      | 7.8           | 0.53      |
| Chromium              |          | 109           | 0.54      | 95.5          | 0.59      |
| Copper                | 600      | 34            | 0.42      | 66.5          | 0.45      |
| Iron                  |          | 33400         | 0.85      | 37700         | 0.92      |
| Mercury               | 14       | 0.11 U        | 0.11      | 0.12 U        | 0.12      |
| Potassium             |          | 2990          | 149       | 2770          | 160       |
| Magnesium             |          | 1560          | 4.4       | 1600          | 4.8       |
| Manganese             |          | 159           | 0.36      | 187           | 0.39      |
| Sodium                |          | 23.4          | 2.8       | 33.1          | 3         |
| Nickel                | 250      | 8.3           | 2.3       | 6.9           | 2.5       |
| Lead                  | 400      | 5340          | 4.6       | 6130          | 4.9       |
| Antimony              | 14       | 3.9 U         | 3.9       | 4.2 U         | 4.2       |
| Selenium              | 63       | 0.45          | 0.17      | 2.1           | 0.21      |
| Thallium              | 2        | 0.21 U        | 0.21      | 0.26 U        | 0.26      |
| Vanadium              | 370      | 27.5          | 0.53      | 25.9          | 0.57      |
| Zinc                  | 1500     | 7750          | 0.51      | 12800         | 0.55      |
| Dilution Factor       |          | * = 2.00      |           |               |           |
| Method:TAL Metals     |          |               |           |               |           |

**MAIN POST**  
**SURFACE SOIL PESTICIDES/PCBS**

| Geographical Location   |          | M15           |           | M15           |           | M15           |           | M15           |           | M16           |           | M16           |           |
|-------------------------|----------|---------------|-----------|---------------|-----------|---------------|-----------|---------------|-----------|---------------|-----------|---------------|-----------|
| Sample                  |          | MP15-SS01-A01 |           | MP15-SS01-A01 |           | MP15-SS02-A01 |           | MP15-SS02-A01 |           | MP16-SS01-A01 |           | MP16-SS01-A01 |           |
| Batch#                  |          | 9411G832      |           | 9411G832      |           | 9411G832      |           | 9411G832      |           | 9411G832      |           | 9411G832      |           |
| Prep#                   |          | 94GP1033      |           | 94GP1033      |           | 94GP1033      |           | 94GP1033      |           | 94GP1033      |           | 94GP1033      |           |
| RFW#                    |          | 010           |           | 010 DL        |           | 011           |           | 011 DL        |           | 012           |           | 012 DL        |           |
| Sample Depth            |          | 0-6"          |           | 0-6"          |           | 0-6"          |           | 0-6"          |           | 0-6"          |           | 0-6"          |           |
| Dilution Factor         |          | 10.0          |           | 500           |           | 1.00          |           | 20.0          |           | 1.00          |           | 20.0          |           |
| Matrix                  |          | soil          |           | soil          |           | soil          |           | soil          |           | soil          |           | soil          |           |
| Units                   | mg/kg    | mg/kg         |           | mg/kg         |           | mg/kg         |           | mg/kg         |           | mg/kg         |           | mg/kg         |           |
| Sampling Date           |          | 11/29/94      |           | 11/29/94      |           | 11/29/94      |           | 11/29/94      |           | 11/29/94      |           | 11/29/94      |           |
| Analysis Date           |          | 12/17/94      |           | 12/14/94      |           | 12/17/94      |           | 12/14/94      |           | 12/17/94      |           | 12/13/94      |           |
| Analysis                | Standard | Analytical    | Reporting | Analytical    | Reporting | Analytical    | Reporting | Analytical    | Reporting | Analytical    | Reporting | Analytical    | Reporting |
|                         |          | Result        | Limit     | Result        | Limit     | Result        | Limit     | Result        | Limit     | Result        | Limit     | Result        | Limit     |
| alpha-BHC               |          | 0.019 U       | 0.019     | 0.95 U        | 0.95      | 0.002 U       | 0.002     | 0.04 U        | 0.04      | 0.0019 U      | 0.0019    | 0.037 U       | 0.037     |
| beta-BHC                |          | 0.019 U       | 0.019     | 0.95 U        | 0.95      | 0.002 U       | 0.002     | 0.04 U        | 0.04      | 0.0019 U      | 0.0019    | 0.037 U       | 0.037     |
| delta-BHC               |          | 0.019 U       | 0.019     | 0.95 U        | 0.95      | 0.002 U       | 0.002     | 0.04 U        | 0.04      | 0.0019 U      | 0.0019    | 0.037 U       | 0.037     |
| gamma-BHC (Lindane)     | 0.52     | 0.019 U       | 0.019     | 0.95 U        | 0.95      | 0.002 U       | 0.002     | 0.04 U        | 0.04      | 0.0034        |           | 0.037 U       | 0.037     |
| Heptachlor              | 0.15     | 0.019 U       | 0.019     | 0.95 U        | 0.95      | 0.002 U       | 0.002     | 0.04 U        | 0.04      | 0.0019 U      | 0.0019    | 0.037 U       | 0.037     |
| Aldrin                  | 0.04     | 0.019 U       | 0.019     | 0.95 U        | 0.95      | 0.002 U       | 0.002     | 0.04 U        | 0.04      | 0.0019 U      | 0.0019    | 0.037 U       | 0.037     |
| Heptachlor epoxide      |          | 0.019 U       | 0.019     | 0.95 U        | 0.95      | 0.002 U       | 0.002     | 0.04 U        | 0.04      | 0.0019 U      | 0.0019    | 0.037 U       | 0.037     |
| Endosulfan I            | 340      | 0.019 U       | 0.019     | 0.95 U        | 0.95      | 0.002 U       | 0.002     | 0.04 U        | 0.04      | 0.0019 U      | 0.0019    | 0.037 U       | 0.037     |
| Dieldrin                | 0.042    | 0.038 U       | 0.038     | 1.9 U         | 1.9       | 0.004 U       | 0.004     | 0.081 U       | 0.081     | 0.017         |           | 0.075 U       | 0.075     |
| 4,4'-DDE                | 2        | 3.1 C         |           | 6.6 CD        |           | 0.32 C        |           | 1 CD          |           | 0.27 C        |           | .35 CD        |           |
| Endrin                  | 17       | 0.038 U       | 0.038     | 1.9 U         | 1.9       | 0.004 U       | 0.004     | 0.081 U       | 0.081     | 0.0037 U      | 0.0037    | 0.075 U       | 0.075     |
| Endosulfan II           | 340      | 0.038 U       | 0.038     | 1.9 U         | 1.9       | 0.004 U       | 0.004     | 0.081 U       | 0.081     | 0.0037 U      | 0.0037    | 0.075 U       | 0.075     |
| 4,4'-DDD                | 3        | 0.038 U       | 0.038     | 1.9 U         | 1.9       | 0.004 U       | 0.004     | 0.081 U       | 0.081     | 0.078         |           | .13 D         |           |
| Endosulfan sulfate      |          | 0.038 U       | 0.038     | 1.9 U         | 1.9       | 0.004 U       | 0.004     | 0.081 U       | 0.081     | 0.0037 U      | 0.0037    | 0.075 U       | 0.075     |
| 4,4'-DDT                | 2        | 3.4 C         |           | 7.9 CD        |           | 0.35 C        |           | 1 CD          |           | 0.33 C        |           | 1.1 CD        |           |
| Methoxychlor            | 280      | 0.19 U        | 0.19      | 9.5 U         | 9.5       | 0.02 U        | 0.02      | 0.4 U         | 0.4       | 0.019 U       | 0.019     | 0.37 U        | 0.37      |
| Endrin ketone           |          | 0.038 U       | 0.038     | 1.9 U         | 1.9       | 0.004 U       | 0.004     | 0.081 U       | 0.081     | 0.0037 U      | 0.0037    | 0.075 U       | 0.075     |
| Endrin aldehyde         |          | 0.038 U       | 0.038     | 1.9 U         | 1.9       | 0.004 U       | 0.004     | 0.081 U       | 0.081     | 0.0037 U      | 0.0037    | 0.075 U       | 0.075     |
| alpha-Chlordane         |          | 0.019 U       | 0.019     | 0.95 U        | 0.95      | 0.002 U       | 0.002     | 0.04 U        | 0.04      | 0.043         |           | .05 D         |           |
| gamma-Chlordane         |          | 0.019 U       | 0.019     | 0.95 U        | 0.95      | 0.002 U       | 0.002     | 0.04 U        | 0.04      | 0.046         |           | .05 D         |           |
| Toxaphene               | 0.1      | 1.9 U         | 1.9       | 95 U          | 95        | 0.2 U         | 0.2       | 4 U           | 4         | 0.19 U        | 0.19      | 3.7 U         | 3.7       |
| Aroclor-1016            | 0.49     | 0.38 U        | 0.38      | 19 U          | 19        | 0.04 U        | 0.04      | 0.81 U        | 0.81      | 0.037 U       | 0.037     | 0.75 U        | 0.75      |
| Aroclor-1221            | 0.49     | 0.76 U        | 0.76      | 38 U          | 38        | 0.081 U       | 0.081     | 1.6 U         | 1.6       | 0.075 U       | 0.075     | 1.5 U         | 1.5       |
| Aroclor-1232            | 0.49     | 0.38 U        | 0.38      | 19 U          | 19        | 0.04 U        | 0.04      | 0.81 U        | 0.81      | 0.037 U       | 0.037     | 0.75 U        | 0.75      |
| Aroclor-1242            | 0.49     | 0.38 U        | 0.38      | 19 U          | 19        | 0.04 U        | 0.04      | 0.81 U        | 0.81      | 0.037 U       | 0.037     | 0.75 U        | 0.75      |
| Aroclor-1248            | 0.49     | 0.38 U        | 0.38      | 19 U          | 19        | 0.04 U        | 0.04      | 0.81 U        | 0.81      | 0.037 U       | 0.037     | 0.75 U        | 0.75      |
| Aroclor-1254            | 0.49     | 0.38 U        | 0.38      | 19 U          | 19        | 0.04 U        | 0.04      | 0.81 U        | 0.81      | 0.037 U       | 0.037     | 0.75 U        | 0.75      |
| Aroclor-1260            | 0.49     | 0.38 U        | 0.38      | 19 U          | 19        | 0.04 U        | 0.04      | 0.81 U        | 0.81      | 0.037 U       | 0.037     | 0.75 U        | 0.75      |
| Method: Pesticides/PCBs |          |               |           |               |           |               |           |               |           |               |           |               |           |

**MAIN POST  
SURFACE SOIL PESTICIDES/PCBS**

| Geographical Location   |          | M16           |           | M16           |           | M16           |           | M16           |           | M16           |           | M16           |           |
|-------------------------|----------|---------------|-----------|---------------|-----------|---------------|-----------|---------------|-----------|---------------|-----------|---------------|-----------|
| Sample                  |          | MP16-SS02-A01 |           | MP16-SS02-A01 |           | MP16-SS03-A01 |           | MP16-SS03-A01 |           | MP16-SS04-A01 |           | MP16-SS04-A01 |           |
| Batch#                  |          | 9411G832      |           | 9411G832      |           | 9411G832      |           | 9411G832      |           | 9411G832      |           | 9411G832      |           |
| Prep#                   |          | 94GP1033      |           | 94GP1033      |           | 94GP1033      |           | 94GP1033      |           | 94GP1033      |           | 94GP1033      |           |
| RFW#                    |          | 013           |           | 013 DL        |           | 015           |           | 015 DL        |           | 014           |           | 014 DL        |           |
| Sample Depth            |          | 0-6"          |           | 0-6"          |           | 0-6"          |           | 0-6"          |           | 0-6"          |           | 0-6"          |           |
| Dilution Factor         |          | 10.0          |           | 500           |           | 1.00          |           | 50.0          |           | 2.00          |           | 50.0          |           |
| Matrix                  |          | soil          |           | soil          |           | soil          |           | soil          |           | soil          |           | soil          |           |
| Units                   | mg/kg    | mg/kg         |           | mg/kg         |           | mg/kg         |           | mg/kg         |           | mg/kg         |           | mg/kg         |           |
| Sampling Date           |          | 11/29/94      |           | 11/29/94      |           | 11/29/94      |           | 11/29/94      |           | 11/29/94      |           | 11/29/94      |           |
| Analysis Date           |          | 12/17/94      |           | 12/14/94      |           | 12/17/94      |           | 12/13/94      |           | 12/17/94      |           | 12/14/94      |           |
| Analysis                | Standard | Analytical    | Reporting | Analytical    | Reporting | Analytical    | Reporting | Analytical    | Reporting | Analytical    | Reporting | Analytical    | Reporting |
|                         |          | Result        | Limit     | Result        | Limit     | Result        | Limit     | Result        | Limit     | Result        | Limit     | Result        | Limit     |
| alpha-BHC               |          | 0.02 U        | 0.02      | 1 U           | 1         | 0.0018 U      | 0.0018    | 0.092 U       | 0.092     | 0.0038 U      | 0.0038    | 0.095 U       | 0.095     |
| beta-BHC                |          | 0.02 U        | 0.02      | 1 U           | 1         | 0.0018 U      | 0.0018    | 0.092 U       | 0.092     | 0.0038 U      | 0.0038    | 0.095 U       | 0.095     |
| delta-BHC               |          | 0.02 U        | 0.02      | 1 U           | 1         | 0.0018 U      | 0.0018    | 0.092 U       | 0.092     | 0.0038 U      | 0.0038    | 0.095 U       | 0.095     |
| gamma-BHC (Lindane)     | 0.52     | 0.17          |           | 1 U           | 1         | 0.0059        |           | 0.092 U       | 0.092     | 0.0038 U      | 0.0038    | 0.095 U       | 0.095     |
| Heptachlor              | 0.15     | 2 C           |           | 2.5 CD        |           | 0.0099        |           | 0.092 U       | 0.092     | 0.0038 U      | 0.0038    | 0.095 U       | 0.095     |
| Aldrin                  | 0.04     | 0.17 C        |           | 1 U           | 1         | 0.0018 U      | 0.0018    | 0.092 U       | 0.092     | 0.0038 U      | 0.0038    | 0.095 U       | 0.095     |
| Heptachlor epoxide      |          | 0.02 U        | 0.02      | 1 U           | 1         | 0.0018 U      | 0.0018    | 0.092 U       | 0.092     | 0.0038 U      | 0.0038    | 0.095 U       | 0.095     |
| Endosulfan I            | 340      | 0.02 U        | 0.02      | 1 U           | 1         | 0.0018 U      | 0.0018    | 0.092 U       | 0.092     | 0.0038 U      | 0.0038    | 0.095 U       | 0.095     |
| Dieldrin                | 0.042    | 1.9 C         |           | 2 CD          |           | 0.15          |           | .21 D         |           | 0.37 C        |           | .37 CD        |           |
| 4,4'-DDE                | 2        | 2 C           |           | 3.5 CD        |           | 0.11 C        |           | .48 CD        |           | 0.46 C        |           | .57 CD        |           |
| Endrin                  | 17       | 0.04 U        | 0.04      | 2 U           | 2         | 0.0037 U      | 0.0037    | 0.18 U        | 0.18      | 0.0076 U      | 0.0076    | 0.19 U        | 0.19      |
| Endosulfan II           | 340      | 0.04 U        | 0.04      | 2 U           | 2         | 0.0037 U      | 0.0037    | 0.18 U        | 0.18      | 0.0076 U      | 0.0076    | 0.19 U        | 0.19      |
| 4,4'-DDD                | 3        | 0.04 U        | 0.04      | 2 U           | 2         | 0.13          |           | .22 D         |           | 0.68 C        |           | 1.6 CD        |           |
| Endosulfan sulfate      |          | 0.04 U        | 0.04      | 2 U           | 2         | 0.0037 U      | 0.0037    | 0.18 U        | 0.18      | 0.0076 U      | 0.0076    | 0.19 U        | 0.19      |
| 4,4'-DDT                | 2        | 3.3 C         |           | 23 CD         |           | 0.31 C        |           | 2 CD          |           | 0.66 C        |           | 1.7 CD        |           |
| Methoxychlor            | 280      | 0.2 U         | 0.2       | 10 U          | 10        | 0.018 U       | 0.018     | 0.92 U        | 0.92      | 0.038 U       | 0.038     | 0.95 U        | 0.95      |
| Endrin ketone           |          | 0.092         |           | 2 U           | 2         | 0.0037 U      | 0.0037    | 0.18 U        | 0.18      | 0.0076 U      | 0.0076    | 0.19 U        | 0.19      |
| Endrin aldehyde         |          | 0.04 U        | 0.04      | 2 U           | 2         | 0.0037 U      | 0.0037    | 0.18 U        | 0.18      | 0.0076 U      | 0.0076    | 0.19 U        | 0.19      |
| alpha-Chlordane         |          | 1.9 C         |           | 11 CD         |           | 0.18          |           | .2 D          |           | 0.45 C        |           | .86 CD        |           |
| gamma-Chlordane         |          | 2 C           |           | 13 CD         |           | 0.19          |           | .2 D          |           | 0.45 C        |           | .92 CD        |           |
| Toxaphene               | 0.1      | 2 U           | 2         | 100 U         | 100       | 0.18 U        | 0.18      | 9.2 U         | 9.2       | 0.38 U        | 0.38      | 9.5 U         | 9.5       |
| Aroclor-1016            | 0.49     | 0.4 U         | 0.4       | 20 U          | 20        | 0.037 U       | 0.037     | 1.8 U         | 1.8       | 0.076 U       | 0.076     | 1.9 U         | 1.9       |
| Aroclor-1221            | 0.49     | 0.8 U         | 0.8       | 40 U          | 40        | 0.073 U       | 0.073     | 3.7 U         | 3.7       | 0.15 U        | 0.15      | 3.8 U         | 3.8       |
| Aroclor-1232            | 0.49     | 0.4 U         | 0.4       | 20 U          | 20        | 0.037 U       | 0.037     | 1.8 U         | 1.8       | 0.076 U       | 0.076     | 1.9 U         | 1.9       |
| Aroclor-1242            | 0.49     | 0.4 U         | 0.4       | 20 U          | 20        | 0.037 U       | 0.037     | 1.8 U         | 1.8       | 0.076 U       | 0.076     | 1.9 U         | 1.9       |
| Aroclor-1248            | 0.49     | 0.4 U         | 0.4       | 20 U          | 20        | 0.037 U       | 0.037     | 1.8 U         | 1.8       | 0.076 U       | 0.076     | 1.9 U         | 1.9       |
| Aroclor-1254            | 0.49     | 0.4 U         | 0.4       | 20 U          | 20        | 0.037 U       | 0.037     | 1.8 U         | 1.8       | 0.076 U       | 0.076     | 1.9 U         | 1.9       |
| Aroclor-1260            | 0.49     | 0.4 U         | 0.4       | 20 U          | 20        | 0.037 U       | 0.037     | 1.8 U         | 1.8       | 0.076 U       | 0.076     | 1.9 U         | 1.9       |
| Method: Pesticides/PCBs |          |               |           |               |           |               |           |               |           |               |           |               |           |



**MAIN POST  
SOIL BORING VOLATILES**

| Geographical Location      |  |  | M-AOC3        |        |            |        | M-AOC3        |       | M-AOC3        |        | M-AOC3              |        | M-AOC3        |        | M-AOC3        |        | M16                 |        |               |
|----------------------------|--|--|---------------|--------|------------|--------|---------------|-------|---------------|--------|---------------------|--------|---------------|--------|---------------|--------|---------------------|--------|---------------|
| Sample                     |  |  | MPA3-SB01-A02 |        |            |        | MPA3-SB01-C02 |       | MPA3-SB01-D02 |        | MPA3-SB01-E02       |        | MPA3-SB02-A02 |        | MPA3-SB02-D02 |        | MPA3-SB03-E02       |        | MP16-SB01-A01 |
| Sample Type                |  |  |               |        |            |        | Duplicate     |       | Trip Blank    |        | Field Rinsate Blank |        |               |        | Trip Blank    |        | Field Rinsate Blank |        |               |
| Batch#                     |  |  | 9412G130      |        |            |        | 9412G130      |       | 9412G155      |        | 9412G130            |        | 9412G155      |        | 9412G155      |        | 9505G825            |        | 9412G155      |
| Prep#                      |  |  | 94GVT030 & 31 |        |            |        | 94GVT030 & 31 |       | 94GVB439      |        | 94GVB439            |        | 94GVT030      |        | 94GVB439      |        | 95GVC137            |        | 94GVT031      |
| RFW#                       |  |  | 001           |        |            |        | 002           |       | 005           |        | 003                 |        | 003           |        | 004           |        | 007                 |        | 001           |
| Sample Depth (bgs)         |  |  | 6 - 9.5'      |        |            |        | 6 - 9.5'      |       |               |        |                     |        | 6 - 9.5'      |        |               |        |                     |        | 0 - 2'        |
| Dilution Factor            |  |  | 1.00          |        |            |        | 1.00          |       | 1.00          |        | 1.00                |        | 1.00          |        | 1.00          |        | 1.00                |        | 1.00          |
| Matrix                     |  |  | soil          |        |            |        | soil          |       | water         |        | water               |        | soil          |        | water         |        | water               |        | soil          |
| Units                      |  |  | mg/kg         | mg/kg  | mg/kg      |        | mg/kg         |       | mg/l          |        | mg/l                |        | mg/kg         |        | mg/l          |        | mg/l                |        | mg/kg         |
| Sampling Date              |  |  | 12/14/94      |        |            |        | 12/14/94      |       | 12/15/94      |        | 12/14/94            |        | 12/15/94      |        | 12/15/94      |        | 5/10/95             |        | 12/15/94      |
| Analysis Date              |  |  | 12/19/94      |        |            |        | 12/19/94      |       | 12/20/94      |        | 12/19/94            |        | 12/19/94      |        | 12/20/94      |        | 5/20/95             |        | 12/20/94      |
| Analysis                   |  |  | Standard      | MDL    | Analytical | CRQL   | Analytical    | CRQL  | Analytical    | CRQL   | Analytical          | CRQL   | Analytical    | CRQL   | Analytical    | CRQL   | Analytical          | CRQL   |               |
|                            |  |  |               |        | Result     |        | Result        |       |               | Result |                     | Result |               | Result |               | Result |                     | Result |               |
| Chloromethane              |  |  | 520           | 0.0073 | 0.011 U    | 0.011  | 0.011 U       | 0.011 | 0.01 U        | 0.01   | 0.01 U              | 0.01   | 0.011 U       | 0.011  | 0.01 U        | 0.01   | 0.01 U              | 0.01   | 0.012 U       |
| Bromomethane               |  |  | 79            | 0.0067 | 0.011 U    | 0.011  | 0.011 U       | 0.011 | 0.01 U        | 0.01   | 0.01 U              | 0.01   | 0.011 U       | 0.011  | 0.01 U        | 0.01   | 0.01 U              | 0.01   | 0.012 U       |
| Vinyl Chloride             |  |  | 2             | 0.0079 | 0.011 U    | 0.011  | 0.011 U       | 0.011 | 0.01 U        | 0.01   | 0.01 U              | 0.01   | 0.011 U       | 0.011  | 0.01 U        | 0.01   | 0.01 U              | 0.01   | 0.012 U       |
| Chloroethane               |  |  |               | 0.0091 | 0.011 U    | 0.011  | 0.011 U       | 0.011 | 0.01 U        | 0.01   | 0.01 U              | 0.01   | 0.011 U       | 0.011  | 0.01 U        | 0.01   | 0.01 U              | 0.01   | 0.012 U       |
| Methylene Chloride         |  |  | 49            | 0.0027 | 0.011 U    | 0.011  | 0.011 U       | 0.011 | 0.01 U        | 0.01   | 0.01 U              | 0.01   | 0.011 U       | 0.011  | 0.01 U        | 0.01   | 0.01 U              | 0.01   | 0.012 U       |
| Acetone                    |  |  | 1000          | 0.0069 | 0.68 B     | .056 * | 2 B           | 110 * | 0.01 U        | 0.01   | 0.24 B              | 0.01   | 0.19 B        | 0.011  | 0.01 U        | 0.01   | 0.01 U              | 0.01   | 0.076 B       |
| Carbon Disulfide           |  |  |               | 0.0044 | 0.011 U    | 0.011  | 0.011 U       | 0.011 | 0.01 U        | 0.01   | 0.01 U              | 0.01   | 0.011 U       | 0.011  | 0.01 U        | 0.01   | 0.01 U              | 0.01   | 0.012 U       |
| 1,1-Dichloroethene         |  |  | 8             | 0.0049 | 0.011 U    | 0.011  | 0.011 U       | 0.011 | 0.01 U        | 0.01   | 0.01 U              | 0.01   | 0.011 U       | 0.011  | 0.01 U        | 0.01   | 0.01 U              | 0.01   | 0.012 U       |
| 1,1-Dichloroethane         |  |  | 570           | 0.003  | 0.011 U    | 0.011  | 0.011 U       | 0.011 | 0.01 U        | 0.01   | 0.01 U              | 0.01   | 0.011 U       | 0.011  | 0.01 U        | 0.01   | 0.01 U              | 0.01   | 0.012 U       |
| 1,2-Dichloroethene (total) |  |  | 79            | 0.0044 | 0.011 U    | 0.011  | 0.011 U       | 0.011 | 0.01 U        | 0.01   | 0.01 U              | 0.01   | 0.011 U       | 0.011  | 0.01 U        | 0.01   | 0.01 U              | 0.01   | 0.012 U       |
| Chloroform                 |  |  | 19            | 0.0029 | 0.011 U    | 0.011  | 0.011 U       | 0.011 | 0.01 U        | 0.01   | 0.006 J             | 0.01   | 0.011 U       | 0.011  | 0.01 U        | 0.01   | 0.01 U              | 0.01   | 0.012 U       |
| 1,2-Dichloroethane         |  |  | 6             | 0.0024 | 0.011 U    | 0.011  | 0.011 U       | 0.011 | 0.01 U        | 0.01   | 0.01 U              | 0.01   | 0.011 U       | 0.011  | 0.01 U        | 0.01   | 0.01 U              | 0.01   | 0.012 U       |
| 2-Butanone                 |  |  | 1000          | 0.0041 | 0.011 U    | 0.011  | 0.011 U       | 0.011 | 0.01 U        | 0.01   | 0.01 U              | 0.01   | 0.011 U       | 0.011  | 0.01 U        | 0.01   | 0.01 U              | 0.01   | 0.012 U       |
| 1,1,1-Trichloroethane      |  |  | 210           | 0.0017 | 0.011 U    | 0.011  | 0.011 U       | 0.011 | 0.01 U        | 0.01   | 0.01 U              | 0.01   | 0.011 U       | 0.011  | 0.01 U        | 0.01   | 0.01 U              | 0.01   | 0.012 U       |
| Carbon Tetrachloride       |  |  | 2             | 0.0015 | 0.011 U    | 0.011  | 0.011 U       | 0.011 | 0.01 U        | 0.01   | 0.01 U              | 0.01   | 0.011 U       | 0.011  | 0.01 U        | 0.01   | 0.01 U              | 0.01   | 0.012 U       |
| Bromodichloromethane       |  |  | 11            | 0.002  | 0.011 U    | 0.011  | 0.011 U       | 0.011 | 0.01 U        | 0.01   | 0.01 U              | 0.01   | 0.011 U       | 0.011  | 0.01 U        | 0.01   | 0.01 U              | 0.01   | 0.012 U       |
| 1,2-Dichloropropane        |  |  | 10            | 0.0017 | 0.011 U    | 0.011  | 0.011 U       | 0.011 | 0.01 U        | 0.01   | 0.01 U              | 0.01   | 0.011 U       | 0.011  | 0.01 U        | 0.01   | 0.01 U              | 0.01   | 0.012 U       |
| cis-1,3-Dichloropropene    |  |  | 4             | 0.003  | 0.011 U    | 0.011  | 0.011 U       | 0.011 | 0.01 U        | 0.01   | 0.01 U              | 0.01   | 0.011 U       | 0.011  | 0.01 U        | 0.01   | 0.01 U              | 0.01   | 0.012 U       |
| Trichloroethene            |  |  | 23            | 0.002  | 0.011 U    | 0.011  | 0.011 U       | 0.011 | 0.01 U        | 0.01   | 0.01 U              | 0.01   | 0.011 U       | 0.011  | 0.01 U        | 0.01   | 0.01 U              | 0.01   | 0.012 U       |
| Dibromochloromethane       |  |  | 110           | 0.0024 | 0.011 U    | 0.011  | 0.011 U       | 0.011 | 0.01 U        | 0.01   | 0.01 U              | 0.01   | 0.011 U       | 0.011  | 0.01 U        | 0.01   | 0.01 U              | 0.01   | 0.012 U       |
| 1,1,2-Trichloroethane      |  |  | 22            | 0.0043 | 0.011 U    | 0.011  | 0.011 U       | 0.011 | 0.01 U        | 0.01   | 0.01 U              | 0.01   | 0.011 U       | 0.011  | 0.01 U        | 0.01   | 0.01 U              | 0.01   | 0.012 U       |
| Benzene                    |  |  | 3             | 0.0033 | 0.011 U    | 0.011  | 0.011 U       | 0.011 | 0.01 U        | 0.01   | 0.01 U              | 0.01   | 0.011 U       | 0.011  | 0.01 U        | 0.01   | 0.01 U              | 0.01   | 0.012 U       |
| trans-1,3-Dichloropropene  |  |  | 4             | 0.0024 | 0.011 U    | 0.011  | 0.011 U       | 0.011 | 0.01 U        | 0.01   | 0.01 U              | 0.01   | 0.011 U       | 0.011  | 0.01 U        | 0.01   | 0.01 U              | 0.01   | 0.012 U       |
| Bromoform                  |  |  | 86            | 0.0031 | 0.011 U    | 0.011  | 0.011 U       | 0.011 | 0.01 U        | 0.01   | 0.01 U              | 0.01   | 0.011 U       | 0.011  | 0.01 U        | 0.01   | 0.01 U              | 0.01   | 0.012 U       |
| 4-Methyl-2-pentanone       |  |  | 1000          | 0.0055 | 0.011 U    | 0.011  | 0.011 U       | 0.011 | 0.01 U        | 0.01   | 0.01 U              | 0.01   | 0.011 U       | 0.011  | 0.01 U        | 0.01   | 0.01 U              | 0.01   | 0.012 U       |
| 2-Hexanone                 |  |  |               | 0.0039 | 0.011 U    | 0.011  | 0.011 U       | 0.011 | 0.01 U        | 0.01   | 0.01 U              | 0.01   | 0.011 U       | 0.011  | 0.01 U        | 0.01   | 0.01 U              | 0.01   | 0.012 U       |
| Tetrachloroethene          |  |  | 4             | 0.004  | 0.011 U    | 0.011  | 0.011 U       | 0.011 | 0.01 U        | 0.01   | 0.01 U              | 0.01   | 0.011 U       | 0.011  | 0.01 U        | 0.01   | 0.01 U              | 0.01   | 0.012 U       |
| 1,1,2,2-Tetrachloroethane  |  |  | 34            | 0.0042 | 0.011 U    | 0.011  | 0.011 U       | 0.011 | 0.01 U        | 0.01   | 0.01 U              | 0.01   | 0.011 U       | 0.011  | 0.01 U        | 0.01   | 0.01 U              | 0.01   | 0.012 U       |
| Toluene                    |  |  | 1000          | 0.0027 | 0.011 U    | 0.011  | 0.011 U       | 0.011 | 0.01 U        | 0.01   | 0.01 U              | 0.01   | 0.011 U       | 0.011  | 0.01 U        | 0.01   | 0.01 U              | 0.01   | 0.012 U       |
| Chlorobenzene              |  |  | 37            | 0.0027 | 0.011 U    | 0.011  | 0.011 U       | 0.011 | 0.01 U        | 0.01   | 0.01 U              | 0.01   | 0.011 U       | 0.011  | 0.01 U        | 0.01   | 0.01 U              | 0.01   | 0.012 U       |
| Ethylbenzene               |  |  | 1000          | 0.0031 | 0.011 U    | 0.011  | 0.011 U       | 0.011 | 0.01 U        | 0.01   | 0.01 U              | 0.01   | 0.011 U       | 0.011  | 0.01 U        | 0.01   | 0.01 U              | 0.01   | 0.012 U       |
| Styrene                    |  |  | 23            | 0.0038 | 0.011 U    | 0.011  | 0.011 U       | 0.011 | 0.01 U        | 0.01   | 0.01 U              | 0.01   | 0.011 U       | 0.011  | 0.01 U        | 0.01   | 0.01 U              | 0.01   | 0.012 U       |
| Xylene (total)             |  |  | 410           | 0.0038 | 0.011 U    | 0.011  | 0.011 U       | 0.011 | 0.01 U        | 0.01   | 0.01 U              | 0.01   | 0.011 U       | 0.011  | 0.01 U        | 0.01   | 0.01 U              | 0.01   | 0.012 U       |
| Total Est. Conc. of TIC.   |  |  |               |        | 0.009 J    |        | .060 J*       |       |               |        |                     |        |               |        |               |        |                     |        |               |
| Dilution Factor            |  |  |               |        | * = 5.0    |        | * = 10.0      |       |               |        |                     |        |               |        |               |        |                     |        |               |
| Method:TCL Volatiles       |  |  |               |        |            |        |               |       |               |        |                     |        |               |        |               |        |                     |        |               |

**MAIN POST  
SOIL BORING VOLATILES**

| Geographical Location      |          |        | M16           |       | M18           |       | M18            |       | M18           |       | M18            |       | M18           |       | M18           |       | M18          |       |
|----------------------------|----------|--------|---------------|-------|---------------|-------|----------------|-------|---------------|-------|----------------|-------|---------------|-------|---------------|-------|--------------|-------|
| Sample                     |          |        | MP16-SB01-A02 |       | MP18-SB01-A01 |       | MP18-SB01-A02  |       | MP18-SB02-A01 |       | MP18-SB02-A02  |       | MP18-SB03-A01 |       | MP18-SB03-A02 |       | M18-SB04-A01 |       |
| Sample Type                |          |        |               |       |               |       |                |       |               |       |                |       |               |       |               |       |              |       |
| Batch#                     |          |        | 9412G155      |       | 9501G632      |       | 9501G632       |       | 9501G632      |       | 9501G632       |       | 9501G632      |       | 9501G632      |       | 9501G587     |       |
| Prep#                      |          |        | 94GVT030      |       | 95GVT016 & 8  |       | 95GVT016 & 9   |       | 95GVT008      |       | 95GVT016 & 9   |       | 95GVT008 & 9  |       | 95GVT008      |       | 95GVF013     |       |
| RFW#                       |          |        | 002           |       | 003           |       | 004            |       | 005           |       | 006            |       | 007           |       | 008           |       | 003          |       |
| Sample Depth (bgs)         |          |        | 2 - 4'        |       | 1 - 1.5'      |       | 2'             |       | 1 - 1.5'      |       | 4 - 6'         |       | 1 - 1.5'      |       | 4 - 7.5'      |       | 1 - 1.5'     |       |
| Dilution Factor            |          |        | 1.00          |       | 1.00          |       | 1.00           |       | 1.00          |       | 1.00           |       | 1.00          |       | 1.00          |       | 1.00         |       |
| Matrix                     |          |        | soil          |       | soil          |       | soil           |       | soil          |       | soil           |       | soil          |       | soil          |       | soil         |       |
| Units                      | mg/kg    | mg/kg  | mg/kg         |       | mg/kg         |       | mg/kg          |       | mg/kg         |       | mg/kg          |       | mg/kg         |       | mg/kg         |       | mg/kg        |       |
| Sampling Date              |          |        | 12/15/94      |       | 1/12/95       |       | 1/12/95        |       | 1/12/95       |       | 1/12/95        |       | 1/12/95       |       | 1/12/95       |       | 1/11/95      |       |
| Analysis Date              |          |        | 12/19/94      |       | 1/18/95       |       | 1/18/95        |       | 1/19/95       |       | 1/18/95        |       | 1/19/95       |       | 1/19/95       |       | 1/16/95      |       |
| Analysis                   | Standard | MDL    | Analytical    | CRQL  | Analytical    | CRQL  | Analytical     | CRQL  | Analytical    | CRQL  | Analytical     | CRQL  | Analytical    | CRQL  | Analytical    | CRQL  | Analytical   | CRQL  |
|                            |          |        | Result        |       | Result        |       | Result         |       | Result        |       | Result         |       | Result        |       | Result        |       | Result       |       |
| Chloromethane              | 520      | 0.0073 | 0.013 U       | 0.013 | 0.012 U       | 0.012 | 0.012 U        | 0.012 | 0.011 U       | 0.011 | 0.012 U        | 0.012 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.011 U      | 0.011 |
| Bromomethane               | 79       | 0.0067 | 0.013 U       | 0.013 | 0.012 U       | 0.012 | 0.012 U        | 0.012 | 0.011 U       | 0.011 | 0.012 U        | 0.012 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.011 U      | 0.011 |
| Vinyl Chloride             | 2        | 0.0079 | 0.013 U       | 0.013 | 0.012 U       | 0.012 | 0.012 U        | 0.012 | 0.011 U       | 0.011 | 0.012 U        | 0.012 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.011 U      | 0.011 |
| Chloroethane               |          | 0.0091 | 0.013 U       | 0.013 | 0.012 U       | 0.012 | 0.012 U        | 0.012 | 0.011 U       | 0.011 | 0.012 U        | 0.012 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.011 U      | 0.011 |
| Methylene Chloride         | 49       | 0.0027 | 0.013 U       | 0.013 | 0.012 U       | 0.012 | 0.012 U        | 0.012 | 0.011 U       | 0.011 | 0.012 U        | 0.012 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.011 U      | 0.011 |
| Acetone                    | 1000     | 0.0069 | 0.027 B       | 0.013 | 0.59 B        | 1.2 * | 2.3 B          | 1.2 * | 0.13 B        | 0.011 | 0.63 B         | .62 * | 0.34 B        | 0.06  | 0.074 B       | 0.012 | 0.011 U      | 0.011 |
| Carbon Disulfide           |          | 0.0044 | 0.013 U       | 0.013 | 0.012 U       | 0.012 | 0.012 U        | 0.012 | 0.011 U       | 0.011 | 0.012 U        | 0.012 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.011 U      | 0.011 |
| 1,1-Dichloroethene         | 8        | 0.0049 | 0.013 U       | 0.013 | 0.012 U       | 0.012 | 0.012 U        | 0.012 | 0.011 U       | 0.011 | 0.012 U        | 0.012 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.011 U      | 0.011 |
| 1,1-Dichloroethane         | 570      | 0.003  | 0.013 U       | 0.013 | 0.012 U       | 0.012 | 0.012 U        | 0.012 | 0.011 U       | 0.011 | 0.012 U        | 0.012 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.011 U      | 0.011 |
| 1,2-Dichloroethene (total) | 79       | 0.0044 | 0.013 U       | 0.013 | 0.012 U       | 0.012 | 0.012 U        | 0.012 | 0.011 U       | 0.011 | 0.012 U        | 0.012 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.011 U      | 0.011 |
| Chloroform                 | 19       | 0.0029 | 0.013 U       | 0.013 | 0.012 U       | 0.012 | 0.012 U        | 0.012 | 0.011 U       | 0.011 | 0.012 U        | 0.012 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.011 U      | 0.011 |
| 1,2-Dichloroethane         | 6        | 0.0024 | 0.013 U       | 0.013 | 0.012 U       | 0.012 | 0.012 U        | 0.012 | 0.011 U       | 0.011 | 0.012 U        | 0.012 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.011 U      | 0.011 |
| 2-Butanone                 | 1000     | 0.0041 | 0.013 U       | 0.013 | 0.039         | 0.012 | 0.054 B        | 12    | 0.023         | 0.011 | 0.14           | 0.012 | 0.13          | 0.012 | 0.013         | 0.012 | 0.011 U      | 0.011 |
| 1,1,1-Trichloroethane      | 210      | 0.0017 | 0.013 U       | 0.013 | 0.012 U       | 0.012 | 0.012 U        | 0.012 | 0.011 U       | 0.011 | 0.012 U        | 0.012 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.011 U      | 0.011 |
| Carbon Tetrachloride       | 2        | 0.0015 | 0.013 U       | 0.013 | 0.012 U       | 0.012 | 0.012 U        | 0.012 | 0.011 U       | 0.011 | 0.012 U        | 0.012 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.011 U      | 0.011 |
| Bromodichloromethane       | 11       | 0.002  | 0.013 U       | 0.013 | 0.012 U       | 0.012 | 0.012 U        | 0.012 | 0.011 U       | 0.011 | 0.012 U        | 0.012 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.011 U      | 0.011 |
| 1,2-Dichloropropane        | 10       | 0.0017 | 0.013 U       | 0.013 | 0.012 U       | 0.012 | 0.012 U        | 0.012 | 0.011 U       | 0.011 | 0.012 U        | 0.012 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.011 U      | 0.011 |
| cis-1,3-Dichloropropene    | 4        | 0.003  | 0.013 U       | 0.013 | 0.012 U       | 0.012 | 0.012 U        | 0.012 | 0.011 U       | 0.011 | 0.012 U        | 0.012 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.011 U      | 0.011 |
| Trichloroethene            | 23       | 0.002  | 0.013 U       | 0.013 | 0.012 U       | 0.012 | 0.012 U        | 0.012 | 0.011 U       | 0.011 | 0.012 U        | 0.012 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.011 U      | 0.011 |
| Dibromochloromethane       | 110      | 0.0024 | 0.013 U       | 0.013 | 0.012 U       | 0.012 | 0.012 U        | 0.012 | 0.011 U       | 0.011 | 0.012 U        | 0.012 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.011 U      | 0.011 |
| 1,1,2-Trichloroethane      | 22       | 0.0043 | 0.013 U       | 0.013 | 0.012 U       | 0.012 | 0.012 U        | 0.012 | 0.011 U       | 0.011 | 0.012 U        | 0.012 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.011 U      | 0.011 |
| Benzene                    | 3        | 0.0033 | 0.013 U       | 0.013 | 0.012 U       | 0.012 | 0.012 U        | 0.012 | 0.011 U       | 0.011 | 0.012 U        | 0.012 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.011 U      | 0.011 |
| trans-1,3-Dichloropropene  | 4        | 0.0024 | 0.013 U       | 0.013 | 0.012 U       | 0.012 | 0.012 U        | 0.012 | 0.011 U       | 0.011 | 0.012 U        | 0.012 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.011 U      | 0.011 |
| Bromoform                  | 86       | 0.0031 | 0.013 U       | 0.013 | 0.012 U       | 0.012 | 0.012 U        | 0.012 | 0.011 U       | 0.011 | 0.012 U        | 0.012 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.011 U      | 0.011 |
| 4-Methyl-2-pentanone       | 1000     | 0.0055 | 0.013 U       | 0.013 | 0.012 U       | 0.012 | 0.012 U        | 0.012 | 0.011 U       | 0.011 | 0.012 U        | 0.012 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.011 U      | 0.011 |
| 2-Hexanone                 |          | 0.0039 | 0.013 U       | 0.013 | 0.012 U       | 0.012 | 0.012 U        | 0.012 | 0.011 U       | 0.011 | 0.012 U        | 0.012 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.011 U      | 0.011 |
| Tetrachloroethene          | 4        | 0.004  | 0.013 U       | 0.013 | 0.012 U       | 0.012 | 0.012 U        | 0.012 | 0.011 U       | 0.011 | 0.012 U        | 0.012 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.011 U      | 0.011 |
| 1,1,2,2-Tetrachloroethane  | 34       | 0.0042 | 0.013 U       | 0.013 | 0.012 U       | 0.012 | 0.012 U        | 0.012 | 0.011 U       | 0.011 | 0.012 U        | 0.012 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.011 U      | 0.011 |
| Toluene                    | 1000     | 0.0027 | 0.013 U       | 0.013 | 0.012 U       | 0.012 | 0.012 U        | 0.012 | 0.011 U       | 0.011 | 0.012 U        | 0.012 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.011 U      | 0.011 |
| Chlorobenzene              | 37       | 0.0027 | 0.013 U       | 0.013 | 0.012 U       | 0.012 | 0.012 U        | 0.012 | 0.011 U       | 0.011 | 0.012 U        | 0.012 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.011 U      | 0.011 |
| Ethylbenzene               | 1000     | 0.0031 | 0.013 U       | 0.013 | 0.012 U       | 0.012 | 0.012 U        | 0.012 | 0.011 U       | 0.011 | 0.012 U        | 0.012 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.011 U      | 0.011 |
| Styrene                    | 23       | 0.0038 | 0.013 U       | 0.013 | 0.012 U       | 0.012 | 0.012 U        | 0.012 | 0.011 U       | 0.011 | 0.012 U        | 0.012 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.011 U      | 0.011 |
| Xylene (total)             | 410      | 0.0038 | 0.013 U       | 0.013 | 0.012 U       | 0.012 | 0.012 U        | 0.012 | 0.011 U       | 0.011 | 0.012 U        | 0.012 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.011 U      | 0.011 |
| Total Est. Conc. of TIC    |          |        |               |       |               |       | .008 J, .6 J * |       |               |       | .009 J, .3 J * |       | .068 J        |       | .06 J         |       |              |       |
| Dilution Factor            |          |        |               |       | * = 10.00     |       | * = 100        |       |               |       | * = 50.0       |       | * = 5.00      |       |               |       |              |       |
| Method: TCL Volatiles      |          |        |               |       |               |       |                |       |               |       |                |       |               |       |               |       |              |       |

**MAIN POST**  
**SOIL BORING VOLATILES**

| Geographical Location      |          |        | M18          |       | M18          |       | M18          |       | M18          |       | M18          |       | M18           |       | M18           |      | M18           |       |
|----------------------------|----------|--------|--------------|-------|--------------|-------|--------------|-------|--------------|-------|--------------|-------|---------------|-------|---------------|------|---------------|-------|
| Sample                     |          |        | M18-SB04-A02 |       | M18-SB05-A01 |       | M18-SB05-A02 |       | M18-SB06-A01 |       | M18-SB06-A02 |       | MP18-SB07-A01 |       | MP18-SB07-D01 |      | MP18-SB24-A01 |       |
| Sample Type                |          |        |              |       |              |       |              |       |              |       |              |       |               |       | Trip Blank    |      |               |       |
| Batch#                     |          |        | 9401G587     |       | 9501G587     |       | 9501G587     |       | 9501G587     |       | 9501G587     |       | 9501G632      |       | 9501G632      |      | 9501G632      |       |
| Prep#                      |          |        | 95GVF013     |       | 95GVF014     |       | 95GVF013     |       | 95GVF013     |       | 95GVF013     |       | 95GVF008      |       | 95GVF008      |      | 95GVF009      |       |
| RFW#                       |          |        | 004          |       | 001          |       | 002          |       | 005          |       | 006          |       | 009           |       | 010           |      | 001           |       |
| Sample Depth (bgs)         |          |        | 4 - 6'       |       | 1 - 1.5'     |       | 2 - 5'       |       | 1 - 1.5'     |       | 2 - 5'       |       | 1 - 1.5'      |       |               |      | 1 - 1.5'      |       |
| Dilution Factor            |          |        | 1.00         |       | 1.00         |       | 1.00         |       | 1.00         |       | 1.00         |       | 1.00          |       | 1.00          |      | 1.00          |       |
| Matrix                     |          |        | soil         |       | soil         |       | soil         |       | soil         |       | soil         |       | soil          |       | soil          |      | soil          |       |
| Units                      | mg/kg    | mg/kg  | mg/kg        |       | mg/kg        |       | mg/kg        |       | mg/kg        |       | mg/kg        |       | mg/kg         |       | mg/kg         |      | mg/kg         |       |
| Sampling Date              |          |        | 1/11/95      |       | 1/11/95      |       | 1/11/95      |       | 1/11/95      |       | 1/11/95      |       | 1/12/95       |       | 1/12/95       |      | 1/12/95       |       |
| Analysis Date              |          |        | 1/16/95      |       | 1/17/95      |       | 1/16/95      |       | 1/16/95      |       | 1/18/95      |       | 1/19/95       |       | 1/23/95       |      | 1/19/95       |       |
| Analysis                   | Standard | MDL    | Analytical   | CRQL  | Analytical   | CRQL  | Analytical   | CRQL  | Analytical   | CRQL  | Analytical   | CRQL  | Analytical    | CRQL  | Analytical    | CRQL | Analytical    | CRQL  |
|                            |          |        | Result       |       | Result       |       | Result       |       | Result       |       | Result       |       | Result        |       | Result        |      | Result        |       |
| Chloromethane              | 520      | 0.0073 | 0.011 U      | 0.011 | 0.011 U      | 0.011 | 0.012 U      | 0.012 | 0.012 U      | 0.012 | 0.014 U      | 0.014 | 0.011 U       | 0.011 | 0.01 U        | 0.01 | 0.012 U       | 0.012 |
| Bromomethane               | 79       | 0.0087 | 0.011 U      | 0.011 | 0.011 U      | 0.011 | 0.012 U      | 0.012 | 0.012 U      | 0.012 | 0.014 U      | 0.014 | 0.011 U       | 0.011 | 0.01 U        | 0.01 | 0.012 U       | 0.012 |
| Vinyl Chloride             | 2        | 0.0079 | 0.011 U      | 0.011 | 0.011 U      | 0.011 | 0.012 U      | 0.012 | 0.012 U      | 0.012 | 0.014 U      | 0.014 | 0.011 U       | 0.011 | 0.01 U        | 0.01 | 0.012 U       | 0.012 |
| Chloroethane               |          | 0.0091 | 0.011 U      | 0.011 | 0.011 U      | 0.011 | 0.012 U      | 0.012 | 0.012 U      | 0.012 | 0.014 U      | 0.014 | 0.011 U       | 0.011 | 0.01 U        | 0.01 | 0.012 U       | 0.012 |
| Methylene Chloride         | 49       | 0.0027 | 0.011 U      | 0.011 | 0.011 U      | 0.011 | 0.012 U      | 0.012 | 0.012 U      | 0.012 | 0.014 U      | 0.014 | 0.011 U       | 0.011 | 0.01 U        | 0.01 | 0.012 U       | 0.012 |
| Acetone                    | 1000     | 0.0069 | 0.011 U      | 0.011 | 0.011 U      | 0.011 | 0.012 U      | 0.012 | 0.03 B       | 0.012 | 0.049 B      | 0.014 | 0.24          | 0.011 | 0.01 U        | 0.01 | 0.012 U       | 0.012 |
| Carbon Disulfide           |          | 0.0044 | 0.011 U      | 0.011 | 0.011 U      | 0.011 | 0.012 U      | 0.012 | 0.012 U      | 0.012 | 0.014 U      | 0.014 | 0.011 U       | 0.011 | 0.01 U        | 0.01 | 0.012 U       | 0.012 |
| 1,1-Dichloroethene         | 8        | 0.0049 | 0.011 U      | 0.011 | 0.011 U      | 0.011 | 0.012 U      | 0.012 | 0.012 U      | 0.012 | 0.014 U      | 0.014 | 0.011 U       | 0.011 | 0.01 U        | 0.01 | 0.012 U       | 0.012 |
| 1,1-Dichloroethane         | 570      | 0.003  | 0.011 U      | 0.011 | 0.011 U      | 0.011 | 0.012 U      | 0.012 | 0.012 U      | 0.012 | 0.014 U      | 0.014 | 0.011 U       | 0.011 | 0.01 U        | 0.01 | 0.012 U       | 0.012 |
| 1,2-Dichloroethene (total) | 79       | 0.0044 | 0.011 U      | 0.011 | 0.011 U      | 0.011 | 0.012 U      | 0.012 | 0.012 U      | 0.012 | 0.014 U      | 0.014 | 0.011 U       | 0.011 | 0.01 U        | 0.01 | 0.012 U       | 0.012 |
| Chloroform                 | 19       | 0.0029 | 0.011 U      | 0.011 | 0.011 U      | 0.011 | 0.012 U      | 0.012 | 0.012 U      | 0.012 | 0.014 U      | 0.014 | 0.011 U       | 0.011 | 0.01 U        | 0.01 | 0.012 U       | 0.012 |
| 1,2-Dichloroethane         | 6        | 0.0024 | 0.011 U      | 0.011 | 0.011 U      | 0.011 | 0.012 U      | 0.012 | 0.012 U      | 0.012 | 0.014 U      | 0.014 | 0.011 U       | 0.011 | 0.01 U        | 0.01 | 0.012 U       | 0.012 |
| 2-Butanone                 | 1000     | 0.0041 | 0.011 U      | 0.011 | 0.011 U      | 0.011 | 0.012 U      | 0.012 | 0.012 U      | 0.012 | 0.013 J      | 0.014 | 0.011 U       | 0.011 | 0.01 U        | 0.01 | 0.012 U       | 0.012 |
| 1,1,1-Trichloroethane      | 210      | 0.0017 | 0.011 U      | 0.011 | 0.011 U      | 0.011 | 0.012 U      | 0.012 | 0.012 U      | 0.012 | 0.014 U      | 0.014 | 0.011 U       | 0.011 | 0.01 U        | 0.01 | 0.012 U       | 0.012 |
| Carbon Tetrachloride       | 2        | 0.0015 | 0.011 U      | 0.011 | 0.011 U      | 0.011 | 0.012 U      | 0.012 | 0.012 U      | 0.012 | 0.014 U      | 0.014 | 0.011 U       | 0.011 | 0.01 U        | 0.01 | 0.012 U       | 0.012 |
| Bromodichloromethane       | 11       | 0.002  | 0.011 U      | 0.011 | 0.011 U      | 0.011 | 0.012 U      | 0.012 | 0.012 U      | 0.012 | 0.014 U      | 0.014 | 0.011 U       | 0.011 | 0.01 U        | 0.01 | 0.012 U       | 0.012 |
| 1,2-Dichloropropane        | 10       | 0.0017 | 0.011 U      | 0.011 | 0.011 U      | 0.011 | 0.012 U      | 0.012 | 0.012 U      | 0.012 | 0.014 U      | 0.014 | 0.011 U       | 0.011 | 0.01 U        | 0.01 | 0.012 U       | 0.012 |
| cis-1,3-Dichloropropene    | 4        | 0.003  | 0.011 U      | 0.011 | 0.011 U      | 0.011 | 0.012 U      | 0.012 | 0.012 U      | 0.012 | 0.014 U      | 0.014 | 0.011 U       | 0.011 | 0.01 U        | 0.01 | 0.012 U       | 0.012 |
| Trichloroethene            | 23       | 0.002  | 0.011 U      | 0.011 | 0.011 U      | 0.011 | 0.012 U      | 0.012 | 0.012 U      | 0.012 | 0.014 U      | 0.014 | 0.011 U       | 0.011 | 0.01 U        | 0.01 | 0.012 U       | 0.012 |
| Dibromochloromethane       | 110      | 0.0024 | 0.011 U      | 0.011 | 0.011 U      | 0.011 | 0.012 U      | 0.012 | 0.012 U      | 0.012 | 0.014 U      | 0.014 | 0.011 U       | 0.011 | 0.01 U        | 0.01 | 0.012 U       | 0.012 |
| 1,1,2-Trichloroethane      | 22       | 0.0043 | 0.011 U      | 0.011 | 0.011 U      | 0.011 | 0.012 U      | 0.012 | 0.012 U      | 0.012 | 0.014 U      | 0.014 | 0.011 U       | 0.011 | 0.01 U        | 0.01 | 0.012 U       | 0.012 |
| Benzene                    | 3        | 0.0033 | 0.011 U      | 0.011 | 0.011 U      | 0.011 | 0.012 U      | 0.012 | 0.012 U      | 0.012 | 0.014 U      | 0.014 | 0.011 U       | 0.011 | 0.01 U        | 0.01 | 0.012 U       | 0.012 |
| trans-1,3-Dichloropropene  | 4        | 0.0024 | 0.011 U      | 0.011 | 0.011 U      | 0.011 | 0.012 U      | 0.012 | 0.012 U      | 0.012 | 0.014 U      | 0.014 | 0.011 U       | 0.011 | 0.01 U        | 0.01 | 0.012 U       | 0.012 |
| Bromoform                  | 86       | 0.0031 | 0.011 U      | 0.011 | 0.011 U      | 0.011 | 0.012 U      | 0.012 | 0.012 U      | 0.012 | 0.014 U      | 0.014 | 0.011 U       | 0.011 | 0.01 U        | 0.01 | 0.012 U       | 0.012 |
| 4-Methyl-2-pentanone       | 1000     | 0.0055 | 0.011 U      | 0.011 | 0.011 U      | 0.011 | 0.012 U      | 0.012 | 0.012 U      | 0.012 | 0.014 U      | 0.014 | 0.011 U       | 0.011 | 0.01 U        | 0.01 | 0.012 U       | 0.012 |
| 2-Hexanone                 |          | 0.0039 | 0.011 U      | 0.011 | 0.011 U      | 0.011 | 0.012 U      | 0.012 | 0.012 U      | 0.012 | 0.014 U      | 0.014 | 0.011 U       | 0.011 | 0.01 U        | 0.01 | 0.012 U       | 0.012 |
| Tetrachloroethene          | 4        | 0.004  | 0.011 U      | 0.011 | 0.011 U      | 0.011 | 0.012 U      | 0.012 | 0.012 U      | 0.012 | 0.014 U      | 0.014 | 0.011 U       | 0.011 | 0.01 U        | 0.01 | 0.012 U       | 0.012 |
| 1,1,2,2-Tetrachloroethane  | 34       | 0.0042 | 0.011 U      | 0.011 | 0.011 U      | 0.011 | 0.012 U      | 0.012 | 0.012 U      | 0.012 | 0.014 U      | 0.014 | 0.011 U       | 0.011 | 0.01 U        | 0.01 | 0.012 U       | 0.012 |
| Toluene                    | 1000     | 0.0027 | 0.011 U      | 0.011 | 0.011 U      | 0.011 | 0.012 U      | 0.012 | 0.012 U      | 0.012 | 0.014 U      | 0.014 | 0.011 U       | 0.011 | 0.01 U        | 0.01 | 0.012 U       | 0.012 |
| Chlorobenzene              | 37       | 0.0027 | 0.011 U      | 0.011 | 0.011 U      | 0.011 | 0.012 U      | 0.012 | 0.012 U      | 0.012 | 0.014 U      | 0.014 | 0.011 U       | 0.011 | 0.01 U        | 0.01 | 0.012 U       | 0.012 |
| Ethylbenzene               | 1000     | 0.0031 | 0.011 U      | 0.011 | 0.011 U      | 0.011 | 0.012 U      | 0.012 | 0.012 U      | 0.012 | 0.002 J      | 0.014 | 0.011 U       | 0.011 | 0.01 U        | 0.01 | 0.012 U       | 0.012 |
| Styrene                    | 23       | 0.0038 | 0.011 U      | 0.011 | 0.011 U      | 0.011 | 0.012 U      | 0.012 | 0.012 U      | 0.012 | 0.014 U      | 0.014 | 0.011 U       | 0.011 | 0.01 U        | 0.01 | 0.012 U       | 0.012 |
| Xylene (total)             | 410      | 0.0038 | 0.011 U      | 0.011 | 0.011 U      | 0.011 | 0.012 U      | 0.012 | 0.012 U      | 0.012 | 0.013 J      | 0.014 | 0.011 U       | 0.011 | 0.01 U        | 0.01 | 0.012 U       | 0.012 |
| Total Est. Conc. of TIC.   |          |        |              |       |              |       |              |       |              |       | 1.15 J       |       | 0.006 J       |       |               |      | 0.007 J       |       |
| Dilution Factor            |          |        |              |       |              |       |              |       |              |       |              |       |               |       |               |      |               |       |
| Method:TCL Volatiles       |          |        |              |       |              |       |              |       |              |       |              |       |               |       |               |      |               |       |

**MAIN POST  
SOIL BORING VOLATILES**

| Geographical Location      |  |  | M18           |        | M18           |       | M18           |       | M18           |       | B1          |       | B1          |       | B2            |       | B2          |       |         |       |
|----------------------------|--|--|---------------|--------|---------------|-------|---------------|-------|---------------|-------|-------------|-------|-------------|-------|---------------|-------|-------------|-------|---------|-------|
| Sample                     |  |  | MP18-SB24-A02 |        | MP18-SB25-A01 |       | MP18-SB25-A02 |       | MP18-SB25-D02 |       | B1-SB01-A01 |       | B1-SB01-A02 |       | B2-SB01-A01   |       | B2-SB01-A02 |       |         |       |
| Sample Type                |  |  |               |        |               |       |               |       | Trip Blank    |       |             |       |             |       |               |       |             |       |         |       |
| Batch#                     |  |  | 9501G632      |        | 9501G656      |       | 9501G656      |       | 9501G656      |       | 9501G527    |       | 9501G527    |       | 9501G500      |       | 9501G500    |       |         |       |
| Prep#                      |  |  | 95GVT016      |        | 95GVT010      |       | 95GVT010      |       | 95GVC007      |       | 95GVF012    |       | 95GVF011    |       | 95GVF011 & 13 |       | 95GVF011    |       |         |       |
| RFW#                       |  |  | 002           |        | 001           |       | 002           |       | 003           |       | 001         |       | 002         |       | 001           |       | 002         |       |         |       |
| Sample Depth (bgs)         |  |  | 2 - 4'        |        | 1 - 1.5'      |       | 2 - 4'        |       |               |       | 1 - 2'      |       | 2 - 4'      |       | 1 - 2'        |       | 6 - 8'      |       |         |       |
| Dilution Factor            |  |  | 1.00          |        | 1.00          |       | 1.00          |       | 1.00          |       | 1.00        |       | 1.00        |       | 1.00          |       | 1.00        |       |         |       |
| Matrix                     |  |  | soil          |        | soil          |       | soil          |       | water         |       | soil        |       | soil        |       | soil          |       | soil        |       |         |       |
| Units                      |  |  | mg/kg         | mg/kg  | mg/kg         | mg/kg | mg/kg         | mg/kg | mg/l          | mg/kg | mg/kg       | mg/kg | mg/kg       | mg/kg | mg/kg         | mg/kg | mg/kg       | mg/kg |         |       |
| Sampling Date              |  |  | 1/12/95       |        | 1/13/95       |       | 1/13/95       |       | 1/13/95       |       | 1/9/94      |       | 1/9/94      |       | 1/6/95        |       | 1/6/95      |       |         |       |
| Analysis Date              |  |  | 1/18/95       |        | 1/20/95       |       | 1/20/95       |       | 1/21/95       |       | 1/15/94     |       | 1/13/94     |       | 1/13/95       |       | 1/13/95     |       |         |       |
| Analysis                   |  |  | Standard      | MDL    | Analytical    | CRQL  | Analytical    | CRQL  | Analytical    | CRQL  | Analytical  | CRQL  | Analytical  | CRQL  | Analytical    | CRQL  | Analytical  | CRQL  |         |       |
|                            |  |  |               |        | Result        |       | Result        |       | Result        |       | Result      |       | Result      |       | Result        |       | Result      |       |         |       |
| Chloromethane              |  |  | 520           | 0.0073 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.011 U       | 0.011 | 0.01 U      | 0.01  | 0.011 U     | 0.011 | 0.013 U       | 0.013 | 0.012 U     | 0.012 | 0.012 U | 0.012 |
| Bromomethane               |  |  | 79            | 0.0067 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.011 U       | 0.011 | 0.01 U      | 0.01  | 0.011 U     | 0.011 | 0.013 U       | 0.013 | 0.012 U     | 0.012 | 0.012 U | 0.012 |
| Vinyl Chloride             |  |  | 2             | 0.0079 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.011 U       | 0.011 | 0.01 U      | 0.01  | 0.011 U     | 0.011 | 0.013 U       | 0.013 | 0.012 U     | 0.012 | 0.012 U | 0.012 |
| Chloroethane               |  |  |               | 0.0091 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.011 U       | 0.011 | 0.01 U      | 0.01  | 0.011 U     | 0.011 | 0.013 U       | 0.013 | 0.012 U     | 0.012 | 0.012 U | 0.012 |
| Methylene Chloride         |  |  | 49            | 0.0027 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.011 U       | 0.011 | 0.01 U      | 0.01  | 0.011 U     | 0.011 | 0.013 U       | 0.013 | 0.012 U     | 0.012 | 0.015 B | 0.012 |
| Acetone                    |  |  | 1000          | 0.0069 | 0.095 B       | 0.012 | 0.012 U       | 0.012 | 0.066 B       | 0.011 | 0.03        | 0.01  | 0.011 U     | 0.011 | 0.001 J       | 0.013 | 0.61 B      | *     | 0.53    | *     |
| Carbon Disulfide           |  |  |               | 0.0044 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.011 U       | 0.011 | 0.01 U      | 0.01  | 0.011 U     | 0.011 | 0.013 U       | 0.013 | 0.012 U     | 0.012 | 0.012 U | 0.012 |
| 1,1-Dichloroethene         |  |  | 8             | 0.0049 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.011 U       | 0.011 | 0.01 U      | 0.01  | 0.011 U     | 0.011 | 0.013 U       | 0.013 | 0.012 U     | 0.012 | 0.012 U | 0.012 |
| 1,1-Dichloroethane         |  |  | 570           | 0.003  | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.011 U       | 0.011 | 0.01 U      | 0.01  | 0.011 U     | 0.011 | 0.013 U       | 0.013 | 0.012 U     | 0.012 | 0.012 U | 0.012 |
| 1,2-Dichloroethene (total) |  |  | 79            | 0.0044 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.011 U       | 0.011 | 0.01 U      | 0.01  | 0.011 U     | 0.011 | 0.013 U       | 0.013 | 0.012 U     | 0.012 | 0.012 U | 0.012 |
| Chloroform                 |  |  | 19            | 0.0029 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.011 U       | 0.011 | 0.003 J     | 0.01  | 0.011 U     | 0.011 | 0.013 U       | 0.013 | 0.012 U     | 0.012 | 0.012 U | 0.012 |
| 1,2-Dichloroethane         |  |  | 6             | 0.0024 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.011 U       | 0.011 | 0.01 U      | 0.01  | 0.011 U     | 0.011 | 0.013 U       | 0.013 | 0.012 U     | 0.012 | 0.012 U | 0.012 |
| 2-Butanone                 |  |  | 1000          | 0.0041 | 0.014         | 0.012 | 0.012 U       | 0.012 | 0.011         | 0.011 | 0.01 U      | 0.01  | 0.011 U     | 0.011 | 0.013 U       | 0.013 | 0.012 U     | 0.012 | 0.012 U | 0.012 |
| 1,1,1-Trichloroethane      |  |  | 210           | 0.0017 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.011 U       | 0.011 | 0.01 U      | 0.01  | 0.011 U     | 0.011 | 0.013 U       | 0.013 | 0.012 U     | 0.012 | 0.012 U | 0.012 |
| Carbon Tetrachloride       |  |  | 2             | 0.0015 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.011 U       | 0.011 | 0.01 U      | 0.01  | 0.011 U     | 0.011 | 0.013 U       | 0.013 | 0.012 U     | 0.012 | 0.012 U | 0.012 |
| Bromodichloromethane       |  |  | 11            | 0.002  | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.011 U       | 0.011 | 0.01 U      | 0.01  | 0.011 U     | 0.011 | 0.013 U       | 0.013 | 0.012 U     | 0.012 | 0.012 U | 0.012 |
| 1,2-Dichloropropane        |  |  | 10            | 0.0017 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.011 U       | 0.011 | 0.01 U      | 0.01  | 0.011 U     | 0.011 | 0.013 U       | 0.013 | 0.012 U     | 0.012 | 0.012 U | 0.012 |
| cis-1,3-Dichloropropene    |  |  | 4             | 0.003  | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.011 U       | 0.011 | 0.01 U      | 0.01  | 0.011 U     | 0.011 | 0.013 U       | 0.013 | 0.012 U     | 0.012 | 0.012 U | 0.012 |
| Trichloroethene            |  |  | 23            | 0.002  | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.011 U       | 0.011 | 0.01 U      | 0.01  | 0.011 U     | 0.011 | 0.013 U       | 0.013 | 0.012 U     | 0.012 | 0.012 U | 0.012 |
| Dibromochloromethane       |  |  | 110           | 0.0024 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.011 U       | 0.011 | 0.01 U      | 0.01  | 0.011 U     | 0.011 | 0.013 U       | 0.013 | 0.012 U     | 0.012 | 0.012 U | 0.012 |
| 1,1,2-Trichloroethane      |  |  | 22            | 0.0043 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.011 U       | 0.011 | 0.01 U      | 0.01  | 0.011 U     | 0.011 | 0.013 U       | 0.013 | 0.012 U     | 0.012 | 0.012 U | 0.012 |
| Benzene                    |  |  | 3             | 0.0033 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.011 U       | 0.011 | 0.01 U      | 0.01  | 0.011 U     | 0.011 | 0.013 U       | 0.013 | 0.012 U     | 0.012 | 0.012 U | 0.012 |
| trans-1,3-Dichloropropene  |  |  | 4             | 0.0024 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.011 U       | 0.011 | 0.01 U      | 0.01  | 0.011 U     | 0.011 | 0.013 U       | 0.013 | 0.012 U     | 0.012 | 0.012 U | 0.012 |
| Bromoform                  |  |  | 86            | 0.0031 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.011 U       | 0.011 | 0.01 U      | 0.01  | 0.011 U     | 0.011 | 0.013 U       | 0.013 | 0.012 U     | 0.012 | 0.012 U | 0.012 |
| 4-Methyl-2-pentanone       |  |  | 1000          | 0.0055 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.011 U       | 0.011 | 0.01 U      | 0.01  | 0.011 U     | 0.011 | 0.013 U       | 0.013 | 0.012 U     | 0.012 | 0.012 U | 0.012 |
| 2-Hexanone                 |  |  |               | 0.0039 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.011 U       | 0.011 | 0.01 U      | 0.01  | 0.011 U     | 0.011 | 0.013 U       | 0.013 | 0.012 U     | 0.012 | 0.012 U | 0.012 |
| Tetrachloroethene          |  |  | 4             | 0.004  | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.011 U       | 0.011 | 0.01 U      | 0.01  | 0.011 U     | 0.011 | 0.013 U       | 0.013 | 0.012 U     | 0.012 | 0.012 U | 0.012 |
| 1,1,2,2-Tetrachloroethane  |  |  | 34            | 0.0042 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.011 U       | 0.011 | 0.01 U      | 0.01  | 0.011 U     | 0.011 | 0.013 U       | 0.013 | 0.012 U     | 0.012 | 0.012 U | 0.012 |
| Toluene                    |  |  | 1000          | 0.0027 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.002 J       | 0.011 | 0.01 U      | 0.01  | 0.011 U     | 0.011 | 0.013 U       | 0.013 | 0.012 U     | 0.012 | 0.012 U | 0.012 |
| Chlorobenzene              |  |  | 37            | 0.0027 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.011 U       | 0.011 | 0.01 U      | 0.01  | 0.011 U     | 0.011 | 0.013 U       | 0.013 | 0.012 U     | 0.012 | 0.012 U | 0.012 |
| Ethylbenzene               |  |  | 1000          | 0.0031 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.011 U       | 0.011 | 0.01 U      | 0.01  | 0.011 U     | 0.011 | 0.013 U       | 0.013 | 0.012 U     | 0.012 | 0.012 U | 0.012 |
| Styrene                    |  |  | 23            | 0.0038 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.011 U       | 0.011 | 0.01 U      | 0.01  | 0.011 U     | 0.011 | 0.013 U       | 0.013 | 0.012 U     | 0.012 | 0.012 U | 0.012 |
| Xylene (total)             |  |  | 410           | 0.0038 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.006 J       | 0.011 | 0.01 U      | 0.01  | 0.011 U     | 0.011 | 0.013 U       | 0.013 | 0.012 U     | 0.012 | 0.012 U | 0.012 |
| Total Est. Conc. of TIC.   |  |  |               |        | 0.064 J       |       |               |       | 0.118 J       |       | 0.008 J     |       |             |       |               |       |             |       |         |       |
| Dilution Factor            |  |  |               |        |               |       |               |       |               |       |             |       |             |       |               |       |             |       |         |       |
| Method:TCL Volatiles       |  |  |               |        |               |       |               |       |               |       |             |       |             |       |               |       |             |       |         |       |

**MAIN POST  
SOIL BORING VOLATILES**

| Geographical Location      |          |        | B3          |       | B3          |       | B3          |      | B4          |       | B4            |       | B4          |       | B4          |      | B5          |       |
|----------------------------|----------|--------|-------------|-------|-------------|-------|-------------|------|-------------|-------|---------------|-------|-------------|-------|-------------|------|-------------|-------|
| Sample                     |          |        | B3-SB01-A01 |       | B3-SB01-A03 |       | B3-SB01-D03 |      | B4-SB01-A01 |       | B4-SB01-A02   |       | B4-SB01-C01 |       | B4-SB01-D01 |      | B5-SB01-A01 |       |
| Sample Type                |          |        |             |       |             |       | Trip Blank  |      |             |       |               |       | Duplicate   |       | Trip Blank  |      |             |       |
| Batch#                     |          |        | 9501G500    |       | 9501G500    |       | 9401G500    |      | 9501G527    |       | 9501G527      |       | 9501G527    |       | 9501G527    |      | 9501G587    |       |
| Prep#                      |          |        | 95GVF011    |       | 95GVF011    |       | 95GB0012    |      | 95GVF012    |       | 95GVF012 & 13 |       | 95GVF012    |       | 95GVE012    |      | 95GVF016    |       |
| RFW#                       |          |        | 003         |       | 004         |       | 005         |      | 003         |       | 004           |       | 005         |       | 006         |      | 007         |       |
| Sample Depth (bgs)         |          |        | 1 - 2'      |       | 16 - 18'    |       |             |      | 1 - 2'      |       | 6 - 8'        |       |             |       |             |      | 1 - 2'      |       |
| Dilution Factor            |          |        | 1.00        |       | 1.00        |       | 1.00        |      | 1.00        |       | 1.00          |       | 1.00        |       | 1.00        |      | 1.00        |       |
| Matrix                     |          |        | soil        |       | soil        |       | water       |      | soil        |       | soil          |       | soil        |       | water       |      | soil        |       |
| Units                      | mg/kg    | mg/kg  | mg/kg       |       | mg/kg       |       | mg/l        |      | mg/kg       |       | mg/kg         |       | mg/kg       |       | mg/l        |      | mg/kg       |       |
| Sampling Date              |          |        | 1/6/95      |       | 1/6/95      |       | 1/6/95      |      | 1/9/95      |       | 1/9/95        |       | 1/9/95      |       | 1/9/95      |      | 1/11/95     |       |
| Analysis Date              |          |        | 1/13/95     |       | 1/12/95     |       | 1/13/95     |      | 1/15/95     |       | 1/15/95       |       | 1/15/95     |       | 1/12/95     |      | 1/18/95     |       |
| Analysis                   | Standard | MDL    | Analytical  | CRQL  | Analytical  | CRQL  | Analytical  | CRQL | Analytical  | CRQL  | Analytical    | CRQL  | Analytical  | CRQL  | Analytical  | CRQL | Analytical  | CRQL  |
|                            |          |        | Result      |       | Result      |       | Result      |      | Result      |       | Result        |       | Result      |       | Result      |      | Result      |       |
| Chloromethane              | 520      | 0.0073 | 0.011 U     | 0.011 | 0.014 U     | 0.014 | 0.01 U      | 0.01 | 0.011 U     | 0.011 | 0.014 U       | 0.014 | 0.011 U     | 0.011 | 0.01 U      | 0.01 | 0.012 U     | 0.012 |
| Bromomethane               | 79       | 0.0067 | 0.011 U     | 0.011 | 0.014 U     | 0.014 | 0.01 U      | 0.01 | 0.011 U     | 0.011 | 0.014 U       | 0.014 | 0.011 U     | 0.011 | 0.01 U      | 0.01 | 0.012 U     | 0.012 |
| Vinyl Chloride             | 2        | 0.0079 | 0.011 U     | 0.011 | 0.014 U     | 0.014 | 0.01 U      | 0.01 | 0.011 U     | 0.011 | 0.014 U       | 0.014 | 0.011 U     | 0.011 | 0.01 U      | 0.01 | 0.012 U     | 0.012 |
| Chloroethane               |          | 0.0091 | 0.011 U     | 0.011 | 0.014 U     | 0.014 | 0.01 U      | 0.01 | 0.011 U     | 0.011 | 0.014 U       | 0.014 | 0.011 U     | 0.011 | 0.01 U      | 0.01 | 0.012 U     | 0.012 |
| Methylene Chloride         | 49       | 0.0027 | 0.011 U     | 0.011 | 0.032 B     | 0.014 | 0.01 U      | 0.01 | 0.011 U     | 0.011 | 0.014 U       | 0.014 | 0.011 U     | 0.011 | 0.01 U      | 0.01 | 0.012 U     | 0.012 |
| Acetone                    | 1000     | 0.0069 | 0.011 U     | 0.011 | 0.036       | 0.014 | 0.01 U      | 0.01 | 0.011 U     | 0.011 | 0.83 B        | .27 * | 0.016       | 0.011 | 0.01 U      | 0.01 | 0.012 U     | 0.012 |
| Carbon Disulfide           |          | 0.0044 | 0.011 U     | 0.011 | 0.014 U     | 0.014 | 0.01 U      | 0.01 | 0.011 U     | 0.011 | 0.014 U       | 0.014 | 0.011 U     | 0.011 | 0.01 U      | 0.01 | 0.012 U     | 0.012 |
| 1,1-Dichloroethene         | 8        | 0.0049 | 0.011 U     | 0.011 | 0.014 U     | 0.014 | 0.01 U      | 0.01 | 0.011 U     | 0.011 | 0.014 U       | 0.014 | 0.011 U     | 0.011 | 0.01 U      | 0.01 | 0.012 U     | 0.012 |
| 1,1-Dichloroethane         | 570      | 0.003  | 0.011 U     | 0.011 | 0.014 U     | 0.014 | 0.01 U      | 0.01 | 0.011 U     | 0.011 | 0.014 U       | 0.014 | 0.011 U     | 0.011 | 0.01 U      | 0.01 | 0.012 U     | 0.012 |
| 1,2-Dichloroethene (total) | 79       | 0.0044 | 0.011 U     | 0.011 | 0.014 U     | 0.014 | 0.01 U      | 0.01 | 0.011 U     | 0.011 | 0.014 U       | 0.014 | 0.011 U     | 0.011 | 0.01 U      | 0.01 | 0.012 U     | 0.012 |
| Chloroform                 | 19       | 0.0029 | 0.011 U     | 0.011 | 0.014 U     | 0.014 | 0.01 U      | 0.01 | 0.011 U     | 0.011 | 0.014 U       | 0.014 | 0.011 U     | 0.011 | 0.01 U      | 0.01 | 0.012 U     | 0.012 |
| 1,2-Dichloroethane         | 6        | 0.0024 | 0.011 U     | 0.011 | 0.014 U     | 0.014 | 0.01 U      | 0.01 | 0.011 U     | 0.011 | 0.014 U       | 0.014 | 0.011 U     | 0.011 | 0.01 U      | 0.01 | 0.012 U     | 0.012 |
| 2-Butanone                 | 1000     | 0.0041 | 0.011 U     | 0.011 | 0.014 U     | 0.014 | 0.01 U      | 0.01 | 0.011 U     | 0.011 | 0.014 U       | 0.014 | 0.011 U     | 0.011 | 0.01 U      | 0.01 | 0.012 U     | 0.012 |
| 1,1,1-Trichloroethane      | 210      | 0.0017 | 0.011 U     | 0.011 | 0.014 U     | 0.014 | 0.01 U      | 0.01 | 0.011 U     | 0.011 | 0.014 U       | 0.014 | 0.011 U     | 0.011 | 0.01 U      | 0.01 | 0.012 U     | 0.012 |
| Carbon Tetrachloride       | 2        | 0.0015 | 0.011 U     | 0.011 | 0.014 U     | 0.014 | 0.01 U      | 0.01 | 0.011 U     | 0.011 | 0.014 U       | 0.014 | 0.011 U     | 0.011 | 0.01 U      | 0.01 | 0.012 U     | 0.012 |
| Bromodichloromethane       | 11       | 0.002  | 0.011 U     | 0.011 | 0.014 U     | 0.014 | 0.01 U      | 0.01 | 0.011 U     | 0.011 | 0.014 U       | 0.014 | 0.011 U     | 0.011 | 0.01 U      | 0.01 | 0.012 U     | 0.012 |
| 1,2-Dichloropropane        | 10       | 0.0017 | 0.011 U     | 0.011 | 0.014 U     | 0.014 | 0.01 U      | 0.01 | 0.011 U     | 0.011 | 0.014 U       | 0.014 | 0.011 U     | 0.011 | 0.01 U      | 0.01 | 0.012 U     | 0.012 |
| cis-1,3-Dichloropropene    | 4        | 0.003  | 0.011 U     | 0.011 | 0.014 U     | 0.014 | 0.01 U      | 0.01 | 0.011 U     | 0.011 | 0.014 U       | 0.014 | 0.011 U     | 0.011 | 0.01 U      | 0.01 | 0.012 U     | 0.012 |
| Trichloroethene            | 23       | 0.002  | 0.011 U     | 0.011 | 0.014 U     | 0.014 | 0.01 U      | 0.01 | 0.011 U     | 0.011 | 0.014 U       | 0.014 | 0.011 U     | 0.011 | 0.01 U      | 0.01 | 0.012 U     | 0.012 |
| Dibromochloromethane       | 110      | 0.0024 | 0.011 U     | 0.011 | 0.014 U     | 0.014 | 0.01 U      | 0.01 | 0.011 U     | 0.011 | 0.014 U       | 0.014 | 0.011 U     | 0.011 | 0.01 U      | 0.01 | 0.012 U     | 0.012 |
| 1,1,2-Trichloroethane      | 22       | 0.0043 | 0.011 U     | 0.011 | 0.014 U     | 0.014 | 0.01 U      | 0.01 | 0.011 U     | 0.011 | 0.014 U       | 0.014 | 0.011 U     | 0.011 | 0.01 U      | 0.01 | 0.012 U     | 0.012 |
| Benzene                    | 3        | 0.0033 | 0.011 U     | 0.011 | 0.014 U     | 0.014 | 0.01 U      | 0.01 | 0.011 U     | 0.011 | 0.014 U       | 0.014 | 0.011 U     | 0.011 | 0.01 U      | 0.01 | 0.012 U     | 0.012 |
| trans-1,3-Dichloropropene  | 4        | 0.0024 | 0.011 U     | 0.011 | 0.014 U     | 0.014 | 0.01 U      | 0.01 | 0.011 U     | 0.011 | 0.014 U       | 0.014 | 0.011 U     | 0.011 | 0.01 U      | 0.01 | 0.012 U     | 0.012 |
| Bromoform                  | 86       | 0.0031 | 0.011 U     | 0.011 | 0.014 U     | 0.014 | 0.01 U      | 0.01 | 0.011 U     | 0.011 | 0.014 U       | 0.014 | 0.011 U     | 0.011 | 0.01 U      | 0.01 | 0.012 U     | 0.012 |
| 4-Methyl-2-pentanone       | 1000     | 0.0055 | 0.011 U     | 0.011 | 0.014 U     | 0.014 | 0.01 U      | 0.01 | 0.011 U     | 0.011 | 0.014 U       | 0.014 | 0.011 U     | 0.011 | 0.01 U      | 0.01 | 0.012 U     | 0.012 |
| 2-Hexanone                 |          | 0.0039 | 0.011 U     | 0.011 | 0.014 U     | 0.014 | 0.01 U      | 0.01 | 0.011 U     | 0.011 | 0.014 U       | 0.014 | 0.011 U     | 0.011 | 0.01 U      | 0.01 | 0.012 U     | 0.012 |
| Tetrachloroethene          | 4        | 0.004  | 0.011 U     | 0.011 | 0.014 U     | 0.014 | 0.01 U      | 0.01 | 0.011 U     | 0.011 | 0.014 U       | 0.014 | 0.011 U     | 0.011 | 0.01 U      | 0.01 | 0.012 U     | 0.012 |
| 1,1,2,2-Tetrachloroethane  | 34       | 0.0042 | 0.011 U     | 0.011 | 0.014 U     | 0.014 | 0.01 U      | 0.01 | 0.011 U     | 0.011 | 0.014 U       | 0.014 | 0.011 U     | 0.011 | 0.01 U      | 0.01 | 0.012 U     | 0.012 |
| Toluene                    | 1000     | 0.0027 | 0.011 U     | 0.011 | 0.014 U     | 0.014 | 0.01 U      | 0.01 | 0.011 U     | 0.011 | 0.014 U       | 0.014 | 0.004 J     | 0.011 | 0.01 U      | 0.01 | 0.012 U     | 0.012 |
| Chlorobenzene              | 37       | 0.0027 | 0.011 U     | 0.011 | 0.014 U     | 0.014 | 0.01 U      | 0.01 | 0.011 U     | 0.011 | 0.014 U       | 0.014 | 0.011 U     | 0.011 | 0.01 U      | 0.01 | 0.012 U     | 0.012 |
| Ethylbenzene               | 1000     | 0.0031 | 0.011 U     | 0.011 | 0.014 U     | 0.014 | 0.01 U      | 0.01 | 0.011 U     | 0.011 | 0.014 U       | 0.014 | 0.011 U     | 0.011 | 0.01 U      | 0.01 | 0.012 U     | 0.012 |
| Styrene                    | 23       | 0.0038 | 0.011 U     | 0.011 | 0.014 U     | 0.014 | 0.01 U      | 0.01 | 0.011 U     | 0.011 | 0.014 U       | 0.014 | 0.011 U     | 0.011 | 0.01 U      | 0.01 | 0.012 U     | 0.012 |
| Xylene (total)             | 410      | 0.0038 | 0.011 U     | 0.011 | 0.014 U     | 0.014 | 0.01 U      | 0.01 | 0.011 U     | 0.011 | 0.014 U       | 0.014 | 0.004 J     | 0.011 | 0.01 U      | 0.01 | 0.012 U     | 0.012 |
| Total Est. Conc. of TIC.   |          |        |             |       |             |       |             |      |             |       |               |       |             |       |             |      | 0.023 J     |       |
| Dilution Factor            |          |        |             |       |             |       |             |      |             |       | * = 20.0      |       |             |       |             |      |             |       |
| Method:TCL Volatiles       |          |        |             |       |             |       |             |      |             |       |               |       |             |       |             |      |             |       |

**MAIN POST  
SOIL BORING VOLATILES**

|                            |          |        |             |       |             |      |
|----------------------------|----------|--------|-------------|-------|-------------|------|
| Geographical Location      |          |        | B5          |       | B5          |      |
| Sample                     |          |        | B5-SB01-A02 |       | B5-SB01-D02 |      |
| Sample Type                |          |        |             |       | Trip Blank  |      |
| Batch#                     |          |        | 9501G587    |       | 9501G587    |      |
| Prep#                      |          |        | 95GVF014    |       | 95GVC005    |      |
| RFW#                       |          |        | 008         |       | 009         |      |
| Sample Depth (bgs)         |          |        | 2 - 4'      |       |             |      |
| Dilution Factor            |          |        | 1.00        |       | 1.00        |      |
| Matrix                     |          |        | soil        |       | water       |      |
| Units                      | mg/kg    | mg/kg  | mg/kg       |       | mg/l        |      |
| Sampling Date              |          |        | 1/11/95     |       | 1/11/95     |      |
| Analysis Date              |          |        | 1/17/95     |       | 1/16/95     |      |
| Analysis                   | Standard | MDL    | Analytical  | CRQL  | Analytical  | CRQL |
|                            |          |        | Result      |       | Result      |      |
| Chloromethane              | 520      | 0.0073 | 0.012 U     | 0.012 | 0.01 U      | 0.01 |
| Bromomethane               | 79       | 0.0067 | 0.012 U     | 0.012 | 0.01 U      | 0.01 |
| Vinyl Chloride             | 2        | 0.0079 | 0.012 U     | 0.012 | 0.01 U      | 0.01 |
| Chloroethane               |          | 0.0091 | 0.012 U     | 0.012 | 0.01 U      | 0.01 |
| Methylene Chloride         | 49       | 0.0027 | 0.012 U     | 0.012 | 0.01 U      | 0.01 |
| Acetone                    | 1000     | 0.0069 | 0.012 U     | 0.012 | 0.01 U      | 0.01 |
| Carbon Disulfide           |          | 0.0044 | 0.012 U     | 0.012 | 0.01 U      | 0.01 |
| 1,1-Dichloroethene         | 8        | 0.0049 | 0.012 U     | 0.012 | 0.01 U      | 0.01 |
| 1,1-Dichloroethane         | 570      | 0.003  | 0.012 U     | 0.012 | 0.01 U      | 0.01 |
| 1,2-Dichloroethene (total) | 79       | 0.0044 | 0.012 U     | 0.012 | 0.01 U      | 0.01 |
| Chloroform                 | 19       | 0.0029 | 0.012 U     | 0.012 | 0.01 U      | 0.01 |
| 1,2-Dichloroethane         | 6        | 0.0024 | 0.012 U     | 0.012 | 0.01 U      | 0.01 |
| 2-Butanone                 | 1000     | 0.0041 | 0.012 U     | 0.012 | 0.01 U      | 0.01 |
| 1,1,1-Trichloroethane      | 210      | 0.0017 | 0.012 U     | 0.012 | 0.01 U      | 0.01 |
| Carbon Tetrachloride       | 2        | 0.0015 | 0.012 U     | 0.012 | 0.01 U      | 0.01 |
| Bromodichloromethane       | 11       | 0.002  | 0.012 U     | 0.012 | 0.01 U      | 0.01 |
| 1,2-Dichloropropane        | 10       | 0.0017 | 0.012 U     | 0.012 | 0.01 U      | 0.01 |
| cis-1,3-Dichloropropene    | 4        | 0.003  | 0.012 U     | 0.012 | 0.01 U      | 0.01 |
| Trichloroethene            | 23       | 0.002  | 0.012 U     | 0.012 | 0.01 U      | 0.01 |
| Dibromochloromethane       | 110      | 0.0024 | 0.012 U     | 0.012 | 0.01 U      | 0.01 |
| 1,1,2-Trichloroethane      | 22       | 0.0043 | 0.012 U     | 0.012 | 0.01 U      | 0.01 |
| Benzene                    | 3        | 0.0033 | 0.012 U     | 0.012 | 0.01 U      | 0.01 |
| trans-1,3-Dichloropropene  | 4        | 0.0024 | 0.012 U     | 0.012 | 0.01 U      | 0.01 |
| Bromoform                  | 86       | 0.0031 | 0.012 U     | 0.012 | 0.01 U      | 0.01 |
| 4-Methyl-2-pentanone       | 1000     | 0.0055 | 0.012 U     | 0.012 | 0.01 U      | 0.01 |
| 2-Hexanone                 |          | 0.0039 | 0.012 U     | 0.012 | 0.01 U      | 0.01 |
| Tetrachloroethene          | 4        | 0.004  | 0.012 U     | 0.012 | 0.01 U      | 0.01 |
| 1,1,2,2-Tetrachloroethane  | 34       | 0.0042 | 0.012 U     | 0.012 | 0.01 U      | 0.01 |
| Toluene                    | 1000     | 0.0027 | 0.012 U     | 0.012 | 0.01 U      | 0.01 |
| Chlorobenzene              | 37       | 0.0027 | 0.012 U     | 0.012 | 0.01 U      | 0.01 |
| Ethylbenzene               | 1000     | 0.0031 | 0.012 U     | 0.012 | 0.01 U      | 0.01 |
| Styrene                    | 23       | 0.0038 | 0.012 U     | 0.012 | 0.01 U      | 0.01 |
| Xylene (total)             | 410      | 0.0038 | 0.012 U     | 0.012 | 0.01 U      | 0.01 |
| Total Est. Conc. of TIC.   |          |        |             |       |             |      |
| Dilution Factor            |          |        |             |       |             |      |
| Method:TCL Volatiles       |          |        |             |       |             |      |

**MAIN POST**  
**SOIL BORING SEMIVOLATILES**

| Geographical Location        |          |       | AOC3          |      | AOC3          |      | AOC3          |      | M16           |      | M16           |      |
|------------------------------|----------|-------|---------------|------|---------------|------|---------------|------|---------------|------|---------------|------|
| Sample                       |          |       | MPA3-SB01-A02 |      | MPA3-SB01-C02 |      | MPA3-SB02-A02 |      | MP16-SB01-A01 |      | MP16-SB01-A02 |      |
| Sample Type                  |          |       |               |      | Duplicate     |      |               |      |               |      |               |      |
| Batch#                       |          |       | 9412G130      |      | 9412G130      |      | 9412G155      |      | 9412G155      |      | 9412G155      |      |
| Prep#                        |          |       | 94GB0835      |      | 94GB0835      |      | 94GB0835      |      | 94GB0835      |      | 94GB0835      |      |
| RFW#                         |          |       | 001           |      | 002           |      | 003           |      | 001           |      | 002           |      |
| Sample Depth (bgs)           |          |       |               |      |               |      |               |      |               |      |               |      |
| Dilution Factor              |          |       | 1.00          |      | 1.00          |      | 1.00          |      | 1.00          |      | 1.00          |      |
| Matrix                       |          |       | soil          |      | soil          |      | soil          |      | soil          |      | soil          |      |
| Units                        |          |       | mg/kg         |      | mg/kg         |      | mg/kg         |      | mg/kg         |      | mg/kg         |      |
| Sampling Date                |          |       | 12/14/94      |      | 12/14/94      |      | 12/15/94      |      | 12/15/94      |      | 12/15/94      |      |
| Analysis Date                |          |       | 12/27/94      |      | 12/27/94      |      | 12/23/94      |      | 12/23/94      |      | 12/27/94      |      |
| Analysis                     | Standard | MDL   | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL |
|                              |          |       | Result        |      | Result        |      | Result        |      | Result        |      | Result        |      |
| Phenol                       | 10000    | 0.234 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.35 U        | 0.35 | 0.38 U        | 0.38 | 0.42 U        | 0.42 |
| bis(2-Chloroethyl) ether     | 0.66     | 0.32  | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.35 U        | 0.35 | 0.38 U        | 0.38 | 0.42 U        | 0.42 |
| 2-Chlorophenol               | 280      | 0.241 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.35 U        | 0.35 | 0.38 U        | 0.38 | 0.42 U        | 0.42 |
| 1,3-Dichlorobenzene          | 5100     | 0.175 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.35 U        | 0.35 | 0.38 U        | 0.38 | 0.42 U        | 0.42 |
| 1,4-Dichlorobenzene          | 570      | 0.158 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.35 U        | 0.35 | 0.38 U        | 0.38 | 0.42 U        | 0.42 |
| 1,2-Dichlorobenzene          | 5100     | 0.188 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.35 U        | 0.35 | 0.38 U        | 0.38 | 0.42 U        | 0.42 |
| 2-Methylphenol               | 2800     | 0.221 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.35 U        | 0.35 | 0.38 U        | 0.38 | 0.42 U        | 0.42 |
| 2,2'-oxybis(1-Chloropropane) |          | 0.231 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.35 U        | 0.35 | 0.38 U        | 0.38 | 0.42 U        | 0.42 |
| 4-Methylphenol               | 2800     | 0.426 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.35 U        | 0.35 | 0.38 U        | 0.38 | 0.42 U        | 0.42 |
| N-Nitroso-di-n-propylamine   | 0.66     | 0.264 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.35 U        | 0.35 | 0.38 U        | 0.38 | 0.42 U        | 0.42 |
| Hexachloroethane             | 6        | 0.175 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.35 U        | 0.35 | 0.38 U        | 0.38 | 0.42 U        | 0.42 |
| Nitrobenzene                 | 28       | 0.244 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.35 U        | 0.35 | 0.38 U        | 0.38 | 0.42 U        | 0.42 |
| Isophorone                   | 1100     | 0.129 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.35 U        | 0.35 | 0.38 U        | 0.38 | 0.42 U        | 0.42 |
| 2-Nitrophenol                |          | 0.231 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.35 U        | 0.35 | 0.38 U        | 0.38 | 0.42 U        | 0.42 |
| 2,4-Dimethylphenol           | 1100     | 0.158 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.35 U        | 0.35 | 0.38 U        | 0.38 | 0.42 U        | 0.42 |
| bis(2-Chloroethoxy) methane  |          | 0.201 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.35 U        | 0.35 | 0.38 U        | 0.38 | 0.42 U        | 0.42 |
| 2,4-Dichlorophenol           | 170      | 0.145 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.35 U        | 0.35 | 0.38 U        | 0.38 | 0.42 U        | 0.42 |
| 1,2,4-Trichlorobenzene       | 68       | 0.317 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.35 U        | 0.35 | 0.38 U        | 0.38 | 0.42 U        | 0.42 |
| Naphthalene                  | 230      | 0.277 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.35 U        | 0.35 | 0.38 U        | 0.38 | 0.42 U        | 0.42 |
| 4-Chloroaniline              | 230      | 0.096 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.35 U        | 0.35 | 0.38 U        | 0.38 | 0.42 U        | 0.42 |
| Hexachlorobutadiene          | 1        | 0.152 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.35 U        | 0.35 | 0.38 U        | 0.38 | 0.42 U        | 0.42 |
| 4-Chloro-3-methylphenol      | 10000    | 0.102 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.35 U        | 0.35 | 0.38 U        | 0.38 | 0.42 U        | 0.42 |
| 2-Methylnaphthalene          |          | 0.287 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.35 U        | 0.35 | 0.38 U        | 0.38 | 0.42 U        | 0.42 |
| Hexachlorocyclopentadiene    | 400      | 0.119 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.35 U        | 0.35 | 0.38 U        | 0.38 | 0.42 U        | 0.42 |
| 2,4,6-Trichlorophenol        | 62       | 0.185 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.35 U        | 0.35 | 0.38 U        | 0.38 | 0.42 U        | 0.42 |
| 2,4,5-Trichlorophenol        | 5600     | 0.155 | 0.92 U        | 0.92 | 0.89 U        | 0.89 | 0.88 U        | 0.88 | 0.96 U        | 0.96 | 1 U           | 1    |
| 2-Chloronaphthalene          |          | 0.271 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.35 U        | 0.35 | 0.38 U        | 0.38 | 0.42 U        | 0.42 |
| 2-Nitroaniline               |          | 0.201 | 0.92 U        | 0.92 | 0.89 U        | 0.89 | 0.88 U        | 0.88 | 0.96 U        | 0.96 | 1 U           | 1    |
| Dimethylphthalate            | 10000    | 0.145 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.35 U        | 0.35 | 0.38 U        | 0.38 | 0.42 U        | 0.42 |
| Acenaphthylene               |          | 0.198 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.35 U        | 0.35 | 0.38 U        | 0.38 | 0.42 U        | 0.42 |
| 2,6-Dinitrotoluene           | 1        | 0.172 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.35 U        | 0.35 | 0.38 U        | 0.38 | 0.42 U        | 0.42 |
| 3-Nitroaniline               |          | 0.172 | 0.92 U        | 0.92 | 0.89 U        | 0.89 | 0.88 U        | 0.88 | 0.96 U        | 0.96 | 1 U           | 1    |
| Acenaphthene                 | 3400     | 0.221 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.35 U        | 0.35 | 0.38 U        | 0.38 | 0.42 U        | 0.42 |
| 2,4-Dinitrophenol            | 110      | 0.152 | 0.92 U        | 0.92 | 0.89 U        | 0.89 | 0.88 U        | 0.88 | 0.96 U        | 0.96 | 1 U           | 1    |
| 4-Nitrophenol                |          | 0.248 | 0.92 U        | 0.92 | 0.89 U        | 0.89 | 0.88 U        | 0.88 | 0.96 U        | 0.96 | 1 U           | 1    |

**MAIN POST  
SOIL BORING SEMIVOLATILES**

| Geographical Location      |          |       | AOC3          |      | AOC3          |      | AOC3            |      | M16           |      | M16           |      |
|----------------------------|----------|-------|---------------|------|---------------|------|-----------------|------|---------------|------|---------------|------|
| Sample                     |          |       | MPA3-SB01-A02 |      | MPA3-SB01-C02 |      | MPA3-SB02-A02   |      | MP16-SB01-A01 |      | MP16-SB01-A02 |      |
| Sample Type                |          |       |               |      | Duplicate     |      |                 |      |               |      |               |      |
| Batch#                     |          |       | 9412G130      |      | 9412G130      |      | 9412G155        |      | 9412G155      |      | 9412G155      |      |
| Prep#                      |          |       | 94GB0835      |      | 94GB0835      |      | 94GB0835        |      | 94GB0835      |      | 94GB0835      |      |
| RFW#                       |          |       | 001           |      | 002           |      | 003             |      | 001           |      | 002           |      |
| Sample Depth (bgs)         |          |       |               |      |               |      |                 |      |               |      |               |      |
| Dilution Factor            |          |       | 1.00          |      | 1.00          |      | 1.00            |      | 1.00          |      | 1.00          |      |
| Matrix                     |          |       | soil          |      | soil          |      | soil            |      | soil          |      | soil          |      |
| Units                      | mg/kg    | mg/kg | mg/kg         |      | mg/kg         |      | mg/kg           |      | mg/kg         |      | mg/kg         |      |
| Sampling Date              |          |       | 12/14/94      |      | 12/14/94      |      | 12/15/94        |      | 12/15/94      |      | 12/15/94      |      |
| Analysis Date              |          |       | 12/27/94      |      | 12/27/94      |      | 12/23/94        |      | 12/23/94      |      | 12/27/94      |      |
| Analysis                   | Standard | MDL   | Analytical    | CRQL | Analytical    | CRQL | Analytical      | CRQL | Analytical    | CRQL | Analytical    | CRQL |
|                            |          |       | Result        |      | Result        |      | Result          |      | Result        |      | Result        |      |
| Dibenzofuran               |          | 0.215 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.35 U          | 0.35 | 0.38 U        | 0.38 | 0.42 U        | 0.42 |
| 2,4-Dinitrotoluene         | 1        | 0.191 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.35 U          | 0.35 | 0.38 U        | 0.38 | 0.42 U        | 0.42 |
| Diethylphthalate           | 10000    | 0.178 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.35 U          | 0.35 | 0.38 U        | 0.38 | 0.42 U        | 0.42 |
| 4-Chlorophenyl-phenylether |          | 0.231 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.35 U          | 0.35 | 0.38 U        | 0.38 | 0.42 U        | 0.42 |
| Fluorene                   | 2300     | 0.208 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.35 U          | 0.35 | 0.38 U        | 0.38 | 0.42 U        | 0.42 |
| 4-Nitroaniline             |          | 0.211 | 0.92 U        | 0.92 | 0.89 U        | 0.89 | 0.88 U          | 0.88 | 0.96 U        | 0.96 | 1 U           | 1    |
| 4,6-Dinitro-2-methylphenol |          | 0.175 | 0.92 U        | 0.92 | 0.89 U        | 0.89 | 0.88 U          | 0.88 | 0.96 U        | 0.96 | 1 U           | 1    |
| N-Nitrosodiphenylamine (1) | 140      | 0.139 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.35 U          | 0.35 | 0.38 U        | 0.38 | 0.42 U        | 0.42 |
| 4-Bromophenyl-phenylether  |          | 0.175 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.35 U          | 0.35 | 0.38 U        | 0.38 | 0.42 U        | 0.42 |
| Hexachlorobenzene          | 0.66     | 0.182 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.35 U          | 0.35 | 0.38 U        | 0.38 | 0.42 U        | 0.42 |
| Pentachlorophenol          | 6        | 0.132 | 0.92 U        | 0.92 | 0.89 U        | 0.89 | 0.88 U          | 0.88 | 0.96 U        | 0.96 | 1 U           | 1    |
| Phenanthrene               |          | 0.165 | 0.09 J        | 0.37 | 0.078 J       | 0.36 | 0.35 U          | 0.35 | 0.14 J        | 0.38 | 0.42 U        | 0.42 |
| Anthracene                 | 10000    | 0.152 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.35 U          | 0.35 | 0.38 U        | 0.38 | 0.42 U        | 0.42 |
| Carbazole                  |          | 0.145 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.35 U          | 0.35 | 0.38 U        | 0.38 | 0.42 U        | 0.42 |
| Di-n-butylphthalate        | 5700     | 0.215 | 0.093 JB      | 0.37 | 0.17 JB       | 0.36 | 0.084 JB        | 0.35 | 0.092 JB      | 0.38 | 0.094 JB      | 0.42 |
| Fluoranthene               | 2300     | 0.198 | 0.11 J        | 0.37 | 0.11 J        | 0.36 | 0.35 U          | 0.35 | 0.33 J        | 0.38 | 0.42 U        | 0.42 |
| Pyrene                     | 1700     | 0.178 | 0.15 J        | 0.37 | 0.14 J        | 0.36 | 0.35 U          | 0.35 | 0.22 J        | 0.38 | 0.42 U        | 0.42 |
| Butylbenzylphthalate       | 1100     | 0.175 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.35 U          | 0.35 | 0.38 U        | 0.38 | 0.42 U        | 0.42 |
| 3,3'-Dichlorobenzidine     | 2        | 0.092 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.35 U          | 0.35 | 0.38 U        | 0.38 | 0.42 U        | 0.42 |
| Benzo(a)anthracene         | 0.9      | 0.162 | 0.077 J       | 0.37 | 0.078 J       | 0.36 | 0.35 U          | 0.35 | 0.092 J       | 0.38 | 0.42 U        | 0.42 |
| Chrysene                   | 9        | 0.145 | 0.099 J       | 0.37 | 0.11 J        | 0.36 | 0.35 U          | 0.35 | 0.15 J        | 0.38 | 0.42 U        | 0.42 |
| bis(2-Ethylhexyl)phthalate | 49       | 0.32  | 0.057 J       | 0.37 | 0.11 J        | 0.36 | 0.053 J         | 0.35 | 0.38 U        | 0.38 | 0.23 J        | 0.42 |
| Di-n-octyl phthalate       | 1100     | 0.185 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.35 U          | 0.35 | 0.38 U        | 0.38 | 0.42 U        | 0.42 |
| Benzo(b)fluoranthene       | 0.9      | 0.188 | 0.077 J       | 0.37 | 0.093 J       | 0.36 | 0.35 U          | 0.35 | 0.15 J        | 0.38 | 0.42 U        | 0.42 |
| Benzo(k)fluoranthene       | 0.9      | 0.205 | 0.37 U        | 0.37 | 0.037 J       | 0.36 | 0.35 U          | 0.35 | 0.069 J       | 0.38 | 0.42 U        | 0.42 |
| Benzo(a)pyrene             | 0.66     | 0.162 | 0.055 J       | 0.37 | 0.069 J       | 0.36 | 0.35 U          | 0.35 | 0.084 J       | 0.38 | 0.43          | 0.42 |
| Indeno(1,2,3-cd)pyrene     | 0.9      | 0.234 | 0.046 J       | 0.37 | 0.057 J       | 0.36 | 0.35 U          | 0.35 | 0.067 J       | 0.38 | 0.42 U        | 0.42 |
| Dibenzo(a,h)anthracene     | 0.66     | 0.198 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.35 U          | 0.35 | 0.38 U        | 0.38 | 0.42 U        | 0.42 |
| Benzo(g,h,i)perylene       |          | 0.224 | 0.049 J       | 0.37 | 0.055 J       | 0.36 | 0.35 U          | 0.35 | 0.063 J       | 0.38 | 0.42 U        | 0.42 |
| Petroleum hydrocarbons     |          |       |               |      |               |      |                 |      |               |      |               |      |
| Total Est. Conc. of TIC    |          |       | 17.3          |      | 17.3          |      | .18 J, 10.28 JB |      | 14.8          |      | 14.2          |      |
| Dilution Factor            |          |       |               |      |               |      |                 |      |               |      |               |      |
| Method:TCL Semivolatiles   |          |       |               |      |               |      |                 |      |               |      |               |      |



**MAIN POST  
SOIL BORING SEMIVOLATILES**

| Geographical Location        |          |       | M16           |      | M18          |      | M18          |      | M18          |      | M18          |      | M18          |      | M18          |       |
|------------------------------|----------|-------|---------------|------|--------------|------|--------------|------|--------------|------|--------------|------|--------------|------|--------------|-------|
| Sample                       |          |       | MP16-SB02-A02 |      | M18-SB04-A01 |      | M18-SB04-A02 |      | M18-SB05-A01 |      | M18-SB05-A02 |      | M18-SB06-A01 |      | M18-SB06-A02 |       |
| Sample Type                  |          |       |               |      |              |      |              |      |              |      |              |      |              |      |              |       |
| Batch#                       |          |       | 9412G155      |      | 9501G587     |      | 9501G587     |      | 9501G587     |      | 9501G587     |      | 9501G587     |      | 9501G587     |       |
| Prep#                        |          |       | 94GB0835      |      | 95GTS014     |      | 95GTS014     |      | 95GTS014     |      | 95GTS014     |      | 95GTS014     |      | 95GTS014     |       |
| RFV#                         |          |       | 003           |      | 003          |      | 004          |      | 001          |      | 002          |      | 005          |      | 006          |       |
| Sample Depth (bgs)           |          |       |               |      |              |      |              |      |              |      |              |      |              |      |              |       |
| Dilution Factor              |          |       | 1.00          |      | 1.00         |      | 1.00         |      | 1.00         |      | 1.00         |      | 1.00         |      | 1.00         |       |
| Matrix                       |          |       | soil          |      | soil         |      | soil         |      | soil         |      | soil         |      | soil         |      | soil         |       |
| Units                        | mg/kg    | mg/kg | mg/kg         |      | mg/kg        |      | mg/kg        |      | mg/kg        |      | mg/kg        |      | mg/kg        |      | mg/kg        |       |
| Sampling Date                |          |       | 12/15/94      |      | 1/11/95      |      | 1/11/95      |      | 1/11/95      |      | 1/11/95      |      | 1/11/95      |      | 1/11/95      |       |
| Analysis Date                |          |       | 12/28/94      |      | 1/20/95      |      | 1/20/95      |      | 1/20/95      |      | 1/20/95      |      | 1/20/95      |      | 2/22/95      |       |
| Analysis                     | Standard | MDL   | Analytical    | CRQL | Analytical   | CRQL | Analytical   | CRQL | Analytical   | CRQL | Analytical   | CRQL | Analytical   | CRQL | Analytical   | CRQL  |
|                              |          |       | Result        |      | Result       |      | Result       |      | Result       |      | Result       |      | Result       |      | Result       |       |
| Phenol                       | 10000    | 0.234 | 0.35 U        | 0.35 |              |      |              |      |              |      |              |      |              |      | 0.46 U       | 0.46  |
| bis(2-Chloroethyl) ether     | 0.66     | 0.32  | 0.35 U        | 0.35 |              |      |              |      |              |      |              |      |              |      | 0.46 U       | 0.46  |
| 2-Chlorophenol               | 280      | 0.241 | 0.35 U        | 0.35 |              |      |              |      |              |      |              |      |              |      | 0.46 U       | 0.46  |
| 1,3-Dichlorobenzene          | 5100     | 0.175 | 0.35 U        | 0.35 |              |      |              |      |              |      |              |      |              |      | 0.46 U       | 0.46  |
| 1,4-Dichlorobenzene          | 570      | 0.158 | 0.35 U        | 0.35 |              |      |              |      |              |      |              |      |              |      | 0.46 U       | 0.46  |
| 1,2-Dichlorobenzene          | 5100     | 0.188 | 0.35 U        | 0.35 |              |      |              |      |              |      |              |      |              |      | 0.46 U       | 0.46  |
| 2-Methylphenol               | 2800     | 0.221 | 0.35 U        | 0.35 |              |      |              |      |              |      |              |      |              |      | 0.46 U       | 0.46  |
| 2,2'-oxybis(1-Chloropropane) |          | 0.231 | 0.35 U        | 0.35 |              |      |              |      |              |      |              |      |              |      | 0.46 U       | 0.46  |
| 4-Methylphenol               | 2800     | 0.426 | 0.35 U        | 0.35 |              |      |              |      |              |      |              |      |              |      | 0.46 U       | 0.46  |
| N-Nitroso-di-n-propylamine   | 0.66     | 0.264 | 0.35 U        | 0.35 |              |      |              |      |              |      |              |      |              |      | 0.46 U       | 0.46  |
| Hexachloroethane             | 6        | 0.175 | 0.35 U        | 0.35 |              |      |              |      |              |      |              |      |              |      | 0.46 U       | 0.46  |
| Nitrobenzene                 | 28       | 0.244 | 0.35 U        | 0.35 |              |      |              |      |              |      |              |      |              |      | 0.46 U       | 0.46  |
| Isophorone                   | 1100     | 0.129 | 0.35 U        | 0.35 |              |      |              |      |              |      |              |      |              |      | 0.46 U       | 0.46  |
| 2-Nitrophenol                |          | 0.231 | 0.35 U        | 0.35 |              |      |              |      |              |      |              |      |              |      | 0.46 U       | 0.46  |
| 2,4-Dimethylphenol           | 1100     | 0.158 | 0.35 U        | 0.35 |              |      |              |      |              |      |              |      |              |      | 0.46 U       | 0.46  |
| bis(2-Chloroethoxy) methane  |          | 0.201 | 0.35 U        | 0.35 |              |      |              |      |              |      |              |      |              |      | 0.46 U       | 0.46  |
| 2,4-Dichlorophenol           | 170      | 0.145 | 0.35 U        | 0.35 |              |      |              |      |              |      |              |      |              |      | 0.46 U       | 0.46  |
| 1,2,4-Trichlorobenzene       | 68       | 0.317 | 0.35 U        | 0.35 |              |      |              |      |              |      |              |      |              |      | 0.46 U       | 0.46  |
| Naphthalene                  | 230      | 0.277 | 0.35 U        | 0.35 |              |      |              |      |              |      |              |      |              |      | 1.2          | 0.46  |
| 4-Chloroaniline              | 230      | 0.096 | 0.35 U        | 0.35 |              |      |              |      |              |      |              |      |              |      | 0.46 U       | 0.46  |
| Hexachlorobutadiene          | 1        | 0.152 | 0.35 U        | 0.35 |              |      |              |      |              |      |              |      |              |      | 0.46 U       | 0.46  |
| 4-Chloro-3-methylphenol      | 10000    | 0.102 | 0.35 U        | 0.35 |              |      |              |      |              |      |              |      |              |      | 0.46 U       | 0.46  |
| 2-Methylnaphthalene          |          | 0.287 | 0.35 U        | 0.35 |              |      |              |      |              |      |              |      |              |      | 0.27 U       | 0.46  |
| Hexachlorocyclopentadiene    | 400      | 0.119 | 0.35 U        | 0.35 |              |      |              |      |              |      |              |      |              |      | 0.46 U       | 0.46  |
| 2,4,6-Trichlorophenol        | 62       | 0.185 | 0.35 U        | 0.35 |              |      |              |      |              |      |              |      |              |      | 0.46 U       | 0.46  |
| 2,4,5-Trichlorophenol        | 5600     | 0.155 | 0.88 U        | 0.88 |              |      |              |      |              |      |              |      |              |      | 1.1 U        | 1.1   |
| 2-Chloronaphthalene          |          | 0.271 | 0.35 U        | 0.35 |              |      |              |      |              |      |              |      |              |      | 0.46 U       | 0.46  |
| 2-Nitroaniline               |          | 0.201 | 0.88 U        | 0.88 |              |      |              |      |              |      |              |      |              |      | 1.1 U        | 1.1   |
| Dimethylphthalate            | 10000    | 0.145 | 0.35 U        | 0.35 |              |      |              |      |              |      |              |      |              |      | 0.46 U       | 0.46  |
| Acenaphthylene               |          | 0.198 | 0.35 U        | 0.35 |              |      |              |      |              |      |              |      |              |      | 0.46 U       | 0.46  |
| 2,6-Dinitrotoluene           | 1        | 0.172 | 0.35 U        | 0.35 |              |      |              |      |              |      |              |      |              |      | 0.46 U       | 0.46  |
| 3-Nitroaniline               |          | 0.172 | 0.88 U        | 0.88 |              |      |              |      |              |      |              |      |              |      | 1.1 U        | 1.1   |
| Acenaphthene                 | 3400     | 0.221 | 0.35 U        | 0.35 |              |      |              |      |              |      |              |      |              |      | 52           | 9.2 * |
| 2,4-Dinitrophenol            | 110      | 0.152 | 0.88 U        | 0.88 |              |      |              |      |              |      |              |      |              |      | 1.1 U        | 1.1   |
| 4-Nitrophenol                |          | 0.248 | 0.88 U        | 0.88 |              |      |              |      |              |      |              |      |              |      | 1.1 U        | 1.1   |

**MAIN POST  
SOIL BORING SEMIVOLATILES**

| Geographical Location      |          |       | M16           |      | M18          |      | M18          |      | M18          |      | M18          |      | M18          |      | M18                |       |
|----------------------------|----------|-------|---------------|------|--------------|------|--------------|------|--------------|------|--------------|------|--------------|------|--------------------|-------|
| Sample                     |          |       | MP16-SB02-A02 |      | M18-SB04-A01 |      | M18-SB04-A02 |      | M18-SB05-A01 |      | M18-SB05-A02 |      | M18-SB06-A01 |      | M18-SB06-A02       |       |
| Sample Type                |          |       |               |      |              |      |              |      |              |      |              |      |              |      |                    |       |
| Batch#                     |          |       | 9412G155      |      | 9501G587     |      | 9501G587     |      | 9501G587     |      | 9501G587     |      | 9501G587     |      | 9501G587           |       |
| Prep#                      |          |       | 94GB0835      |      | 95GTS014     |      | 95GTS014     |      | 95GTS014     |      | 95GTS014     |      | 95GTS014     |      | 95GTS014           |       |
| RFW#                       |          |       | 003           |      | 003          |      | 004          |      | 001          |      | 002          |      | 005          |      | 006                |       |
| Sample Depth (bgs)         |          |       |               |      |              |      |              |      |              |      |              |      |              |      |                    |       |
| Dilution Factor            |          |       | 1.00          |      | 1.00         |      | 1.00         |      | 1.00         |      | 1.00         |      | 1.00         |      | 1.00               |       |
| Matrix                     |          |       | soil          |      | soil         |      | soil         |      | soil         |      | soil         |      | soil         |      | soil               |       |
| Units                      | mg/kg    | mg/kg | mg/kg         |      | mg/kg        |      | mg/kg        |      | mg/kg        |      | mg/kg        |      | mg/kg        |      | mg/kg              |       |
| Sampling Date              |          |       | 12/15/94      |      | 1/11/95      |      | 1/11/95      |      | 1/11/95      |      | 1/11/95      |      | 1/11/95      |      | 1/11/95            |       |
| Analysis Date              |          |       | 12/28/94      |      | 1/20/95      |      | 1/20/95      |      | 1/20/95      |      | 1/20/95      |      | 1/20/95      |      | 2/22/95            |       |
| Analysis                   | Standard | MDL   | Analytical    | CRQL | Analytical   | CRQL | Analytical   | CRQL | Analytical   | CRQL | Analytical   | CRQL | Analytical   | CRQL | Analytical         | CRQL  |
|                            |          |       | Result        |      | Result       |      | Result       |      | Result       |      | Result       |      | Result       |      | Result             |       |
| Dibenzofuran               |          | 0.215 | 0.35 U        | 0.35 |              |      |              |      |              |      |              |      |              |      | 31                 | 9.2 * |
| 2,4-Dinitrotoluene         | 1        | 0.191 | 0.35 U        | 0.35 |              |      |              |      |              |      |              |      |              |      | 0.460 U            | 0.46  |
| Diethylphthalate           | 10000    | 0.178 | 0.35 U        | 0.35 |              |      |              |      |              |      |              |      |              |      | 0.460 U            | 0.46  |
| 4-Chlorophenyl-phenylether |          | 0.231 | 0.35 U        | 0.35 |              |      |              |      |              |      |              |      |              |      | 0.460 U            | 0.46  |
| Fluorene                   | 2300     | 0.208 | 0.35 U        | 0.35 |              |      |              |      |              |      |              |      |              |      | 40                 | 9.2 * |
| 4-Nitroaniline             |          | 0.211 | 0.88 U        | 0.88 |              |      |              |      |              |      |              |      |              |      | 1.1 U              | 1.1   |
| 4,6-Dinitro-2-methylphenol |          | 0.175 | 0.88 U        | 0.88 |              |      |              |      |              |      |              |      |              |      | 1.1 U              | 1.1   |
| N-Nitrosodiphenylamine (1) | 140      | 0.139 | 0.35 U        | 0.35 |              |      |              |      |              |      |              |      |              |      | 0.46 U             | 0.46  |
| 4-Bromophenyl-phenylether  |          | 0.175 | 0.35 U        | 0.35 |              |      |              |      |              |      |              |      |              |      | 0.46 U             | 0.46  |
| Hexachlorobenzene          | 0.66     | 0.182 | 0.35 U        | 0.35 |              |      |              |      |              |      |              |      |              |      | 0.46 U             | 0.46  |
| Pentachlorophenol          | 6        | 0.132 | 0.88 U        | 0.88 |              |      |              |      |              |      |              |      |              |      | 1.1 U              | 1.1   |
| Phenanthrene               |          | 0.165 | 0.35 U        | 0.35 |              |      |              |      |              |      |              |      |              |      | 140                | 46 ** |
| Anthracene                 | 10000    | 0.152 | 0.35 U        | 0.35 |              |      |              |      |              |      |              |      |              |      | 16                 | 9.2 * |
| Carbazole                  |          | 0.145 | 0.35 U        | 0.35 |              |      |              |      |              |      |              |      |              |      | 4.8 J              | 9.2 * |
| Di-n-butylphthalate        | 5700     | 0.215 | 0.084 JB      | 0.35 |              |      |              |      |              |      |              |      |              |      | 0.36 JB            | 0.46  |
| Fluoranthene               | 2300     | 0.198 | 0.35 U        | 0.35 |              |      |              |      |              |      |              |      |              |      | 46                 | 9.2 * |
| Pyrene                     | 1700     | 0.178 | 0.35 U        | 0.35 |              |      |              |      |              |      |              |      |              |      | 48                 | 9.2 * |
| Butylbenzylphthalate       | 1100     | 0.175 | 0.35 U        | 0.35 |              |      |              |      |              |      |              |      |              |      | 0.45 J             | 0.46  |
| 3,3'-Dichlorobenzidine     | 2        | 0.092 | 0.35 U        | 0.35 |              |      |              |      |              |      |              |      |              |      | 0.46 U             | 0.46  |
| Benzo(a)anthracene         | 0.9      | 0.162 | 0.35 U        | 0.35 |              |      |              |      |              |      |              |      |              |      | 11                 | 9.2 * |
| Chrysene                   | 9        | 0.145 | 0.35 U        | 0.35 |              |      |              |      |              |      |              |      |              |      | 10                 | 9.2 * |
| bis(2-Ethylhexy)phthalate  | 49       | 0.32  | 0.053 J       | 0.35 |              |      |              |      |              |      |              |      |              |      | 0.17 J             | 0.46  |
| Di-n-octyl phthalate       | 1100     | 0.185 | 0.35 U        | 0.35 |              |      |              |      |              |      |              |      |              |      | 0.46 U             | 0.46  |
| Benzo(b)fluoranthene       | 0.9      | 0.188 | 0.35 U        | 0.35 |              |      |              |      |              |      |              |      |              |      | 7.6 J              | 9.2 * |
| Benzo(k)fluoranthene       | 0.9      | 0.205 | 0.35 U        | 0.35 |              |      |              |      |              |      |              |      |              |      | 2.3                | 0.46  |
| Benzo(a)pyrene             | 0.66     | 0.162 | 0.35 U        | 0.35 |              |      |              |      |              |      |              |      |              |      | 3.8 J              | 9.2 * |
| Indeno(1,2,3-cd)pyrene     | 0.9      | 0.234 | 0.35 U        | 0.35 |              |      |              |      |              |      |              |      |              |      | 2.1                | 0.46  |
| Dibenzo(a,h)anthracene     | 0.66     | 0.198 | 0.35 U        | 0.35 |              |      |              |      |              |      |              |      |              |      | 0.45 J             | 0.46  |
| Benzo(g,h,i)perylene       |          | 0.224 | 0.35 U        | 0.35 |              |      |              |      |              |      |              |      |              |      | 0.21 J             | 0.46  |
| Petroleum hydrocarbons     |          |       |               |      | 27.8 U       | 27.8 | 26.8 U       | 26.8 | 117          | 28.7 | 30.0 U       | 30.0 | 221          | 28.6 | 2300               | 348   |
| Total Est. Conc. of TIC    |          |       | 10.46         |      |              |      |              |      |              |      |              |      |              |      | 17.8               |       |
| Dilution Factor            |          |       |               |      |              |      |              |      |              |      |              |      |              |      | * = 20.0, ** = 100 |       |
| Method: TCL Semivolatiles  |          |       |               |      |              |      |              |      |              |      |              |      |              |      |                    |       |

**MAIN POST**  
**SOIL BORING SEMIVOLATILES**

| Geographical Location        |  |  | M18            |       | M18           |       | M18           |       | M18           |       | M18           |       | M18           |       |
|------------------------------|--|--|----------------|-------|---------------|-------|---------------|-------|---------------|-------|---------------|-------|---------------|-------|
| Sample                       |  |  | M18-SB06-A02RE |       | MP18-SB01-A01 |       | MP18-SB01-A02 |       | MP18-SB02-A01 |       | MP18-SB02-A02 |       | MP18-SB03-A01 |       |
| Sample Type                  |  |  |                |       |               |       |               |       |               |       |               |       |               |       |
| Batch#                       |  |  | 9501G587       |       | 9412G632      |       | 9412G632      |       | 9412G632      |       | 9412G632      |       | 9412G632      |       |
| Prep#                        |  |  | 95GP0083       |       | 94GTS038      |       | 94GTS038      |       | 94GTS038      |       | 94GTS038      |       | 94GTS038      |       |
| RFW#                         |  |  | 006            |       | 003           |       | 004           |       | 005           |       | 006           |       | 006           |       |
| Sample Depth (bgs)           |  |  |                |       |               |       |               |       |               |       |               |       |               |       |
| Dilution Factor              |  |  | 1.00           |       | 1.00          |       | 1.00          |       | 1.00          |       | 1.00          |       | 1.00          |       |
| Matrix                       |  |  | soil           |       | soil          |       | soil          |       | soil          |       | soil          |       | soil          |       |
| Units                        |  |  | mg/kg          | mg/kg | mg/kg         | mg/kg | mg/kg         | mg/kg | mg/kg         | mg/kg | mg/kg         | mg/kg | mg/kg         | mg/kg |
| Sampling Date                |  |  | 1/11/95        |       | 1/12/95       |       | 1/12/95       |       | 1/12/95       |       | 1/12/95       |       | 1/12/95       |       |
| Analysis Date                |  |  | 2/11/95        |       | 1/30/95       |       | 1/30/95       |       | 1/30/95       |       | 1/30/95       |       | 1/30/95       |       |
| Analysis                     |  |  | Standard       | MDL   | Analytical    | CRQL  | Analytical    | CRQL  | Analytical    | CRQL  | Analytical    | CRQL  | Analytical    | CRQL  |
|                              |  |  |                |       | Result        |       | Result        |       | Result        |       | Result        |       | Result        |       |
| Phenol                       |  |  | 10000          | 0.234 | 0.46 U        | 0.46  |               |       |               |       |               |       |               |       |
| bis(2-Chloroethyl) ether     |  |  | 0.66           | 0.32  | 0.46 U        | 0.46  |               |       |               |       |               |       |               |       |
| 2-Chlorophenol               |  |  | 280            | 0.241 | 0.46 U        | 0.46  |               |       |               |       |               |       |               |       |
| 1,3-Dichlorobenzene          |  |  | 5100           | 0.175 | 0.46 U        | 0.46  |               |       |               |       |               |       |               |       |
| 1,4-Dichlorobenzene          |  |  | 570            | 0.158 | 0.46 U        | 0.46  |               |       |               |       |               |       |               |       |
| 1,2-Dichlorobenzene          |  |  | 5100           | 0.188 | 0.46 U        | 0.46  |               |       |               |       |               |       |               |       |
| 2-Methylphenol               |  |  | 2800           | 0.221 | 0.46 U        | 0.46  |               |       |               |       |               |       |               |       |
| 2,2'-oxybis(1-Chloropropane) |  |  |                | 0.231 | 0.46 U        | 0.46  |               |       |               |       |               |       |               |       |
| 4-Methylphenol               |  |  | 2800           | 0.426 | 0.46 U        | 0.46  |               |       |               |       |               |       |               |       |
| N-Nitroso-di-n-propylamine   |  |  | 0.66           | 0.264 | 0.46 U        | 0.46  |               |       |               |       |               |       |               |       |
| Hexachloroethane             |  |  | 6              | 0.175 | 0.46 U        | 0.46  |               |       |               |       |               |       |               |       |
| Nitrobenzene                 |  |  | 28             | 0.244 | 0.46 U        | 0.46  |               |       |               |       |               |       |               |       |
| Isophorone                   |  |  | 1100           | 0.129 | 0.46 U        | 0.46  |               |       |               |       |               |       |               |       |
| 2-Nitrophenol                |  |  |                | 0.231 | 0.46 U        | 0.46  |               |       |               |       |               |       |               |       |
| 2,4-Dimethylphenol           |  |  | 1100           | 0.158 | 0.46 U        | 0.46  |               |       |               |       |               |       |               |       |
| bis(2-Chloroethoxy) methane  |  |  |                | 0.201 | 0.46 U        | 0.46  |               |       |               |       |               |       |               |       |
| 2,4-Dichlorophenol           |  |  | 170            | 0.145 | 0.46 U        | 0.46  |               |       |               |       |               |       |               |       |
| 1,2,4-Trichlorobenzene       |  |  | 68             | 0.317 | 0.46 U        | 0.46  |               |       |               |       |               |       |               |       |
| Naphthalene                  |  |  | 230            | 0.277 | 0.94          | 0.46  |               |       |               |       |               |       |               |       |
| 4-Chloroaniline              |  |  | 230            | 0.096 | 0.46 U        | 0.46  |               |       |               |       |               |       |               |       |
| Hexachlorobutadiene          |  |  | 1              | 0.152 | 0.46 U        | 0.46  |               |       |               |       |               |       |               |       |
| 4-Chloro-3-methylphenol      |  |  | 10000          | 0.102 | 0.46 U        | 0.46  |               |       |               |       |               |       |               |       |
| 2-Methylnaphthalene          |  |  |                | 0.287 | 0.18 J        | 0.46  |               |       |               |       |               |       |               |       |
| Hexachlorocyclopentadiene    |  |  | 400            | 0.119 | 0.46 U        | 0.46  |               |       |               |       |               |       |               |       |
| 2,4,6-Trichlorophenol        |  |  | 62             | 0.185 | 0.46 U        | 0.46  |               |       |               |       |               |       |               |       |
| 2,4,5-Trichlorophenol        |  |  | 5600           | 0.155 | 1.2 U         | 1.2   |               |       |               |       |               |       |               |       |
| 2-Chloronaphthalene          |  |  |                | 0.271 | 0.46 U        | 0.46  |               |       |               |       |               |       |               |       |
| 2-Nitroaniline               |  |  |                | 0.201 | 1.2 U         | 1.2   |               |       |               |       |               |       |               |       |
| Dimethylphthalate            |  |  | 10000          | 0.145 | 0.46 U        | 0.46  |               |       |               |       |               |       |               |       |
| Acenaphthylene               |  |  |                | 0.198 | 0.46 U        | 0.46  |               |       |               |       |               |       |               |       |
| 2,6-Dinitrotoluene           |  |  | 1              | 0.172 | 0.46 U        | 0.46  |               |       |               |       |               |       |               |       |
| 3-Nitroaniline               |  |  |                | 0.172 | 1.2 U         | 1.2   |               |       |               |       |               |       |               |       |
| Acenaphthene                 |  |  | 3400           | 0.221 | E             | 0.46  |               |       |               |       |               |       |               |       |
| 2,4-Dinitrophenol            |  |  | 110            | 0.152 | 1.2 U         | 1.2   |               |       |               |       |               |       |               |       |
| 4-Nitrophenol                |  |  |                | 0.248 | 1.2 U         | 1.2   |               |       |               |       |               |       |               |       |

**MAIN POST  
SOIL BORING SEMIVOLATILES**

| Geographical Location      |          |       | M18            | M18           | M18           | M18           | M18           | M18           | M18        | M18  | M18        | M18  | M18        | M18  | M18  |
|----------------------------|----------|-------|----------------|---------------|---------------|---------------|---------------|---------------|------------|------|------------|------|------------|------|------|
| Sample                     |          |       | M18-SB06-A02RE | MP18-SB01-A01 | MP18-SB01-A02 | MP18-SB02-A01 | MP18-SB02-A02 | MP18-SB03-A01 |            |      |            |      |            |      |      |
| Sample Type                |          |       |                |               |               |               |               |               |            |      |            |      |            |      |      |
| Batch#                     |          |       | 9501G587       | 9412G632      | 9412G632      | 9412G632      | 9412G632      | 9412G632      |            |      |            |      |            |      |      |
| Prep#                      |          |       | 95GP0083       | 94GTS038      | 94GTS038      | 94GTS038      | 94GTS038      | 94GTS038      |            |      |            |      |            |      |      |
| RFW#                       |          |       | 006            | 003           | 004           | 005           | 006           | 006           |            |      |            |      |            |      |      |
| Sample Depth (bgs)         |          |       |                |               |               |               |               |               |            |      |            |      |            |      |      |
| Dilution Factor            |          |       | 1.00           | 1.00          | 1.00          | 1.00          | 1.00          | 1.00          |            |      |            |      |            |      |      |
| Matrix                     |          |       | soil           | soil          | soil          | soil          | soil          | soil          |            |      |            |      |            |      |      |
| Units                      | mg/kg    | mg/kg | mg/kg          | mg/kg         | mg/kg         | mg/kg         | mg/kg         | mg/kg         |            |      |            |      |            |      |      |
| Sampling Date              |          |       | 1/11/95        | 1/12/95       | 1/12/95       | 1/12/95       | 1/12/95       | 1/12/95       |            |      |            |      |            |      |      |
| Analysis Date              |          |       | 2/11/95        | 1/30/95       | 1/30/95       | 1/30/95       | 1/30/95       | 1/30/95       |            |      |            |      |            |      |      |
| Analysis                   | Standard | MDL   | Analytical     | CRQL          | Analytical    | CRQL          | Analytical    | CRQL          | Analytical | CRQL | Analytical | CRQL | Analytical | CRQL | CRQL |
|                            |          |       | Result         |               | Result        |               | Result        |               | Result     |      | Result     |      | Result     |      |      |
| Dibenzofuran               |          | 0.215 | E              | 0.46          |               |               |               |               |            |      |            |      |            |      |      |
| 2,4-Dinitrotoluene         | 1        | 0.191 | 0.46 U         | 0.46          |               |               |               |               |            |      |            |      |            |      |      |
| Diethylphthalate           | 10000    | 0.178 | 0.46 U         | 0.46          |               |               |               |               |            |      |            |      |            |      |      |
| 4-Chlorophenyl-phenylether |          | 0.231 | 0.46 U         | 0.46          |               |               |               |               |            |      |            |      |            |      |      |
| Fluorene                   | 2300     | 0.208 | E              | 0.46          |               |               |               |               |            |      |            |      |            |      |      |
| 4-Nitroaniline             |          | 0.211 | 1.2 U          | 1.2           |               |               |               |               |            |      |            |      |            |      |      |
| 4,6-Dinitro-2-methylphenol |          | 0.175 | 1.2 U          | 1.2           |               |               |               |               |            |      |            |      |            |      |      |
| N-Nitrosodiphenylamine (1) | 140      | 0.139 | 0.46 U         | 0.46          |               |               |               |               |            |      |            |      |            |      |      |
| 4-Bromophenyl-phenylether  |          | 0.175 | 0.46 U         | 0.46          |               |               |               |               |            |      |            |      |            |      |      |
| Hexachlorobenzene          | 0.66     | 0.182 | 0.46 U         | 0.46          |               |               |               |               |            |      |            |      |            |      |      |
| Pentachlorophenol          | 6        | 0.132 | 1.2 U          | 1.2           |               |               |               |               |            |      |            |      |            |      |      |
| Phenanthrene               |          | 0.165 | E              | 0.46          |               |               |               |               |            |      |            |      |            |      |      |
| Anthracene                 | 10000    | 0.152 | E              | 0.46          |               |               |               |               |            |      |            |      |            |      |      |
| Carbazole                  |          | 0.145 | E              | 0.46          |               |               |               |               |            |      |            |      |            |      |      |
| Di-n-butylphthalate        | 5700     | 0.215 | 1.6 B          | 0.46          |               |               |               |               |            |      |            |      |            |      |      |
| Fluoranthene               | 2300     | 0.198 | E              | 0.46          |               |               |               |               |            |      |            |      |            |      |      |
| Pyrene                     | 1700     | 0.178 | E              | 0.46          |               |               |               |               |            |      |            |      |            |      |      |
| Butylbenzylphthalate       | 1100     | 0.175 | 0.46 U         | 0.46          |               |               |               |               |            |      |            |      |            |      |      |
| 3,3'-Dichlorobenzidine     | 2        | 0.092 | 0.46 U         | 0.46          |               |               |               |               |            |      |            |      |            |      |      |
| Benzo(a)anthracene         | 0.9      | 0.162 | E              | 0.46          |               |               |               |               |            |      |            |      |            |      |      |
| Chrysene                   | 9        | 0.145 | E              | 0.46          |               |               |               |               |            |      |            |      |            |      |      |
| bis(2-Ethylhexy)phthalate  | 49       | 0.32  | 0.18 J         | 0.46          |               |               |               |               |            |      |            |      |            |      |      |
| Di-n-octyl phthalate       | 1100     | 0.185 | 0.46 U         | 0.46          |               |               |               |               |            |      |            |      |            |      |      |
| Benzo(b)fluoranthene       | 0.9      | 0.188 | E              | 0.46          |               |               |               |               |            |      |            |      |            |      |      |
| Benzo(k)fluoranthene       | 0.9      | 0.205 | 1.3            | 0.46          |               |               |               |               |            |      |            |      |            |      |      |
| Benzo(a)pyrene             | 0.66     | 0.162 | 3.1            | 0.46          |               |               |               |               |            |      |            |      |            |      |      |
| Indeno(1,2,3-cd)pyrene     | 0.9      | 0.234 | 1.7            | 0.46          |               |               |               |               |            |      |            |      |            |      |      |
| Dibenzo(a,h)anthracene     | 0.66     | 0.198 | 0.46 U         | 0.46          |               |               |               |               |            |      |            |      |            |      |      |
| Benzo(g,h,i)perylene       |          | 0.224 | 1.5            | 0.46          |               |               |               |               |            |      |            |      |            |      |      |
| Petroleum hydrocarbons     |          |       |                |               | 367           | 27.5          | 84.9          | 28.5          | 188        | 27.8 | 612        | 30.6 | 6330       | 719  |      |
| Total Est. Conc. of TIC    |          |       | 21.2           |               |               |               |               |               |            |      |            |      |            |      |      |
| Dilution Factor            |          |       |                |               |               |               |               |               |            |      |            |      |            |      |      |
| Method:TCL Semivolatiles   |          |       |                |               |               |               |               |               |            |      |            |      |            |      |      |

**MAIN POST  
SOIL BORING SEMIVOLATILES**

| Geographical Location        |          |       | M18           |       | M18           |       | M18           |       | M18           |       | M18           |       |
|------------------------------|----------|-------|---------------|-------|---------------|-------|---------------|-------|---------------|-------|---------------|-------|
| Sample                       |          |       | MP18-SB03-A01 |       | MP18-SB07-A02 |       | MP18-SB24-A01 |       | MP18-SB24-A02 |       | MP18-SB25-A01 |       |
| Sample Type                  |          |       |               |       |               |       |               |       |               |       |               |       |
| Batch#                       |          |       | 9412G632      |       | 9412G632      |       | 9412G632      |       | 9412G632      |       | 9501G656      |       |
| Prep#                        |          |       | 94GTS038      |       | 94GTS038      |       | 94GTS038      |       | 94GTS038      |       | 95GTS038      |       |
| RFW#                         |          |       | 007           |       | 008           |       | 001           |       | 002           |       | 001           |       |
| Sample Depth (bgs)           |          |       |               |       |               |       |               |       |               |       |               |       |
| Dilution Factor              |          |       | 1.00          |       | 1.00          |       | 1.00          |       | 1.00          |       | 10.0          |       |
| Matrix                       |          |       | soil          |       | soil          |       | soil          |       | soil          |       | soil          |       |
| Units                        |          |       | mg/kg         | mg/kg | mg/kg         | mg/kg | mg/kg         | mg/kg | mg/kg         | mg/kg | mg/kg         | mg/kg |
| Sampling Date                |          |       | 1/12/95       |       | 1/12/95       |       | 1/12/95       |       | 1/12/95       |       | 1/11/95       |       |
| Analysis Date                |          |       | 1/30/95       |       | 1/30/95       |       | 1/30/95       |       | 1/30/95       |       | 1/13/95       |       |
| Analysis                     | Standard | MDL   | Analytical    | CRQL  | Analytical    | CRQL  | Analytical    | CRQL  | Analytical    | CRQL  | Analytical    | CRQL  |
|                              |          |       | Result        |       | Result        |       | Result        |       | Result        |       | Result        |       |
| Phenol                       | 10000    | 0.234 |               |       |               |       |               |       |               |       |               |       |
| bis(2-Chloroethyl) ether     | 0.66     | 0.32  |               |       |               |       |               |       |               |       |               |       |
| 2-Chlorophenol               | 280      | 0.241 |               |       |               |       |               |       |               |       |               |       |
| 1,3-Dichlorobenzene          | 5100     | 0.175 |               |       |               |       |               |       |               |       |               |       |
| 1,4-Dichlorobenzene          | 570      | 0.158 |               |       |               |       |               |       |               |       |               |       |
| 1,2-Dichlorobenzene          | 5100     | 0.188 |               |       |               |       |               |       |               |       |               |       |
| 2-Methylphenol               | 2800     | 0.221 |               |       |               |       |               |       |               |       |               |       |
| 2,2'-oxybis(1-Chloropropane) |          | 0.231 |               |       |               |       |               |       |               |       |               |       |
| 4-Methylphenol               | 2800     | 0.426 |               |       |               |       |               |       |               |       |               |       |
| N-Nitroso-di-n-propylamine   | 0.66     | 0.264 |               |       |               |       |               |       |               |       |               |       |
| Hexachloroethane             | 6        | 0.175 |               |       |               |       |               |       |               |       |               |       |
| Nitrobenzene                 | 28       | 0.244 |               |       |               |       |               |       |               |       |               |       |
| Isophorone                   | 1100     | 0.129 |               |       |               |       |               |       |               |       |               |       |
| 2-Nitrophenol                |          | 0.231 |               |       |               |       |               |       |               |       |               |       |
| 2,4-Dimethylphenol           | 1100     | 0.158 |               |       |               |       |               |       |               |       |               |       |
| bis(2-Chloroethoxy) methane  |          | 0.201 |               |       |               |       |               |       |               |       |               |       |
| 2,4-Dichlorophenol           | 170      | 0.145 |               |       |               |       |               |       |               |       |               |       |
| 1,2,4-Trichlorobenzene       | 68       | 0.317 |               |       |               |       |               |       |               |       |               |       |
| Naphthalene                  | 230      | 0.277 |               |       |               |       |               |       |               |       |               |       |
| 4-Chloroaniline              | 230      | 0.096 |               |       |               |       |               |       |               |       |               |       |
| Hexachlorobutadiene          | 1        | 0.152 |               |       |               |       |               |       |               |       |               |       |
| 4-Chloro-3-methylphenol      | 10000    | 0.102 |               |       |               |       |               |       |               |       |               |       |
| 2-Methylnaphthalene          |          | 0.287 |               |       |               |       |               |       |               |       |               |       |
| Hexachlorocyclopentadiene    | 400      | 0.119 |               |       |               |       |               |       |               |       |               |       |
| 2,4,6-Trichlorophenol        | 62       | 0.185 |               |       |               |       |               |       |               |       |               |       |
| 2,4,5-Trichlorophenol        | 5600     | 0.155 |               |       |               |       |               |       |               |       |               |       |
| 2-Chloronaphthalene          |          | 0.271 |               |       |               |       |               |       |               |       |               |       |
| 2-Nitroaniline               |          | 0.201 |               |       |               |       |               |       |               |       |               |       |
| Dimethylphthalate            | 10000    | 0.145 |               |       |               |       |               |       |               |       |               |       |
| Acenaphthylene               |          | 0.198 |               |       |               |       |               |       |               |       |               |       |
| 2,6-Dinitrotoluene           | 1        | 0.172 |               |       |               |       |               |       |               |       |               |       |
| 3-Nitroaniline               |          | 0.172 |               |       |               |       |               |       |               |       |               |       |
| Acenaphthene                 | 3400     | 0.221 |               |       |               |       |               |       |               |       |               |       |
| 2,4-Dinitrophenol            | 110      | 0.152 |               |       |               |       |               |       |               |       |               |       |
| 4-Nitrophenol                |          | 0.248 |               |       |               |       |               |       |               |       |               |       |

**MAIN POST  
SOIL BORING SEMIVOLATILES**

| Geographical Location      |          |       | M18           |      | M18                                                 |      | M18           |      | M18           |      | M18           |      |
|----------------------------|----------|-------|---------------|------|-----------------------------------------------------|------|---------------|------|---------------|------|---------------|------|
| Sample                     |          |       | MP18-SB03-A01 |      | MP18-SB07-A02                                       |      | MP18-SB24-A01 |      | MP18-SB24-A02 |      | MP18-SB25-A01 |      |
| Sample Type                |          |       |               |      |                                                     |      |               |      |               |      |               |      |
| Batch#                     |          |       | 9412G632      |      | 9412G632                                            |      | 9412G632      |      | 9412G632      |      | 9501G656      |      |
| Prep#                      |          |       | 94GTS038      |      | 94GTS038                                            |      | 94GTS038      |      | 94GTS038      |      | 95GTS038      |      |
| RFW#                       |          |       | 007           |      | 008                                                 |      | 001           |      | 002           |      | 001           |      |
| Sample Depth (bgs)         |          |       |               |      |                                                     |      |               |      |               |      |               |      |
| Dilution Factor            |          |       | 1.00          |      | 1.00                                                |      | 1.00          |      | 1.00          |      | 10.0          |      |
| Matrix                     |          |       | soil          |      | soil                                                |      | soil          |      | soil          |      | soil          |      |
| Units                      | mg/kg    | mg/kg | mg/kg         |      | mg/kg                                               |      | mg/kg         |      | mg/kg         |      | mg/kg         |      |
| Sampling Date              |          |       | 1/12/95       |      | 1/12/95                                             |      | 1/12/95       |      | 1/12/95       |      | 1/11/95       |      |
| Analysis Date              |          |       | 1/30/95       |      | 1/30/95                                             |      | 1/30/95       |      | 1/30/95       |      | 1/13/95       |      |
| Analysis                   | Standard | MDL   | Analytical    | CRQL | Analytical                                          | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL |
|                            |          |       | Result        |      | Result                                              |      | Result        |      | Result        |      | Result        |      |
| Dibenzofuran               |          | 0.215 |               |      |                                                     |      |               |      |               |      |               |      |
| 2,4-Dinitrotoluene         | 1        | 0.191 |               |      |                                                     |      |               |      |               |      |               |      |
| Diethylphthalate           | 10000    | 0.178 |               |      |                                                     |      |               |      |               |      |               |      |
| 4-Chlorophenyl-phenylether |          | 0.231 |               |      |                                                     |      |               |      |               |      |               |      |
| Fluorene                   | 2300     | 0.208 |               |      |                                                     |      |               |      |               |      |               |      |
| 4-Nitroaniline             |          | 0.211 |               |      |                                                     |      |               |      |               |      |               |      |
| 4,6-Dinitro-2-methylphenol |          | 0.175 |               |      |                                                     |      |               |      |               |      |               |      |
| N-Nitrosodiphenylamine (1) | 140      | 0.139 |               |      |                                                     |      |               |      |               |      |               |      |
| 4-Bromophenyl-phenylether  |          | 0.175 |               |      |                                                     |      |               |      |               |      |               |      |
| Hexachlorobenzene          | 0.66     | 0.182 |               |      |                                                     |      |               |      |               |      |               |      |
| Pentachlorophenol          | 6        | 0.132 |               |      |                                                     |      |               |      |               |      |               |      |
| Phenanthrene               |          | 0.165 |               |      |                                                     |      |               |      |               |      |               |      |
| Anthracene                 | 10000    | 0.152 |               |      |                                                     |      |               |      |               |      |               |      |
| Carbazole                  |          | 0.145 |               |      |                                                     |      |               |      |               |      |               |      |
| Di-n-butylphthalate        | 5700     | 0.215 |               |      |                                                     |      |               |      |               |      |               |      |
| Fluoranthene               | 2300     | 0.198 |               |      |                                                     |      |               |      |               |      |               |      |
| Pyrene                     | 1700     | 0.178 |               |      |                                                     |      |               |      |               |      |               |      |
| Butylbenzylphthalate       | 1100     | 0.175 |               |      |                                                     |      |               |      |               |      |               |      |
| 3,3'-Dichlorobenzidine     | 2        | 0.092 |               |      |                                                     |      |               |      |               |      |               |      |
| Benzo(a)anthracene         | 0.9      | 0.162 |               |      |                                                     |      |               |      |               |      |               |      |
| Chrysene                   | 9        | 0.145 |               |      |                                                     |      |               |      |               |      |               |      |
| bis(2-Ethylhexy)phthalate  | 49       | 0.32  |               |      |                                                     |      |               |      |               |      |               |      |
| Di-n-octyl phthalate       | 1100     | 0.185 |               |      |                                                     |      |               |      |               |      |               |      |
| Benzo(b)fluoranthene       | 0.9      | 0.188 |               |      |                                                     |      |               |      |               |      |               |      |
| Benzo(k)fluoranthene       | 0.9      | 0.205 |               |      |                                                     |      |               |      |               |      |               |      |
| Benzo(a)pyrene             | 0.66     | 0.162 |               |      |                                                     |      |               |      |               |      |               |      |
| Indeno(1,2,3-cd)pyrene     | 0.9      | 0.234 |               |      |                                                     |      |               |      |               |      |               |      |
| Dibenzo(a,h)anthracene     | 0.66     | 0.198 |               |      |                                                     |      |               |      |               |      |               |      |
| Benzo(g,h,i)perylene       |          | 0.224 |               |      |                                                     |      |               |      |               |      |               |      |
| Petroleum hydrocarbons     |          |       | 1100          | 29.0 | 29.9                                                | 28.6 | 695           | 28.8 | 993           | 31.1 | 311           | 29.6 |
| Total Est. Conc. of TIC    |          |       |               |      |                                                     |      |               |      |               |      |               |      |
| Dilution Factor            |          |       |               |      | These can be found in the Inorganics data packages. |      |               |      |               |      |               |      |
| Method:TCL Semivolatiles   |          |       |               |      |                                                     |      |               |      |               |      |               |      |

**MAIN POST  
SOIL BORING SEMIVOLATILES**

| Geographical Location        |          |       | M18           |      | B1          |      | B1            |      | B1          |      | B2          |      |
|------------------------------|----------|-------|---------------|------|-------------|------|---------------|------|-------------|------|-------------|------|
| Sample                       |          |       | MP18-SB25-A02 |      | B1-SB01-A01 |      | B1-SB01-A01RE |      | B1-SB01-A02 |      | B2-SB01-A01 |      |
| Sample Type                  |          |       |               |      |             |      |               |      |             |      |             |      |
| Batch#                       |          |       | 9501G656      |      | 9401G527    |      | 9401G527      |      | 9401G527    |      | 9401G500    |      |
| Prep#                        |          |       | 95GTS038      |      | 95GB0017    |      | 95GB0017      |      | 95GB0017    |      | 95GB0017    |      |
| RFW#                         |          |       | 002           |      | 001         |      | 001           |      | 002         |      | 001         |      |
| Sample Depth (bgs)           |          |       |               |      |             |      |               |      |             |      |             |      |
| Dilution Factor              |          |       | 10.0          |      | 1.00        |      | 1.00          |      | 1.00        |      | 1.00        |      |
| Matrix                       |          |       | soil          |      | soil        |      | soil          |      | soil        |      | soil        |      |
| Units                        | mg/kg    | mg/kg | mg/kg         |      | mg/kg       |      | mg/kg         |      | mg/kg       |      | mg/kg       |      |
| Sampling Date                |          |       | 1/11/95       |      | 1/9/95      |      | 1/9/95        |      | 1/9/95      |      | 1/6/95      |      |
| Analysis Date                |          |       | 1/13/95       |      | 1/21/94     |      | 2/8/94        |      | 2/8/94      |      | 1/21/95     |      |
| Analysis                     | Standard | MDL   | Analytical    | CRQL | Analytical  | CRQL | Analytical    | CRQL | Analytical  | CRQL | Analytical  | CRQL |
|                              |          |       | Result        |      | Result      |      | Result        |      | Result      |      | Result      |      |
| Phenol                       | 10000    | 0.234 |               |      | 0.38 U      | 0.38 | 0.38 U        | 0.38 | 0.42 U      | 0.42 | 0.41 U      | 0.41 |
| bis(2-Chloroethyl) ether     | 0.66     | 0.32  |               |      | 0.38 U      | 0.38 | 0.38 U        | 0.38 | 0.42 U      | 0.42 | 0.41 U      | 0.41 |
| 2-Chlorophenol               | 280      | 0.241 |               |      | 0.38 U      | 0.38 | 0.38 U        | 0.38 | 0.42 U      | 0.42 | 0.41 U      | 0.41 |
| 1,3-Dichlorobenzene          | 5100     | 0.175 |               |      | 0.38 U      | 0.38 | 0.38 U        | 0.38 | 0.42 U      | 0.42 | 0.41 U      | 0.41 |
| 1,4-Dichlorobenzene          | 570      | 0.158 |               |      | 0.38 U      | 0.38 | 0.38 U        | 0.38 | 0.42 U      | 0.42 | 0.41 U      | 0.41 |
| 1,2-Dichlorobenzene          | 5100     | 0.188 |               |      | 0.38 U      | 0.38 | 0.38 U        | 0.38 | 0.42 U      | 0.42 | 0.41 U      | 0.41 |
| 2-Methylphenol               | 2800     | 0.221 |               |      | 0.38 U      | 0.38 | 0.38 U        | 0.38 | 0.42 U      | 0.42 | 0.41 U      | 0.41 |
| 2,2'-oxybis(1-Chloropropane) |          | 0.231 |               |      | 0.38 U      | 0.38 | 0.38 U        | 0.38 | 0.42 U      | 0.42 | 0.41 U      | 0.41 |
| 4-Methylphenol               | 2800     | 0.426 |               |      | 0.38 U      | 0.38 | 0.38 U        | 0.38 | 0.42 U      | 0.42 | 0.41 U      | 0.41 |
| N-Nitroso-di-n-propylamine   | 0.66     | 0.264 |               |      | 0.38 U      | 0.38 | 0.38 U        | 0.38 | 0.42 U      | 0.42 | 0.41 U      | 0.41 |
| Hexachloroethane             | 6        | 0.175 |               |      | 0.38 U      | 0.38 | 0.38 U        | 0.38 | 0.42 U      | 0.42 | 0.41 U      | 0.41 |
| Nitrobenzene                 | 28       | 0.244 |               |      | 0.38 U      | 0.38 | 0.38 U        | 0.38 | 0.42 U      | 0.42 | 0.41 U      | 0.41 |
| Isophorone                   | 1100     | 0.129 |               |      | 0.38 U      | 0.38 | 0.38 U        | 0.38 | 0.42 U      | 0.42 | 0.41 U      | 0.41 |
| 2-Nitrophenol                |          | 0.231 |               |      | 0.38 U      | 0.38 | 0.38 U        | 0.38 | 0.42 U      | 0.42 | 0.41 U      | 0.41 |
| 2,4-Dimethylphenol           | 1100     | 0.158 |               |      | 0.38 U      | 0.38 | 0.38 U        | 0.38 | 0.42 U      | 0.42 | 0.41 U      | 0.41 |
| bis(2-Chloroethoxy) methane  |          | 0.201 |               |      | 0.38 U      | 0.38 | 0.38 U        | 0.38 | 0.42 U      | 0.42 | 0.41 U      | 0.41 |
| 2,4-Dichlorophenol           | 170      | 0.145 |               |      | 0.38 U      | 0.38 | 0.38 U        | 0.38 | 0.42 U      | 0.42 | 0.41 U      | 0.41 |
| 1,2,4-Trichlorobenzene       | 68       | 0.317 |               |      | 0.38 U      | 0.38 | 0.38 U        | 0.38 | 0.42 U      | 0.42 | 0.41 U      | 0.41 |
| Naphthalene                  | 230      | 0.277 |               |      | 0.38 U      | 0.38 | 0.38 U        | 0.38 | 0.42 U      | 0.42 | 0.41 U      | 0.41 |
| 4-Chloroaniline              | 230      | 0.096 |               |      | 0.38 U      | 0.38 | 0.38 U        | 0.38 | 0.42 U      | 0.42 | 0.41 U      | 0.41 |
| Hexachlorobutadiene          | 1        | 0.152 |               |      | 0.38 U      | 0.38 | 0.38 U        | 0.38 | 0.42 U      | 0.42 | 0.41 U      | 0.41 |
| 4-Chloro-3-methylphenol      | 10000    | 0.102 |               |      | 0.38 U      | 0.38 | 0.38 U        | 0.38 | 0.42 U      | 0.42 | 0.41 U      | 0.41 |
| 2-Methylnaphthalene          |          | 0.287 |               |      | 0.38 U      | 0.38 | 0.38 U        | 0.38 | 0.42 U      | 0.42 | 0.41 U      | 0.41 |
| Hexachlorocyclopentadiene    | 400      | 0.119 |               |      | 0.38 U      | 0.38 | 0.38 U        | 0.38 | 0.42 U      | 0.42 | 0.41 U      | 0.41 |
| 2,4,6-Trichlorophenol        | 62       | 0.185 |               |      | 0.38 U      | 0.38 | 0.38 U        | 0.38 | 0.42 U      | 0.42 | 0.41 U      | 0.41 |
| 2,4,5-Trichlorophenol        | 5600     | 0.155 |               |      | 0.94 U      | 0.94 | 0.94 U        | 0.94 | 1 U         | 1    | 1 U         | 1    |
| 2-Chloronaphthalene          |          | 0.271 |               |      | 0.38 U      | 0.38 | 0.38 U        | 0.38 | 0.42 U      | 0.42 | 0.41 U      | 0.41 |
| 2-Nitroaniline               |          | 0.201 |               |      | 0.94 U      | 0.94 | 0.94 U        | 0.94 | 1 U         | 1    | 1 U         | 1    |
| Dimethylphthalate            | 10000    | 0.145 |               |      | 0.38 U      | 0.38 | 0.38 U        | 0.38 | 0.42 U      | 0.42 | 0.41 U      | 0.41 |
| Acenaphthylene               |          | 0.198 |               |      | 0.38 U      | 0.38 | 0.38 U        | 0.38 | 0.42 U      | 0.42 | 0.41 U      | 0.41 |
| 2,6-Dinitrotoluene           | 1        | 0.172 |               |      | 0.38 U      | 0.38 | 0.38 U        | 0.38 | 0.42 U      | 0.42 | 0.41 U      | 0.41 |
| 3-Nitroaniline               |          | 0.172 |               |      | 0.94 U      | 0.94 | 0.94 U        | 0.94 | 1 U         | 1    | 1 U         | 1    |
| Acenaphthene                 | 3400     | 0.221 |               |      | 0.38 U      | 0.38 | 0.38 U        | 0.38 | 0.42 U      | 0.42 | 0.41 U      | 0.41 |
| 2,4-Dinitrophenol            | 110      | 0.152 |               |      | 0.94 U      | 0.94 | 0.94 U        | 0.94 | 1 U         | 1    | 1 U         | 1    |
| 4-Nitrophenol                |          | 0.248 |               |      | 0.94 U      | 0.94 | 0.94 U        | 0.94 | 1 U         | 1    | 1 U         | 1    |

**MAIN POST  
SOIL BORING SEMIVOLATILES**

| Geographical Location      |          |       | M18           |      | B1          |      | B1            |      | B1          |      | B2          |      |
|----------------------------|----------|-------|---------------|------|-------------|------|---------------|------|-------------|------|-------------|------|
| Sample                     |          |       | MP18-SB25-A02 |      | B1-SB01-A01 |      | B1-SB01-A01RE |      | B1-SB01-A02 |      | B2-SB01-A01 |      |
| Sample Type                |          |       |               |      |             |      |               |      |             |      |             |      |
| Batch#                     |          |       | 9501G656      |      | 9401G527    |      | 9401G527      |      | 9401G527    |      | 9401G500    |      |
| Prep#                      |          |       | 95GTS038      |      | 95GB0017    |      | 95GB0017      |      | 95GB0017    |      | 95GB0017    |      |
| RFW#                       |          |       | 002           |      | 001         |      | 001           |      | 002         |      | 001         |      |
| Sample Depth (bgs)         |          |       |               |      |             |      |               |      |             |      |             |      |
| Dilution Factor            |          |       | 10.0          |      | 1.00        |      | 1.00          |      | 1.00        |      | 1.00        |      |
| Matrix                     |          |       | soil          |      | soil        |      | soil          |      | soil        |      | soil        |      |
| Units                      | mg/kg    | mg/kg | mg/kg         |      | mg/kg       |      | mg/kg         |      | mg/kg       |      | mg/kg       |      |
| Sampling Date              |          |       | 1/11/95       |      | 1/9/95      |      | 1/9/95        |      | 1/9/95      |      | 1/6/95      |      |
| Analysis Date              |          |       | 1/13/95       |      | 1/21/94     |      | 2/8/94        |      | 2/8/94      |      | 1/21/95     |      |
| Analysis                   | Standard | MDL   | Analytical    | CRQL | Analytical  | CRQL | Analytical    | CRQL | Analytical  | CRQL | Analytical  | CRQL |
|                            |          |       | Result        |      | Result      |      | Result        |      | Result      |      | Result      |      |
| Dibenzofuran               |          | 0.215 |               |      | 0.38 U      | 0.38 | 0.38 U        | 0.38 | 0.42 U      | 0.42 | 0.41 U      | 0.41 |
| 2,4-Dinitrotoluene         | 1        | 0.191 |               |      | 0.38 U      | 0.38 | 0.38 U        | 0.38 | 0.42 U      | 0.42 | 0.41 U      | 0.41 |
| Diethylphthalate           | 10000    | 0.178 |               |      | 0.38 U      | 0.38 | 0.38 U        | 0.38 | 0.42 U      | 0.42 | 0.41 U      | 0.41 |
| 4-Chlorophenyl-phenylether |          | 0.231 |               |      | 0.38 U      | 0.38 | 0.38 U        | 0.38 | 0.42 U      | 0.42 | 0.41 U      | 0.41 |
| Fluorene                   | 2300     | 0.208 |               |      | 0.38 U      | 0.38 | 0.38 U        | 0.38 | 0.42 U      | 0.42 | 0.41 U      | 0.41 |
| 4-Nitroaniline             |          | 0.211 |               |      | 0.94 U      | 0.94 | 0.94 U        | 0.94 | 1 U         | 1    | 1 U         | 1    |
| 4,6-Dinitro-2-methylphenol |          | 0.175 |               |      | 0.94 U      | 0.94 | 0.94 U        | 0.94 | 1 U         | 1    | 1 U         | 1    |
| N-Nitrosodiphenylamine (1) | 140      | 0.139 |               |      | 0.38 U      | 0.38 | 0.38 U        | 0.38 | 0.42 U      | 0.42 | 0.41 U      | 0.41 |
| 4-Bromophenyl-phenylether  |          | 0.175 |               |      | 0.38 U      | 0.38 | 0.38 U        | 0.38 | 0.42 U      | 0.42 | 0.41 U      | 0.41 |
| Hexachlorobenzene          | 0.66     | 0.182 |               |      | 0.38 U      | 0.38 | 0.38 U        | 0.38 | 0.42 U      | 0.42 | 0.41 U      | 0.41 |
| Pentachlorophenol          | 6        | 0.132 |               |      | 0.94 U      | 0.94 | 0.94 U        | 0.94 | 1 U         | 1    | 1 U         | 1    |
| Phenanthrene               |          | 0.165 |               |      | 0.38 U      | 0.38 | 0.38 U        | 0.38 | 0.42 U      | 0.42 | 0.067 J     | 0.41 |
| Anthracene                 | 10000    | 0.152 |               |      | 0.38 U      | 0.38 | 0.38 U        | 0.38 | 0.42 U      | 0.42 | 0.41 U      | 0.41 |
| Carbazole                  |          | 0.145 |               |      | 0.38 U      | 0.38 | 0.38 U        | 0.38 | 0.42 U      | 0.42 | 0.41 U      | 0.41 |
| Di-n-butylphthalate        | 5700     | 0.215 |               |      | 0.16 JB     | 0.38 | 0.11 JB       | 0.38 | 0.078 JB    | 0.42 | 0.068 JB    | 0.41 |
| Fluoranthene               | 2300     | 0.198 |               |      | 0.38 U      | 0.38 | 0.38 U        | 0.38 | 0.42 U      | 0.42 | 0.042 J     | 0.41 |
| Pyrene                     | 1700     | 0.178 |               |      | 0.38 U      | 0.38 | 0.38 U        | 0.38 | 0.42 U      | 0.42 | 0.081 J     | 0.41 |
| Butylbenzylphthalate       | 1100     | 0.175 |               |      | 0.38 U      | 0.38 | 0.38 U        | 0.38 | 0.42 U      | 0.42 | 0.41 U      | 0.41 |
| 3,3'-Dichlorobenzidine     | 2        | 0.092 |               |      | 0.38 U      | 0.38 | 0.38 U        | 0.38 | 0.42 U      | 0.42 | 0.41 U      | 0.41 |
| Benzo(a)anthracene         | 0.9      | 0.162 |               |      | 0.38 U      | 0.38 | 0.38 U        | 0.38 | 0.42 U      | 0.42 | 0.41 U      | 0.41 |
| Chrysene                   | 9        | 0.145 |               |      | 0.38 U      | 0.38 | 0.38 U        | 0.38 | 0.42 U      | 0.42 | 0.41 U      | 0.41 |
| bis(2-Ethylhexy)phthalate  | 49       | 0.32  |               |      | 0.041 J     | 0.38 | 0.083 J       | 0.38 | 0.42 U      | 0.42 | 0.067 J     | 0.41 |
| Di-n-octyl phthalate       | 1100     | 0.185 |               |      | 0.38 U      | 0.38 | 0.38 U        | 0.38 | 0.42 U      | 0.42 | 0.41 U      | 0.41 |
| Benzo(b)fluoranthene       | 0.9      | 0.188 |               |      | 0.38 U      | 0.38 | 0.38 U        | 0.38 | 0.42 U      | 0.42 | 0.41 U      | 0.41 |
| Benzo(k)fluoranthene       | 0.9      | 0.205 |               |      | 0.38 U      | 0.38 | 0.38 U        | 0.38 | 0.42 U      | 0.42 | 0.41 U      | 0.41 |
| Benzo(a)pyrene             | 0.66     | 0.162 |               |      | 0.38 U      | 0.38 | 0.38 U        | 0.38 | 0.42 U      | 0.42 | 0.41 U      | 0.41 |
| Indeno(1,2,3-cd)pyrene     | 0.9      | 0.234 |               |      | 0.38 U      | 0.38 | 0.38 U        | 0.38 | 0.42 U      | 0.42 | 0.41 U      | 0.41 |
| Dibenzo(a,h)anthracene     | 0.66     | 0.198 |               |      | 0.38 U      | 0.38 | 0.38 U        | 0.38 | 0.42 U      | 0.42 | 0.41 U      | 0.41 |
| Benzo(g,h,i)perylene       |          | 0.224 |               |      | 0.38 U      | 0.38 | 0.38 U        | 0.38 | 0.42 U      | 0.42 | 0.41 U      | 0.41 |
| Petroleum hydrocarbons     |          |       | 2500          | 141  |             |      |               |      |             |      |             |      |
| Total Est. Conc. of TIC    |          |       |               |      | 12.1        |      | 5.15          |      | 5.58        |      | 11.5        |      |
| Dilution Factor            |          |       |               |      |             |      |               |      |             |      |             |      |
| Method:TCL Semivolatiles   |          |       |               |      |             |      |               |      |             |      |             |      |



**MAIN POST  
SOIL BORING SEMIVOLATILES**

| Geographical Location        |          |       | B2          |      | B3          |      | B3          |      | B4          |      | B4            |      |
|------------------------------|----------|-------|-------------|------|-------------|------|-------------|------|-------------|------|---------------|------|
| Sample                       |          |       | B2-SB01-A02 |      | B3-SB01-A01 |      | B3-SB01-A03 |      | B4-SB01-A01 |      | B4-SB01-A01RE |      |
| Sample Type                  |          |       |             |      |             |      |             |      |             |      |               |      |
| Batch#                       |          |       | 9401G500    |      | 9401G500    |      | 9401G500    |      | 9401G527    |      | 9401G527      |      |
| Prep#                        |          |       | 95GB0017    |      | 95GB0017    |      | 95GB0017    |      | 95GB0017    |      | 95GB0017      |      |
| RFW#                         |          |       | 002         |      | 003         |      | 004         |      | 003         |      | 003           |      |
| Sample Depth (bgs)           |          |       |             |      |             |      |             |      |             |      |               |      |
| Dilution Factor              |          |       | 1.00        |      | 1.00        |      | 1.00        |      | 1.00        |      | 1.00          |      |
| Matrix                       |          |       | soil        |      | soil        |      | soil        |      | soil        |      | soil          |      |
| Units                        | mg/kg    | mg/kg | mg/kg       |      | mg/kg       |      | mg/kg       |      | mg/kg       |      | mg/kg         |      |
| Sampling Date                |          |       | 1/6/95      |      | 1/6/95      |      | 1/6/95      |      | 1/9/95      |      | 1/9/95        |      |
| Analysis Date                |          |       | 1/21/95     |      | 1/21/95     |      | 1/21/95     |      | 2/8/94      |      | 2/9/94        |      |
| Analysis                     | Standard | MDL   | Analytical  | CRQL | Analytical  | CRQL | Analytical  | CRQL | Analytical  | CRQL | Analytical    | CRQL |
|                              |          |       | Result      |      | Result      |      | Result      |      | Result      |      | Result        |      |
| Phenol                       | 10000    | 0.234 | 0.41 U      | 0.41 | 0.38 U      | 0.38 | 0.45 U      | 0.45 | 0.38 U      | 0.38 | 0.38 U        | 0.38 |
| bis(2-Chloroethyl) ether     | 0.66     | 0.32  | 0.41 U      | 0.41 | 0.38 U      | 0.38 | 0.45 U      | 0.45 | 0.38 U      | 0.38 | 0.38 U        | 0.38 |
| 2-Chlorophenol               | 280      | 0.241 | 0.41 U      | 0.41 | 0.38 U      | 0.38 | 0.45 U      | 0.45 | 0.38 U      | 0.38 | 0.38 U        | 0.38 |
| 1,3-Dichlorobenzene          | 5100     | 0.175 | 0.41 U      | 0.41 | 0.38 U      | 0.38 | 0.45 U      | 0.45 | 0.38 U      | 0.38 | 0.38 U        | 0.38 |
| 1,4-Dichlorobenzene          | 570      | 0.158 | 0.41 U      | 0.41 | 0.38 U      | 0.38 | 0.45 U      | 0.45 | 0.38 U      | 0.38 | 0.38 U        | 0.38 |
| 1,2-Dichlorobenzene          | 5100     | 0.188 | 0.41 U      | 0.41 | 0.38 U      | 0.38 | 0.45 U      | 0.45 | 0.38 U      | 0.38 | 0.38 U        | 0.38 |
| 2-Methylphenol               | 2800     | 0.221 | 0.41 U      | 0.41 | 0.38 U      | 0.38 | 0.45 U      | 0.45 | 0.38 U      | 0.38 | 0.38 U        | 0.38 |
| 2,2'-oxybis(1-Chloropropane) |          | 0.231 | 0.41 U      | 0.41 | 0.38 U      | 0.38 | 0.45 U      | 0.45 | 0.38 U      | 0.38 | 0.38 U        | 0.38 |
| 4-Methylphenol               | 2800     | 0.426 | 0.41 U      | 0.41 | 0.38 U      | 0.38 | 0.45 U      | 0.45 | 0.38 U      | 0.38 | 0.38 U        | 0.38 |
| N-Nitroso-di-n-propylamine   | 0.66     | 0.264 | 0.41 U      | 0.41 | 0.38 U      | 0.38 | 0.45 U      | 0.45 | 0.38 U      | 0.38 | 0.38 U        | 0.38 |
| Hexachloroethane             | 6        | 0.175 | 0.41 U      | 0.41 | 0.38 U      | 0.38 | 0.45 U      | 0.45 | 0.38 U      | 0.38 | 0.38 U        | 0.38 |
| Nitrobenzene                 | 28       | 0.244 | 0.41 U      | 0.41 | 0.38 U      | 0.38 | 0.45 U      | 0.45 | 0.38 U      | 0.38 | 0.38 U        | 0.38 |
| Isophorone                   | 1100     | 0.129 | 0.41 U      | 0.41 | 0.38 U      | 0.38 | 0.45 U      | 0.45 | 0.38 U      | 0.38 | 0.38 U        | 0.38 |
| 2-Nitrophenol                |          | 0.231 | 0.41 U      | 0.41 | 0.38 U      | 0.38 | 0.45 U      | 0.45 | 0.38 U      | 0.38 | 0.38 U        | 0.38 |
| 2,4-Dimethylphenol           | 1100     | 0.158 | 0.41 U      | 0.41 | 0.38 U      | 0.38 | 0.45 U      | 0.45 | 0.38 U      | 0.38 | 0.38 U        | 0.38 |
| bis(2-Chloroethoxy) methane  |          | 0.201 | 0.41 U      | 0.41 | 0.38 U      | 0.38 | 0.45 U      | 0.45 | 0.38 U      | 0.38 | 0.38 U        | 0.38 |
| 2,4-Dichlorophenol           | 170      | 0.145 | 0.41 U      | 0.41 | 0.38 U      | 0.38 | 0.45 U      | 0.45 | 0.38 U      | 0.38 | 0.38 U        | 0.38 |
| 1,2,4-Trichlorobenzene       | 68       | 0.317 | 0.41 U      | 0.41 | 0.38 U      | 0.38 | 0.45 U      | 0.45 | 0.38 U      | 0.38 | 0.38 U        | 0.38 |
| Naphthalene                  | 230      | 0.277 | 0.41 U      | 0.41 | 0.38 U      | 0.38 | 0.45 U      | 0.45 | 0.38 U      | 0.38 | 0.38 U        | 0.38 |
| 4-Chloroaniline              | 230      | 0.096 | 0.41 U      | 0.41 | 0.38 U      | 0.38 | 0.45 U      | 0.45 | 0.38 U      | 0.38 | 0.38 U        | 0.38 |
| Hexachlorobutadiene          | 1        | 0.152 | 0.41 U      | 0.41 | 0.38 U      | 0.38 | 0.45 U      | 0.45 | 0.38 U      | 0.38 | 0.38 U        | 0.38 |
| 4-Chloro-3-methylphenol      | 10000    | 0.102 | 0.41 U      | 0.41 | 0.38 U      | 0.38 | 0.45 U      | 0.45 | 0.38 U      | 0.38 | 0.38 U        | 0.38 |
| 2-Methylnaphthalene          |          | 0.287 | 0.41 U      | 0.41 | 0.38 U      | 0.38 | 0.45 U      | 0.45 | 0.38 U      | 0.38 | 0.38 U        | 0.38 |
| Hexachlorocyclopentadiene    | 400      | 0.119 | 0.41 U      | 0.41 | 0.38 U      | 0.38 | 0.45 U      | 0.45 | 0.38 U      | 0.38 | 0.38 U        | 0.38 |
| 2,4,6-Trichlorophenol        | 62       | 0.185 | 0.41 U      | 0.41 | 0.38 U      | 0.38 | 0.45 U      | 0.45 | 0.38 U      | 0.38 | 0.38 U        | 0.38 |
| 2,4,5-Trichlorophenol        | 5600     | 0.155 | 1 U         | 1    | 0.94 U      | 0.94 | 1.1 U       | 1.1  | 0.94 U      | 0.94 | 0.94 U        | 0.94 |
| 2-Chloronaphthalene          |          | 0.271 | 0.41 U      | 0.41 | 0.38 U      | 0.38 | 0.45 U      | 0.45 | 0.38 U      | 0.38 | 0.38 U        | 0.38 |
| 2-Nitroaniline               |          | 0.201 | 1 U         | 1    | 0.94 U      | 0.94 | 1.1 U       | 1.1  | 0.94 U      | 0.94 | 0.94 U        | 0.94 |
| Dimethylphthalate            | 10000    | 0.145 | 0.41 U      | 0.41 | 0.38 U      | 0.38 | 0.45 U      | 0.45 | 0.38 U      | 0.38 | 0.38 U        | 0.38 |
| Acenaphthylene               |          | 0.198 | 0.41 U      | 0.41 | 0.38 U      | 0.38 | 0.45 U      | 0.45 | 0.039 J     | 0.38 | 0.38 U        | 0.38 |
| 2,6-Dinitrotoluene           | 1        | 0.172 | 0.41 U      | 0.41 | 0.38 U      | 0.38 | 0.45 U      | 0.45 | 0.38 U      | 0.38 | 0.38 U        | 0.38 |
| 3-Nitroaniline               |          | 0.172 | 1 U         | 1    | 0.94 U      | 0.94 | 1.1 U       | 1.1  | 0.94 U      | 0.94 | 0.94 U        | 0.94 |
| Acenaphthene                 | 3400     | 0.221 | 0.41 U      | 0.41 | 0.38 U      | 0.38 | 0.45 U      | 0.45 | 0.38 U      | 0.38 | 0.38 U        | 0.38 |
| 2,4-Dinitrophenol            | 110      | 0.152 | 1 U         | 1    | 0.94 U      | 0.94 | 1.1 U       | 1.1  | 0.94 U      | 0.94 | 0.94 U        | 0.94 |
| 4-Nitrophenol                |          | 0.248 | 1 U         | 1    | 0.94 U      | 0.94 | 1.1 U       | 1.1  | 0.94 U      | 0.94 | 0.94 U        | 0.94 |

**MAIN POST  
SOIL BORING SEMIVOLATILES**

| Geographical Location      |          |       | B2          |      | B3          |      | B3          |      | B4          |      | B4            |      |
|----------------------------|----------|-------|-------------|------|-------------|------|-------------|------|-------------|------|---------------|------|
| Sample                     |          |       | B2-SB01-A02 |      | B3-SB01-A01 |      | B3-SB01-A03 |      | B4-SB01-A01 |      | B4-SB01-A01RE |      |
| Sample Type                |          |       |             |      |             |      |             |      |             |      |               |      |
| Batch#                     |          |       | 9401G500    |      | 9401G500    |      | 9401G500    |      | 9401G527    |      | 9401G527      |      |
| Prep#                      |          |       | 95GB0017    |      | 95GB0017    |      | 95GB0017    |      | 95GB0017    |      | 95GB0017      |      |
| RFW#                       |          |       | 002         |      | 003         |      | 004         |      | 003         |      | 003           |      |
| Sample Depth (bgs)         |          |       |             |      |             |      |             |      |             |      |               |      |
| Dilution Factor            |          |       | 1.00        |      | 1.00        |      | 1.00        |      | 1.00        |      | 1.00          |      |
| Matrix                     |          |       | soil        |      | soil        |      | soil        |      | soil        |      | soil          |      |
| Units                      | mg/kg    | mg/kg | mg/kg       |      | mg/kg       |      | mg/kg       |      | mg/kg       |      | mg/kg         |      |
| Sampling Date              |          |       | 1/6/95      |      | 1/6/95      |      | 1/6/95      |      | 1/9/95      |      | 1/9/95        |      |
| Analysis Date              |          |       | 1/21/95     |      | 1/21/95     |      | 1/21/95     |      | 2/8/94      |      | 2/9/94        |      |
| Analysis                   | Standard | MDL   | Analytical  | CRQL | Analytical  | CRQL | Analytical  | CRQL | Analytical  | CRQL | Analytical    | CRQL |
|                            |          |       | Result      |      | Result      |      | Result      |      | Result      |      | Result        |      |
| Dibenzofuran               |          | 0.215 | 0.41 U      | 0.41 | 0.38 U      | 0.38 | 0.45 U      | 0.45 | 0.38 U      | 0.38 | 0.38 U        | 0.38 |
| 2,4-Dinitrotoluene         | 1        | 0.191 | 0.41 U      | 0.41 | 0.38 U      | 0.38 | 0.45 U      | 0.45 | 0.38 U      | 0.38 | 0.38 U        | 0.38 |
| Diethylphthalate           | 10000    | 0.178 | 0.41 U      | 0.41 | 0.38 U      | 0.38 | 0.45 U      | 0.45 | 0.38 U      | 0.38 | 0.38 U        | 0.38 |
| 4-Chlorophenyl-phenylether |          | 0.231 | 0.41 U      | 0.41 | 0.38 U      | 0.38 | 0.45 U      | 0.45 | 0.38 U      | 0.38 | 0.38 U        | 0.38 |
| Fluorene                   | 2300     | 0.208 | 0.41 U      | 0.41 | 0.38 U      | 0.38 | 0.45 U      | 0.45 | 0.38 U      | 0.38 | 0.38 U        | 0.38 |
| 4-Nitroaniline             |          | 0.211 | 1 U         | 1    | 0.94 U      | 0.94 | 1.1 U       | 1.1  | 0.94 U      | 0.94 | 0.94 U        | 0.94 |
| 4,6-Dinitro-2-methylphenol |          | 0.175 | 1 U         | 1    | 0.94 U      | 0.94 | 1.1 U       | 1.1  | 0.94 U      | 0.94 | 0.94 U        | 0.94 |
| N-Nitrosodiphenylamine (1) | 140      | 0.139 | 0.41 U      | 0.41 | 0.38 U      | 0.38 | 0.45 U      | 0.45 | 0.38 U      | 0.38 | 0.38 U        | 0.38 |
| 4-Bromophenyl-phenylether  |          | 0.175 | 0.41 U      | 0.41 | 0.38 U      | 0.38 | 0.45 U      | 0.45 | 0.38 U      | 0.38 | 0.38 U        | 0.38 |
| Hexachlorobenzene          | 0.66     | 0.182 | 0.41 U      | 0.41 | 0.38 U      | 0.38 | 0.45 U      | 0.45 | 0.38 U      | 0.38 | 0.38 U        | 0.38 |
| Pentachlorophenol          | 6        | 0.132 | 1 U         | 1    | 0.94 U      | 0.94 | 1.1 U       | 1.1  | 0.94 U      | 0.94 | 0.94 U        | 0.94 |
| Phenanthrene               |          | 0.165 | 0.41 U      | 0.41 | 0.38 U      | 0.38 | 0.45 U      | 0.45 | 0.39        | 0.38 | 0.37 J        | 0.38 |
| Anthracene                 | 10000    | 0.152 | 0.41 U      | 0.41 | 0.38 U      | 0.38 | 0.45 U      | 0.45 | 0.092 J     | 0.38 | 0.071 J       | 0.38 |
| Carbazole                  |          | 0.145 | 0.41 U      | 0.41 | 0.38 U      | 0.38 | 0.45 U      | 0.45 | 0.38 U      | 0.38 | 0.38 U        | 0.38 |
| Di-n-butylphthalate        | 5700     | 0.215 | 0.073 JB    | 0.41 | 0.058 JB    | 0.38 | 0.071 JB    | 0.45 | 0.056 JB    | 0.38 | 0.057 JB      | 0.38 |
| Fluoranthene               | 2300     | 0.198 | 0.41 U      | 0.41 | 0.07 J      | 0.38 | 0.45 U      | 0.45 | 0.44        | 0.38 | 0.46          | 0.38 |
| Pyrene                     | 1700     | 0.178 | 0.41 U      | 0.41 | 0.062 J     | 0.38 | 0.45 U      | 0.45 | 1.5         | 0.38 | 1.1           | 0.38 |
| Butylbenzylphthalate       | 1100     | 0.175 | 0.41 U      | 0.41 | 0.38 U      | 0.38 | 0.45 U      | 0.45 | 0.38 U      | 0.38 | 0.38 U        | 0.38 |
| 3,3'-Dichlorobenzidine     | 2        | 0.092 | 0.41 U      | 0.41 | 0.38 U      | 0.38 | 0.45 U      | 0.45 | 0.38 U      | 0.38 | 0.38 U        | 0.38 |
| Benzo(a)anthracene         | 0.9      | 0.162 | 0.41 U      | 0.41 | 0.38 U      | 0.38 | 0.45 U      | 0.45 | 0.54        | 0.38 | 0.65          | 0.38 |
| Chrysene                   | 9        | 0.145 | 0.41 U      | 0.41 | 0.38 U      | 0.38 | 0.45 U      | 0.45 | 0.64        | 0.38 | 0.58          | 0.38 |
| bis(2-Ethylhexy)phthalate  | 49       | 0.32  | 0.047 J     | 0.41 | 0.38 U      | 0.38 | 0.078 J     | 0.45 | 0.069 J     | 0.38 | 0.064 J       | 0.38 |
| Di-n-octyl phthalate       | 1100     | 0.185 | 0.41 U      | 0.41 | 0.38 U      | 0.38 | 0.45 U      | 0.45 | 0.38 U      | 0.38 | 0.38 U        | 0.38 |
| Benzo(b)fluoranthene       | 0.9      | 0.188 | 0.41 U      | 0.41 | 0.055 J     | 0.38 | 0.45 U      | 0.45 | 0.83        | 0.38 | 0.83          | 0.38 |
| Benzo(k)fluoranthene       | 0.9      | 0.205 | 0.41 U      | 0.41 | 0.38 U      | 0.38 | 0.45 U      | 0.45 | 0.37 J      | 0.38 | 0.43          | 0.38 |
| Benzo(a)pyrene             | 0.66     | 0.162 | 0.41 U      | 0.41 | 0.38 U      | 0.38 | 0.45 U      | 0.45 | 0.51        | 0.38 | 0.57          | 0.38 |
| Indeno(1,2,3-cd)pyrene     | 0.9      | 0.234 | 0.41 U      | 0.41 | 0.38 U      | 0.38 | 0.45 U      | 0.45 | 0.3 J       | 0.38 | 0.46          | 0.38 |
| Dibenzo(a,h)anthracene     | 0.66     | 0.198 | 0.41 U      | 0.41 | 0.38 U      | 0.38 | 0.45 U      | 0.45 | 0.05 JB     | 0.38 | 0.38 U        | 0.38 |
| Benzo(g,h,i)perylene       |          | 0.224 | 0.41 U      | 0.41 | 0.38 U      | 0.38 | 0.45 U      | 0.45 | 0.33 JB     | 0.38 | 0.54 B        | 0.38 |
| Petroleum hydrocarbons     |          |       |             |      |             |      |             |      |             |      |               |      |
| Total Est. Conc. of TIC    |          |       | 11.58       |      | 10.47       |      |             |      | 4.53        |      | 0.86          |      |
| Dilution Factor            |          |       |             |      |             |      |             |      |             |      |               |      |
| Method: TCL Semivolatiles  |          |       |             |      |             |      |             |      |             |      |               |      |

**MAIN POST  
SOIL BORING SEMIVOLATILES**

| Geographical Location        |          |       | B4          |      | B4            |      | B4          |      | B4            |      | B5          |      |
|------------------------------|----------|-------|-------------|------|---------------|------|-------------|------|---------------|------|-------------|------|
| Sample                       |          |       | B4-SB01-A02 |      | B4-SB01-A02RE |      | B4-SB01-C01 |      | B4-SB01-C01RE |      | B5-SB01-A01 |      |
| Sample Type                  |          |       |             |      |               |      | Duplicate   |      | Duplicate     |      |             |      |
| Batch#                       |          |       | 9401G527    |      | 9401G527      |      | 9401G527    |      | 9401G527      |      | 9501G587    |      |
| Prep#                        |          |       | 95GB0017    |      | 95GB0017      |      | 95GB0017    |      | 95GB0017      |      | 95GP0035    |      |
| RFW#                         |          |       | 004         |      | 004           |      | 005         |      | 005           |      | 007         |      |
| Sample Depth (bgs)           |          |       |             |      |               |      |             |      |               |      |             |      |
| Dilution Factor              |          |       | 1.00        |      | 1.00          |      | 1.00        |      | 1.00          |      | 1.00        |      |
| Matrix                       |          |       | soil        |      | soil          |      | soil        |      | soil          |      | soil        |      |
| Units                        | mg/kg    | mg/kg | mg/kg       |      | mg/kg         |      | mg/kg       |      | mg/kg         |      | mg/kg       |      |
| Sampling Date                |          |       | 1/9/95      |      | 1/9/95        |      | 1/9/95      |      | 1/9/95        |      | 1/11/95     |      |
| Analysis Date                |          |       | 2/8/94      |      | 2/9/94        |      | 2/8/95      |      | 2/9/95        |      | 2/10/95     |      |
| Analysis                     | Standard | MDL   | Analytical  | CRQL | Analytical    | CRQL | Analytical  | CRQL | Analytical    | CRQL | Analytical  | CRQL |
|                              |          |       | Result      |      | Result        |      | Result      |      | Result        |      | Result      |      |
| Phenol                       | 10000    | 0.234 | 0.42 J      | 0.45 | 0.45 U        | 0.45 | 0.37 U      | 0.37 | 0.37 U        | 0.37 | 0.39 U      | 0.39 |
| bis(2-Chloroethyl) ether     | 0.66     | 0.32  | 0.45 U      | 0.45 | 0.45 U        | 0.45 | 0.37 U      | 0.37 | 0.37 U        | 0.37 | 0.39 U      | 0.39 |
| 2-Chlorophenol               | 280      | 0.241 | 0.45 U      | 0.45 | 0.45 U        | 0.45 | 0.37 U      | 0.37 | 0.37 U        | 0.37 | 0.39 U      | 0.39 |
| 1,3-Dichlorobenzene          | 5100     | 0.175 | 0.45 U      | 0.45 | 0.45 U        | 0.45 | 0.37 U      | 0.37 | 0.37 U        | 0.37 | 0.39 U      | 0.39 |
| 1,4-Dichlorobenzene          | 570      | 0.158 | 0.45 U      | 0.45 | 0.45 U        | 0.45 | 0.37 U      | 0.37 | 0.37 U        | 0.37 | 0.39 U      | 0.39 |
| 1,2-Dichlorobenzene          | 5100     | 0.188 | 0.45 U      | 0.45 | 0.45 U        | 0.45 | 0.37 U      | 0.37 | 0.37 U        | 0.37 | 0.39 U      | 0.39 |
| 2-Methylphenol               | 2800     | 0.221 | 0.45 U      | 0.45 | 0.45 U        | 0.45 | 0.37 U      | 0.37 | 0.37 U        | 0.37 | 0.39 U      | 0.39 |
| 2,2'-oxybis(1-Chloropropane) |          | 0.231 | 0.45 U      | 0.45 | 0.45 U        | 0.45 | 0.37 U      | 0.37 | 0.37 U        | 0.37 | 0.39 U      | 0.39 |
| 4-Methylphenol               | 2800     | 0.426 | 0.45 U      | 0.45 | 0.45 U        | 0.45 | 0.37 U      | 0.37 | 0.37 U        | 0.37 | 0.39 U      | 0.39 |
| N-Nitroso-di-n-propylamine   | 0.66     | 0.264 | 0.45 U      | 0.45 | 0.45 U        | 0.45 | 0.37 U      | 0.37 | 0.37 U        | 0.37 | 0.39 U      | 0.39 |
| Hexachloroethane             | 6        | 0.175 | 0.45 U      | 0.45 | 0.45 U        | 0.45 | 0.37 U      | 0.37 | 0.37 U        | 0.37 | 0.39 U      | 0.39 |
| Nitrobenzene                 | 28       | 0.244 | 0.45 U      | 0.45 | 0.45 U        | 0.45 | 0.37 U      | 0.37 | 0.37 U        | 0.37 | 0.39 U      | 0.39 |
| Isophorone                   | 1100     | 0.129 | 0.45 U      | 0.45 | 0.45 U        | 0.45 | 0.37 U      | 0.37 | 0.37 U        | 0.37 | 0.39 U      | 0.39 |
| 2-Nitrophenol                |          | 0.231 | 0.45 U      | 0.45 | 0.45 U        | 0.45 | 0.37 U      | 0.37 | 0.37 U        | 0.37 | 0.39 U      | 0.39 |
| 2,4-Dimethylphenol           | 1100     | 0.158 | 0.45 U      | 0.45 | 0.45 U        | 0.45 | 0.37 U      | 0.37 | 0.37 U        | 0.37 | 0.39 U      | 0.39 |
| bis(2-Chloroethoxy) methane  |          | 0.201 | 0.45 U      | 0.45 | 0.45 U        | 0.45 | 0.37 U      | 0.37 | 0.37 U        | 0.37 | 0.39 U      | 0.39 |
| 2,4-Dichlorophenol           | 170      | 0.145 | 0.45 U      | 0.45 | 0.45 U        | 0.45 | 0.37 U      | 0.37 | 0.37 U        | 0.37 | 0.39 U      | 0.39 |
| 1,2,4-Trichlorobenzene       | 68       | 0.317 | 0.45 U      | 0.45 | 0.45 U        | 0.45 | 0.37 U      | 0.37 | 0.37 U        | 0.37 | 0.39 U      | 0.39 |
| Naphthalene                  | 230      | 0.277 | 0.45 U      | 0.45 | 0.45 U        | 0.45 | 0.37 U      | 0.37 | 0.37 U        | 0.37 | 0.39 U      | 0.39 |
| 4-Chloroaniline              | 230      | 0.096 | 0.45 U      | 0.45 | 0.45 U        | 0.45 | 0.37 U      | 0.37 | 0.37 U        | 0.37 | 0.39 U      | 0.39 |
| Hexachlorobutadiene          | 1        | 0.152 | 0.45 U      | 0.45 | 0.45 U        | 0.45 | 0.37 U      | 0.37 | 0.37 U        | 0.37 | 0.39 U      | 0.39 |
| 4-Chloro-3-methylphenol      | 10000    | 0.102 | 0.45 U      | 0.45 | 0.45 U        | 0.45 | 0.37 U      | 0.37 | 0.37 U        | 0.37 | 0.39 U      | 0.39 |
| 2-Methylnaphthalene          |          | 0.287 | 0.45 U      | 0.45 | 0.45 U        | 0.45 | 0.37 U      | 0.37 | 0.37 U        | 0.37 | 0.39 U      | 0.39 |
| Hexachlorocyclopentadiene    | 400      | 0.119 | 0.45 U      | 0.45 | 0.45 U        | 0.45 | 0.37 U      | 0.37 | 0.37 U        | 0.37 | 0.39 U      | 0.39 |
| 2,4,6-Trichlorophenol        | 62       | 0.185 | 0.45 U      | 0.45 | 0.45 U        | 0.45 | 0.37 U      | 0.37 | 0.37 U        | 0.37 | 0.39 U      | 0.39 |
| 2,4,5-Trichlorophenol        | 5600     | 0.155 | 1.1 U       | 1.1  | 1.1 U         | 1.1  | 0.93 U      | 0.93 | 0.93 U        | 0.93 | 0.98 U      | 0.98 |
| 2-Chloronaphthalene          |          | 0.271 | 0.45 U      | 0.45 | 0.45 U        | 0.45 | 0.37 U      | 0.37 | 0.37 U        | 0.37 | 0.39 U      | 0.39 |
| 2-Nitroaniline               |          | 0.201 | 1.1 U       | 1.1  | 1.1 U         | 1.1  | 0.93 U      | 0.93 | 0.93 U        | 0.93 | 0.98 U      | 0.98 |
| Dimethylphthalate            | 10000    | 0.145 | 0.45 U      | 0.45 | 0.45 U        | 0.45 | 0.37 U      | 0.37 | 0.37 U        | 0.37 | 0.39 U      | 0.39 |
| Acenaphthylene               |          | 0.198 | 0.45 U      | 0.45 | 0.45 U        | 0.45 | 0.041 J     | 0.37 | 0.37 U        | 0.37 | 0.39 U      | 0.39 |
| 2,6-Dinitrotoluene           | 1        | 0.172 | 0.45 U      | 0.45 | 0.45 U        | 0.45 | 0.37 U      | 0.37 | 0.37 U        | 0.37 | 0.39 U      | 0.39 |
| 3-Nitroaniline               |          | 0.172 | 1.1 U       | 1.1  | 1.1 U         | 1.1  | 0.93 U      | 0.93 | 0.93 U        | 0.93 | 0.98 U      | 0.98 |
| Acenaphthene                 | 3400     | 0.221 | 0.45 U      | 0.45 | 0.45 U        | 0.45 | 0.37 U      | 0.37 | 0.37 U        | 0.37 | 0.39 U      | 0.39 |
| 2,4-Dinitrophenol            | 110      | 0.152 | 1.1 U       | 1.1  | 1.1 U         | 1.1  | 0.93 U      | 0.93 | 0.93 U        | 0.93 | 0.98 U      | 0.98 |
| 4-Nitrophenol                |          | 0.248 | 1.1 U       | 1.1  | 1.1 U         | 1.1  | 0.93 U      | 0.93 | 0.93 U        | 0.93 | 0.98 U      | 0.98 |

**MAIN POST  
SOIL BORING SEMIVOLATILES**

| Geographical Location      |          |       | B4          |      | B4            |      | B4          |      | B4            |      | B5          |      |
|----------------------------|----------|-------|-------------|------|---------------|------|-------------|------|---------------|------|-------------|------|
| Sample                     |          |       | B4-SB01-A02 |      | B4-SB01-A02RE |      | B4-SB01-C01 |      | B4-SB01-C01RE |      | B5-SB01-A01 |      |
| Sample Type                |          |       |             |      |               |      | Duplicate   |      | Duplicate     |      |             |      |
| Batch#                     |          |       | 9401G527    |      | 9401G527      |      | 9401G527    |      | 9401G527      |      | 9501G587    |      |
| Prep#                      |          |       | 95GB0017    |      | 95GB0017      |      | 95GB0017    |      | 95GB0017      |      | 95GP0035    |      |
| RFW#                       |          |       | 004         |      | 004           |      | 005         |      | 005           |      | 007         |      |
| Sample Depth (bgs)         |          |       |             |      |               |      |             |      |               |      |             |      |
| Dilution Factor            |          |       | 1.00        |      | 1.00          |      | 1.00        |      | 1.00          |      | 1.00        |      |
| Matrix                     |          |       | soil        |      | soil          |      | soil        |      | soil          |      | soil        |      |
| Units                      | mg/kg    | mg/kg | mg/kg       |      | mg/kg         |      | mg/kg       |      | mg/kg         |      | mg/kg       |      |
| Sampling Date              |          |       | 1/9/95      |      | 1/9/95        |      | 1/9/95      |      | 1/9/95        |      | 1/11/95     |      |
| Analysis Date              |          |       | 2/8/94      |      | 2/9/94        |      | 2/8/95      |      | 2/9/95        |      | 2/10/95     |      |
| Analysis                   | Standard | MDL   | Analytical  | CRQL | Analytical    | CRQL | Analytical  | CRQL | Analytical    | CRQL | Analytical  | CRQL |
|                            |          |       | Result      |      | Result        |      | Result      |      | Result        |      | Result      |      |
| Dibenzofuran               |          | 0.215 | 0.45 U      | 0.45 | 0.45 U        | 0.45 | 0.37 U      | 0.37 | 0.37 U        | 0.37 | 0.39 U      | 0.39 |
| 2,4-Dinitrotoluene         | 1        | 0.191 | 0.45 U      | 0.45 | 0.45 U        | 0.45 | 0.37 U      | 0.37 | 0.37 U        | 0.37 | 0.39 U      | 0.39 |
| Diethylphthalate           | 10000    | 0.178 | 0.45 U      | 0.45 | 0.45 U        | 0.45 | 0.37 U      | 0.37 | 0.37 U        | 0.37 | 0.39 U      | 0.39 |
| 4-Chlorophenyl-phenylether |          | 0.231 | 0.45 U      | 0.45 | 0.45 U        | 0.45 | 0.37 U      | 0.37 | 0.37 U        | 0.37 | 0.39 U      | 0.39 |
| Fluorene                   | 2300     | 0.208 | 0.45 U      | 0.45 | 0.45 U        | 0.45 | 0.37 U      | 0.37 | 0.37 U        | 0.37 | 0.39 U      | 0.39 |
| 4-Nitroaniline             |          | 0.211 | 1.1 U       | 1.1  | 1.1 U         | 1.1  | 0.93 U      | 0.93 | 0.93 U        | 0.93 | 0.98 U      | 0.98 |
| 4,6-Dinitro-2-methylphenol |          | 0.175 | 1.1 U       | 1.1  | 1.1 U         | 1.1  | 0.93 U      | 0.93 | 0.93 U        | 0.93 | 0.98 U      | 0.98 |
| N-Nitrosodiphenylamine (1) | 140      | 0.139 | 0.45 U      | 0.45 | 0.45 U        | 0.45 | 0.37 U      | 0.37 | 0.37 U        | 0.37 | 0.39 U      | 0.39 |
| 4-Bromophenyl-phenylether  |          | 0.175 | 0.45 U      | 0.45 | 0.45 U        | 0.45 | 0.37 U      | 0.37 | 0.37 U        | 0.37 | 0.39 U      | 0.39 |
| Hexachlorobenzene          | 0.66     | 0.182 | 0.45 U      | 0.45 | 0.45 U        | 0.45 | 0.37 U      | 0.37 | 0.37 U        | 0.37 | 0.39 U      | 0.39 |
| Pentachlorophenol          | 6        | 0.132 | 1.1 U       | 1.1  | 1.1 U         | 1.1  | 0.93 U      | 0.93 | 0.93 U        | 0.93 | 0.98 U      | 0.98 |
| Phenanthrene               |          | 0.165 | 0.45 U      | 0.45 | 0.45 U        | 0.45 | 0.11 J      | 0.37 | 0.1 J         | 0.37 | 0.39 U      | 0.39 |
| Anthracene                 | 10000    | 0.152 | 0.45 U      | 0.45 | 0.45 U        | 0.45 | 0.37 U      | 0.37 | 0.04 J        | 0.37 | 0.39 U      | 0.39 |
| Carbazole                  |          | 0.145 | 0.45 U      | 0.45 | 0.45 U        | 0.45 | 0.37 U      | 0.37 | 0.37 U        | 0.37 | 0.39 U      | 0.39 |
| Di-n-butylphthalate        | 5700     | 0.215 | 0.22 JB     | 0.45 | 0.22 JB       | 0.45 | 0.062 JB    | 0.37 | 0.067 JB      | 0.37 | 0.082 JB    | 0.39 |
| Fluoranthene               | 2300     | 0.198 | 0.45 U      | 0.45 | 0.45 U        | 0.45 | 0.3 J       | 0.37 | 0.36 J        | 0.37 | 0.046 J     | 0.39 |
| Pyrene                     | 1700     | 0.178 | 0.45 U      | 0.45 | 0.45 U        | 0.45 | 1.1         | 0.37 | 0.81          | 0.37 | 0.041 J     | 0.39 |
| Butylbenzylphthalate       | 1100     | 0.175 | 0.45 U      | 0.45 | 0.45 U        | 0.45 | 0.37 U      | 0.37 | 0.37 U        | 0.37 | 0.39 U      | 0.39 |
| 3,3'-Dichlorobenzidine     | 2        | 0.092 | 0.45 U      | 0.45 | 0.45 U        | 0.45 | 0.37 U      | 0.37 | 0.37 U        | 0.37 | 0.39 U      | 0.39 |
| Benzo(a)anthracene         | 0.9      | 0.162 | 0.45 U      | 0.45 | 0.45 U        | 0.45 | 0.54        | 0.37 | 0.58          | 0.37 | 0.39 U      | 0.39 |
| Chrysene                   | 9        | 0.145 | 0.45 U      | 0.45 | 0.45 U        | 0.45 | 0.61        | 0.37 | 0.65          | 0.37 | 0.39 U      | 0.39 |
| bis(2-Ethylhexy)phthalate  | 49       | 0.32  | 0.45 U      | 0.45 | 0.45 U        | 0.45 | 0.04 J      | 0.37 | 0.37 U        | 0.37 | 0.39 U      | 0.39 |
| Di-n-octyl phthalate       | 1100     | 0.185 | 0.45 U      | 0.45 | 0.45 U        | 0.45 | 0.37 U      | 0.37 | 0.37 U        | 0.37 | 0.39 U      | 0.39 |
| Benzo(b)fluoranthene       | 0.9      | 0.188 | 0.45 U      | 0.45 | 0.45 U        | 0.45 | 0.75        | 0.37 | 0.9           | 0.37 | 0.056 J     | 0.39 |
| Benzo(k)fluoranthene       | 0.9      | 0.205 | 0.45 U      | 0.45 | 0.45 U        | 0.45 | 0.23 J      | 0.37 | 0.26 J        | 0.37 | 0.39 U      | 0.39 |
| Benzo(a)pyrene             | 0.66     | 0.162 | 0.45 U      | 0.45 | 0.45 U        | 0.45 | 0.59        | 0.37 | 0.6           | 0.37 | 0.39 U      | 0.39 |
| Indeno(1,2,3-cd)pyrene     | 0.9      | 0.234 | 0.45 U      | 0.45 | 0.45 U        | 0.45 | 0.26 J      | 0.37 | 0.44          | 0.37 | 0.39 U      | 0.39 |
| Dibenzo(a,h)anthracene     | 0.66     | 0.198 | 0.45 U      | 0.45 | 0.45 U        | 0.45 | 0.058 JB    | 0.37 | 0.079 JB      | 0.37 | 0.39 U      | 0.39 |
| Benzo(g,h,i)perylene       |          | 0.224 | 0.45 U      | 0.45 | 0.45 U        | 0.45 | 0.39 B      | 0.37 | 0.64 B        | 0.37 | 0.39 U      | 0.39 |
| Petroleum hydrocarbons     |          |       |             |      |               |      |             |      |               |      |             |      |
| Total Est. Conc. of TIC    |          |       | 4.88        |      | 5.18          |      | 5.6         |      | 5.02          |      | 6.35        |      |
| Dilution Factor            |          |       |             |      |               |      |             |      |               |      |             |      |
| Method: TCL Semivolatiles  |          |       |             |      |               |      |             |      |               |      |             |      |

**MAIN POST  
SOIL BORING SEMIVOLATILES**

| Geographical Location        |          |       | B5            |      | B5            |      | B5          |      |
|------------------------------|----------|-------|---------------|------|---------------|------|-------------|------|
| Sample                       |          |       | B5-SB01-A01RE |      | B5-SB01-A01RE |      | B5-SB01-A02 |      |
| Sample Type                  |          |       |               |      |               |      |             |      |
| Batch#                       |          |       | 9501G587      |      | 9501G587      |      | 9501G587    |      |
| Prep#                        |          |       | 95GP0035      |      | 95GP0035      |      | 95GP0035    |      |
| RFW#                         |          |       | 007           |      | 008           |      | 008         |      |
| Sample Depth (bgs)           |          |       |               |      |               |      |             |      |
| Dilution Factor              |          |       | 1.00          |      | 1.00          |      | 1.00        |      |
| Matrix                       |          |       | soil          |      | soil          |      | soil        |      |
| Units                        | mg/kg    | mg/kg | mg/kg         |      | mg/kg         |      | mg/kg       |      |
| Sampling Date                |          |       | 1/11/95       |      | 1/11/95       |      | 1/11/95     |      |
| Analysis Date                |          |       | 2/10/95       |      | 2/11/95       |      | 2/10/95     |      |
| Analysis                     | Standard | MDL   | Analytical    | CRQL | Analytical    | CRQL | Analytical  | CRQL |
|                              |          |       | Result        |      | Result        |      | Result      |      |
| Phenol                       | 10000    | 0.234 | 0.39 U        | 0.39 | 0.4 U         | 0.4  | 0.39 U      | 0.39 |
| bis(2-Chloroethyl) ether     | 0.66     | 0.32  | 0.39 U        | 0.39 | 0.4 U         | 0.4  | 0.39 U      | 0.39 |
| 2-Chlorophenol               | 280      | 0.241 | 0.39 U        | 0.39 | 0.4 U         | 0.4  | 0.39 U      | 0.39 |
| 1,3-Dichlorobenzene          | 5100     | 0.175 | 0.39 U        | 0.39 | 0.4 U         | 0.4  | 0.39 U      | 0.39 |
| 1,4-Dichlorobenzene          | 570      | 0.158 | 0.39 U        | 0.39 | 0.4 U         | 0.4  | 0.39 U      | 0.39 |
| 1,2-Dichlorobenzene          | 5100     | 0.188 | 0.39 U        | 0.39 | 0.4 U         | 0.4  | 0.39 U      | 0.39 |
| 2-Methylphenol               | 2800     | 0.221 | 0.39 U        | 0.39 | 0.4 U         | 0.4  | 0.39 U      | 0.39 |
| 2,2'-oxybis(1-Chloropropane) |          | 0.231 | 0.39 U        | 0.39 | 0.4 U         | 0.4  | 0.39 U      | 0.39 |
| 4-Methylphenol               | 2800     | 0.426 | 0.39 U        | 0.39 | 0.4 U         | 0.4  | 0.39 U      | 0.39 |
| N-Nitroso-di-n-propylamine   | 0.66     | 0.264 | 0.39 U        | 0.39 | 0.4 U         | 0.4  | 0.39 U      | 0.39 |
| Hexachloroethane             | 6        | 0.175 | 0.39 U        | 0.39 | 0.4 U         | 0.4  | 0.39 U      | 0.39 |
| Nitrobenzene                 | 28       | 0.244 | 0.39 U        | 0.39 | 0.4 U         | 0.4  | 0.39 U      | 0.39 |
| Isophorone                   | 1100     | 0.129 | 0.39 U        | 0.39 | 0.4 U         | 0.4  | 0.39 U      | 0.39 |
| 2-Nitrophenol                |          | 0.231 | 0.39 U        | 0.39 | 0.4 U         | 0.4  | 0.39 U      | 0.39 |
| 2,4-Dimethylphenol           | 1100     | 0.158 | 0.39 U        | 0.39 | 0.4 U         | 0.4  | 0.39 U      | 0.39 |
| bis(2-Chloroethoxy) methane  |          | 0.201 | 0.39 U        | 0.39 | 0.4 U         | 0.4  | 0.39 U      | 0.39 |
| 2,4-Dichlorophenol           | 170      | 0.145 | 0.39 U        | 0.39 | 0.4 U         | 0.4  | 0.39 U      | 0.39 |
| 1,2,4-Trichlorobenzene       | 68       | 0.317 | 0.39 U        | 0.39 | 0.4 U         | 0.4  | 0.39 U      | 0.39 |
| Naphthalene                  | 230      | 0.277 | 0.39 U        | 0.39 | 0.4 U         | 0.4  | 0.39 U      | 0.39 |
| 4-Chloroaniline              | 230      | 0.096 | 0.39 U        | 0.39 | 0.4 U         | 0.4  | 0.39 U      | 0.39 |
| Hexachlorobutadiene          | 1        | 0.152 | 0.39 U        | 0.39 | 0.4 U         | 0.4  | 0.39 U      | 0.39 |
| 4-Chloro-3-methylphenol      | 10000    | 0.102 | 0.39 U        | 0.39 | 0.4 U         | 0.4  | 0.39 U      | 0.39 |
| 2-Methylnaphthalene          |          | 0.287 | 0.39 U        | 0.39 | 0.4 U         | 0.4  | 0.39 U      | 0.39 |
| Hexachlorocyclopentadiene    | 400      | 0.119 | 0.39 U        | 0.39 | 0.4 U         | 0.4  | 0.39 U      | 0.39 |
| 2,4,6-Trichlorophenol        | 62       | 0.185 | 0.39 U        | 0.39 | 0.4 U         | 0.4  | 0.39 U      | 0.39 |
| 2,4,5-Trichlorophenol        | 5600     | 0.155 | 0.98 U        | 0.98 | 0.99 U        | 0.99 | 0.98 U      | 0.98 |
| 2-Chloronaphthalene          |          | 0.271 | 0.39 U        | 0.39 | 0.4 U         | 0.4  | 0.39 U      | 0.39 |
| 2-Nitroaniline               |          | 0.201 | 0.98 U        | 0.98 | 0.99 U        | 0.99 | 0.98 U      | 0.98 |
| Dimethylphthalate            | 10000    | 0.145 | 0.39 U        | 0.39 | 0.4 U         | 0.4  | 0.39 U      | 0.39 |
| Acenaphthylene               |          | 0.198 | 0.39 U        | 0.39 | 0.4 U         | 0.4  | 0.39 U      | 0.39 |
| 2,6-Dinitrotoluene           | 1        | 0.172 | 0.39 U        | 0.39 | 0.4 U         | 0.4  | 0.39 U      | 0.39 |
| 3-Nitroaniline               |          | 0.172 | 0.98 U        | 0.98 | 0.99 U        | 0.99 | 0.98 U      | 0.98 |
| Acenaphthene                 | 3400     | 0.221 | 0.1 J         | 0.39 | 0.4 U         | 0.4  | 0.39 U      | 0.39 |
| 2,4-Dinitrophenol            | 110      | 0.152 | 0.98 U        | 0.98 | 0.99 U        | 0.99 | 0.98 U      | 0.98 |
| 4-Nitrophenol                |          | 0.248 | 0.98 U        | 0.98 | 0.99 U        | 0.99 | 0.98 U      | 0.98 |

**MAIN POST  
SOIL BORING SEMIVOLATILES**

| Geographical Location      |          |       | B5            |      | B5            |      | B5          |      |
|----------------------------|----------|-------|---------------|------|---------------|------|-------------|------|
| Sample                     |          |       | B5-SB01-A01RE |      | B5-SB01-A01RE |      | B5-SB01-A02 |      |
| Sample Type                |          |       |               |      |               |      |             |      |
| Batch#                     |          |       | 9501G587      |      | 9501G587      |      | 9501G587    |      |
| Prep#                      |          |       | 95GP0035      |      | 95GP0035      |      | 95GP0035    |      |
| RFW#                       |          |       | 007           |      | 008           |      | 008         |      |
| Sample Depth (bgs)         |          |       |               |      |               |      |             |      |
| Dilution Factor            |          |       | 1.00          |      | 1.00          |      | 1.00        |      |
| Matrix                     |          |       | soil          |      | soil          |      | soil        |      |
| Units                      |          |       | mg/kg         |      | mg/kg         |      | mg/kg       |      |
| Sampling Date              |          |       | 1/11/95       |      | 1/11/95       |      | 1/11/95     |      |
| Analysis Date              |          |       | 2/10/95       |      | 2/11/95       |      | 2/10/95     |      |
| Analysis                   | Standard | MDL   | Analytical    | CRQL | Analytical    | CRQL | Analytical  | CRQL |
|                            |          |       | Result        |      | Result        |      | Result      |      |
| Dibenzofuran               |          | 0.215 | 0.06 J        | 0.39 | 0.4 U         | 0.4  | 0.39 U      | 0.39 |
| 2,4-Dinitrotoluene         | 1        | 0.191 | 0.39 U        | 0.39 | 0.4 U         | 0.4  | 0.39 U      | 0.39 |
| Diethylphthalate           | 10000    | 0.178 | 0.39 U        | 0.39 | 0.4 U         | 0.4  | 0.39 U      | 0.39 |
| 4-Chlorophenyl-phenylether |          | 0.231 | 0.39 U        | 0.39 | 0.4 U         | 0.4  | 0.39 U      | 0.39 |
| Fluorene                   | 2300     | 0.208 | 0.074 J       | 0.39 | 0.4 U         | 0.4  | 0.39 U      | 0.39 |
| 4-Nitroaniline             |          | 0.211 | 0.98 U        | 0.98 | 0.99 U        | 0.99 | 0.98 U      | 0.98 |
| 4,6-Dinitro-2-methylphenol |          | 0.175 | 0.98 U        | 0.98 | 0.99 U        | 0.99 | 0.98 U      | 0.98 |
| N-Nitrosodiphenylamine (1) | 140      | 0.139 | 0.39 U        | 0.39 | 0.4 U         | 0.4  | 0.39 U      | 0.39 |
| 4-Bromophenyl-phenylether  |          | 0.175 | 0.39 U        | 0.39 | 0.4 U         | 0.4  | 0.39 U      | 0.39 |
| Hexachlorobenzene          | 0.66     | 0.182 | 0.39 U        | 0.39 | 0.4 U         | 0.4  | 0.39 U      | 0.39 |
| Pentachlorophenol          | 6        | 0.132 | 0.98 U        | 0.98 | 0.99 U        | 0.99 | 0.98 U      | 0.98 |
| Phenanthrene               |          | 0.165 | 0.3 J         | 0.39 | 0.4 U         | 0.4  | 0.39 U      | 0.39 |
| Anthracene                 | 10000    | 0.152 | 0.1 J         | 0.39 | 0.4 U         | 0.4  | 0.39 U      | 0.39 |
| Carbazole                  |          | 0.145 | 0.39 U        | 0.39 | 0.4 U         | 0.4  | 0.39 U      | 0.39 |
| Di-n-butylphthalate        | 5700     | 0.215 | 1.8 B         | 0.39 | 2.2 B         | 0.4  | 0.094 JB    | 0.39 |
| Fluoranthene               | 2300     | 0.198 | 0.21 J        | 0.39 | 0.4 U         | 0.4  | 0.39 U      | 0.39 |
| Pyrene                     | 1700     | 0.178 | 0.2 J         | 0.39 | 0.4 U         | 0.4  | 0.39 U      | 0.39 |
| Butylbenzylphthalate       | 1100     | 0.175 | 0.39 U        | 0.39 | 0.4 U         | 0.4  | 0.39 U      | 0.39 |
| 3,3'-Dichlorobenzidine     | 2        | 0.092 | 0.39 U        | 0.39 | 0.4 U         | 0.4  | 0.39 U      | 0.39 |
| Benzo(a)anthracene         | 0.9      | 0.162 | 0.047 J       | 0.39 | 0.4 U         | 0.4  | 0.39 U      | 0.39 |
| Chrysene                   | 9        | 0.145 | 0.056 J       | 0.39 | 0.4 U         | 0.4  | 0.39 U      | 0.39 |
| bis(2-Ethylhexyl)phthalate | 49       | 0.32  | 0.39 U        | 0.39 | 0.19 J        | 0.4  | 0.39 U      | 0.39 |
| Di-n-octyl phthalate       | 1100     | 0.185 | 0.39 U        | 0.39 | 0.4 U         | 0.4  | 0.39 U      | 0.39 |
| Benzo(b)fluoranthene       | 0.9      | 0.188 | 0.12 J        | 0.39 | 0.4 U         | 0.4  | 0.39 U      | 0.39 |
| Benzo(k)fluoranthene       | 0.9      | 0.205 | 0.12 J        | 0.39 | 0.4 U         | 0.4  | 0.39 U      | 0.39 |
| Benzo(a)pyrene             | 0.66     | 0.162 | 0.08 J        | 0.39 | 0.4 U         | 0.4  | 0.39 U      | 0.39 |
| Indeno(1,2,3-cd)pyrene     | 0.9      | 0.234 | 0.39 U        | 0.39 | 0.4 U         | 0.4  | 0.39 U      | 0.39 |
| Dibenzo(a,h)anthracene     | 0.66     | 0.198 | 0.39 U        | 0.39 | 0.4 U         | 0.4  | 0.39 U      | 0.39 |
| Benzo(g,h,i)perylene       |          | 0.224 | 0.39 U        | 0.39 | 0.4 U         | 0.4  | 0.39 U      | 0.39 |
| Petroleum hydrocarbons     |          |       |               |      |               |      |             |      |
| Total Est. Conc. of TIC    |          |       | 10.68         |      | 12.2          |      | 4.85        |      |
| Dilution Factor            |          |       |               |      |               |      |             |      |
| Method:TCL Semivolatiles   |          |       |               |      |               |      |             |      |

**MAIN POST  
SOIL BORING INORGANICS**

| Geographical Location       |          | M-AOC3        |           | M-AOC3        |           | M-AOC3        |           | M16           |           | M16           |           |
|-----------------------------|----------|---------------|-----------|---------------|-----------|---------------|-----------|---------------|-----------|---------------|-----------|
| Sample                      |          | MPA3-SB01-A02 |           | MPA3-SB01-C02 |           | MPA3-SB02-A02 |           | MP16-SB01-A01 |           | MP16-SB01-A02 |           |
| Sample Type                 |          |               |           | Duplicate     |           |               |           |               |           |               |           |
| Batch#                      |          | 9412G130      |           | 9412G130      |           | 9412G155      |           | 9412G155      |           | 9412G155      |           |
| Prep#                       |          | 94GTS484      |           | 94GTS484      |           | 94GTS484      |           | 94GTS484      |           | 94GTS484      |           |
| RFW#                        |          | 001           |           | 002           |           | 003           |           | 001           |           | 002           |           |
| Sample Depth (bgs)          |          |               |           |               |           |               |           |               |           |               |           |
| Dilution Factor             |          | 1.00          |           | 1.00          |           | 1.00          |           | 1.00          |           | 1.00          |           |
| Matrix                      |          | soil          |           | soil          |           | soil          |           | soil          |           | soil          |           |
| Units                       | mg/kg    | mg/kg         |           | mg/kg         |           | mg/kg         |           | mg/kg         |           | mg/kg         |           |
| Sampling Date               |          | 12/14/94      |           | 12/14/94      |           | 12/15/94      |           | 12/15/94      |           | 12/15/94      |           |
| Analysis Date               |          | 12/22/94      |           | 12/22/94      |           | 12/22/94      |           | 12/22/94      |           | 12/22/94      |           |
| Analysis                    | Standard | Analytical    | Reporting | Analytical    | Reporting | Analytical    | Reporting | Analytical    | Reporting | Analytical    | Reporting |
|                             |          | Result        | Limit     | Result        | Limit     | Result        | Limit     | Result        | Limit     | Result        | Limit     |
| % Solids                    |          | 90.1          | 0.10      | 90.1          | 0.10      | 93.0          | 0.1       | 86.1          | 0.10      | 77.9          | 0.10      |
| Silver                      | 110      | 0.43 U        | 0.43      | 0.52 U        | 0.52      | 0.69          | 0.42      | 0.40 U        | 0.40      | 0.60 U        | 0.60      |
| Aluminum                    |          | 3000          | 1.8       | 3580          | 2.2       | 4020          | 1.8       | 6840          | 1.7       | 11900         | 2.6       |
| Arsenic                     | 20       | 2.8           | 0.31      | 3.4           | 0.27      | 4.2           | 0.33      | 8.8           | 0.31      | 16.0          | 2.0 *     |
| Barium                      | 700      | 14.4          | 0.14      | 11.6          | 0.17      | 12.5          | 0.14      | 36.3          | 0.13      | 29.7          | 0.20      |
| Beryllium                   | 1        | 0.34          | 0.072     | 0.39          | 0.087     | 0.63          | 0.069     | 0.84          | 0.067     | 0.80          | 0.10      |
| Calcium                     |          | 310           | 1.6       | 406           | 1.9       | 226           | 1.5       | 1500          | 1.5       | 1200          | 2.2       |
| Cadmium                     | 1        | 0.61 U        | 0.61      | 0.74 U        | 0.74      | 0.59 U        | 0.59      | 0.57 U        | 0.57      | 0.86 U        | 0.86      |
| Cobalt                      |          | 0.72          | 0.51      | 1.4           | 0.61      | 1.5           | 0.49      | 5.0           | 0.47      | 2.8           | 0.70      |
| Chromium                    |          | 39.9          | 1.2       | 45.2          | 1.4       | 61.0          | 1.1       | 54.6          | 1.1       | 59.5          | 1.6       |
| Copper                      | 600      | 1.9           | 0.43      | 1.9           | 0.52      | 1.7           | 0.42      | 24.2          | 0.40      | 11.7          | 0.60      |
| Iron                        |          | 15000         | 0.42      | 18900         | 0.50      | 21700         | 0.40      | 21300         | 0.39      | 36200         | 0.58      |
| Mercury                     | 14       | 0.09 U        | 0.09      | 0.073 U       | 0.073     | 0.11 U        | 0.11      | 0.10 U        | 0.10      | 0.12 U        | 0.12      |
| Potassium                   |          | 1760          | 18.5      | 1950          | 22.3      | 4240          | 17.7      | 2990          | 17.2      | 3660          | 25.7      |
| Magnesium                   |          | 690           | 6.9       | 760           | 8.3       | 1490          | 6.6       | 1670          | 6.4       | 2340          | 9.6       |
| Manganese                   |          | 13.8          | 0.11      | 19.6          | 0.13      | 15.6          | 0.10      | 74.5          | 0.10      | 37.7          | 0.15      |
| Sodium                      |          | 17.4          | 2.4       | 21.6          | 2.9       | 18.6          | 2.3       | 283           | 2.2       | 232           | 3.3       |
| Nickel                      | 250      | 1.9           | 0.58      | 2.5           | 0.70      | 3.0           | 0.55      | 8.0           | 0.54      | 5.4           | 0.81      |
| Lead                        | 400      | 8.3           | 2.7 *     | 28.6          | 2.4 *     | 11.5          | 2.9       | 35.3          | 5.4 *     | 16.3          | 1.7       |
| Antimony                    | 14       | 2.1 U         | 2.1       | 2.5 U         | 2.5       | 2.0 U         | 2.0       | 1.9 U         | 1.9       | 2.9 U         | 2.9 *     |
| Selenium                    | 63       | 0.17 U        | 0.17      | 0.18          | 0.15      | 0.19 U        | 0.19      | 0.67          | 0.17      | 0.96          | 0.22      |
| Thallium                    | 2        | 0.21 U        | 0.21      | 0.19 U        | 0.19      | 0.23 U        | 0.23      | 0.21 U        | 0.21      | 0.27 U        | 0.27      |
| Vanadium                    | 370      | 28.0          | 0.38      | 28.4          | 0.46      | 32.9          | 0.36      | 37.6          | 0.35      | 43.5          | 0.53      |
| Zinc                        | 1500     | 19.1          | 0.38      | 25.3          | 0.46      | 30.8          | 0.36      | 93.0          | 0.35      | 42.1          | 0.53      |
| Cyanide                     | 1100     | 0.48 U        | 0.48      | 0.45 U        | 0.45      |               |           |               |           |               |           |
| Dilution Factor             |          | * = 10.0      |           | * = 10.0      |           |               |           | * = 20.0      |           | * = 5.00      |           |
| Method: TAL Metals, Cyanide |          |               |           |               |           |               |           |               |           |               |           |

**MAIN POST  
SOIL BORING INORGANICS**

| Geographical Location       |          | M18                  |                    | M18                  |                    | M18                  |                    | M18                  |                    | M18                  |                    |
|-----------------------------|----------|----------------------|--------------------|----------------------|--------------------|----------------------|--------------------|----------------------|--------------------|----------------------|--------------------|
| Sample                      |          | M18-SB06-A02         |                    | MP18-SB01-A01        |                    | MP18-SB01-A02        |                    | MP18-SB02-A01        |                    | MP18-SB02-A02        |                    |
| Sample Type                 |          |                      |                    |                      |                    |                      |                    |                      |                    |                      |                    |
| Batch#                      |          | 9501G587             |                    | 9501G632             |                    | 9501G632             |                    | 9501G632             |                    | 9501G632             |                    |
| Prep#                       |          | 95GTS013             |                    | 95GTS038             |                    | 95GTS038             |                    | 95GTS038             |                    | 95GTS038             |                    |
| RFV#                        |          | 006                  |                    | 003                  |                    | 004                  |                    | 005                  |                    | 006                  |                    |
| Sample Depth (bgs)          |          |                      |                    |                      |                    |                      |                    |                      |                    |                      |                    |
| Dilution Factor             |          | 1.00                 |                    | 1.00                 |                    | 1.00                 |                    | 1.00                 |                    | 1.00                 |                    |
| Matrix                      |          | soil                 |                    | soil                 |                    | soil                 |                    | soil                 |                    | soil                 |                    |
| Units                       | mg/kg    | mg/kg                |                    | mg/kg                |                    | mg/kg                |                    | mg/kg                |                    | mg/kg                |                    |
| Sampling Date               |          | 1/11/95              |                    | 1/12/95              |                    | 1/12/95              |                    | 1/12/95              |                    | 1/12/95              |                    |
| Analysis Date               |          | 1/13/95              |                    | 1/30/95              |                    | 1/30/95              |                    | 1/30/95              |                    | 1/30/95              |                    |
| Analysis                    | Standard | Analytical<br>Result | Reporting<br>Limit | Analytical<br>Result | Reporting<br>Limit | Analytical<br>Result | Reporting<br>Limit | Analytical<br>Result | Reporting<br>Limit | Analytical<br>Result | Reporting<br>Limit |
| % Solids                    |          | 72.1                 | 0.10               | 86.0                 | 0.10               | 84.0                 | 0.10               | 87.6                 | 0.10               | 80.5                 | 0.10               |
| Silver                      | 110      | 0.57 U               | 0.57               |                      |                    |                      |                    |                      |                    |                      |                    |
| Aluminum                    |          | 6130                 | 3.9                |                      |                    |                      |                    |                      |                    |                      |                    |
| Arsenic                     | 20       | 5.8                  | 0.44               |                      |                    |                      |                    |                      |                    |                      |                    |
| Barium                      | 700      | 31.0                 | 0.18               |                      |                    |                      |                    |                      |                    |                      |                    |
| Beryllium                   | 1        | 0.07 U               | 0.07               |                      |                    |                      |                    |                      |                    |                      |                    |
| Calcium                     |          | 11100                | 1.9                |                      |                    |                      |                    |                      |                    |                      |                    |
| Cadmium                     | 1        | 0.66 U               | 0.66               |                      |                    |                      |                    |                      |                    |                      |                    |
| Cobalt                      |          | 6.3                  | 0.53               |                      |                    |                      |                    |                      |                    |                      |                    |
| Chromium                    |          | 35.3                 | 1.1                |                      |                    |                      |                    |                      |                    |                      |                    |
| Copper                      | 600      | 218                  | 0.92               |                      |                    |                      |                    |                      |                    |                      |                    |
| Iron                        |          | 17700                | 0.57               |                      |                    |                      |                    |                      |                    |                      |                    |
| Mercury                     | 14       | 0.61                 | 0.11               |                      |                    |                      |                    |                      |                    |                      |                    |
| Potassium                   |          | 2190                 | 15.6               |                      |                    |                      |                    |                      |                    |                      |                    |
| Magnesium                   |          | 3380                 | 7.9                |                      |                    |                      |                    |                      |                    |                      |                    |
| Manganese                   |          | 168                  | 0.21               |                      |                    |                      |                    |                      |                    |                      |                    |
| Sodium                      |          | 181                  | 4.4                |                      |                    |                      |                    |                      |                    |                      |                    |
| Nickel                      | 250      | 12.6                 | 0.96               |                      |                    |                      |                    |                      |                    |                      |                    |
| Lead                        | 400      | 127                  | 4.6 *              |                      |                    |                      |                    |                      |                    |                      |                    |
| Antimony                    | 14       | 2.5 U                | 2.5                |                      |                    |                      |                    |                      |                    |                      |                    |
| Selenium                    | 63       | 0.78                 | 0.35               |                      |                    |                      |                    |                      |                    |                      |                    |
| Thallium                    | 2        | 0.16 U               | 0.16               |                      |                    |                      |                    |                      |                    |                      |                    |
| Vanadium                    | 370      | 27.3                 | 0.48               |                      |                    |                      |                    |                      |                    |                      |                    |
| Zinc                        | 1500     | 72.6                 | 0.44               |                      |                    |                      |                    |                      |                    |                      |                    |
| Cyanide                     | 1100     |                      |                    |                      |                    |                      |                    |                      |                    |                      |                    |
| Dilution Factor             |          | * = 20.0             |                    |                      |                    |                      |                    |                      |                    |                      |                    |
| Method: TAL Metals, Cyanide |          |                      |                    |                      |                    |                      |                    |                      |                    |                      |                    |



**MAIN POST  
SOIL BORING INORGANICS**

| Geographical Location       |          | M18                  |                    | M18                  |                    | M18                  |                    | M18                  |                    | M18                  |                    |
|-----------------------------|----------|----------------------|--------------------|----------------------|--------------------|----------------------|--------------------|----------------------|--------------------|----------------------|--------------------|
| Sample                      |          | MP18-SB03-A01        |                    | MP18-SB03-A02        |                    | MP18-SB07-A01        |                    | MP18-SB24-A01        |                    | MP18-SB24-A02        |                    |
| Sample Type                 |          |                      |                    |                      |                    |                      |                    |                      |                    |                      |                    |
| Batch#                      |          | 9501G632             |                    | 9501G632             |                    | 9501G632             |                    | 9501G632             |                    | 9501G632             |                    |
| Prep#                       |          | 95GTS038             |                    | 95GTS038             |                    | 95GTS038             |                    | 95GTS038             |                    | 95GTS038             |                    |
| RFW#                        |          | 007                  |                    | 008                  |                    | 009                  |                    | 001                  |                    | 002                  |                    |
| Sample Depth (bgs)          |          |                      |                    |                      |                    |                      |                    |                      |                    |                      |                    |
| Dilution Factor             |          | 1.00                 |                    | 1.00                 |                    | 1.00                 |                    | 1.00                 |                    | 1.00                 |                    |
| Matrix                      |          | soil                 |                    | soil                 |                    | soil                 |                    | soil                 |                    | soil                 |                    |
| Units                       | mg/kg    | mg/kg                |                    | mg/kg                |                    | mg/kg                |                    | mg/kg                |                    | mg/kg                |                    |
| Sampling Date               |          | 1/12/95              |                    | 1/12/95              |                    | 1/12/95              |                    | 1/12/95              |                    | 1/12/95              |                    |
| Analysis Date               |          | 1/30/95              |                    | 1/30/95              |                    | 1/30/95              |                    | 1/30/95              |                    | 1/30/95              |                    |
| Analysis                    | Standard | Analytical<br>Result | Reporting<br>Limit | Analytical<br>Result | Reporting<br>Limit | Analytical<br>Result | Reporting<br>Limit | Analytical<br>Result | Reporting<br>Limit | Analytical<br>Result | Reporting<br>Limit |
| % Solids                    |          | 83.1                 | 0.10               | 85.0                 | 0.10               | 87.7                 | 0.10               | 86.3                 | 0.10               | 80.8                 | 0.10               |
| Silver                      | 110      |                      |                    |                      |                    |                      |                    |                      |                    |                      |                    |
| Aluminum                    |          |                      |                    |                      |                    |                      |                    |                      |                    |                      |                    |
| Arsenic                     | 20       |                      |                    |                      |                    |                      |                    |                      |                    |                      |                    |
| Barium                      | 700      |                      |                    |                      |                    |                      |                    |                      |                    |                      |                    |
| Beryllium                   | 1        |                      |                    |                      |                    |                      |                    |                      |                    |                      |                    |
| Calcium                     |          |                      |                    |                      |                    |                      |                    |                      |                    |                      |                    |
| Cadmium                     | 1        |                      |                    |                      |                    |                      |                    |                      |                    |                      |                    |
| Cobalt                      |          |                      |                    |                      |                    |                      |                    |                      |                    |                      |                    |
| Chromium                    |          |                      |                    |                      |                    |                      |                    |                      |                    |                      |                    |
| Copper                      | 600      |                      |                    |                      |                    |                      |                    |                      |                    |                      |                    |
| Iron                        |          |                      |                    |                      |                    |                      |                    |                      |                    |                      |                    |
| Mercury                     | 14       |                      |                    |                      |                    |                      |                    |                      |                    |                      |                    |
| Potassium                   |          |                      |                    |                      |                    |                      |                    |                      |                    |                      |                    |
| Magnesium                   |          |                      |                    |                      |                    |                      |                    |                      |                    |                      |                    |
| Manganese                   |          |                      |                    |                      |                    |                      |                    |                      |                    |                      |                    |
| Sodium                      |          |                      |                    |                      |                    |                      |                    |                      |                    |                      |                    |
| Nickel                      | 250      |                      |                    |                      |                    |                      |                    |                      |                    |                      |                    |
| Lead                        | 400      |                      |                    |                      |                    |                      |                    |                      |                    |                      |                    |
| Antimony                    | 14       |                      |                    |                      |                    |                      |                    |                      |                    |                      |                    |
| Selenium                    | 63       |                      |                    |                      |                    |                      |                    |                      |                    |                      |                    |
| Thallium                    | 2        |                      |                    |                      |                    |                      |                    |                      |                    |                      |                    |
| Vanadium                    | 370      |                      |                    |                      |                    |                      |                    |                      |                    |                      |                    |
| Zinc                        | 1500     |                      |                    |                      |                    |                      |                    |                      |                    |                      |                    |
| Cyanide                     | 1100     |                      |                    |                      |                    |                      |                    |                      |                    |                      |                    |
| Dilution Factor             |          |                      |                    |                      |                    |                      |                    |                      |                    |                      |                    |
| Method: TAL Metals, Cyanide |          |                      |                    |                      |                    |                      |                    |                      |                    |                      |                    |

**MAIN POST  
SOIL BORING INORGANICS**

|                             |          |               |           |               |           |              |           |              |           |              |           |
|-----------------------------|----------|---------------|-----------|---------------|-----------|--------------|-----------|--------------|-----------|--------------|-----------|
| Geographical Location       |          | M18           |           | M18           |           | M18          |           | M18          |           | M18          |           |
| Sample                      |          | MP18-SB25-A01 |           | MP18-SB25-A02 |           | M18-SB04-A01 |           | M18-SB04-A02 |           | M18-SB05-A01 |           |
| Sample Type                 |          |               |           |               |           |              |           |              |           |              |           |
| Batch#                      |          | 9501GG656     |           | 9501GG656     |           | 9501G587     |           | 9501G587     |           | 9501G587     |           |
| Prep#                       |          | 95GTS038      |           | 95GTS038      |           | 95GTS013     |           | 95GTS013     |           | 95GTS013     |           |
| RFW#                        |          | 001           |           | 002           |           | 003          |           | 004          |           | 001          |           |
| Sample Depth (bgs)          |          |               |           |               |           |              |           |              |           |              |           |
| Dilution Factor             |          | 1.00          |           | 1.00          |           | 1.00         |           | 1.00         |           | 1.00         |           |
| Matrix                      |          | soil          |           | soil          |           | soil         |           | soil         |           | soil         |           |
| Units                       | mg/kg    | mg/kg         |           | mg/kg         |           | mg/kg        |           | mg/kg        |           | mg/kg        |           |
| Sampling Date               |          | 1/13/95       |           | 1/13/95       |           | 1/11/95      |           | 1/11/95      |           | 1/11/95      |           |
| Analysis Date               |          | 1/30/95       |           | 1/30/95       |           | 1/13/95      |           | 1/13/95      |           | 1/13/95      |           |
| Analysis                    | Standard | Analytical    | Reporting | Analytical    | Reporting | Analytical   | Reporting | Analytical   | Reporting | Analytical   | Reporting |
|                             |          | Result        | Limit     | Result        | Limit     | Result       | Limit     | Result       | Limit     | Result       | Limit     |
| % Solids                    |          | 83.0          | 0.10      | 88.4          | 0.10      | 92.7         | 0.10      | 90.8         | 0.10      | 87.4         | 0.10      |
| Silver                      | 110      |               |           |               |           |              |           |              |           |              |           |
| Aluminum                    |          |               |           |               |           |              |           |              |           |              |           |
| Arsenic                     | 20       |               |           |               |           |              |           |              |           |              |           |
| Barium                      | 700      |               |           |               |           |              |           |              |           |              |           |
| Beryllium                   | 1        |               |           |               |           |              |           |              |           |              |           |
| Calcium                     |          |               |           |               |           |              |           |              |           |              |           |
| Cadmium                     | 1        |               |           |               |           |              |           |              |           |              |           |
| Cobalt                      |          |               |           |               |           |              |           |              |           |              |           |
| Chromium                    |          |               |           |               |           |              |           |              |           |              |           |
| Copper                      | 600      |               |           |               |           |              |           |              |           |              |           |
| Iron                        |          |               |           |               |           |              |           |              |           |              |           |
| Mercury                     | 14       |               |           |               |           |              |           |              |           |              |           |
| Potassium                   |          |               |           |               |           |              |           |              |           |              |           |
| Magnesium                   |          |               |           |               |           |              |           |              |           |              |           |
| Manganese                   |          |               |           |               |           |              |           |              |           |              |           |
| Sodium                      |          |               |           |               |           |              |           |              |           |              |           |
| Nickel                      | 250      |               |           |               |           |              |           |              |           |              |           |
| Lead                        | 400      |               |           |               |           |              |           |              |           |              |           |
| Antimony                    | 14       |               |           |               |           |              |           |              |           |              |           |
| Selenium                    | 63       |               |           |               |           |              |           |              |           |              |           |
| Thallium                    | 2        |               |           |               |           |              |           |              |           |              |           |
| Vanadium                    | 370      |               |           |               |           |              |           |              |           |              |           |
| Zinc                        | 1500     |               |           |               |           |              |           |              |           |              |           |
| Cyanide                     | 1100     |               |           |               |           |              |           |              |           |              |           |
| Dilution Factor             |          |               |           |               |           |              |           |              |           |              |           |
| Method: TAL Metals, Cyanide |          |               |           |               |           |              |           |              |           |              |           |

**MAIN POST  
SOIL BORING INORGANICS**

| Geographical Location       |          | M18          |           | M18          |           | M18           |           | B1          |           | B1          |           |
|-----------------------------|----------|--------------|-----------|--------------|-----------|---------------|-----------|-------------|-----------|-------------|-----------|
| Sample                      |          | M18-SB05-A02 |           | M18-SB06-A01 |           | MP18-MW03-A01 |           | B1-SB01-A01 |           | B1-SB01-A02 |           |
| Sample Type                 |          |              |           |              |           |               |           |             |           |             |           |
| Batch#                      |          | 9501G587     |           | 9501G587     |           | 9505G825      |           | 9512G527    |           | 9512G527    |           |
| Prep#                       |          | 95GTS013     |           | 95GTS013     |           | 95GI713       |           | 95GTS007    |           | 95GTS007    |           |
| RFW#                        |          | 002          |           | 005          |           | 006           |           | 001         |           | 002         |           |
| Sample Depth (bgs)          |          |              |           |              |           |               |           |             |           |             |           |
| Dilution Factor             |          | 1.00         |           | 1.00         |           | 1.00          |           | 1.00        |           | 1.00        |           |
| Matrix                      |          | soil         |           | soil         |           | water         |           | soil        |           | soil        |           |
| Units                       | mg/kg    | mg/kg        |           | mg/kg        |           | mg/kg         |           | mg/kg       |           | mg/kg       |           |
| Sampling Date               |          | 1/11/95      |           | 1/11/95      |           | 5/10/95       |           | 1/9/95      |           | 1/9/95      |           |
| Analysis Date               |          | 1/13/95      |           | 1/13/95      |           | 5/24/95       |           | 1/11/95     |           | 1/11/95     |           |
| Analysis                    | Standard | Analytical   | Reporting | Analytical   | Reporting | Analytical    | Reporting | Analytical  | Reporting | Analytical  | Reporting |
|                             |          | Result       | Limit     | Result       | Limit     | Result        | Limit     | Result      | Limit     | Result      | Limit     |
| % Solids                    |          | 79.8         | 0.10      | 87.0         | 0.10      | 85.9          | 0.10      | 88.0        | 0.10      | 79.0        | 0.10      |
| Silver                      | 110      |              |           |              |           |               |           | 0.51 U      | 0.51      | 0.53 U      | 0.53      |
| Aluminum                    |          |              |           |              |           |               |           | 4780        | 3.4       | 4680        | 3.5       |
| Arsenic                     | 20       |              |           |              |           |               |           | 5.8         | 0.31      | 4.7         | 0.32      |
| Barium                      | 700      |              |           |              |           |               |           | 6.5         | 0.16      | 6.3         | 0.17      |
| Beryllium                   | 1        |              |           |              |           |               |           | 0.54        | 0.061     | 0.75        | 0.063     |
| Calcium                     |          |              |           |              |           |               |           | 170         | 1.7       | 96.1        | 1.8       |
| Cadmium                     | 1        |              |           |              |           |               |           | 0.59 U      | 0.59      | 0.61 U      | 0.61      |
| Cobalt                      |          |              |           |              |           |               |           | 0.79        | 0.47      | 1.4         | 0.49      |
| Chromium                    |          |              |           |              |           |               |           | 64.6        | 0.96      | 84.8        | 0.99      |
| Copper                      | 600      |              |           |              |           |               |           | 2.0         | 0.82      | 2.0         | 0.84      |
| Iron                        |          |              |           |              |           |               |           | 14700       | 0.51      | 17400       | 0.53      |
| Mercury                     | 14       |              |           |              |           |               |           | 0.095 U     | 0.095     | 0.094 U     | 0.094     |
| Potassium                   |          |              |           |              |           |               |           | 3110        | 13.9      | 2730        | 14.3      |
| Magnesium                   |          |              |           |              |           |               |           | 1130        | 7.0       | 1070        | 7.2       |
| Manganese                   |          |              |           |              |           |               |           | 9.4         | 0.18      | 8.2         | 0.19      |
| Sodium                      |          |              |           |              |           |               |           | 15.1        | 3.9       | 12.6        | 4.0       |
| Nickel                      | 250      |              |           |              |           |               |           | 2.0         | 0.86      | 3.2         | 0.89      |
| Lead                        | 400      |              |           |              |           |               |           | 7.7         | 0.54 *    | 8.4         | 0.56 *    |
| Antimony                    | 14       |              |           |              |           |               |           | 2.2 U       | 2.2       | 2.3 U       | 2.3       |
| Selenium                    | 63       |              |           |              |           |               |           | 0.17 U      | 0.17      | 0.18 U      | 0.18      |
| Thallium                    | 2        |              |           |              |           |               |           | 0.21 U      | 0.21      | 0.22 U      | 0.22      |
| Vanadium                    | 370      |              |           |              |           |               |           | 43.9        | 0.43      | 94.1        | 0.44      |
| Zinc                        | 1500     |              |           |              |           |               |           | 20.2        | 0.39      | 19.6        | 0.40      |
| Cyanide                     | 1100     |              |           |              |           | 0.53 U        | 0.53      | 0.32 U      | 0.32      | 0.63 U      | 0.63      |
| Dilution Factor             |          |              |           |              |           |               |           | * = 2.00    |           | * = 2.00    |           |
| Method: TAL Metals, Cyanide |          |              |           |              |           |               |           |             |           |             |           |

**MAIN POST  
SOIL BORING INORGANICS**

| Geographical Location      |          | B2          |           | B2          |           | B3                  |           | B3          |           | B4          |           |
|----------------------------|----------|-------------|-----------|-------------|-----------|---------------------|-----------|-------------|-----------|-------------|-----------|
| Sample                     |          | B2-SB01-A01 |           | B2-SB01-A02 |           | B3-SB01-A01         |           | B3-SB01-A03 |           | B4-SB01-A01 |           |
| Sample Type                |          |             |           |             |           |                     |           |             |           |             |           |
| Batch#                     |          | 9501G500    |           | 9501G500    |           | 9501G500            |           | 9501G500    |           | 9512G527    |           |
| Prep#                      |          | 95GTS007    |           | 95GTS007    |           | 95GTS007            |           | 95GTS007    |           | 95GTS007    |           |
| RFW#                       |          | 001         |           | 002         |           | 003                 |           | 004         |           | 003         |           |
| Sample Depth (bgs)         |          |             |           |             |           |                     |           |             |           |             |           |
| Dilution Factor            |          | 1.00        |           | 1.00        |           | 1.00                |           | 1.00        |           | 1.00        |           |
| Matrix                     |          | soil        |           | soil        |           | soil                |           | soil        |           | soil        |           |
| Units                      | mg/kg    | mg/kg       |           | mg/kg       |           | mg/kg               |           | mg/kg       |           | mg/kg       |           |
| Sampling Date              |          | 1/6/95      |           | 1/6/95      |           | 1/6/95              |           | 1/6/95      |           | 1/9/95      |           |
| Analysis Date              |          | 1/10/95     |           | 1/10/95     |           | 1/10/95             |           | 1/10/95     |           | 1/11/95     |           |
| Analysis                   | Standard | Analytical  | Reporting | Analytical  | Reporting | Analytical          | Reporting | Analytical  | Reporting | Analytical  | Reporting |
|                            |          | Result      | Limit     | Result      | Limit     | Result              | Limit     | Result      | Limit     | Result      | Limit     |
| % Solids                   |          | 81.2        | 0.10      | 80.1        | 0.10      | 88.1                | 0.1       | 73.3        | 0.10      | 88.8        | 0.10      |
| Silver                     | 110      | 0.88        | 0.64      | 0.86        | 0.66      | 0.73                | 0.59      | 1.1         | 0.70      | 0.52 U      | 0.52      |
| Aluminum                   |          | 9900        | 0.55      | 12700       | 5.7       | 7630                | 5.1       | 15200       | 6.0       | 4290        | 3.5       |
| Arsenic                    | 20       | 21.7        | 3.2 *     | 22.9        | 3.3 *     | 6.2                 | 0.60 *    | 9.8         | 0.72 *    | 4.5         | 0.32      |
| Barium                     | 700      | 23.7        | 0.43      | 20.1        | 0.45      | 28.0                | 0.40      | 26.0        | 0.47      | 22.7        | 0.17      |
| Beryllium                  | 1        | 0.99        | 0.31      | 1.4         | 0.32      | 0.78                | 0.29      | 2.0         | 0.34      | 0.53        | 0.063     |
| Calcium                    |          | 427         | 2.5       | 343         | 2.6       | 921                 | 2.3       | 511         | 2.7       | 642         | 1.8       |
| Cadmium                    | 1        | 0.57 U      | 0.57      | 0.60 U      | 0.60      | 0.53 U              | 0.53      | 0.63 U      | 0.63      | 0.60 U      | 0.60      |
| Cobalt                     |          | 1.6         | 0.55      | 1.1         | 0.58      | 1.0                 | 0.52      | 0.97        | 0.61      | 0.98        | 0.48      |
| Chromium                   |          | 109         | 0.62      | 154         | 0.64      | 48.4                | 0.57      | 269         | 0.68      | 39.9        | 0.98      |
| Copper                     | 600      | 6.4         | 0.47      | 5.7         | 0.49      | 4.1                 | 0.44      | 7.8         | 0.52      | 4.0         | 0.83      |
| Iron                       |          | 36800       | 0.96      | 39800       | 1.0       | 19700               | 0.90      | 55800       | 1.1       | 12900       | 0.52      |
| Mercury                    | 14       | 0.12 U      | 0.12      | 0.10 U      | 0.10      | 0.11 U              | 0.11      | 0.13 U      | 0.13      | 0.11 U      | 0.11      |
| Potassium                  |          | 5840        | 169       | 9290        | 175       | 3090                | 157       | 15400       | 185       | 2580        | 14.2      |
| Magnesium                  |          | 3030        | 5.0       | 4400        | 5.2       | 1920                | 4.7       | 7320        | 5.5       | 1290        | 7.2       |
| Manganese                  |          | 34.2        | 0.41      | 29.9        | 0.43      | 90.7                | 0.38      | 9.9         | 0.45      | 18.4        | 0.19      |
| Sodium                     |          | 24.9        | 3.2       | 23.8        | 3.3       | 22.3                | 2.9       | 51.6        | 3.5       | 18.7        | 4.0       |
| Nickel                     | 250      | 8.4         | 2.6       | 5.5         | 2.7       | 5.1                 | 2.4       | 6.6         | 2.9       | 2.8         | 0.88      |
| Lead                       | 400      | 6.8         | 0.20      | 5.9         | 0.21      | 15.2                | 0.94 **   | 4.2         | 0.23      | 19.5        | 2.8 *     |
| Antimony                   | 14       | 4.4 U       | 4.4       | 4.6 U       | 4.6       | 4.1 U               | 4.1       | 4.8 U       | 4.8       | 2.3 U       | 2.3       |
| Selenium                   | 63       | 1.8         | 0.18      | 1.7         | 0.19      | 0.64                | 0.17      | 1.9         | 0.20      | 0.25        | 0.18      |
| Thallium                   | 2        | 0.22 U      | 0.22      | 0.23 U      | 0.23      | 0.21 U              | 0.21      | 0.25 U      | 0.25      | 0.22 U      | 0.22      |
| Vanadium                   | 370      | 39.4        | 0.60      | 53.9        | 0.62      | 29.1                | 0.55      | 50.3        | 0.65      | 19.9        | 0.44      |
| Zinc                       | 1500     | 39.9        | 0.57      | 39.1        | 0.60      | 35.0                | 0.53      | 81.4        | 0.63      | 24.1        | 0.40      |
| Cyanide                    | 1100     | 0.51 U      | 0.51      | 0.39 U      | 0.39      | 0.35 U              | 0.35      | 0.59 U      | 0.59      | 0.35 U      | 0.35      |
| Dilution Factor            |          | * = 10.0    |           | * = 10.0    |           | * = 2.00, ** = 5.00 |           | * = 2.00    |           | * = 10.0    |           |
| Method:TAL Metals, Cyanide |          |             |           |             |           |                     |           |             |           |             |           |

**MAIN POST  
SOIL BORING INORGANICS**

|                             |          |             |           |             |           |                     |           |             |           |
|-----------------------------|----------|-------------|-----------|-------------|-----------|---------------------|-----------|-------------|-----------|
| Geographical Location       |          | B4          |           | B4          |           | B5                  |           | B5          |           |
| Sample                      |          | B4-SB01-A02 |           | B4-SB01-C01 |           | B5-SB01-A01         |           | B5-SB01-A02 |           |
| Sample Type                 |          |             |           | Duplicate   |           |                     |           |             |           |
| Batch#                      |          | 9512G527    |           | 9512G527    |           | 9501G587            |           | 9501G587    |           |
| Prep#                       |          | 95GTS007    |           | 95GTS007    |           | 95GTS013            |           | 95GTS013    |           |
| RFW#                        |          | 004         |           | 005         |           | 007                 |           | 008         |           |
| Sample Depth (bgs)          |          |             |           |             |           |                     |           |             |           |
| Dilution Factor             |          | 1.00        |           | 1.00        |           | 1.00                |           | 1.00        |           |
| Matrix                      |          | soil        |           | soil        |           | soil                |           | soil        |           |
| Units                       | mg/kg    | mg/kg       |           | mg/kg       |           | mg/kg               |           | mg/kg       |           |
| Sampling Date               |          | 1/9/95      |           | 1/9/95      |           | 1/11/95             |           | 1/11/95     |           |
| Analysis Date               |          | 1/11/95     |           | 1/11/95     |           | 1/13/95             |           | 1/13/95     |           |
| Analysis                    | Standard | Analytical  | Reporting | Analytical  | Reporting | Analytical          | Reporting | Analytical  | Reporting |
|                             |          | Result      | Limit     | Result      | Limit     | Result              | Limit     | Result      | Limit     |
| % Solids                    |          | 74.3        | 0.10      | 89.3        | 0.10      | 84.4                | 0.10      | 83.1        | 0.10      |
| Silver                      | 110      | 0.45 U      | 0.45      | 0.47 U      | 0.47      | 0.49 U              | 0.49      | 0.50 U      | 0.50      |
| Aluminum                    |          | 11700       | 3.1       | 4570        | 3.2       | 8020                | 3.3       | 8450        | 3.3       |
| Arsenic                     | 20       | 10          | 0.72 *    | 3.7         | 0.27      | 7.4                 | 0.74 *    | 8.0         | {0.76}    |
| Barium                      | 700      | 32.3        | 0.15      | 21.9        | 0.15      | 28.3                | 0.16      | 21.7        | 0.16      |
| Beryllium                   | 1        | 1.7         | 0.055/    | 0.53        | 0.056     | 0.76                | 0.059     | 0.89        | 0.060     |
| Calcium                     |          | 104         | 1.5       | 601         | 1.6       | 738                 | 1.7       | 517         | 1.7       |
| Cadmium                     | 1        | 0.53 U      | 0.53      | 0.55 U      | 0.55      | 0.57 U              | 0.57      | 0.58 U      | 0.58      |
| Cobalt                      |          | 2.5         | 0.42      | 0.58        | 0.43      | 2                   | 0.45      | 1.5         | 0.46      |
| Chromium                    |          | 143         | 0.85      | 42.8        | 0.88      | 54.8                | 0.93      | 80.4        | 0.93      |
| Copper                      | 600      | 8.0         | 0.73      | 2.7         | 0.75      | 6.2                 | 0.79      | 3.4         | 0.80      |
| Iron                        |          | 41400       | 0.45      | 13800       | 0.47      | 21200               | 0.49      | 25700       | 0.50      |
| Mercury                     | 14       | 0.13 U      | 0.13      | 0.083 U     | 0.083     | 0.09 U              | 0.09      | 0.09 U      | 0.09      |
| Potassium                   |          | 11800       | 12.4      | 2940        | 12.8      | 3770                | 13.4      | 3990        | 13.5      |
| Magnesium                   |          | 5430        | 6.2       | 1440        | 6.5       | 1840                | 6.8       | 1880        | 6.8       |
| Manganese                   |          | 9.5         | 0.16      | 16.7        | 0.17      | 46                  | 0.18      | 14.0        | 0.18      |
| Sodium                      |          | 40.5        | 3.5       | 13.7        | 3.6       | 33.9                | 3.8       | 22.9        | 3.8       |
| Nickel                      | 250      | 5.0         | 0.76      | 2.4         | 0.79      | 3.7                 | 0.83      | 3.5         | 0.84      |
| Lead                        | 400      | 3.8         | 0.32      | 9.7         | 1.2 *     | 19.0                | 2.0 **    | 5.7         | 0.20      |
| Antimony                    | 14       | 2.0 U       | 2.0       | 2.1 U       | 2.1       | 2.2 U               | 2.2       | 2.2 U       | 2.2       |
| Selenium                    | 63       | 0.20 U      | 0.20      | 0.28        | 0.15      | 0.67                | 0.29      | 1.2         | 0.30      |
| Thallium                    | 2        | 0.25 U      | 0.25      | 0.18 U      | 0.18      | 0.14 U              | 0.14      | 0.14 U      | 0.14      |
| Vanadium                    | 370      | 23.7        | 0.38      | 19.0        | 0.40      | 35.1                | 0.41      | 46.9        | 0.42      |
| Zinc                        | 1500     | 60.2        | 0.35      | 24.0        | 0.36      | 38.1                | 0.38      | 30.3        | 0.38      |
| Cyanide                     | 1100     | 0.45 U      | 0.45      | 0.49 U      | 0.49      | 0.35 U              | 0.35      | 0.39 U      | 0.39      |
| Dilution Factor             |          | * = 2.00    |           | * = 5.00    |           | * = 2.00, ** = 10.0 |           | * = 2.00    |           |
| Method: TAL Metals, Cyanide |          |             |           |             |           |                     |           |             |           |

**MAIN POST**  
**SOIL BORING PESTICIDES/PCBS**

| Geographical Location      |          | M-AOC3        |           | M-AOC3        |           | M-AOC3        |           | M-AOC3          |           | M16           |           | M16             |           |
|----------------------------|----------|---------------|-----------|---------------|-----------|---------------|-----------|-----------------|-----------|---------------|-----------|-----------------|-----------|
| Sample                     |          | MPA3-SB01-A02 |           | MPA3-SB01-C02 |           | MPA3-SB02-A02 |           | MPA3-SB02-A02DL |           | MP16-SB01-A01 |           | MP16-SB01-A01DL |           |
| Sample Type                |          |               |           | Duplicate     |           |               |           |                 |           |               |           |                 |           |
| Batch#                     |          | 9412G130      |           | 9412G130      |           | 9401G155      |           | 9401G155        |           | 9401G155      |           | 9401G155        |           |
| Prep#                      |          | 94GP1090      |           | 94GP1090      |           | 94GP1090      |           | 94GP1090        |           | 94GP1090      |           | 94GP1090        |           |
| RFW#                       |          | 001           |           | 002           |           | 003           |           | 003             |           | 001           |           | 001DL           |           |
| Sample Depth (bgs)         |          |               |           |               |           |               |           |                 |           |               |           |                 |           |
| Dilution Factor            |          | 1.00          |           | 1.00          |           | 1.00          |           | 10.0            |           | 10.0          |           | 100             |           |
| Matrix                     |          | soil          |           | soil          |           | soil          |           | soil            |           | soil          |           | soil            |           |
| Units                      | mg/kg    | mg/kg         |           | mg/kg         |           | mg/kg         |           | mg/kg           |           | mg/kg         |           | mg/kg           |           |
| Sampling Date              |          | 12/14/94      |           | 12/14/94      |           | 12/15/94      |           | 12/15/94        |           | 12/15/94      |           | 12/15/94        |           |
| Analysis Date              |          | 1/3/95        |           | 1/3/95        |           | 1/3/95        |           | 1/3/95          |           | 1/3/95        |           | 1/4/95          |           |
| Analysis                   | Standard | Analytical    | Reporting | Analytical    | Reporting | Analytical    | Reporting | Analytical      | Reporting | Analytical    | Reporting | Analytical      | Reporting |
|                            |          | Result        | Limit     | Result        | Limit     | Result        | Limit     | Result          | Limit     | Result        | Limit     | Result          | Limit     |
| alpha-BHC                  |          | 0.0018 U      | 0.0018    | 0.0018 U      | 0.0018    | 0.0017 U      | 0.0017    | 0.017 U         | 0.017     | 0.019 U       | 0.019     | 0.19 U          | 0.19      |
| beta-BHC                   |          | 0.0018 U      | 0.0018    | 0.0018 U      | 0.0018    | 0.0017 U      | 0.0017    | 0.017 U         | 0.017     | 0.019 U       | 0.019     | 0.19 U          | 0.19      |
| delta-BHC                  |          | 0.0018 U      | 0.0018    | 0.0018 U      | 0.0018    | 0.0017 U      | 0.0017    | 0.017 U         | 0.017     | 0.019 U       | 0.019     | 0.19 U          | 0.19      |
| gamma-BHC (Lindane)        | 0.52     | 0.0018 U      | 0.0018    | 0.0018 U      | 0.0018    | 0.0017 U      | 0.0017    | 0.017 U         | 0.017     | 0.019 U       | 0.019     | 0.19 U          | 0.19      |
| Heptachlor                 | 0.15     | 0.0018 U      | 0.0018    | 0.0018 U      | 0.0018    | 0.0017 U      | 0.0017    | 0.017 U         | 0.017     | 0.019 U       | 0.019     | 0.19 U          | 0.19      |
| Aldrin                     | 0.04     | 0.0018 U      | 0.0018    | 0.0018 U      | 0.0018    | 0.0017 U      | 0.0017    | 0.017 U         | 0.017     | 0.019 U       | 0.019     | 0.19 U          | 0.19      |
| Heptachlor epoxide         |          | 0.0018 U      | 0.0018    | 0.0018 U      | 0.0018    | 0.0017 U      | 0.0017    | 0.017 U         | 0.017     | 0.019 U       | 0.019     | 0.19 U          | 0.19      |
| Endosulfan I               | 340      | 0.0018 U      | 0.0018    | 0.0018 U      | 0.0018    | 0.0017 U      | 0.0017    | 0.017 U         | 0.017     | 0.019 U       | 0.019     | 0.19 U          | 0.19      |
| Dieldrin                   | 0.042    | 0.0037 U      | 0.0037    | 0.0036 U      | 0.0036    | 0.0035 U      | 0.0035    | 0.035 U         | 0.035     | 0.12          | 0.038     | 0.38 U          | 0.38      |
| 4,4'-DDE                   | 2        | 0.044         | 0.0037    | 0.011         | 0.0036    | 0.022         | 0.0035    | 0.035 U         | 0.035     | 1 C           | 0.038     | 0.65 CD         | 0.38      |
| Endrin                     | 17       | 0.0037 U      | 0.0037    | 0.0036 U      | 0.0036    | 0.0035 U      | 0.0035    | 0.035 U         | 0.035     | 0.038 U       | 0.038     | 0.38 U          | 0.38      |
| Endosulfan II              | 340      | 0.0037 U      | 0.0037    | 0.0036 U      | 0.0036    | 0.0035 U      | 0.0035    | 0.035 U         | 0.035     | 0.038 U       | 0.038     | 0.38 U          | 0.38      |
| 4,4'-DDD                   | 3        | 0.024         | 0.0037    | 0.0097        | 0.0036    | 0.016         | 0.0035    | 0.035 U         | 0.035     | 1.5 C         | 0.038     | 1.1 CD          | 0.38      |
| Endosulfan sulfate         |          | 0.0037 U      | 0.0037    | 0.0036 U      | 0.0036    | 0.0035 U      | 0.0035    | 0.035 U         | 0.035     | 0.04 U        | 0.038     | 0.38 U          | 0.38      |
| 4,4'-DDT                   | 2        | 0.035 P       | 0.0037    | 0.017         | 0.0036    | 0.085         | 0.0035    | 0.073 P         | 0.035     | 0.71 C        | 0.038     | 0.62 D          | 0.38      |
| Methoxychlor               | 280      | 0.018 U       | 0.018     | 0.018 U       | 0.018     | 0.02 U        | 0.017     | 0.17 U          | 0.17      | 0.19 U        | 0.19      | 1.9 U           | 0.38      |
| Endrin ketone              |          | 0.0037 U      | 0.0037    | 0.0036 U      | 0.0036    | 0.0035 U      | 0.0035    | 0.035 U         | 0.035     | 0.038 U       | 0.038     | 0.38 U          | 0.38      |
| Endrin aldehyde            |          | 0.0037 U      | 0.0037    | 0.0036 U      | 0.0036    | 0.0035 U      | 0.0035    | 0.035 U         | 0.035     | 0.038 U       | 0.038     | 0.38 U          | 0.38      |
| alpha-Chlordane            |          | 0.0018 U      | 0.0018    | 0.0018 U      | 0.0018    | 0.0052        | 0.0017    | 0.017 U         | 0.017     | 0.042         | 0.019     | 0.19 U          | 0.19      |
| gamma-Chlordane            |          | 0.0018 U      | 0.0018    | 0.0014 JP     | 0.0018    | 0.0035 P      | 0.0017    | 0.017 U         | 0.017     | 0.033 P       | 0.019     | 0.19 U          | 0.19      |
| Toxaphene                  | 0.1      | 0.18 U        | 0.18      | 0.18 U        | 0.18      | 0.17 U        | 0.17      | 1.7 U           | 1.7       | 1.9 U         | 1.9       | 19 U            | 19        |
| Aroclor-1016               | 0.49     | 0.037 U       | 0.037     | 0.036 U       | 0.036     | 0.035 U       | 0.035     | 0.35 U          | 0.35      | 0.38 U        | 0.38      | 3.8 U           | 3.8       |
| Aroclor-1221               | 0.49     | 0.073 U       | 0.073     | 0.072 U       | 0.072     | 0.07 U        | 0.07      | 0.7 U           | 0.7       | 0.77 U        | 0.77      | 7.7 U           | 7.7       |
| Aroclor-1232               | 0.49     | 0.037 U       | 0.037     | 0.036 U       | 0.036     | 0.035 U       | 0.035     | 0.35 U          | 0.35      | 0.38 U        | 0.38      | 3.8 U           | 3.8       |
| Aroclor-1242               | 0.49     | 0.037 U       | 0.037     | 0.036 U       | 0.036     | 0.035 U       | 0.035     | 0.35 U          | 0.35      | 0.38 U        | 0.38      | 3.8 U           | 3.8       |
| Aroclor-1248               | 0.49     | 0.037 U       | 0.037     | 0.036 U       | 0.036     | 0.2 P         | 0.035     | 0.25 JDP        | 0.35      | 0.38 U        | 0.38      | 3.8 U           | 3.8       |
| Aroclor-1254               | 0.49     | 0.037 U       | 0.037     | 0.036 U       | 0.036     | 0.035 U       | 0.035     | 0.35 U          | 0.35      | 0.38 U        | 0.38      | 3.8 U           | 3.8       |
| Aroclor-1260               | 0.49     | 0.037 U       | 0.037     | 0.036 U       | 0.036     | 0.035 U       | 0.035     | 0.35 U          | 0.35      | 0.38 U        | 0.38      | 3.8 U           | 3.8       |
| Method:TCL Pesticides/PCBs |          |               |           |               |           |               |           |                 |           |               |           |                 |           |

**MAIN POST  
SOIL BORING PESTICIDES/PCBS**

| Geographical Location      |          | M16           |           | M16             |           | M18          |           | M18            |           | B1          |           | B1          |           |
|----------------------------|----------|---------------|-----------|-----------------|-----------|--------------|-----------|----------------|-----------|-------------|-----------|-------------|-----------|
| Sample                     |          | MP16-SB01-A02 |           | MP16-SB01-A02DL |           | M18-SB06-A02 |           | M18-SB06-A02DL |           | B1-SB01-A01 |           | B1-SB01-A02 |           |
| Sample Type                |          |               |           |                 |           |              |           |                |           |             |           |             |           |
| Batch#                     |          | 9401G155      |           | 9401G155        |           | 9501G587     |           | 9501G587       |           | 9501G527    |           | 9501G527    |           |
| Prep#                      |          | 94GP1090      |           | 94GP1090        |           | 95GP0050     |           | 95GP0050       |           | 95GP0028    |           | 95GP0028    |           |
| RFW#                       |          | 002           |           | 002DL           |           | 006          |           | 006DL          |           | 001         |           | 002         |           |
| Sample Depth (bgs)         |          |               |           |                 |           |              |           |                |           |             |           |             |           |
| Dilution Factor            |          | 1.00          |           | 10.0            |           | 1.00         |           | 10.0           |           | 1.00        |           | 1.00        |           |
| Matrix                     |          | soil          |           | soil            |           | soil         |           | soil           |           | soil        |           | soil        |           |
| Units                      | mg/kg    | mg/kg         |           | mg/kg           |           | mg/kg        |           | mg/kg          |           | mg/kg       |           | mg/kg       |           |
| Sampling Date              |          | 12/15/94      |           | 12/15/94        |           | 1/11/95      |           | 1/11/95        |           | 1/9/95      |           | 1/9/95      |           |
| Analysis Date              |          | 1/3/95        |           | 1/3/95          |           | 2/2/95       |           | 2/2/95         |           | 1/18/95     |           | 1/18/95     |           |
| Analysis                   | Standard | Analytical    | Reporting | Analytical      | Reporting | Analytical   | Reporting | Analytical     | Reporting | Analytical  | Reporting | Analytical  | Reporting |
|                            |          | Result        | Limit     | Result          | Limit     | Result       | Limit     | Result         | Limit     | Result      | Limit     | Result      | Limit     |
| alpha-BHC                  |          | 0.0021 U      | 0.0021    | 0.021 U         | 0.021     | 0.0023 U     | 0.0023    | 0.023 U        | 0.023     | 0.0019 U    | 0.0019    | 0.0021 U    | 0.0021    |
| beta-BHC                   |          | 0.0021 U      | 0.0021    | 0.021 U         | 0.021     | 0.0023 U     | 0.0023    | 0.023 U        | 0.023     | 0.0019 U    | 0.0019    | 0.0021 U    | 0.0021    |
| delta-BHC                  |          | 0.0021 U      | 0.0021    | 0.021 U         | 0.021     | 0.0023 U     | 0.0023    | 0.023 U        | 0.023     | 0.0019 U    | 0.0019    | 0.0021 U    | 0.0021    |
| gamma-BHC (Lindane)        | 0.52     | 0.0021 U      | 0.0021    | 0.021 U         | 0.021     | 0.0023 U     | 0.0023    | 0.023 U        | 0.023     | 0.0019 U    | 0.0019    | 0.0021 U    | 0.0021    |
| Heptachlor                 | 0.15     | 0.0021 U      | 0.0021    | 0.021 U         | 0.021     | 0.0023 U     | 0.0023    | 0.023 U        | 0.023     | 0.0019 U    | 0.0019    | 0.0021 U    | 0.0021    |
| Aldrin                     | 0.04     | 0.0021 U      | 0.0021    | 0.021 U         | 0.021     | 0.0023 U     | 0.0023    | 0.023 U        | 0.023     | 0.0019 U    | 0.0019    | 0.0021 U    | 0.0021    |
| Heptachlor epoxide         |          | 0.0021 U      | 0.0021    | 0.021 U         | 0.021     | 0.03 P       | 0.0023    | .038 DP        | 0.023     | 0.0019 U    | 0.0019    | 0.0021 U    | 0.0021    |
| Endosulfan I               | 340      | 0.0021 U      | 0.0021    | 0.021 U         | 0.021     | 0.0023 U     | 0.0023    | 0.023 U        | 0.023     | 0.0019 U    | 0.0019    | 0.0021 U    | 0.0021    |
| Dieldrin                   | 0.042    | 0.0042 U      | 0.0042    | 0.042 U         | 0.042     | 0.0046 U     | 0.0046    | 0.046 U        | 0.046     | 0.0038 U    | 0.0038    | 0.0042 U    | 0.0042    |
| 4,4'-DDE                   | 2        | 0.1           | 0.0042    | .07 D           | 0.042     | 0.11         | 0.0046    | .077 D         | 0.046     | 0.0038 U    | 0.0038    | 0.0042 U    | 0.0042    |
| Endrin                     | 17       | 0.0042 U      | 0.0042    | 0.042 U         | 0.042     | 0.0046 U     | 0.0046    | 0.046 U        | 0.046     | 0.0038 U    | 0.0038    | 0.0042 U    | 0.0042    |
| Endosulfan II              | 340      | 0.0042 U      | 0.0042    | 0.042 U         | 0.042     | 0.0046 U     | 0.0046    | 0.046 U        | 0.046     | 0.0038 U    | 0.0038    | 0.0042 U    | 0.0042    |
| 4,4'-DDD                   | 3        | 0.2           | 0.0042    | .16 D           | 0.042     | 0.46 UX      | 0.0046    | 4.6 UX         | 0.046     | 0.0038 U    | 0.0038    | 0.0042 U    | 0.0042    |
| Endosulfan sulfate         |          | 0.0042 U      | 0.0042    | 0.042 U         | 0.042     | 0.0046 U     | 0.0046    | 0.046 U        | 0.046     | 0.0038 U    | 0.0038    | 0.0042 U    | 0.0042    |
| 4,4'-DDT                   | 2        | 0.072         | 0.0042    | .063 D          | 0.042     | 0.032        | 0.0046    | .038 JDP       | 0.046     | 0.0038 U    | 0.0038    | 0.0042 U    | 0.0042    |
| Methoxychlor               | 280      | 0.021 U       | 0.021     | 0.21 U          | 0.21      | 0.023 U      | 0.023     | 0.23 U         | 0.23      | 0.019 U     | 0.019     | 0.021 U     | 0.021     |
| Endrin ketone              |          | 0.0042 U      | 0.0042    | 0.042 U         | 0.042     | 0.0046 U     | 0.0046    | 0.046 U        | 0.046     | 0.0038 U    | 0.0038    | 0.0042 U    | 0.0042    |
| Endrin aldehyde            |          | 0.0042 U      | 0.0042    | 0.042 U         | 0.042     | 0.0046 U     | 0.0046    | 0.046 U        | 0.046     | 0.0038 U    | 0.0038    | 0.0042 U    | 0.0042    |
| alpha-Chlordane            |          | 0.0096        | 0.0021    | 0.021 U         | 0.021     | 0.0078       | 0.0023    | 0.023 U        | 0.023     | 0.0019 U    | 0.0019    | 0.0021 U    | 0.0021    |
| gamma-Chlordane            |          | 0.0088 P      | 0.0021    | 0.021 U         | 0.021     | 0.02 P       | 0.0023    | 0.023 U        | 0.023     | 0.0019 U    | 0.0019    | 0.0021 U    | 0.0021    |
| Toxaphene                  | 0.1      | 0.21 U        | 0.21      | 2.1 U           | 2.1       | 0.23 U       | 0.23      | 2.3 U          | 2.3       | 0.19 U      | 0.19      | 0.21 U      | 0.21      |
| Aroclor-1016               | 0.49     | 0.042 U       | 0.042     | 0.42 U          | 0.42      | 0.046 U      | 0.046     | 0.46 U         | 0.46      | 0.038 U     | 0.038     | 0.042 U     | 0.042     |
| Aroclor-1221               | 0.49     | 0.083 U       | 0.083     | 0.83 U          | 0.83      | 0.092 U      | 0.092     | 0.92 U         | 0.92      | 0.076 U     | 0.076     | 0.084 U     | 0.084     |
| Aroclor-1232               | 0.49     | 0.042 U       | 0.042     | 0.42 U          | 0.42      | 0.046 U      | 0.046     | 0.46 U         | 0.46      | 0.038 U     | 0.038     | 0.042 U     | 0.042     |
| Aroclor-1242               | 0.49     | 0.042 U       | 0.042     | 0.42 U          | 0.42      | 0.046 U      | 0.046     | 0.46 U         | 0.46      | 0.038 U     | 0.038     | 0.042 U     | 0.042     |
| Aroclor-1248               | 0.49     | 0.042 U       | 0.042     | 0.42 U          | 0.42      | 0.046 U      | 0.046     | 0.46 U         | 0.46      | 0.038 U     | 0.038     | 0.042 U     | 0.042     |
| Aroclor-1254               | 0.49     | 0.042 U       | 0.042     | 0.42 U          | 0.42      | 0.046 U      | 0.046     | 0.46 U         | 0.46      | 0.038 U     | 0.038     | 0.042 U     | 0.042     |
| Aroclor-1260               | 0.49     | 0.042 U       | 0.042     | 0.42 U          | 0.42      | 0.046 U      | 0.046     | 0.46 U         | 0.46      | 0.038 U     | 0.038     | 0.042 U     | 0.042     |
| Method:TCL Pesticides/PCBs |          |               |           |                 |           |              |           |                |           |             |           |             |           |

**MAIN POST  
SOIL BORING PESTICIDES/PCBS**

| Geographical Location       |          | B2          |           | B2          |           | B3          |           | B3          |           | B4          |           | B4            |           |
|-----------------------------|----------|-------------|-----------|-------------|-----------|-------------|-----------|-------------|-----------|-------------|-----------|---------------|-----------|
| Sample                      |          | B2-SB01-A01 |           | B2-SB01-A02 |           | B3-SB01-A01 |           | B3-SB01-A03 |           | B4-SB01-A01 |           | B4-SB01-A01DL |           |
| Sample Type                 |          |             |           |             |           |             |           |             |           |             |           |               |           |
| Batch#                      |          | 9501G500    |           | 9501G500    |           | 9501G500    |           | 9501G500    |           | 9501G527    |           | 9501G527      |           |
| Prep#                       |          | 95GP0028    |           | 95GP0028    |           | 95GP0028    |           | 95GP0028    |           | 95GP0028    |           | 95GP0028      |           |
| RFW#                        |          | 001         |           | 002         |           | 003         |           | 004         |           | 003         |           | 003           |           |
| Sample Depth (bgs)          |          |             |           |             |           |             |           |             |           |             |           |               |           |
| Dilution Factor             |          | 1.00        |           | 1.00        |           | 1.00        |           | 1.00        |           | 1.00        |           | 10.00         |           |
| Matrix                      |          | soil        |           | soil        |           | soil        |           | soil        |           | soil        |           | soil          |           |
| Units                       | mg/kg    | mg/kg       |           | mg/kg       |           | mg/kg       |           | mg/kg       |           | mg/kg       |           | mg/kg         |           |
| Sampling Date               |          | 1/6/95      |           | 1/6/95      |           | 1/6/95      |           | 1/6/95      |           | 1/9/95      |           | 1/9/95        |           |
| Analysis Date               |          | 1/18/95     |           | 1/18/95     |           | 1/18/95     |           | 1/18/95     |           | 1/18/95     |           | 1/18/95       |           |
| Analysis                    | Standard | Analytical  | Reporting | Analytical  | Reporting | Analytical  | Reporting | Analytical  | Reporting | Analytical  | Reporting | Analytical    | Reporting |
|                             |          | Result      | Limit     | Result      | Limit     | Result      | Limit     | Result      | Limit     | Result      | Limit     | Result        | Limit     |
| alpha-BHC                   |          | 0.002 U     | 0.002     | 0.002 U     | 0.002     | 0.0018 U    | 0.0018    | 0.0023 U    | 0.0023    | 0.0018 U    | 0.0018    | 0.018 U       | 0.018     |
| beta-BHC                    |          | 0.002 U     | 0.002     | 0.002 U     | 0.002     | 0.0018 U    | 0.0018    | 0.0023 U    | 0.0023    | 0.0018 U    | 0.0018    | 0.018 U       | 0.018     |
| delta-BHC                   |          | 0.002 U     | 0.002     | 0.002 U     | 0.002     | 0.0018 U    | 0.0018    | 0.0023 U    | 0.0023    | 0.0018 U    | 0.0018    | 0.018 U       | 0.018     |
| gamma-BHC (Lindane)         | 0.52     | 0.002 U     | 0.002     | 0.002 U     | 0.002     | 0.0018 U    | 0.0018    | 0.0023 U    | 0.0023    | 0.0018 U    | 0.0018    | 0.018 U       | 0.018     |
| Heptachlor                  | 0.15     | 0.002 U     | 0.002     | 0.002 U     | 0.002     | 0.0018 U    | 0.0018    | 0.0023 U    | 0.0023    | 0.0018 U    | 0.0018    | 0.018 U       | 0.018     |
| Aldrin                      | 0.04     | 0.002 U     | 0.002     | 0.002 U     | 0.002     | 0.0018 U    | 0.0018    | 0.0023 U    | 0.0023    | 0.0018 U    | 0.0018    | 0.018 U       | 0.018     |
| Heptachlor epoxide          |          | 0.002 U     | 0.002     | 0.002 U     | 0.002     | 0.0018 U    | 0.0018    | 0.0023 U    | 0.0023    | 0.0018 U    | 0.0018    | 0.037 U       | 0.037     |
| Endosulfan I                | 340      | 0.002 U     | 0.002     | 0.002 U     | 0.002     | 0.0018 U    | 0.0018    | 0.0023 U    | 0.0023    | 0.0018 U    | 0.0018    | 0.037 U       | 0.037     |
| Dieldrin                    | 0.042    | 0.004 U     | 0.004     | 0.0041 U    | 0.0041    | 0.0037 U    | 0.0037    | 0.0045 U    | 0.0045    | 0.0037 U    | 0.0037    | 0.037 U       | 0.037     |
| 4,4'-DDE                    | 2        | 0.004 U     | 0.004     | 0.0041 U    | 0.0041    | 0.0048 P    | 0.0037    | 0.0045 U    | 0.0045    | 0.086 P     | 0.0037    | .097 D        | 0.037     |
| Endrin                      | 17       | 0.004 U     | 0.004     | 0.0041 U    | 0.0041    | 0.0037 U    | 0.0037    | 0.0045 U    | 0.0045    | 0.0037 U    | 0.0037    | 0.037 U       | 0.037     |
| Endosulfan II               | 340      | 0.004 U     | 0.004     | 0.0041 U    | 0.0041    | 0.0037 U    | 0.0037    | 0.0045 U    | 0.0045    | 0.0037 U    | 0.0037    | 0.037 U       | 0.037     |
| 4,4'-DDD                    | 3        | 0.0028 JP   | 0.004     | 0.0041 U    | 0.0041    | 0.0037 U    | 0.0037    | 0.0045 U    | 0.0045    | 0.0096 P    | 0.0037    | 0.037 U       | 0.037     |
| Endosulfan sulfate          |          | 0.004 U     | 0.004     | 0.0041 U    | 0.0041    | 0.0037 U    | 0.0037    | 0.0045 U    | 0.0045    | 0.0037 U    | 0.0037    | 0.037 U       | 0.037     |
| 4,4'-DDT                    | 2        | 0.0028 JP   | 0.004     | 0.0041 U    | 0.0041    | 0.0033 JP   | 0.0037    | 0.0045 U    | 0.0045    | 0.1 P       | 0.0037    | .11 D         | 0.037     |
| Methoxychlor                | 280      | 0.02 U      | 0.02      | 0.02 U      | 0.02      | 0.018 U     | 0.018     | 0.023 U     | 0.023     | 0.018 U     | 0.018     | 0.18 U        | 0.18      |
| Endrin ketone               |          | 0.004 U     | 0.004     | 0.0041 U    | 0.0041    | 0.0037 U    | 0.0037    | 0.0045 U    | 0.0045    | 0.0037 U    | 0.0037    | 0.037 U       | 0.037     |
| Endrin aldehyde             |          | 0.004 U     | 0.004     | 0.0041 U    | 0.0041    | 0.0037 U    | 0.0037    | 0.0045 U    | 0.0045    | 0.0037 U    | 0.0037    | 0.037 U       | 0.037     |
| alpha-Chlordane             |          | 0.002 U     | 0.002     | 0.002 U     | 0.002     | 0.0018 U    | 0.0018    | 0.0023 U    | 0.0023    | 0.0018 U    | 0.0018    | 0.018 U       | 0.018     |
| gamma-Chlordane             |          | 0.002 U     | 0.002     | 0.002 U     | 0.002     | 0.0018 U    | 0.0018    | 0.0023 U    | 0.0023    | 0.0018 U    | 0.0018    | 0.018 U       | 0.018     |
| Toxaphene                   | 0.1      | 0.2 U       | 0.2       | 0.2 U       | 0.2       | 0.18 U      | 0.18      | 0.23 U      | 0.23      | 0.18 U      | 0.18      | 1.8 U         | 1.8       |
| Aroclor-1016                | 0.49     | 0.04 U      | 0.04      | 0.041 U     | 0.041     | 0.04 U      | 0.037     | 0.045 U     | 0.045     | 0.037 U     | 0.037     | 0.37 U        | 0.37      |
| Aroclor-1221                | 0.49     | 0.08 U      | 0.08      | 0.082 U     | 0.082     | 0.07 U      | 0.074     | 0.09 U      | 0.09      | 0.074 U     | 0.074     | 0.74 U        | 0.74      |
| Aroclor-1232                | 0.49     | 0.04 U      | 0.04      | 0.041 U     | 0.041     | 0.04 U      | 0.037     | 0.045 U     | 0.045     | 0.037 U     | 0.037     | 0.37 U        | 0.37      |
| Aroclor-1242                | 0.49     | 0.04 U      | 0.04      | 0.041 U     | 0.041     | 0.04 U      | 0.037     | 0.045 U     | 0.045     | 0.037 U     | 0.037     | 0.37 U        | 0.37      |
| Aroclor-1248                | 0.49     | 0.04 U      | 0.04      | 0.041 U     | 0.041     | 0.04 U      | 0.037     | 0.045 U     | 0.045     | 0.037 U     | 0.037     | 0.37 U        | 0.37      |
| Aroclor-1254                | 0.49     | 0.04 U      | 0.04      | 0.041 U     | 0.041     | 0.04 U      | 0.037     | 0.045 U     | 0.045     | 0.037 U     | 0.037     | 0.37 U        | 0.37      |
| Aroclor-1260                | 0.49     | 0.04 U      | 0.04      | 0.041 U     | 0.041     | 0.04 U      | 0.037     | 0.045 U     | 0.045     | 0.037 U     | 0.037     | 0.37 U        | 0.37      |
| Method: TCL Pesticides/PCBs |          |             |           |             |           |             |           |             |           |             |           |               |           |



**MAIN POST**  
**SOIL BORING PESTICIDES/PCBS**

| Geographical Location       |          | B4          |           | B4          |           | B4            |           | B5          |           | B5          |           |
|-----------------------------|----------|-------------|-----------|-------------|-----------|---------------|-----------|-------------|-----------|-------------|-----------|
| Sample                      |          | B4-SB01-A02 |           | B4-SB01-C01 |           | B4-SB01-C01DL |           | B5-SB01-A01 |           | B5-SB01-A02 |           |
| Sample Type                 |          |             |           | Duplicate   |           | Duplicate     |           |             |           |             |           |
| Batch#                      |          | 9501G527    |           | 9501G527    |           | 9501G527      |           | 9501G587    |           | 9501G587    |           |
| Prep#                       |          | 95GP0028    |           | 95GP0028    |           | 95GP0028      |           | 95GP0050    |           | 95GP0050    |           |
| RFW#                        |          | 004         |           | 005         |           | 005           |           | 007         |           | 008         |           |
| Sample Depth (bgs)          |          |             |           |             |           |               |           |             |           |             |           |
| Dilution Factor             |          | 1.00        |           | 1.00        |           | 5.00          |           | 1.00        |           | 1.00        |           |
| Matrix                      |          | soil        |           | soil        |           | soil          |           | soil        |           | soil        |           |
| Units                       | mg/kg    | mg/kg       |           | mg/kg       |           | mg/kg         |           | mg/kg       |           | mg/kg       |           |
| Sampling Date               |          | 1/9/95      |           | 1/9/95      |           | 1/9/95        |           | 1/11/95     |           | 1/11/95     |           |
| Analysis Date               |          | 1/18/95     |           | 1/18/95     |           | 1/18/95       |           | 2/3/95      |           | 2/3/95      |           |
| Analysis                    | Standard | Analytical  | Reporting | Analytical  | Reporting | Analytical    | Reporting | Analytical  | Reporting | Analytical  | Reporting |
|                             |          | Result      | Limit     | Result      | Limit     | Result        | Limit     | Result      | Limit     | Result      | Limit     |
| alpha-BHC                   |          | 0.0022 U    | 0.0022    | 0.0018 U    | 0.0018    | 0.0092 U      | 0.0092    | 0.002 U     | 0.002     | 0.002 U     | 0.002     |
| beta-BHC                    |          | 0.0022 U    | 0.0022    | 0.0018 U    | 0.0018    | 0.0092 U      | 0.0092    | 0.002 U     | 0.002     | 0.002 U     | 0.002     |
| delta-BHC                   |          | 0.0022 U    | 0.0022    | 0.0018 U    | 0.0018    | 0.0092 U      | 0.0092    | 0.002 U     | 0.002     | 0.002 U     | 0.002     |
| gamma-BHC (Lindane)         | 0.52     | 0.0022 U    | 0.0022    | 0.0018 U    | 0.0018    | 0.0092 U      | 0.0092    | 0.002 U     | 0.002     | 0.002 U     | 0.002     |
| Heptachlor                  | 0.15     | 0.0022 U    | 0.0022    | 0.0018 U    | 0.0018    | 0.0092 U      | 0.0092    | 0.002 U     | 0.002     | 0.002 U     | 0.002     |
| Aldrin                      | 0.04     | 0.0022 U    | 0.0022    | 0.0018 U    | 0.0018    | 0.0092 U      | 0.0092    | 0.002 U     | 0.002     | 0.002 U     | 0.002     |
| Heptachlor epoxide          |          | 0.0022 U    | 0.0022    | 0.0018 U    | 0.0018    | 0.0092 U      | 0.0092    | 0.002 U     | 0.002     | 0.002 U     | 0.002     |
| Endosulfan I                | 340      | 0.0022 U    | 0.0022    | 0.0018 U    | 0.0018    | 0.0092 U      | 0.0092    | 0.002 U     | 0.002     | 0.002 U     | 0.002     |
| Dieldrin                    | 0.042    | 0.0044 U    | 0.0044    | 0.0037 U    | 0.0037    | 0.018 U       | 0.018     | 0.0039 U    | 0.0039    | 0.004 U     | 0.004     |
| 4,4'-DDE                    | 2        | 0.0044 U    | 0.0044    | 0.072 P     | 0.0037    | .085 D        | 0.018     | 0.028       | 0.0039    | 0.004 U     | 0.004     |
| Endrin                      | 17       | 0.0044 U    | 0.0044    | 0.0037 U    | 0.0037    | 0.018 U       | 0.018     | 0.0039 U    | 0.0039    | 0.004 U     | 0.004     |
| Endosulfan II               | 340      | 0.0044 U    | 0.0044    | 0.0037 U    | 0.0037    | 0.018 U       | 0.018     | 0.0039 U    | 0.0039    | 0.004 U     | 0.004     |
| 4,4'-DDD                    | 3        | 0.0044 U    | 0.0044    | 0.0037 U    | 0.0037    | 0.018 U       | 0.018     | 0.0039 U    | 0.0039    | 0.004 U     | 0.004     |
| Endosulfan sulfate          |          | 0.0044 U    | 0.0044    | 0.0037 U    | 0.0037    | 0.018 U       | 0.018     | 0.0039 U    | 0.0039    | 0.004 U     | 0.004     |
| 4,4'-DDT                    | 2        | 0.0044 U    | 0.0044    | 0.078 P     | 0.0037    | .092 DP       | 0.018     | 0.043       | 0.0039    | 0.004 U     | 0.004     |
| Methoxychlor                | 280      | 0.022 U     | 0.022     | 0.018 U     | 0.018     | 0.092 U       | 0.092     | 0.02 U      | 0.02      | 0.02 U      | 0.02      |
| Endrin ketone               |          | 0.0044 U    | 0.0044    | 0.0037 U    | 0.0037    | 0.018 U       | 0.018     | 0.0039 U    | 0.0039    | 0.004 U     | 0.004     |
| Endrin aldehyde             |          | 0.0044 U    | 0.0044    | 0.0037 U    | 0.0037    | 0.018 U       | 0.018     | 0.0039 U    | 0.0039    | 0.004 U     | 0.004     |
| alpha-Chlordane             |          | 0.0022 U    | 0.0022    | 0.0018 U    | 0.0018    | 0.0092 U      | 0.0092    | 0.002 U     | 0.002     | 0.002 U     | 0.002     |
| gamma-Chlordane             |          | 0.0022 U    | 0.0022    | 0.0018 U    | 0.0018    | 0.0092 U      | 0.0092    | 0.002 U     | 0.002     | 0.002 U     | 0.002     |
| Toxaphene                   | 0.1      | 0.22 U      | 0.22      | 0.18 U      | 0.18      | 0.92 U        | 0.92      | 0.2 U       | 0.2       | 0.2 U       | 0.2       |
| Aroclor-1016                | 0.49     | 0.044 U     | 0.044     | 0.037 U     | 0.037     | 0.18 U        | 0.18      | 0.039 U     | 0.039     | 0.04 U      | 0.04      |
| Aroclor-1221                | 0.49     | 0.087 U     | 0.087     | 0.074 U     | 0.074     | 0.37 U        | 0.37      | 0.078 U     | 0.078     | 0.079 U     | 0.079     |
| Aroclor-1232                | 0.49     | 0.044 U     | 0.044     | 0.037 U     | 0.037     | 0.18 U        | 0.18      | 0.039 U     | 0.039     | 0.04 U      | 0.04      |
| Aroclor-1242                | 0.49     | 0.044 U     | 0.044     | 0.037 U     | 0.037     | 0.18 U        | 0.18      | 0.039 U     | 0.039     | 0.04 U      | 0.04      |
| Aroclor-1248                | 0.49     | 0.044 U     | 0.044     | 0.037 U     | 0.037     | 0.18 U        | 0.18      | 0.039 U     | 0.039     | 0.04 U      | 0.04      |
| Aroclor-1254                | 0.49     | 0.044 U     | 0.044     | 0.037 U     | 0.037     | 0.18 U        | 0.18      | 0.039 U     | 0.039     | 0.04 U      | 0.04      |
| Aroclor-1260                | 0.49     | 0.044 U     | 0.044     | 0.037 U     | 0.037     | 0.18 U        | 0.18      | 0.039 U     | 0.039     | 0.04 U      | 0.04      |
| Method: TCL Pesticides/PCBs |          |             |           |             |           |               |           |             |           |             |           |

**MAIN POST  
GROUNDWATER VOLATILES**

| Geographical Location      |          |      | M2            |      | M2            |      | M2            |      | M2            |      | M2            |      | M2            |      | M3            |      |
|----------------------------|----------|------|---------------|------|---------------|------|---------------|------|---------------|------|---------------|------|---------------|------|---------------|------|
| Sample                     |          |      | MP02-MW01-A01 |      | MP02-MW01-A02 |      | MP02-MW02-A01 |      | MP02-MW02-A02 |      | MP02-MW03-A01 |      | MP02-MW03-A02 |      | MP03-MW04-A01 |      |
| Sample Type                |          |      |               |      |               |      |               |      |               |      |               |      |               |      |               |      |
| Batch#                     |          |      | 9502G197      |      | 9503G642      |      | 9502G197      |      | 9503G642      |      | 9502G197      |      | 9503G642      |      | 9502G219      |      |
| Prep#                      |          |      | 95GVC034      |      | 95GVC054      |      | 95GVF029      |      | 95GVC054      |      | 95GVF029      |      | 95GVC054      |      | 95GVC030      |      |
| RFW#                       |          |      | 001           |      | 001           |      | 003           |      | 003           |      | 005           |      | 005           |      | 001           |      |
| Dilution Factor            |          |      | 1.00          |      | 1.00          |      | 1.00          |      | 1.00          |      | 1.00          |      | 1.00          |      | 1.00          |      |
| Matrix                     |          |      | water         |      | water         |      | water         |      | water         |      | water         |      | water         |      | water         |      |
| Units                      | ug/l     | ug/l | ug/l          |      | ug/l          |      | ug/l          |      | ug/l          |      | ug/l          |      | ug/l          |      | ug/l          |      |
| Sampling Date              |          |      | 2/15/95       |      | 3/8/95        |      | 2/15/95       |      | 3/8/95        |      | 2/15/95       |      | 3/8/95        |      | 2/16/95       |      |
| Analysis Date              |          |      | 2/22/95       |      | 3/10/95       |      | 2/20/95       |      | 3/10/95       |      | 2/21/95       |      | 3/10/95       |      | 2/21/95       |      |
| Analysis                   | Standard | MDL  | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL |
|                            |          |      | Result        |      | Result        |      | Result        |      | Result        |      | Result        |      | Result        |      | Result        |      |
| Chloromethane              |          | 7.3  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Bromomethane               |          | 6.7  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Vinyl Chloride             | 5        | 7.9  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Chloroethane               |          | 9.1  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Methylene Chloride         | 2        | 2.7  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Acetone                    | 700      | 6.9  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Carbon Disulfide           |          | 4.4  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| 1,1-Dichloroethene         |          | 4.9  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| 1,1-Dichloroethane         | 70       | 3.0  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| 1,2-Dichloroethene (total) |          | 4.4  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Chloroform                 | 6        | 2.9  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| 1,2-Dichloroethane         | 2        | 2.4  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| 2-Butanone                 |          | 4.1  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| 1,1,1-Trichloroethane      | 30       | 1.7  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Carbon Tetrachloride       | 2        | 1.5  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Bromodichloromethane       | 1        | 2.0  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| 1,2-Dichloropropane        | 1        | 1.7  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| cis-1,3-Dichloropropene    | 0.2      | 3.0  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Trichloroethene            | 1        | 2.0  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Dibromochloromethane       | 10       | 2.4  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| 1,1,2-Trichloroethane      | 3        | 4.3  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Benzene                    | 1        | 3.3  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| trans-1,3-Dichloropropene  | 0.2      | 2.4  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Bromoform                  | 4        | 3.1  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| 4-Methyl-2-pentanone       | 400      | 5.5  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| 2-Hexanone                 |          | 3.9  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Tetrachloroethene          | 1        | 4.0  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| 1,1,2,2-Tetrachloroethane  | 2        | 4.2  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Toluene                    | 1000     | 2.7  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Chlorobenzene              | 4        | 2.7  | 10 U          | 10   | 25            | 10   | 33            | 10   | 25            | 10   | 10            | 10   | 10            | 10   | 10 U          | 10   |
| Ethylbenzene               | 700      | 3.1  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Styrene                    | 100      | 3.8  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Xylene (total)             | 40       | 3.8  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Total Est. Conc. of TIC.   |          |      |               |      | 20 J          |      | 10 J          |      | 20 J          |      |               |      |               |      |               |      |
| Method: TCL Volatiles      |          |      |               |      |               |      |               |      |               |      |               |      |               |      |               |      |

**MAIN POST  
GROUNDWATER VOLATILES**

| Geographical Location      |          |      | M3            |      | M3            |      | M3            |      | M3            |      | M3            |      | M4            |      | M4            |      |
|----------------------------|----------|------|---------------|------|---------------|------|---------------|------|---------------|------|---------------|------|---------------|------|---------------|------|
| Sample                     |          |      | MP03-MW04-A02 |      | MP03-MW05-A01 |      | MP03-MW05-A02 |      | MP03-MW06-A01 |      | MP03-MW06-A02 |      | MP04-MW07-A01 |      | MP04-MW07-A02 |      |
| Sample Type                |          |      |               |      |               |      |               |      |               |      |               |      |               |      |               |      |
| Batch#                     |          |      | 9503G642      |      | 9502G219      |      | 9503G660      |      | 9502G219      |      | 9503G660      |      | 9502G219      |      | 9503G660      |      |
| Prep#                      |          |      | 95GVC054      |      | 95GVC030      |      | 95GVC055      |      | 95GVC030      |      | 95GVC055      |      | 95GVC030      |      | 95GVC055      |      |
| RFW#                       |          |      | 009           |      | 003           |      | 003           |      | 005           |      | 001           |      | 007           |      | 005           |      |
| Dilution Factor            |          |      | 1.00          |      | 1.00          |      | 1.00          |      | 1.00          |      | 1.00          |      | 1.00          |      | 1.00          |      |
| Matrix                     |          |      | water         |      | water         |      | water         |      | water         |      | water         |      | water         |      | water         |      |
| Units                      | ug/l     | ug/l | ug/l          |      | ug/l          |      | ug/l          |      | ug/l          |      | ug/l          |      | ug/l          |      | ug/l          |      |
| Sampling Date              |          |      | 3/8/95        |      | 2/16/95       |      | 3/9/95        |      | 2/16/95       |      | 3/9/95        |      | 2/16/95       |      | 3/9/95        |      |
| Analysis Date              |          |      | 3/10/95       |      | 2/21/95       |      | 3/10/95       |      | 2/21/95       |      | 3/10/95       |      | 2/21/95       |      | 3/10/95       |      |
| Analysis                   | Standard | MDL  | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL |
|                            |          |      | Result        |      | Result        |      | Result        |      | Result        |      | Result        |      | Result        |      | Result        |      |
| Chloromethane              |          | 7.3  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Bromomethane               |          | 6.7  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Vinyl Chloride             | 5        | 7.9  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Chloroethane               |          | 9.1  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Methylene Chloride         | 2        | 2.7  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Acetone                    | 700      | 6.9  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Carbon Disulfide           |          | 4.4  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| 1,1-Dichloroethene         |          | 4.9  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| 1,1-Dichloroethane         | 70       | 3.0  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| 1,2-Dichloroethene (total) |          | 4.4  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Chloroform                 | 6        | 2.9  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| 1,2-Dichloroethane         | 2        | 2.4  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| 2-Butanone                 |          | 4.1  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| 1,1,1-Trichloroethane      | 30       | 1.7  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Carbon Tetrachloride       | 2        | 1.5  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Bromodichloromethane       | 1        | 2.0  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| 1,2-Dichloropropane        | 1        | 1.7  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| cis-1,3-Dichloropropene    | 0.2      | 3.0  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Trichloroethene            | 1        | 2.0  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Dibromochloromethane       | 10       | 2.4  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| 1,1,2-Trichloroethane      | 3        | 4.3  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Benzene                    | 1        | 3.3  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| trans-1,3-Dichloropropene  | 0.2      | 2.4  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Bromoform                  | 4        | 3.1  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| 4-Methyl-2-pentanone       | 400      | 5.5  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| 2-Hexanone                 |          | 3.9  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Tetrachloroethene          | 1        | 4.0  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| 1,1,2,2-Tetrachloroethane  | 2        | 4.2  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Toluene                    | 1000     | 2.7  | 10 U          | 10   | 4 J           | 10   | 10 U          | 10   | 3 J           | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Chlorobenzene              | 4        | 2.7  | 10 U          | 10   | 10 U          | 10   | 5 J           | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Ethylbenzene               | 700      | 3.1  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Styrene                    | 100      | 3.8  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Xylene (total)             | 40       | 3.8  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Total Est. Conc. of TIC.   |          |      |               |      | 30 J          |      | 30 J          |      | 30 J          |      | 30 J          |      |               |      |               |      |
| Method:TCL Volatiles       |          |      |               |      |               |      |               |      |               |      |               |      |               |      |               |      |

**MAIN POST  
GROUNDWATER VOLATILES**

| Geographical Location      |          | M4            |            | M4            |            | M4            |            | M4                  |            | M4            |            | M4            |            | M4            |            | M4   |      |
|----------------------------|----------|---------------|------------|---------------|------------|---------------|------------|---------------------|------------|---------------|------------|---------------|------------|---------------|------------|------|------|
| Sample                     |          | MP04-MW07-C01 |            | MP04-MW07-C02 |            | MP04-MW07-D01 |            | MP04-MW07-E01       |            | MP04-MW08-A01 |            | MP04-MW08-A02 |            | MP04-MW09-A01 |            |      |      |
| Sample Type                |          | Duplicate     |            | Duplicate     |            | Trip Blank    |            | Field Rinsate Blank |            |               |            |               |            |               |            |      |      |
| Batch#                     |          | 9502G219      |            | 9503G660      |            | 9502G219      |            | 9502G219            |            | 9502G219      |            | 9503G642      |            | 9502G219      |            |      |      |
| Prep#                      |          | 95GVC030      |            | 95GVC055      |            | 95GVC030      |            | 95GVC031            |            | 95GVC031      |            | 95GVC054      |            | 95GVC031      |            |      |      |
| RFW#                       |          | 009           |            | 007           |            | 011           |            | 012                 |            | 014           |            | 007           |            | 016           |            |      |      |
| Dilution Factor            |          | 1.00          |            | 1.00          |            | 1.00          |            | 1.00                |            | 1.00          |            | 1.00          |            | 1.00          |            |      |      |
| Matrix                     |          | water         |            | water         |            | water         |            | water               |            | water         |            | water         |            | water         |            |      |      |
| Units                      |          | ug/l          | ug/l       | ug/l          | ug/l       | ug/l          | ug/l       | ug/l                | ug/l       | ug/l          | ug/l       | ug/l          | ug/l       | ug/l          | ug/l       | ug/l | ug/l |
| Sampling Date              |          | 2/16/95       |            | 3/9/95        |            | 2/16/95       |            | 2/16/95             |            | 2/16/95       |            | 3/8/95        |            | 2/16/95       |            |      |      |
| Analysis Date              |          | 2/21/95       |            | 3/10/95       |            | 2/21/95       |            | 2/21/95             |            | 2/21/95       |            | 3/10/95       |            | 2/21/95       |            |      |      |
| Analysis                   | Standard | MDL           | Analytical | CRQL          | Analytical | CRQL          | Analytical | CRQL                | Analytical | CRQL          | Analytical | CRQL          | Analytical | CRQL          | Analytical | CRQL |      |
|                            |          |               | Result     |               | Result     |               | Result     |                     | Result     |               | Result     |               | Result     |               | Result     |      |      |
| Chloromethane              |          | 7.3           | 10 U       | 10            | 10 U       | 10            | 10 U       | 10                  | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10   | 10   |
| Bromomethane               |          | 6.7           | 10 U       | 10            | 10 U       | 10            | 10 U       | 10                  | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10   | 10   |
| Vinyl Chloride             | 5        | 7.9           | 10 U       | 10            | 10 U       | 10            | 10 U       | 10                  | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10   | 10   |
| Chloroethane               |          | 9.1           | 10 U       | 10            | 10 U       | 10            | 10 U       | 10                  | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10   | 10   |
| Methylene Chloride         | 2        | 2.7           | 10 U       | 10            | 10 U       | 10            | 10 U       | 10                  | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10   | 10   |
| Acetone                    | 700      | 6.9           | 10 U       | 10            | 10 U       | 10            | 13         | 10                  | 10         | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10   | 10   |
| Carbon Disulfide           |          | 4.4           | 10 U       | 10            | 10 U       | 10            | 10 U       | 10                  | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10   | 10   |
| 1,1-Dichloroethene         |          | 4.9           | 10 U       | 10            | 10 U       | 10            | 10 U       | 10                  | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10   | 10   |
| 1,1-Dichloroethane         | 70       | 3.0           | 10 U       | 10            | 10 U       | 10            | 10 U       | 10                  | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10   | 10   |
| 1,2-Dichloroethene (total) |          | 4.4           | 10 U       | 10            | 10 U       | 10            | 10 U       | 10                  | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10   | 10   |
| Chloroform                 | 6        | 2.9           | 10 U       | 10            | 10 U       | 10            | 10 U       | 10                  | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10   | 10   |
| 1,2-Dichloroethane         | 2        | 2.4           | 10 U       | 10            | 10 U       | 10            | 10 U       | 10                  | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10   | 10   |
| 2-Butanone                 |          | 4.1           | 10 U       | 10            | 10 U       | 10            | 27         | 10                  | 27         | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10   | 10   |
| 1,1,1-Trichloroethane      | 30       | 1.7           | 10 U       | 10            | 10 U       | 10            | 10 U       | 10                  | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10   | 10   |
| Carbon Tetrachloride       | 2        | 1.5           | 10 U       | 10            | 10 U       | 10            | 10 U       | 10                  | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10   | 10   |
| Bromodichloromethane       | 1        | 2.0           | 10 U       | 10            | 10 U       | 10            | 10 U       | 10                  | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10   | 10   |
| 1,2-Dichloropropane        | 1        | 1.7           | 10 U       | 10            | 10 U       | 10            | 10 U       | 10                  | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10   | 10   |
| cis-1,3-Dichloropropene    | 0.2      | 3.0           | 10 U       | 10            | 10 U       | 10            | 10 U       | 10                  | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10   | 10   |
| Trichloroethene            | 1        | 2.0           | 10 U       | 10            | 10 U       | 10            | 10 U       | 10                  | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10   | 10   |
| Dibromochloromethane       | 10       | 2.4           | 10 U       | 10            | 10 U       | 10            | 10 U       | 10                  | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10   | 10   |
| 1,1,2-Trichloroethane      | 3        | 4.3           | 10 U       | 10            | 10 U       | 10            | 10 U       | 10                  | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10   | 10   |
| Benzene                    | 1        | 3.3           | 10 U       | 10            | 10 U       | 10            | 10 U       | 10                  | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10   | 10   |
| trans-1,3-Dichloropropene  | 0.2      | 2.4           | 10 U       | 10            | 10 U       | 10            | 10 U       | 10                  | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10   | 10   |
| Bromoform                  | 4        | 3.1           | 10 U       | 10            | 10 U       | 10            | 10 U       | 10                  | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10   | 10   |
| 4-Methyl-2-pentanone       | 400      | 5.5           | 10 U       | 10            | 10 U       | 10            | 10 U       | 10                  | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10   | 10   |
| 2-Hexanone                 |          | 3.9           | 10 U       | 10            | 10 U       | 10            | 10 U       | 10                  | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10   | 10   |
| Tetrachloroethene          | 1        | 4.0           | 10 U       | 10            | 10 U       | 10            | 10 U       | 10                  | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10   | 10   |
| 1,1,2,2-Tetrachloroethane  | 2        | 4.2           | 10 U       | 10            | 10 U       | 10            | 10 U       | 10                  | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10   | 10   |
| Toluene                    | 1000     | 2.7           | 10 U       | 10            | 10 U       | 10            | 10 U       | 10                  | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10   | 10   |
| Chlorobenzene              | 4        | 2.7           | 10 U       | 10            | 10 U       | 10            | 10 U       | 10                  | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10   | 10   |
| Ethylbenzene               | 700      | 3.1           | 10 U       | 10            | 10 U       | 10            | 10 U       | 10                  | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10   | 10   |
| Styrene                    | 100      | 3.8           | 10 U       | 10            | 10 U       | 10            | 10 U       | 10                  | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10   | 10   |
| Xylene (total)             | 40       | 3.8           | 10 U       | 10            | 10 U       | 10            | 10 U       | 10                  | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10   | 10   |
| Total Est. Conc. of TIC.   |          |               |            |               |            |               |            |                     |            |               |            |               |            |               |            |      |      |
| Method:TCL Volatiles       |          |               |            |               |            |               |            |                     |            |               |            |               |            |               |            |      |      |

**MAIN POST  
GROUNDWATER VOLATILES**

| Geographical Location      |          |      | M4            |      | M5            |      | M5            |      | M5            |      | M5            |      | M5            |      | M5                  |      |
|----------------------------|----------|------|---------------|------|---------------|------|---------------|------|---------------|------|---------------|------|---------------|------|---------------------|------|
| Sample                     |          |      | MP04-MW09-A02 |      | MP05-MW10-A01 |      | MP05-MW10-A02 |      | MP05-MW11-A01 |      | MP05-MW11-A02 |      | MP05-MW11-D02 |      | MP05-MW11-E02       |      |
| Sample Type                |          |      |               |      |               |      |               |      |               |      |               |      | Trip Blank    |      | Field Rinsate Blank |      |
| Batch#                     |          |      | 9503G660      |      | 9502G238      |      | 9503G660      |      | 9502G238      |      | 9503G660      |      | 9503G660      |      | 9503G660            |      |
| Prep#                      |          |      | 95GVC055      |      | 95GVC032      |      | 95GVC055      |      | 95GVC032      |      | 95GVC055      |      | 95GVC055      |      | 95GVC055            |      |
| RFW#                       |          |      | 009           |      | 010           |      | 011           |      | 012           |      | 013           |      | 015           |      | 016                 |      |
| Dilution Factor            |          |      | 1.00          |      | 1.00          |      | 1.00          |      | 1.00          |      | 1.00          |      | 1.00          |      | 1.00                |      |
| Matrix                     |          |      | water         |      | water         |      | water         |      | water         |      | water         |      | water         |      | water               |      |
| Units                      | ug/l     | ug/l | ug/l          |      | ug/l          |      | ug/l          |      | ug/l          |      | ug/l          |      | ug/l          |      | ug/l                |      |
| Sampling Date              |          |      | 3/9/95        |      | 2/17/95       |      | 3/9/95        |      | 2/17/95       |      | 3/9/95        |      | 3/9/95        |      | 3/9/95              |      |
| Analysis Date              |          |      | 3/11/95       |      | 2/22/95       |      | 3/11/95       |      | 2/22/95       |      | 3/11/95       |      | 3/11/95       |      | 3/11/95             |      |
| Analysis                   | Standard | MDL  | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical          | CRQL |
|                            |          |      | Result        |      | Result        |      | Result        |      | Result        |      | Result        |      | Result        |      | Result              |      |
| Chloromethane              |          | 7.3  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   |
| Bromomethane               |          | 6.7  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   |
| Vinyl Chloride             | 5        | 7.9  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   |
| Chloroethane               |          | 9.1  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   |
| Methylene Chloride         | 2        | 2.7  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   |
| Acetone                    | 700      | 6.9  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   |
| Carbon Disulfide           |          | 4.4  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   |
| 1,1-Dichloroethene         |          | 4.9  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   |
| 1,1-Dichloroethane         | 70       | 3.0  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   |
| 1,2-Dichloroethene (total) |          | 4.4  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   |
| Chloroform                 | 6        | 2.9  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 33                  | 10   |
| 1,2-Dichloroethane         | 2        | 2.4  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   |
| 2-Butanone                 |          | 4.1  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   |
| 1,1,1-Trichloroethane      | 30       | 1.7  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   |
| Carbon Tetrachloride       | 2        | 1.5  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   |
| Bromodichloromethane       | 1        | 2.0  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   |
| 1,2-Dichloropropane        | 1        | 1.7  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   |
| cis-1,3-Dichloropropene    | 0.2      | 3.0  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   |
| Trichloroethene            | 1        | 2.0  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   |
| Dibromochloromethane       | 10       | 2.4  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   |
| 1,1,2-Trichloroethane      | 3        | 4.3  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   |
| Benzene                    | 1        | 3.3  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   |
| trans-1,3-Dichloropropene  | 0.2      | 2.4  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   |
| Bromoform                  | 4        | 3.1  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   |
| 4-Methyl-2-pentanone       | 400      | 5.5  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   |
| 2-Hexanone                 |          | 3.9  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   |
| Tetrachloroethene          | 1        | 4.0  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 130           | 10   | 88            | 10   | 10 U          | 10   | 10 U                | 10   |
| 1,1,2,2-Tetrachloroethane  | 2        | 4.2  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   |
| Toluene                    | 1000     | 2.7  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   |
| Chlorobenzene              | 4        | 2.7  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   |
| Ethylbenzene               | 700      | 3.1  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   |
| Styrene                    | 100      | 3.8  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   |
| Xylene (total)             | 40       | 3.8  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   |
| Total Est. Conc. of TIC.   |          |      |               |      |               |      |               |      |               |      |               |      |               |      |                     |      |
| Method:TCL Volatiles       |          |      |               |      |               |      |               |      |               |      |               |      |               |      |                     |      |

**MAIN POST  
GROUNDWATER VOLATILES**

| Geographical Location      |          |      | M8            |      | M8            |      | M8            |      | M8            |      | M8                  |      | M8            |      |
|----------------------------|----------|------|---------------|------|---------------|------|---------------|------|---------------|------|---------------------|------|---------------|------|
| Sample                     |          |      | MP08-MW12-A01 |      | MP08-MW12-A02 |      | MP08-MW12-C02 |      | MP08-MW12-D02 |      | MP08-MW12-E02       |      | MP08-MW13-A01 |      |
| Sample Type                |          |      |               |      |               |      | Duplicate     |      | Trip Blank    |      | Field Rinsate Blank |      |               |      |
| Batch#                     |          |      | 9502G238      |      | 9503G767      |      | 9503G767      |      | 9503G767      |      | 9503G767            |      | 9502G403      |      |
| Prep#                      |          |      | 95GVC033      |      | 95GVE072      |      | 95GVE072      |      | 95GVE072      |      | 95GVE072            |      | 95GVC041      |      |
| RFW#                       |          |      | 014           |      | 001           |      | 003           |      | 005           |      | 006                 |      | 001           |      |
| Dilution Factor            |          |      | 1.00          |      | 1.00          |      | 1.00          |      | 1.00          |      | 1.00                |      | 1.00          |      |
| Matrix                     |          |      | water         |      | water         |      | water         |      | water         |      | water               |      | water         |      |
| Units                      | ug/l     | ug/l | ug/l          |      | ug/l          |      | ug/l          |      | ug/l          |      | ug/l                |      | ug/l          |      |
| Sampling Date              |          |      | 2/17/95       |      | 3/15/95       |      | 3/15/95       |      | 3/15/95       |      | 3/15/95             |      | 2/22/95       |      |
| Analysis Date              |          |      | 2/22/95       |      | 3/20/95       |      | 3/20/95       |      | 3/20/95       |      | 3/20/95             |      | 3/1/95        |      |
| Analysis                   | Standard | MDL  | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical          | CRQL | Analytical    | CRQL |
|                            |          |      | Result        |      | Result        |      | Result        |      | Result        |      | Result              |      | Result        |      |
| Chloromethane              |          | 7.3  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 10 U          | 10   |
| Bromomethane               |          | 6.7  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 10 U          | 10   |
| Vinyl Chloride             | 5        | 7.9  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 10 U          | 10   |
| Chloroethane               |          | 9.1  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 10 U          | 10   |
| Methylene Chloride         | 2        | 2.7  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 10 U          | 10   |
| Acetone                    | 700      | 6.9  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 10 U          | 10   |
| Carbon Disulfide           |          | 4.4  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 10 U          | 10   |
| 1,1-Dichloroethene         |          | 4.9  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 10 U          | 10   |
| 1,1-Dichloroethane         | 70       | 3.0  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 10 U          | 10   |
| 1,2-Dichloroethene (total) |          | 4.4  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 10 U          | 10   |
| Chloroform                 | 6        | 2.9  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 10 U          | 10   |
| 1,2-Dichloroethane         | 2        | 2.4  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 10 U          | 10   |
| 2-Butanone                 |          | 4.1  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 10 U          | 10   |
| 1,1,1-Trichloroethane      | 30       | 1.7  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 10 U          | 10   |
| Carbon Tetrachloride       | 2        | 1.5  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 10 U          | 10   |
| Bromodichloromethane       | 1        | 2.0  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 10 U          | 10   |
| 1,2-Dichloropropane        | 1        | 1.7  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 10 U          | 10   |
| cis-1,3-Dichloropropene    | 0.2      | 3.0  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 10 U          | 10   |
| Trichloroethene            | 1        | 2.0  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 10 U          | 10   |
| Dibromochloromethane       | 10       | 2.4  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 10 U          | 10   |
| 1,1,2-Trichloroethane      | 3        | 4.3  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 10 U          | 10   |
| Benzene                    | 1        | 3.3  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 10 U          | 10   |
| trans-1,3-Dichloropropene  | 0.2      | 2.4  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 10 U          | 10   |
| Bromoform                  | 4        | 3.1  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 10 U          | 10   |
| 4-Methyl-2-pentanone       | 400      | 5.5  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 10 U          | 10   |
| 2-Hexanone                 |          | 3.9  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 10 U          | 10   |
| Tetrachloroethene          | 1        | 4.0  | 40            | 10   | 52            | 10   | 54            | 10   | 10 U          | 10   | 10 U                | 10   | 10 U          | 10   |
| 1,1,2,2-Tetrachloroethane  | 2        | 4.2  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 10 U          | 10   |
| Toluene                    | 1000     | 2.7  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 10 U          | 10   |
| Chlorobenzene              | 4        | 2.7  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 10 U          | 10   |
| Ethylbenzene               | 700      | 3.1  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 10 U          | 10   |
| Styrene                    | 100      | 3.8  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 10 U          | 10   |
| Xylene (total)             | 40       | 3.8  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 10 U          | 10   |
| Total Est. Conc. of TIC.   |          |      |               |      |               |      |               |      |               |      |                     |      |               |      |
| Method: TCL Volatiles      |          |      |               |      |               |      |               |      |               |      |                     |      |               |      |

**MAIN POST  
GROUNDWATER VOLATILES**

| Geographical Location      |          |      | M8            |      | M8            |      | M8            |      | M8            |      | M8            |      | M8            |      | M8            |      |
|----------------------------|----------|------|---------------|------|---------------|------|---------------|------|---------------|------|---------------|------|---------------|------|---------------|------|
| Sample                     |          |      | MP08-MW13-A02 |      | MP08-MW14-A01 |      | MP08-MW14-A02 |      | MP08-MW15-A01 |      | MP08-MW15-A02 |      | MP08-MW15-C01 |      | MP08-MW15-D01 |      |
| Sample Type                |          |      |               |      |               |      |               |      |               |      |               |      | Duplicate     |      | Trip Blank    |      |
| Batch#                     |          |      | 9503G767      |      | 9502G219      |      | 9503G767      |      | 9502G403      |      | 9503G767      |      | 9502G403      |      | 9502G403      |      |
| Prep#                      |          |      | 95GVE072      |      | 95GVC031      |      | 95GVE072      |      | 95GVC041      |      | 95GVE072      |      | 95GVC042      |      | 95GVC042      |      |
| RFW#                       |          |      | 008           |      | 018           |      | 010           |      | 003           |      | 012           |      | 005           |      | 007           |      |
| Dilution Factor            |          |      | 1.00          |      | 1.00          |      | 1.00          |      | 1.00          |      | 1.00          |      | 1.00          |      | 1.00          |      |
| Matrix                     |          |      | water         |      | water         |      | water         |      | water         |      | water         |      | water         |      | water         |      |
| Units                      | ug/l     | ug/l | ug/l          |      | ug/l          |      | ug/l          |      | ug/l          |      | ug/l          |      | ug/l          |      | ug/l          |      |
| Sampling Date              |          |      | 3/15/95       |      | 2/16/95       |      | 3/15/95       |      | 2/22/95       |      | 3/15/95       |      | 2/22/95       |      | 2/22/95       |      |
| Analysis Date              |          |      | 2/21/95       |      | 2/21/95       |      | 3/20/95       |      | 3/1/95        |      | 3/20/95       |      | 3/1/95        |      | 3/1/95        |      |
| Analysis                   | Standard | MDL  | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL |
|                            |          |      | Result        |      | Result        |      | Result        |      | Result        |      | Result        |      | Result        |      | Result        |      |
| Chloromethane              |          | 7.3  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Bromomethane               |          | 6.7  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Vinyl Chloride             | 5        | 7.9  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Chloroethane               |          | 9.1  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Methylene Chloride         | 2        | 2.7  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Acetone                    | 700      | 6.9  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 20            | 10   |
| Carbon Disulfide           |          | 4.4  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| 1,1-Dichloroethene         |          | 4.9  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| 1,1-Dichloroethane         | 70       | 3.0  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| 1,2-Dichloroethene (total) |          | 4.4  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Chloroform                 | 6        | 2.9  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| 1,2-Dichloroethane         | 2        | 2.4  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| 2-Butanone                 |          | 4.1  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 37            | 10   |
| 1,1,1-Trichloroethane      | 30       | 1.7  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Carbon Tetrachloride       | 2        | 1.5  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Bromodichloromethane       | 1        | 2.0  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| 1,2-Dichloropropane        | 1        | 1.7  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| cis-1,3-Dichloropropene    | 0.2      | 3.0  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Trichloroethene            | 1        | 2.0  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Dibromochloromethane       | 10       | 2.4  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| 1,1,2-Trichloroethane      | 3        | 4.3  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Benzene                    | 1        | 3.3  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 3 J           | 10   | 5 J           | 10   | 4 J           | 10   | 10 U          | 10   |
| trans-1,3-Dichloropropene  | 0.2      | 2.4  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Bromoform                  | 4        | 3.1  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| 4-Methyl-2-pentanone       | 400      | 5.5  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| 2-Hexanone                 |          | 3.9  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Tetrachloroethene          | 1        | 4.0  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| 1,1,2,2-Tetrachloroethane  | 2        | 4.2  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Toluene                    | 1000     | 2.7  | 10 U          | 10   | 4 J           | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Chlorobenzene              | 4        | 2.7  | 10 U          | 10   | 10 U          | 10   | 8 J           | 10   | 33            | 10   | 39            | 10   | 36            | 10   | 10 U          | 10   |
| Ethylbenzene               | 700      | 3.1  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Styrene                    | 100      | 3.8  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Xylene (total)             | 40       | 3.8  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Total Est. Conc. of TIC.   |          |      |               |      |               |      | 5 J           |      | 10 J          |      | 15 J          |      | 10 J          |      |               |      |
| Method: TCL Volatiles      |          |      |               |      |               |      |               |      |               |      |               |      |               |      |               |      |

**MAIN POST  
GROUNDWATER VOLATILES**

| Geographical Location      |          | M8                  |            | M12           |            | M12           |            | M12           |            | M12           |            | M12           |            | M12           |            | M12  |      |
|----------------------------|----------|---------------------|------------|---------------|------------|---------------|------------|---------------|------------|---------------|------------|---------------|------------|---------------|------------|------|------|
| Sample                     |          | MP08-MW15-E01       |            | MP12-MW16-A01 |            | MP12-MW16-A02 |            | MP12-MW17-A01 |            | MP12-MW17-A02 |            | MP12-MW18-A01 |            | MP12-MW18-A02 |            |      |      |
| Sample Type                |          | Field Rinsate Blank |            |               |            |               |            |               |            |               |            |               |            |               |            |      |      |
| Batch#                     |          | 9502G403            |            | 9502G299      |            | 9503G681      |            | 9502G299      |            | 9503G681      |            | 9502G299      |            | 9503G681      |            |      |      |
| Prep#                      |          | 95GVC042            |            | 95GVC034      |            | 95GVE063      |            | 95GVC034      |            | 95GVE063      |            | 95GVC034      |            | 95GVE063      |            |      |      |
| RFW#                       |          | 008                 |            | 001           |            | 001           |            | 003           |            | 003           |            | 005           |            | 005           |            |      |      |
| Dilution Factor            |          | 1.00                |            | 1.00          |            | 1.00          |            | 1.00          |            | 1.00          |            | 1.00          |            | 1.00          |            |      |      |
| Matrix                     |          | water               |            | water         |            | water         |            | water         |            | water         |            | water         |            | water         |            |      |      |
| Units                      |          | ug/l                | ug/l       | ug/l          | ug/l       | ug/l          | ug/l       | ug/l          | ug/l       | ug/l          | ug/l       | ug/l          | ug/l       | ug/l          | ug/l       | ug/l | ug/l |
| Sampling Date              |          | 2/22/95             |            | 2/20/95       |            | 3/10/95       |            | 2/20/95       |            | 3/10/95       |            | 2/20/95       |            | 3/10/95       |            |      |      |
| Analysis Date              |          | 3/1/95              |            | 2/23/95       |            | 3/14/95       |            | 2/23/95       |            | 3/14/95       |            | 2/23/95       |            | 3/14/95       |            |      |      |
| Analysis                   | Standard | MDL                 | Analytical | CRQL          | Analytical | CRQL          | Analytical | CRQL          | Analytical | CRQL          | Analytical | CRQL          | Analytical | CRQL          | Analytical | CRQL |      |
|                            |          |                     | Result     |               | Result     |               | Result     |               | Result     |               | Result     |               | Result     |               | Result     |      |      |
| Chloromethane              |          | 7.3                 | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10   | 10   |
| Bromomethane               |          | 6.7                 | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10   | 10   |
| Vinyl Chloride             | 5        | 7.9                 | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10   | 10   |
| Chloroethane               |          | 9.1                 | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10   | 10   |
| Methylene Chloride         | 2        | 2.7                 | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10   | 10   |
| Acetone                    | 700      | 6.9                 | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10   | 10   |
| Carbon Disulfide           |          | 4.4                 | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10   | 10   |
| 1,1-Dichloroethene         |          | 4.9                 | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10   | 10   |
| 1,1-Dichloroethane         | 70       | 3.0                 | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10   | 10   |
| 1,2-Dichloroethene (total) |          | 4.4                 | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10   | 10   |
| Chloroform                 | 6        | 2.9                 | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10   | 10   |
| 1,2-Dichloroethane         | 2        | 2.4                 | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10   | 10   |
| 2-Butanone                 |          | 4.1                 | 38         | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10   | 10   |
| 1,1,1-Trichloroethane      | 30       | 1.7                 | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10   | 10   |
| Carbon Tetrachloride       | 2        | 1.5                 | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10   | 10   |
| Bromodichloromethane       | 1        | 2.0                 | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10   | 10   |
| 1,2-Dichloropropane        | 1        | 1.7                 | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10   | 10   |
| cis-1,3-Dichloropropene    | 0.2      | 3.0                 | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10   | 10   |
| Trichloroethene            | 1        | 2.0                 | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10   | 10   |
| Dibromochloromethane       | 10       | 2.4                 | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10   | 10   |
| 1,1,2-Trichloroethane      | 3        | 4.3                 | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10   | 10   |
| Benzene                    | 1        | 3.3                 | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10   | 10   |
| trans-1,3-Dichloropropene  | 0.2      | 2.4                 | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10   | 10   |
| Bromoform                  | 4        | 3.1                 | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10   | 10   |
| 4-Methyl-2-pentanone       | 400      | 5.5                 | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10   | 10   |
| 2-Hexanone                 |          | 3.9                 | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10   | 10   |
| Tetrachloroethene          | 1        | 4.0                 | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10   | 10   |
| 1,1,2,2-Tetrachloroethane  | 2        | 4.2                 | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10   | 10   |
| Toluene                    | 1000     | 2.7                 | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10   | 10   |
| Chlorobenzene              | 4        | 2.7                 | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10   | 10   |
| Ethylbenzene               | 700      | 3.1                 | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10   | 10   |
| Styrene                    | 100      | 3.8                 | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10   | 10   |
| Xylene (total)             | 40       | 3.8                 | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10            | 10 U       | 10   | 10   |
| Total Est. Conc. of TIC.   |          |                     |            |               |            |               |            |               |            |               |            |               |            |               |            |      |      |
| Method: TCL Volatiles      |          |                     |            |               |            |               |            |               |            |               |            |               |            |               |            |      |      |



**MAIN POST  
GROUNDWATER VOLATILES**

| Geographical Location      |          |      | M14           |      | M14           |      | M14           |      | M14           |      | M14           |      | M14                 |      |
|----------------------------|----------|------|---------------|------|---------------|------|---------------|------|---------------|------|---------------|------|---------------------|------|
| Sample                     |          |      | MP14-MW19-A01 |      | MP14-MW19-A02 |      | MP14-MW20-A01 |      | MP14-MW20-A02 |      | MP14-MW20-D02 |      | MP14-MW20-E02       |      |
| Sample Type                |          |      |               |      |               |      |               |      |               |      | Trip Blank    |      | Field Rinsate Blank |      |
| Batch#                     |          |      | 9502G299      |      | 9503G681      |      | 9502G403      |      | 9503G722      |      | 9503G767      |      | 9503G722            |      |
| Prep#                      |          |      | 95GVC034      |      | 95GVE063      |      | 95GVC042      |      | 95GVE071      |      | 95GVE072      |      | 95GVE071            |      |
| RFW#                       |          |      | 007           |      | 007           |      | 010           |      | 1             |      | 014           |      | 3                   |      |
| Dilution Factor            |          |      | 1.00          |      | 1.00          |      | 1.00          |      | 1.00          |      | 1.00          |      | 1.00                |      |
| Matrix                     |          |      | water         |      | water         |      | water         |      | water         |      | water         |      | water               |      |
| Units                      | ug/l     | ug/l | ug/l          |      | ug/l          |      | ug/l          |      | ug/l          |      | ug/l          |      | ug/l                |      |
| Sampling Date              |          |      | 2/20/95       |      | 3/10/95       |      | 2/22/95       |      | 3/13/95       |      | 3/15/95       |      | 3/13/95             |      |
| Analysis Date              |          |      | 2/23/95       |      | 3/14/95       |      | 3/1/95        |      | 3/19/95       |      | 3/21/95       |      | 3/19/95             |      |
| Analysis                   | Standard | MDL  | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical          | CRQL |
|                            |          |      | Result        |      | Result        |      | Result        |      | Result        |      | Result        |      | Result              |      |
| Chloromethane              |          | 7.3  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   |
| Bromomethane               |          | 6.7  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   |
| Vinyl Chloride             | 5        | 7.9  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   |
| Chloroethane               |          | 9.1  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   |
| Methylene Chloride         | 2        | 2.7  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   |
| Acetone                    | 700      | 6.9  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   |
| Carbon Disulfide           |          | 4.4  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   |
| 1,1-Dichloroethene         |          | 4.9  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   |
| 1,1-Dichloroethane         | 70       | 3.0  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   |
| 1,2-Dichloroethene (total) |          | 4.4  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   |
| Chloroform                 | 6        | 2.9  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   |
| 1,2-Dichloroethane         | 2        | 2.4  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   |
| 2-Butanone                 |          | 4.1  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   |
| 1,1,1-Trichloroethane      | 30       | 1.7  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   |
| Carbon Tetrachloride       | 2        | 1.5  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   |
| Bromodichloromethane       | 1        | 2.0  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   |
| 1,2-Dichloropropane        | 1        | 1.7  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   |
| cis-1,3-Dichloropropene    | 0.2      | 3.0  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   |
| Trichloroethene            | 1        | 2.0  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   |
| Dibromochloromethane       | 10       | 2.4  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   |
| 1,1,2-Trichloroethane      | 3        | 4.3  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   |
| Benzene                    | 1        | 3.3  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   |
| trans-1,3-Dichloropropene  | 0.2      | 2.4  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   |
| Bromoform                  | 4        | 3.1  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   |
| 4-Methyl-2-pentanone       | 400      | 5.5  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   |
| 2-Hexanone                 |          | 3.9  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   |
| Tetrachloroethene          | 1        | 4.0  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   |
| 1,1,2,2-Tetrachloroethane  | 2        | 4.2  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   |
| Toluene                    | 1000     | 2.7  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   |
| Chlorobenzene              | 4        | 2.7  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   |
| Ethylbenzene               | 700      | 3.1  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   |
| Styrene                    | 100      | 3.8  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   |
| Xylene (total)             | 40       | 3.8  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   |
| Total Est. Conc. of TIC.   |          |      |               |      |               |      |               |      |               |      |               |      |                     |      |
| Method:TCL Volatiles       |          |      |               |      |               |      |               |      |               |      |               |      |                     |      |

**MAIN POST  
GROUNDWATER VOLATILES**

| Geographical Location      |          |      | M14           |      | M14           |      | M16           |      | M16           |      | M18           |      | M18           |      | M18           |      |
|----------------------------|----------|------|---------------|------|---------------|------|---------------|------|---------------|------|---------------|------|---------------|------|---------------|------|
| Sample                     |          |      | MP14-MW21-A01 |      | MP14-MW21-A02 |      | MP16-MW22-A01 |      | MP16-MW22-A02 |      | MP18-MW03-A01 |      | MP18-MW03-A02 |      | MP18-MW03-D01 |      |
| Sample Type                |          |      |               |      |               |      |               |      |               |      |               |      |               |      | Trip Blank    |      |
| Batch#                     |          |      | 9502G403      |      | 9503G660      |      | 9502G238      |      | 9503G660      |      | 9505G825      |      | 9505G139      |      | 9505G825      |      |
| Prep#                      |          |      | 95GVC042      |      | 95GVC055      |      | 95GVC033      |      | 95GVC055      |      | 95GVC137      |      | 95GVB148      |      | 95GVC137      |      |
| RFW#                       |          |      | 012           |      | 019           |      | 016           |      | 018           |      | 001           |      | 001           |      | 003           |      |
| Dilution Factor            |          |      | 1.00          |      | 1.00          |      | 1.00          |      | 1.00          |      | 1.00          |      | 1.00          |      | 1.00          |      |
| Matrix                     |          |      | water         |      | water         |      | water         |      | water         |      | water         |      | water         |      | water         |      |
| Units                      | ug/l     | ug/l | ug/l          |      | ug/l          |      | ug/l          |      | ug/l          |      | ug/l          |      | ug/l          |      | ug/l          |      |
| Sampling Date              |          |      | 2/22/95       |      | 3/9/95        |      | 2/17/95       |      | 3/9/95        |      | 5/10/95       |      | 5/27/95       |      | 5/10/95       |      |
| Analysis Date              |          |      | 3/1/95        |      | 3/1/95        |      | 2/22/95       |      | 3/11/95       |      | 5/20/95       |      | 6/1/95        |      | 5/20/95       |      |
| Analysis                   | Standard | MDL  | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL |
|                            |          |      | Result        |      | Result        |      | Result        |      | Result        |      | Result        |      | Result        |      | Result        |      |
| Chloromethane              |          | 7.3  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Bromomethane               |          | 6.7  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Vinyl Chloride             | 5        | 7.9  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Chloroethane               |          | 9.1  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Methylene Chloride         | 2        | 2.7  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Acetone                    | 700      | 6.9  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Carbon Disulfide           |          | 4.4  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| 1,1-Dichloroethene         |          | 4.9  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| 1,1-Dichloroethane         | 70       | 3.0  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| 1,2-Dichloroethene (total) |          | 4.4  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Chloroform                 | 6        | 2.9  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| 1,2-Dichloroethane         | 2        | 2.4  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| 2-Butanone                 |          | 4.1  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| 1,1,1-Trichloroethane      | 30       | 1.7  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Carbon Tetrachloride       | 2        | 1.5  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Bromodichloromethane       | 1        | 2.0  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| 1,2-Dichloropropane        | 1        | 1.7  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| cis-1,3-Dichloropropene    | 0.2      | 3.0  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Trichloroethene            | 1        | 2.0  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Dibromochloromethane       | 10       | 2.4  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| 1,1,2-Trichloroethane      | 3        | 4.3  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Benzene                    | 1        | 3.3  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| trans-1,3-Dichloropropene  | 0.2      | 2.4  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Bromoform                  | 4        | 3.1  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| 4-Methyl-2-pentanone       | 400      | 5.5  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| 2-Hexanone                 |          | 3.9  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Tetrachloroethene          | 1        | 4.0  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| 1,1,2,2-Tetrachloroethane  | 2        | 4.2  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Toluene                    | 1000     | 2.7  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Chlorobenzene              | 4        | 2.7  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Ethylbenzene               | 700      | 3.1  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Styrene                    | 100      | 3.8  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Xylene (total)             | 40       | 3.8  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Total Est. Conc. of TIC.   |          |      |               |      |               |      |               |      |               |      |               |      |               |      |               |      |
| Method: TCL Volatiles      |          |      |               |      |               |      |               |      |               |      |               |      |               |      |               |      |

**MAIN POST  
GROUNDWATER VOLATILES**

| Geographical Location      |          |      | M18                 |      | M18           |      | M18           |      | M18           |      | M18           |      | M18           |      |
|----------------------------|----------|------|---------------------|------|---------------|------|---------------|------|---------------|------|---------------|------|---------------|------|
| Sample                     |          |      | MP18-MW03-E01       |      | MP18-MW24-A01 |      | MP18-MW24-A02 |      | MP18-MW24-C02 |      | MP18-MW24-D01 |      | MP18-MW24-D02 |      |
| Sample Type                |          |      | Field Rinsate Blank |      |               |      |               |      | Duplicate     |      | Trip Blank    |      | Trip Blank    |      |
| Batch#                     |          |      | 9505G825            |      | 9502G238      |      | 9503G681      |      | 9503G681      |      | 9502G238      |      | 9503G681      |      |
| Prep#                      |          |      | 95GVC137            |      | 95GVC032      |      | 95GVE063      |      | 95GVE063      |      | 95GVC031      |      | 95GVE063      |      |
| RFW#                       |          |      | 004                 |      | 001           |      | 009           |      | 011           |      | 003           |      | 013           |      |
| Dilution Factor            |          |      | 1.00                |      | 1.00          |      | 1.00          |      | 1.00          |      | 1.00          |      | 1.00          |      |
| Matrix                     |          |      | water               |      | water         |      | water         |      | water         |      | water         |      | water         |      |
| Units                      | ug/l     | ug/l | ug/l                |      | ug/l          |      | ug/l          |      | ug/l          |      | ug/l          |      | ug/l          |      |
| Sampling Date              |          |      | 5/10/95             |      | 2/17/95       |      | 3/10/95       |      | 3/10/95       |      | 2/17/95       |      | 3/10/95       |      |
| Analysis Date              |          |      | 5/20/95             |      | 2/21/95       |      | 3/14/95       |      | 3/14/95       |      | 2/21/95       |      | 3/14/95       |      |
| Analysis                   | Standard | MDL  | Analytical          | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL |
|                            |          |      | Result              |      | Result        |      | Result        |      | Result        |      | Result        |      | Result        |      |
| Chloromethane              |          | 7.3  | 10 U                | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Bromomethane               |          | 6.7  | 10 U                | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Vinyl Chloride             | 5        | 7.9  | 10 U                | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Chloroethane               |          | 9.1  | 10 U                | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Methylene Chloride         | 2        | 2.7  | 10 U                | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Acetone                    | 700      | 6.9  | 10 U                | 10   | 12            | 10   | 7 J           | 10   | 8 J           | 10   | 10 U          | 10   | 10 U          | 10   |
| Carbon Disulfide           |          | 4.4  | 10 U                | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| 1,1-Dichloroethene         |          | 4.9  | 10 U                | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| 1,1-Dichloroethane         | 70       | 3.0  | 10 U                | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| 1,2-Dichloroethene (total) |          | 4.4  | 10 U                | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Chloroform                 | 6        | 2.9  | 10 U                | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| 1,2-Dichloroethane         | 2        | 2.4  | 10 U                | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| 2-Butanone                 |          | 4.1  | 10 U                | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 23            | 10   | 10 U          | 10   |
| 1,1,1-Trichloroethane      | 30       | 1.7  | 10 U                | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Carbon Tetrachloride       | 2        | 1.5  | 10 U                | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Bromodichloromethane       | 1        | 2.0  | 10 U                | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| 1,2-Dichloropropane        | 1        | 1.7  | 10 U                | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| cis-1,3-Dichloropropene    | 0.2      | 3.0  | 10 U                | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Trichloroethene            | 1        | 2.0  | 10 U                | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Dibromochloromethane       | 10       | 2.4  | 10 U                | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| 1,1,2-Trichloroethane      | 3        | 4.3  | 10 U                | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Benzene                    | 1        | 3.3  | 10 U                | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| trans-1,3-Dichloropropene  | 0.2      | 2.4  | 10 U                | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Bromoform                  | 4        | 3.1  | 10 U                | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| 4-Methyl-2-pentanone       | 400      | 5.5  | 10 U                | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| 2-Hexanone                 |          | 3.9  | 10 U                | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Tetrachloroethene          | 1        | 4.0  | 10 U                | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| 1,1,2,2-Tetrachloroethane  | 2        | 4.2  | 10 U                | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Toluene                    | 1000     | 2.7  | 10 U                | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Chlorobenzene              | 4        | 2.7  | 10 U                | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Ethylbenzene               | 700      | 3.1  | 10 U                | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Styrene                    | 100      | 3.8  | 10 U                | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Xylene (total)             | 40       | 3.8  | 10 U                | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Total Est. Conc. of TIC.   |          |      |                     |      |               |      |               |      |               |      |               |      |               |      |
| Method:TCL Volatiles       |          |      |                     |      |               |      |               |      |               |      |               |      |               |      |

**MAIN POST  
GROUNDWATER VOLATILES**

| Geographical Location      |          |      | M18                 |      | M18                 |      | M18           |      | M18           |      | M18           |      | B1           |      |
|----------------------------|----------|------|---------------------|------|---------------------|------|---------------|------|---------------|------|---------------|------|--------------|------|
| Sample                     |          |      | MP18-MW24-E01       |      | MP18-MW24-E02       |      | MP18-MW25-A01 |      | MP18-MW25-A02 |      | MP18-MW25-C01 |      | B1-MW01B-A01 |      |
| Sample Type                |          |      | Field Rinsate Blank |      | Field Rinsate Blank |      |               |      |               |      | Duplicate     |      |              |      |
| Batch#                     |          |      | 9502G238            |      | 9503G681            |      | 9502G238      |      | 9503G681      |      | 9502G238      |      | 9502G169     |      |
| Prep#                      |          |      | 95GVC031            |      | 95GVE063            |      | 95GVC031      |      | 95GVE063      |      | 95GVC032      |      | 95GVC028     |      |
| RFW#                       |          |      | 004                 |      | 014                 |      | 006           |      | 016           |      | 008           |      | 001          |      |
| Dilution Factor            |          |      | 1.00                |      | 1.00                |      | 1.00          |      | 1.00          |      | 1.00          |      | 1.00         |      |
| Matrix                     |          |      | water               |      | water               |      | water         |      | water         |      | water         |      | water        |      |
| Units                      | ug/l     | ug/l | ug/l                |      | ug/l                |      | ug/l          |      | ug/l          |      | ug/l          |      | ug/l         |      |
| Sampling Date              |          |      | 2/17/95             |      | 3/10/95             |      | 2/17/95       |      | 3/10/95       |      | 2/17/95       |      | 2/14/95      |      |
| Analysis Date              |          |      | 2/21/95             |      | 3/14/95             |      | 2/21/95       |      | 3/14/95       |      | 2/22/95       |      | 2/19/95      |      |
| Analysis                   | Standard | MDL  | Analytical          | CRQL | Analytical          | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical   | CRQL |
|                            |          |      | Result              |      | Result              |      | Result        |      | Result        |      | Result        |      | Result       |      |
| Chloromethane              |          | 7.3  | 10 U                | 10   | 10 U                | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U         | 10   |
| Bromomethane               |          | 6.7  | 10 U                | 10   | 10 U                | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U         | 10   |
| Vinyl Chloride             | 5        | 7.9  | 10 U                | 10   | 10 U                | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U         | 10   |
| Chloroethane               |          | 9.1  | 10 U                | 10   | 10 U                | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U         | 10   |
| Methylene Chloride         | 2        | 2.7  | 10 U                | 10   | 10 U                | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U         | 10   |
| Acetone                    | 700      | 6.9  | 10 U                | 10   | 10 U                | 10   | 10            | 10   | 15            | 10   | 10 U          | 10   | 10 U         | 10   |
| Carbon Disulfide           |          | 4.4  | 10 U                | 10   | 10 U                | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U         | 10   |
| 1,1-Dichloroethene         |          | 4.9  | 10 U                | 10   | 10 U                | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U         | 10   |
| 1,1-Dichloroethane         | 70       | 3.0  | 10 U                | 10   | 10 U                | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U         | 10   |
| 1,2-Dichloroethene (total) |          | 4.4  | 10 U                | 10   | 10 U                | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U         | 10   |
| Chloroform                 | 6        | 2.9  | 10 U                | 10   | 10 U                | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U         | 10   |
| 1,2-Dichloroethane         | 2        | 2.4  | 10 U                | 10   | 10 U                | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U         | 10   |
| 2-Butanone                 |          | 4.1  | 21                  | 10   | 10 U                | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U         | 10   |
| 1,1,1-Trichloroethane      | 30       | 1.7  | 10 U                | 10   | 10 U                | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U         | 10   |
| Carbon Tetrachloride       | 2        | 1.5  | 10 U                | 10   | 10 U                | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U         | 10   |
| Bromodichloromethane       | 1        | 2.0  | 10 U                | 10   | 10 U                | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U         | 10   |
| 1,2-Dichloropropane        | 1        | 1.7  | 10 U                | 10   | 10 U                | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U         | 10   |
| cis-1,3-Dichloropropene    | 0.2      | 3.0  | 10 U                | 10   | 10 U                | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U         | 10   |
| Trichloroethene            | 1        | 2.0  | 10 U                | 10   | 10 U                | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U         | 10   |
| Dibromochloromethane       | 10       | 2.4  | 10 U                | 10   | 10 U                | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U         | 10   |
| 1,1,2-Trichloroethane      | 3        | 4.3  | 10 U                | 10   | 10 U                | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U         | 10   |
| Benzene                    | 1        | 3.3  | 10 U                | 10   | 10 U                | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U         | 10   |
| trans-1,3-Dichloropropene  | 0.2      | 2.4  | 10 U                | 10   | 10 U                | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U         | 10   |
| Bromoform                  | 4        | 3.1  | 10 U                | 10   | 10 U                | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U         | 10   |
| 4-Methyl-2-pentanone       | 400      | 5.5  | 10 U                | 10   | 10 U                | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U         | 10   |
| 2-Hexanone                 |          | 3.9  | 10 U                | 10   | 10 U                | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U         | 10   |
| Tetrachloroethene          | 1        | 4.0  | 10 U                | 10   | 10 U                | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U         | 10   |
| 1,1,2,2-Tetrachloroethane  | 2        | 4.2  | 10 U                | 10   | 10 U                | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U         | 10   |
| Toluene                    | 1000     | 2.7  | 10 U                | 10   | 10 U                | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U         | 10   |
| Chlorobenzene              | 4        | 2.7  | 10 U                | 10   | 10 U                | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U         | 10   |
| Ethylbenzene               | 700      | 3.1  | 10 U                | 10   | 10 U                | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U         | 10   |
| Styrene                    | 100      | 3.8  | 10 U                | 10   | 10 U                | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U         | 10   |
| Xylene (total)             | 40       | 3.8  | 10 U                | 10   | 10 U                | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U         | 10   |
| Total Est. Conc. of TIC.   |          |      |                     |      |                     |      |               |      |               |      |               |      |              |      |
| Method: TCL Volatiles      |          |      |                     |      |                     |      |               |      |               |      |               |      |              |      |

**MAIN POST  
GROUNDWATER VOLATILES**

| Geographical Location      |          |      | B1           |      | B2           |      | B2           |      | B3           |      | B3           |      | B3           |      | B3           |      |
|----------------------------|----------|------|--------------|------|--------------|------|--------------|------|--------------|------|--------------|------|--------------|------|--------------|------|
| Sample                     |          |      | B1-MW01B-A02 |      | B2-MW02B-A01 |      | B2-MW02B-A02 |      | B3-MW03B-A01 |      | B3-MW03B-A02 |      | B3-MW03B-D01 |      | B3-MW03B-D02 |      |
| Sample Type                |          |      |              |      |              |      |              |      |              |      |              |      | Trip Blank   |      | Trip Blank   |      |
| Batch#                     |          |      | 9503G616     |      | 9502G169     |      | 9503G616     |      | 9502G169     |      | 9503G740     |      | 9502G169     |      | 9503G616     |      |
| Prep#                      |          |      | 95GVC053     |      | 95GVC028     |      | 95GVC053     |      | 95GVC028     |      | 95GVE072     |      | 95GVC028     |      | 95GVC053     |      |
| RFVW#                      |          |      | 008          |      | 003          |      | 010          |      | 005          |      | 001          |      | 007          |      | 005          |      |
| Dilution Factor            |          |      | 1.00         |      | 1.00         |      | 1.00         |      | 1.00         |      | 1.00         |      | 1.00         |      | 1.00         |      |
| Matrix                     |          |      | water        |      | water        |      | water        |      | water        |      | water        |      | water        |      | water        |      |
| Units                      | ug/l     | ug/l | ug/l         |      | ug/l         |      | ug/l         |      | ug/l         |      | ug/l         |      | ug/l         |      | ug/l         |      |
| Sampling Date              |          |      | 3/7/95       |      | 2/14/95      |      | 3/7/95       |      | 2/14/95      |      | 3/14/95      |      | 2/13/95      |      | 3/7/95       |      |
| Analysis Date              |          |      | 3/10/95      |      | 2/19/95      |      | 3/10/95      |      | 2/19/95      |      | 3/20/95      |      | 2/19/95      |      | 3/9/95       |      |
| Analysis                   | Standard | MDL  | Analytical   | CRQL | Analytical   | CRQL | Analytical   | CRQL | Analytical   | CRQL | Analytical   | CRQL | Analytical   | CRQL | Analytical   | CRQL |
|                            |          |      | Result       |      | Result       |      | Result       |      | Result       |      | Result       |      | Result       |      | Result       |      |
| Chloromethane              |          | 7.3  | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   |
| Bromomethane               |          | 6.7  | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   |
| Vinyl Chloride             | 5        | 7.9  | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   |
| Chloroethane               |          | 9.1  | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   |
| Methylene Chloride         | 2        | 2.7  | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   |
| Acetone                    | 700      | 6.9  | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   |
| Carbon Disulfide           |          | 4.4  | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   |
| 1,1-Dichloroethene         |          | 4.9  | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   |
| 1,1-Dichloroethane         | 70       | 3.0  | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   |
| 1,2-Dichloroethene (total) |          | 4.4  | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   |
| Chloroform                 | 6        | 2.9  | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   |
| 1,2-Dichloroethane         | 2        | 2.4  | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   |
| 2-Butanone                 |          | 4.1  | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 15           | 10   | 10 U         | 10   |
| 1,1,1-Trichloroethane      | 30       | 1.7  | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   |
| Carbon Tetrachloride       | 2        | 1.5  | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   |
| Bromodichloromethane       | 1        | 2.0  | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   |
| 1,2-Dichloropropane        | 1        | 1.7  | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   |
| cis-1,3-Dichloropropene    | 0.2      | 3.0  | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   |
| Trichloroethene            | 1        | 2.0  | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   |
| Dibromochloromethane       | 10       | 2.4  | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   |
| 1,1,2-Trichloroethane      | 3        | 4.3  | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   |
| Benzene                    | 1        | 3.3  | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   |
| trans-1,3-Dichloropropene  | 0.2      | 2.4  | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   |
| Bromoform                  | 4        | 3.1  | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   |
| 4-Methyl-2-pentanone       | 400      | 5.5  | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   |
| 2-Hexanone                 |          | 3.9  | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   |
| Tetrachloroethene          | 1        | 4.0  | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   |
| 1,1,2,2-Tetrachloroethane  | 2        | 4.2  | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   |
| Toluene                    | 1000     | 2.7  | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   |
| Chlorobenzene              | 4        | 2.7  | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   |
| Ethylbenzene               | 700      | 3.1  | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   |
| Styrene                    | 100      | 3.8  | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   |
| Xylene (total)             | 40       | 3.8  | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   |
| Total Est. Conc. of TIC.   |          |      |              |      |              |      |              |      |              |      |              |      |              |      |              |      |
| Method:TCL Volatiles       |          |      |              |      |              |      |              |      |              |      |              |      |              |      |              |      |

**MAIN POST  
GROUNDWATER VOLATILES**

| Geographical Location      |          |      | B3                  |      | B3                  |      | B4           |      | B4           |      | B5           |      | B5           |      |
|----------------------------|----------|------|---------------------|------|---------------------|------|--------------|------|--------------|------|--------------|------|--------------|------|
| Sample                     |          |      | B3-MW03B-E01        |      | B3-MW03B-E02        |      | B4-MW04B-A01 |      | B4-MW04B-A02 |      | B5-MW05B-A01 |      | B5-MW05B-A02 |      |
| Sample Type                |          |      | Field Rinsate Blank |      | Field Rinsate Blank |      |              |      |              |      |              |      |              |      |
| Batch#                     |          |      | 9502G169            |      | 9503G616            |      | 9502G169     |      | 9503G616     |      | 9502G169     |      | 9503G616     |      |
| Prep#                      |          |      | 95GVC028            |      | 95GVC053            |      | 95GVC028     |      | 95GVC053     |      | 95GVC028     |      | 95GVC053     |      |
| RFW#                       |          |      | 008                 |      | 006                 |      | 010          |      | 012          |      | 012          |      | 001          |      |
| Dilution Factor            |          |      | 1.00                |      | 1.00                |      | 1.00         |      | 1.00         |      | 1.00         |      | 1.00         |      |
| Matrix                     |          |      | water               |      | water               |      | water        |      | water        |      | water        |      | water        |      |
| Units                      | ug/l     | ug/l | ug/l                |      | ug/l                |      | ug/l         |      | ug/l         |      | ug/l         |      | ug/l         |      |
| Sampling Date              |          |      | 2/13/95             |      | 3/7/95              |      | 2/13/95      |      | 3/7/95       |      | 2/13/95      |      | 3/7/95       |      |
| Analysis Date              |          |      | 2/19/95             |      | 3/9/95              |      | 2/19/95      |      | 3/10/95      |      | 2/19/95      |      | 3/9/95       |      |
| Analysis                   | Standard | MDL  | Analytical          | CRQL | Analytical          | CRQL | Analytical   | CRQL | Analytical   | CRQL | Analytical   | CRQL | Analytical   | CRQL |
|                            |          |      | Result              |      | Result              |      | Result       |      | Result       |      | Result       |      | Result       |      |
| Chloromethane              |          | 7.3  | 10 U                | 10   | 10 U                | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   |
| Bromomethane               |          | 6.7  | 10 U                | 10   | 10 U                | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   |
| Vinyl Chloride             | 5        | 7.9  | 10 U                | 10   | 10 U                | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   |
| Chloroethane               |          | 9.1  | 10 U                | 10   | 10 U                | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   |
| Methylene Chloride         | 2        | 2.7  | 10 U                | 10   | 10 U                | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   |
| Acetone                    | 700      | 6.9  | 10 U                | 10   | 10 U                | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   |
| Carbon Disulfide           |          | 4.4  | 10 U                | 10   | 10 U                | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   |
| 1,1-Dichloroethene         |          | 4.9  | 10 U                | 10   | 10 U                | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   |
| 1,1-Dichloroethane         | 70       | 3.0  | 10 U                | 10   | 10 U                | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   |
| 1,2-Dichloroethene (total) |          | 4.4  | 10 U                | 10   | 10 U                | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   |
| Chloroform                 | 6        | 2.9  | 10 U                | 10   | 10 U                | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   |
| 1,2-Dichloroethane         | 2        | 2.4  | 10 U                | 10   | 10 U                | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   |
| 2-Butanone                 |          | 4.1  | 17                  | 10   | 10 U                | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   |
| 1,1,1-Trichloroethane      | 30       | 1.7  | 10 U                | 10   | 8 J                 | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   |
| Carbon Tetrachloride       | 2        | 1.5  | 10 U                | 10   | 10 U                | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   |
| Bromodichloromethane       | 1        | 2.0  | 10 U                | 10   | 10 U                | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   |
| 1,2-Dichloropropane        | 1        | 1.7  | 10 U                | 10   | 10 U                | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   |
| cis-1,3-Dichloropropene    | 0.2      | 3.0  | 10 U                | 10   | 10 U                | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   |
| Trichloroethene            | 1        | 2.0  | 10 U                | 10   | 10 U                | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   |
| Dibromochloromethane       | 10       | 2.4  | 10 U                | 10   | 10 U                | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   |
| 1,1,2-Trichloroethane      | 3        | 4.3  | 10 U                | 10   | 10 U                | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   |
| Benzene                    | 1        | 3.3  | 10 U                | 10   | 10 U                | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   |
| trans-1,3-Dichloropropene  | 0.2      | 2.4  | 10 U                | 10   | 10 U                | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   |
| Bromoform                  | 4        | 3.1  | 10 U                | 10   | 10 U                | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   |
| 4-Methyl-2-pentanone       | 400      | 5.5  | 10 U                | 10   | 10 U                | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   |
| 2-Hexanone                 |          | 3.9  | 10 U                | 10   | 10 U                | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   |
| Tetrachloroethene          | 1        | 4.0  | 10 U                | 10   | 10 U                | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   |
| 1,1,2,2-Tetrachloroethane  | 2        | 4.2  | 10 U                | 10   | 10 U                | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   |
| Toluene                    | 1000     | 2.7  | 10 U                | 10   | 10 U                | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   |
| Chlorobenzene              | 4        | 2.7  | 10 U                | 10   | 10 U                | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   |
| Ethylbenzene               | 700      | 3.1  | 10 U                | 10   | 10 U                | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   |
| Styrene                    | 100      | 3.8  | 10 U                | 10   | 10 U                | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   |
| Xylene (total)             | 40       | 3.8  | 10 U                | 10   | 10 U                | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   | 10 U         | 10   |
| Total Est. Conc. of TIC.   |          |      |                     |      |                     |      |              |      |              |      |              |      |              |      |
| Method: TCL Volatiles      |          |      |                     |      |                     |      |              |      |              |      |              |      |              |      |

**MAIN POST  
GROUNDWATER SEMIVOLATILES**

| Geographical Location        |          |      | M2            |      | M2            |      | M2            |      | M2            |      | M2            |      |
|------------------------------|----------|------|---------------|------|---------------|------|---------------|------|---------------|------|---------------|------|
| Sample                       |          |      | MP02-MW01-A01 |      | MP02-MW01-A02 |      | MP02-MW02-A01 |      | MP02-MW02-A02 |      | MP02-MW03-A01 |      |
| Sample Type                  |          |      |               |      |               |      |               |      |               |      |               |      |
| Batch#                       |          |      | 9502G197      |      | 9503G642      |      | 9502G197      |      | 9503G642      |      | 9502G197      |      |
| Prep#                        |          |      | 95GB0108      |      | 95GB0172      |      | 95GB0108      |      | 95GB0172      |      | 95GB0108      |      |
| RFW#                         |          |      | 001           |      | 001           |      | 003           |      | 003           |      | 005           |      |
| Dilution Factor              |          |      | 1.00          |      | 1.00          |      | 1.00          |      | 1.00          |      | 1.00          |      |
| Matrix                       |          |      | water         |      | water         |      | water         |      | water         |      | water         |      |
| Units                        | ug/l     | ug/l | ug/l          |      | ug/l          |      | ug/l          |      | ug/l          |      | ug/l          |      |
| Sampling Date                |          |      | 2/15/95       |      | 3/8/95        |      | 2/15/95       |      | 3/8/95        |      | 2/15/95       |      |
| Analysis Date                |          |      | 3/4/95        |      | 3/24/95       |      | 3/4/95        |      | 3/24/95       |      | 3/10/95       |      |
| Analysis                     | Standard | MDL  | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL |
|                              |          |      | Result        |      | Result        |      | Result        |      | Result        |      | Result        |      |
| Phenol                       | 4000     | 7.1  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 12 U          | 12   |
| bis(2-Chloroethyl) ether     | 10       | 9.7  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 12 U          | 12   |
| 2-Chlorophenol               | 40       | 7.3  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 12 U          | 12   |
| 1,3-Dichlorobenzene          | 600      | 5.3  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 12 U          | 12   |
| 1,4-Dichlorobenzene          | 75       | 4.8  | 10 U          | 10   | 10 U          | 10   | 4 J           | 10   | 2 J           | 10   | 12 U          | 12   |
| 1,2-Dichlorobenzene          | 600      | 5.7  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 12 U          | 12   |
| 2-Methylphenol               |          | 6.7  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 12 U          | 12   |
| 2,2'-oxybis(1-Chloropropane) |          | 7.0  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 12 U          | 12   |
| 4-Methylphenol               |          | 12.9 | 10 U          | 10   | 10 U          | 10   | 3 J           | 10   | 10 U          | 10   | 12 U          | 12   |
| N-Nitroso-di-n-propylamine   | 20       | 8.0  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 12 U          | 12   |
| Hexachloroethane             | 10       | 5.3  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 12 U          | 12   |
| Nitrobenzene                 | 10       | 7.4  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 12 U          | 12   |
| Isophorone                   | 100      | 3.9  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 12 U          | 12   |
| 2-Nitrophenol                |          | 7.0  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 12 U          | 12   |
| 2,4-Dimethylphenol           | 100      | 4.8  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 12 U          | 12   |
| bis(2-Chloroethoxy) methane  |          | 6.1  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 12 U          | 12   |
| 2,4-Dichlorophenol           | 20       | 4.4  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 12 U          | 12   |
| 1,2,4-Trichlorobenzene       | 9        | 9.6  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 12 U          | 12   |
| Naphthalene                  |          | 8.4  | 10 U          | 10   | 10 U          | 10   | 1 J           | 10   | 10 U          | 10   | 12 U          | 12   |
| 4-Chloroaniline              |          | 2.9  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 12 U          | 12   |
| Hexachlorobutadiene          | 1        | 4.6  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 12 U          | 12   |
| 4-Chloro-3-methylphenol      | 20       | 3.1  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 12 U          | 12   |
| 2-Methylnaphthalene          |          | 8.7  | 10 U          | 10   | 10 U          | 10   | 2 J           | 10   | 2 J           | 10   | 12 U          | 12   |
| Hexachlorocyclopentadiene    | 50       | 3.6  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 12 U          | 12   |
| 2,4,6-Trichlorophenol        |          | 5.6  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 12 U          | 12   |
| 2,4,5-Trichlorophenol        | 700      | 4.7  | 25 U          | 25   | 25 U          | 25   | 24 U          | 24   | 24 U          | 24   | 30 U          | 30   |
| 2-Chloronaphthalene          |          | 8.2  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 12 U          | 12   |
| 2-Nitroaniline               |          | 6.1  | 25 U          | 25   | 25 U          | 25   | 24 U          | 24   | 24 U          | 24   | 30 U          | 30   |
| Dimethylphthalate            | 7000     | 4.4  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 12 U          | 12   |
| Acenaphthylene               | 10       | 6.0  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 12 U          | 12   |
| 2,6-Dinitrotoluene           | 10       | 5.2  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 12 U          | 12   |
| 3-Nitroaniline               |          | 5.2  | 25 U          | 25   | 25 U          | 25   | 24 U          | 24   | 24 U          | 24   | 30 U          | 30   |
| Acenaphthene                 | 400      | 6.7  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 12 U          | 12   |
| 2,4-Dinitrophenol            | 40       | 4.6  | 25 U          | 25   | 25 U          | 25   | 24 U          | 24   | 24 U          | 24   | 30 U          | 30   |

**MAIN POST  
GROUNDWATER SEMIVOLATILES**

| Geographical Location      |          |      | M2            |      | M2            |      | M2            |      | M2            |      | M2            |      |
|----------------------------|----------|------|---------------|------|---------------|------|---------------|------|---------------|------|---------------|------|
| Sample                     |          |      | MP02-MW01-A01 |      | MP02-MW01-A02 |      | MP02-MW02-A01 |      | MP02-MW02-A02 |      | MP02-MW03-A01 |      |
| Sample Type                |          |      |               |      |               |      |               |      |               |      |               |      |
| Batch#                     |          |      | 9502G197      |      | 9503G642      |      | 9502G197      |      | 9503G642      |      | 9502G197      |      |
| Prep#                      |          |      | 95GB0108      |      | 95GB0172      |      | 95GB0108      |      | 95GB0172      |      | 95GB0108      |      |
| RFW#                       |          |      | 001           |      | 001           |      | 003           |      | 003           |      | 005           |      |
| Dilution Factor            |          |      | 1.00          |      | 1.00          |      | 1.00          |      | 1.00          |      | 1.00          |      |
| Matrix                     |          |      | water         |      | water         |      | water         |      | water         |      | water         |      |
| Units                      | ug/l     | ug/l | ug/l          |      | ug/l          |      | ug/l          |      | ug/l          |      | ug/l          |      |
| Sampling Date              |          |      | 2/15/95       |      | 3/8/95        |      | 2/15/95       |      | 3/8/95        |      | 2/15/95       |      |
| Analysis Date              |          |      | 3/4/95        |      | 3/24/95       |      | 3/4/95        |      | 3/24/95       |      | 3/10/95       |      |
| Analysis                   | Standard | MDL  | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL |
|                            |          |      | Result        |      | Result        |      | Result        |      | Result        |      | Result        |      |
| 4-Nitrophenol              |          | 7.5  | 25 U          | 25   | 25 U          | 25   | 24 U          | 24   | 24 U          | 24   | 30 U          | 30   |
| Dibenzofuran               |          | 6.5  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 12 U          | 12   |
| 2,4-Dinitrotoluene         | 10       | 5.8  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 12 U          | 12   |
| Diethylphthalate           | 5000     | 5.4  | 1 J           | 10   | 1 JB          | 10   | 1 J           | 10   | 1 JB          | 10   | 12 U          | 12   |
| 4-Chlorophenyl-phenylether |          | 7.0  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 12 U          | 12   |
| Fluorene                   | 300      | 6.3  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 12 U          | 12   |
| 4-Nitroaniline             |          | 6.4  | 25 U          | 25   | 25 U          | 25   | 24 U          | 24   | 24 U          | 24   | 30 U          | 30   |
| 4,6-Dinitro-2-methylphenol |          | 5.3  | 25 U          | 25   | 25 U          | 25   | 24 U          | 24   | 24 U          | 24   | 30 U          | 30   |
| N-Nitrosodiphenylamine (1) | 20       | 4.2  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 12 U          | 12   |
| 4-Bromophenyl-phenylether  |          | 5.3  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 12 U          | 12   |
| Hexachlorobenzene          | 10       | 5.5  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 12 U          | 12   |
| Pentachlorophenol          | 1        | 4.0  | 25 U          | 25   | 25 U          | 25   | 24 U          | 24   | 24 U          | 24   | 30 U          | 30   |
| Phenanthrene               | 10       | 5.0  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 12 U          | 12   |
| Anthracene                 | 2000     | 4.6  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 12 U          | 12   |
| Carbazole                  |          | 4.4  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 12 U          | 12   |
| Di-n-butylphthalate        | 900      | 6.5  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 12 U          | 12   |
| Fluoranthene               | 300      | 6.0  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 12 U          | 12   |
| Pyrene                     | 200      | 5.4  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 12 U          | 12   |
| Butylbenzylphthalate       | 100      | 5.3  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 12 U          | 12   |
| 3,3'-Dichlorobenzidine     | 60       | 2.8  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 12 U          | 12   |
| Benzo(a)anthracene         | 10       | 4.9  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 12 U          | 12   |
| Chrysene                   | 20       | 4.4  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 12 U          | 12   |
| bis(2-Ethylhexy)phthalate  | 30       | 9.7  | 2 J           | 10   | 1 J           | 10   | 10 U          | 10   | 10 U          | 10   | 12 U          | 12   |
| Di-n-octyl phthalate       | 100      | 5.6  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 12 U          | 12   |
| Benzo(b)fluoranthene       | 2        | 5.7  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 12 U          | 12   |
| Benzo(k)fluoranthene       | 2        | 6.2  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 12 U          | 12   |
| Benzo(a)pyrene             | 20       | 4.9  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 12 U          | 12   |
| Indeno(1,2,3-cd)pyrene     | 20       | 7.1  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 12 U          | 12   |
| Dibenzo(a,h)anthracene     | 20       | 6.0  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 12 U          | 12   |
| Benzo(g,h,i)perylene       | 20       | 6.8  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 12 U          | 12   |
| Petroleum hydrocarbons     |          |      |               |      |               |      |               |      |               |      |               |      |
| Total Est. Conc. of TIC    |          |      | 47            |      |               |      | 63            |      |               |      | 9             |      |
| Dilution Factor            |          |      |               |      |               |      |               |      |               |      |               |      |
| Method:TCL Semivolatiles   |          |      |               |      |               |      |               |      |               |      |               |      |



**MAIN POST  
GROUNDWATER SEMIVOLATILES**

| Geographical Location        |          |      | M2            |      | M3            |      | M3            |      | M3            |      | M3            |      | M3            |      |
|------------------------------|----------|------|---------------|------|---------------|------|---------------|------|---------------|------|---------------|------|---------------|------|
| Sample                       |          |      | MP02-MW03-A02 |      | MP03-MW04-A01 |      | MP03-MW04-A02 |      | MP03-MW05-A01 |      | MP03-MW05-A02 |      | MP03-MW06-A01 |      |
| Sample Type                  |          |      |               |      |               |      |               |      |               |      |               |      |               |      |
| Batch#                       |          |      | 9503G642      |      | 9502G219      |      | 9503G642      |      | 9502G219      |      | 9503G660      |      | 9502G219      |      |
| Prep#                        |          |      | 95GB0172      |      | 95GB0111      |      | 95GB0172      |      | 95GB0111      |      | 95GB0174      |      | 95GB0111      |      |
| RFW#                         |          |      | 005           |      | 001           |      | 009           |      | 003           |      | 003           |      | 005           |      |
| Dilution Factor              |          |      | 1.00          |      | 1.00          |      | 1.00          |      | 1.00          |      | 1.00          |      | 1.00          |      |
| Matrix                       |          |      | water         |      | water         |      | water         |      | water         |      | water         |      | water         |      |
| Units                        | ug/l     | ug/l | ug/l          |      | ug/l          |      | ug/l          |      | ug/l          |      | ug/l          |      | ug/l          |      |
| Sampling Date                |          |      | 3/8/95        |      | 2/16/95       |      | 3/8/95        |      | 2/16/95       |      | 3/9/95        |      | 2/16/95       |      |
| Analysis Date                |          |      | 3/24/95       |      | 3/7/95        |      | 3/24/95       |      | 3/8/95        |      | 3/25/95       |      | 3/8/95        |      |
| Analysis                     | Standard | MDL  | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL |
|                              |          |      | Result        |      | Result        |      | Result        |      | Result        |      | Result        |      | Result        |      |
| Phenol                       | 4000     | 7.1  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| bis(2-Chloroethyl) ether     | 10       | 9.7  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| 2-Chlorophenol               | 40       | 7.3  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| 1,3-Dichlorobenzene          | 600      | 5.3  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| 1,4-Dichlorobenzene          | 75       | 4.8  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| 1,2-Dichlorobenzene          | 600      | 5.7  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| 2-Methylphenol               |          | 6.7  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| 2,2'-oxybis(1-Chloropropane) |          | 7.0  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| 4-Methylphenol               |          | 12.9 | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 3 J           | 10   | 10 U          | 10   | 10 U          | 10   |
| N-Nitroso-di-n-propylamine   | 20       | 8.0  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Hexachloroethane             | 10       | 5.3  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Nitrobenzene                 | 10       | 7.4  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Isophorone                   | 100      | 3.9  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| 2-Nitrophenol                |          | 7.0  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| 2,4-Dimethylphenol           | 100      | 4.8  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| bis(2-Chloroethoxy) methane  |          | 6.1  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| 2,4-Dichlorophenol           | 20       | 4.4  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| 1,2,4-Trichlorobenzene       | 9        | 9.6  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Naphthalene                  |          | 8.4  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 1 J           | 10   | 10 U          | 10   | 10 U          | 10   |
| 4-Chloroaniline              |          | 2.9  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Hexachlorobutadiene          | 1        | 4.6  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| 4-Chloro-3-methylphenol      | 20       | 3.1  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| 2-Methylnaphthalene          |          | 8.7  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 2 J           | 10   | 1 J           | 10   | 10 U          | 10   |
| Hexachlorocyclopentadiene    | 50       | 3.6  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| 2,4,6-Trichlorophenol        |          | 5.6  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| 2,4,5-Trichlorophenol        | 700      | 4.7  | 24 U          | 24   | 28 U          | 28   | 26 U          | 26   | 24 U          | 24   | 25 U          | 25   | 24 U          | 24   |
| 2-Chloronaphthalene          |          | 8.2  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| 2-Nitroaniline               |          | 6.1  | 24 U          | 24   | 28 U          | 28   | 26 U          | 26   | 24 U          | 24   | 25 U          | 25   | 24 U          | 24   |
| Dimethylphthalate            | 7000     | 4.4  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Acenaphthylene               | 10       | 6.0  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| 2,6-Dinitrotoluene           | 10       | 5.2  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| 3-Nitroaniline               |          | 5.2  | 24 U          | 24   | 28 U          | 28   | 26 U          | 26   | 24 U          | 24   | 25 U          | 25   | 24 U          | 24   |
| Acenaphthene                 | 400      | 6.7  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 2 J           | 10   | 2 J           | 10   | 10 U          | 10   |
| 2,4-Dinitrophenol            | 40       | 4.6  | 24 U          | 24   | 28 U          | 28   | 26 U          | 26   | 24 U          | 24   | 25 U          | 25   | 24 U          | 24   |

**MAIN POST  
GROUNDWATER SEMIVOLATILES**

| Geographical Location      |          |      | M2            |      | M3            |      | M3            |      | M3            |      | M3            |      | M3            |      |
|----------------------------|----------|------|---------------|------|---------------|------|---------------|------|---------------|------|---------------|------|---------------|------|
| Sample                     |          |      | MP02-MW03-A02 |      | MP03-MW04-A01 |      | MP03-MW04-A02 |      | MP03-MW05-A01 |      | MP03-MW05-A02 |      | MP03-MW06-A01 |      |
| Sample Type                |          |      |               |      |               |      |               |      |               |      |               |      |               |      |
| Batch#                     |          |      | 9503G642      |      | 9502G219      |      | 9503G642      |      | 9502G219      |      | 9503G660      |      | 9502G219      |      |
| Prep#                      |          |      | 95GB0172      |      | 95GB0111      |      | 95GB0172      |      | 95GB0111      |      | 95GB0174      |      | 95GB0111      |      |
| RFW#                       |          |      | 005           |      | 001           |      | 009           |      | 003           |      | 003           |      | 005           |      |
| Dilution Factor            |          |      | 1.00          |      | 1.00          |      | 1.00          |      | 1.00          |      | 1.00          |      | 1.00          |      |
| Matrix                     |          |      | water         |      | water         |      | water         |      | water         |      | water         |      | water         |      |
| Units                      | ug/l     | ug/l | ug/l          |      | ug/l          |      | ug/l          |      | ug/l          |      | ug/l          |      | ug/l          |      |
| Sampling Date              |          |      | 3/8/95        |      | 2/16/95       |      | 3/8/95        |      | 2/16/95       |      | 3/9/95        |      | 2/16/95       |      |
| Analysis Date              |          |      | 3/24/95       |      | 3/7/95        |      | 3/24/95       |      | 3/8/95        |      | 3/25/95       |      | 3/8/95        |      |
| Analysis                   | Standard | MDL  | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL |
|                            |          |      | Result        |      | Result        |      | Result        |      | Result        |      | Result        |      | Result        |      |
| 4-Nitrophenol              |          | 7.5  | 24 U          | 24   | 28 U          | 28   | 26 U          | 26   | 24 U          | 24   | 25 U          | 25   | 24 U          | 24   |
| Dibenzofuran               |          | 6.5  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| 2,4-Dinitrotoluene         | 10       | 5.8  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Diethylphthalate           | 5000     | 5.4  | 10 U          | 10   | 11 U          | 11   | 1 JB          | 11   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| 4-Chlorophenyl-phenylether |          | 7.0  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Fluorene                   | 300      | 6.3  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 2 J           | 10   | 1 J           | 10   | 10 U          | 10   |
| 4-Nitroaniline             |          | 6.4  | 24 U          | 24   | 28 U          | 28   | 26 U          | 26   | 24 U          | 24   | 25 U          | 25   | 24 U          | 24   |
| 4,6-Dinitro-2-methylphenol |          | 5.3  | 24 U          | 24   | 28 U          | 28   | 26 U          | 26   | 24 U          | 24   | 25 U          | 25   | 24 U          | 24   |
| N-Nitrosodiphenylamine (1) | 20       | 4.2  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| 4-Bromophenyl-phenylether  |          | 5.3  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Hexachlorobenzene          | 10       | 5.5  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Pentachlorophenol          | 1        | 4.0  | 24 U          | 24   | 28 U          | 28   | 26 U          | 26   | 24 U          | 24   | 25 U          | 25   | 24 U          | 24   |
| Phenanthrene               | 10       | 5.0  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 3 J           | 10   | 3 J           | 10   | 10 U          | 10   |
| Anthracene                 | 2000     | 4.6  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 10 U          | 10   | 1 J           | 10   | 10 U          | 10   |
| Carbazole                  |          | 4.4  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 1 J           | 10   | 10 U          | 10   | 10 U          | 10   |
| Di-n-butylphthalate        | 900      | 6.5  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Fluoranthene               | 300      | 6.0  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Pyrene                     | 200      | 5.4  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 10 U          | 10   | 1 J           | 10   | 10 U          | 10   |
| Butylbenzylphthalate       | 100      | 5.3  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| 3,3'-Dichlorobenzidine     | 60       | 2.8  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Benzo(a)anthracene         | 10       | 4.9  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Chrysene                   | 20       | 4.4  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| bis(2-Ethylhexyl)phthalate | 30       | 9.7  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 10 U          | 10   | 10 U          | 10   | 3 J           | 10   |
| Di-n-octyl phthalate       | 100      | 5.6  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Benzo(b)fluoranthene       | 2        | 5.7  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Benzo(k)fluoranthene       | 2        | 6.2  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Benzo(a)pyrene             | 20       | 4.9  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Indeno(1,2,3-cd)pyrene     | 20       | 7.1  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Dibenzo(a,h)anthracene     | 20       | 6.0  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Benzo(g,h,i)perylene       | 20       | 6.8  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   |
| Petroleum hydrocarbons     |          |      |               |      |               |      |               |      |               |      |               |      |               |      |
| Total Est. Conc. of TIC    |          |      |               |      | 4 J           |      |               |      | 38 J          |      | 43 J          |      | 18 J          |      |
| Dilution Factor            |          |      |               |      |               |      |               |      |               |      |               |      |               |      |
| Method:TCL Semivolatiles   |          |      |               |      |               |      |               |      |               |      |               |      |               |      |

**MAIN POST  
GROUNDWATER SEMIVOLATILES**

| Geographical Location        |          |      | M3            |      | M4            |      | M4            |      | M4            |      | M4            |      | M4                  |      |
|------------------------------|----------|------|---------------|------|---------------|------|---------------|------|---------------|------|---------------|------|---------------------|------|
| Sample                       |          |      | MP03-MW06-A02 |      | MP04-MW07-A01 |      | MP04-MW07-A02 |      | MP04-MW07-C01 |      | MP04-MW07-C02 |      | MP04-MW07-E01       |      |
| Sample Type                  |          |      |               |      |               |      |               |      | Duplicate     |      | Duplicate     |      | Field Rinsate Blank |      |
| Batch#                       |          |      | 9503G660      |      | 9502G219      |      | 9503G660      |      | 9502G219      |      | 9503G660      |      | 9502G219            |      |
| Prep#                        |          |      | 95GB0174      |      | 95GB0111      |      | 95GB0174      |      | 95GB0111      |      | 95GB0174      |      | 95GB0111            |      |
| RFW#                         |          |      | 001           |      | 007           |      | 005           |      | 009           |      | 007           |      | 012                 |      |
| Dilution Factor              |          |      | 1.00          |      | 1.00          |      | 1.00          |      | 1.00          |      | 1.00          |      | 1.00                |      |
| Matrix                       |          |      | water         |      | water         |      | water         |      | water         |      | water         |      | water               |      |
| Units                        | ug/l     | ug/l | ug/l          |      | ug/l          |      | ug/l          |      | ug/l          |      | ug/l          |      | ug/l                |      |
| Sampling Date                |          |      | 3/9/95        |      | 2/16/95       |      | 3/9/95        |      | 2/16/95       |      | 3/9/95        |      | 2/16/95             |      |
| Analysis Date                |          |      | 3/25/95       |      | 3/9/95        |      | 3/25/95       |      | 3/8/95        |      | 3/26/95       |      | 3/8/95              |      |
| Analysis                     | Standard | MDL  | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical          | CRQL |
|                              |          |      | Result        |      | Result        |      | Result        |      | Result        |      | Result        |      | Result              |      |
| Phenol                       | 4000     | 7.1  | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 12 U                | 12   |
| bis(2-Chloroethyl) ether     | 10       | 9.7  | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 12 U                | 12   |
| 2-Chlorophenol               | 40       | 7.3  | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 12 U                | 12   |
| 1,3-Dichlorobenzene          | 600      | 5.3  | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 12 U                | 12   |
| 1,4-Dichlorobenzene          | 75       | 4.8  | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 12 U                | 12   |
| 1,2-Dichlorobenzene          | 600      | 5.7  | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 12 U                | 12   |
| 2-Methylphenol               |          | 6.7  | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 12 U                | 12   |
| 2,2'-oxybis(1-Chloropropane) |          | 7.0  | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 12 U                | 12   |
| 4-Methylphenol               |          | 12.9 | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 12 U                | 12   |
| N-Nitroso-di-n-propylamine   | 20       | 8.0  | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 12 U                | 12   |
| Hexachloroethane             | 10       | 5.3  | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 12 U                | 12   |
| Nitrobenzene                 | 10       | 7.4  | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 12 U                | 12   |
| Isophorone                   | 100      | 3.9  | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 12 U                | 12   |
| 2-Nitrophenol                |          | 7.0  | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 12 U                | 12   |
| 2,4-Dimethylphenol           | 100      | 4.8  | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 12 U                | 12   |
| bis(2-Chloroethoxy) methane  |          | 6.1  | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 12 U                | 12   |
| 2,4-Dichlorophenol           | 20       | 4.4  | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 12 U                | 12   |
| 1,2,4-Trichlorobenzene       | 9        | 9.6  | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 12 U                | 12   |
| Naphthalene                  |          | 8.4  | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 12 U                | 12   |
| 4-Chloroaniline              |          | 2.9  | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 12 U                | 12   |
| Hexachlorobutadiene          | 1        | 4.6  | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 12 U                | 12   |
| 4-Chloro-3-methylphenol      | 20       | 3.1  | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 12 U                | 12   |
| 2-Methylnaphthalene          |          | 8.7  | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 12 U                | 12   |
| Hexachlorocyclopentadiene    | 50       | 3.6  | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 12 U                | 12   |
| 2,4,6-Trichlorophenol        |          | 5.6  | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 12 U                | 12   |
| 2,4,5-Trichlorophenol        | 700      | 4.7  | 24 U          | 24   | 26 U          | 26   | 26 U          | 26   | 26 U          | 26   | 26 U          | 26   | 30 U                | 30   |
| 2-Chloronaphthalene          |          | 8.2  | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 12 U                | 12   |
| 2-Nitroaniline               |          | 6.1  | 24 U          | 24   | 26 U          | 26   | 26 U          | 26   | 26 U          | 26   | 26 U          | 26   | 30 U                | 30   |
| Dimethylphthalate            | 7000     | 4.4  | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 12 U                | 12   |
| Acenaphthylene               | 10       | 6.0  | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 12 U                | 12   |
| 2,6-Dinitrotoluene           | 10       | 5.2  | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 12 U                | 12   |
| 3-Nitroaniline               |          | 5.2  | 24 U          | 24   | 26 U          | 26   | 26 U          | 26   | 26 U          | 26   | 26 U          | 26   | 30 U                | 30   |
| Acenaphthene                 | 400      | 6.7  | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 12 U                | 12   |
| 2,4-Dinitrophenol            | 40       | 4.6  | 24 U          | 24   | 26 U          | 26   | 26 U          | 26   | 26 U          | 26   | 26 U          | 26   | 30 U                | 30   |

**MAIN POST  
GROUNDWATER SEMIVOLATILES**

| Geographical Location      |          |      | M3                   |      | M4                   |      | M4                   |      | M4                   |      | M4                   |      | M4                   |      |
|----------------------------|----------|------|----------------------|------|----------------------|------|----------------------|------|----------------------|------|----------------------|------|----------------------|------|
| Sample                     |          |      | MP03-MW06-A02        |      | MP04-MW07-A01        |      | MP04-MW07-A02        |      | MP04-MW07-C01        |      | MP04-MW07-C02        |      | MP04-MW07-E01        |      |
| Sample Type                |          |      |                      |      |                      |      |                      |      | Duplicate            |      | Duplicate            |      | Field Rinsate Blank  |      |
| Batch#                     |          |      | 9503G660             |      | 9502G219             |      | 9503G660             |      | 9502G219             |      | 9503G660             |      | 9502G219             |      |
| Prep#                      |          |      | 95GB0174             |      | 95GB0111             |      | 95GB0174             |      | 95GB0111             |      | 95GB0174             |      | 95GB0111             |      |
| RFW#                       |          |      | 001                  |      | 007                  |      | 005                  |      | 009                  |      | 007                  |      | 012                  |      |
| Dilution Factor            |          |      | 1.00                 |      | 1.00                 |      | 1.00                 |      | 1.00                 |      | 1.00                 |      | 1.00                 |      |
| Matrix                     |          |      | water                |      | water                |      | water                |      | water                |      | water                |      | water                |      |
| Units                      | ug/l     | ug/l | ug/l                 |      | ug/l                 |      | ug/l                 |      | ug/l                 |      | ug/l                 |      | ug/l                 |      |
| Sampling Date              |          |      | 3/9/95               |      | 2/16/95              |      | 3/9/95               |      | 2/16/95              |      | 3/9/95               |      | 2/16/95              |      |
| Analysis Date              |          |      | 3/25/95              |      | 3/9/95               |      | 3/25/95              |      | 3/8/95               |      | 3/26/95              |      | 3/8/95               |      |
| Analysis                   | Standard | MDL  | Analytical<br>Result | CRQL | Analytical<br>Result | CRQL | Analytical<br>Result | CRQL | Analytical<br>Result | CRQL | Analytical<br>Result | CRQL | Analytical<br>Result | CRQL |
| 4-Nitrophenol              |          | 7.5  | 24 U                 | 24   | 26 U                 | 26   | 26 U                 | 26   | 26 U                 | 26   | 26 U                 | 26   | 30 U                 | 30   |
| Dibenzofuran               |          | 6.5  | 10 U                 | 10   | 10 U                 | 10   | 11 U                 | 11   | 11 U                 | 11   | 11 U                 | 11   | 12 U                 | 12   |
| 2,4-Dinitrotoluene         | 10       | 5.8  | 10 U                 | 10   | 10 U                 | 10   | 11 U                 | 11   | 11 U                 | 11   | 11 U                 | 11   | 12 U                 | 12   |
| Diethylphthalate           | 5000     | 5.4  | 10 U                 | 10   | 10 U                 | 10   | 11 U                 | 11   | 11 U                 | 11   | 11 U                 | 11   | 12 U                 | 12   |
| 4-Chlorophenyl-phenylether |          | 7.0  | 10 U                 | 10   | 10 U                 | 10   | 11 U                 | 11   | 11 U                 | 11   | 11 U                 | 11   | 12 U                 | 12   |
| Fluorene                   | 300      | 6.3  | 10 U                 | 10   | 10 U                 | 10   | 11 U                 | 11   | 11 U                 | 11   | 11 U                 | 11   | 12 U                 | 12   |
| 4-Nitroaniline             |          | 6.4  | 24 U                 | 24   | 26 U                 | 26   | 26 U                 | 26   | 26 U                 | 26   | 26 U                 | 26   | 30 U                 | 30   |
| 4,6-Dinitro-2-methylphenol |          | 5.3  | 24 U                 | 24   | 26 U                 | 26   | 26 U                 | 26   | 26 U                 | 26   | 26 U                 | 26   | 30 U                 | 30   |
| N-Nitrosodiphenylamine (1) | 20       | 4.2  | 10 U                 | 10   | 10 U                 | 10   | 11 U                 | 11   | 11 U                 | 11   | 11 U                 | 11   | 12 U                 | 12   |
| 4-Bromophenyl-phenylether  |          | 5.3  | 10 U                 | 10   | 10 U                 | 10   | 11 U                 | 11   | 11 U                 | 11   | 11 U                 | 11   | 12 U                 | 12   |
| Hexachlorobenzene          | 10       | 5.5  | 10 U                 | 10   | 10 U                 | 10   | 11 U                 | 11   | 11 U                 | 11   | 11 U                 | 11   | 12 U                 | 12   |
| Pentachlorophenol          | 1        | 4.0  | 24 U                 | 24   | 26 U                 | 26   | 26 U                 | 26   | 26 U                 | 26   | 26 U                 | 26   | 30 U                 | 30   |
| Phenanthrene               | 10       | 5.0  | 10 U                 | 10   | 10 U                 | 10   | 11 U                 | 11   | 11 U                 | 11   | 11 U                 | 11   | 12 U                 | 12   |
| Anthracene                 | 2000     | 4.6  | 10 U                 | 10   | 10 U                 | 10   | 11 U                 | 11   | 11 U                 | 11   | 11 U                 | 11   | 12 U                 | 12   |
| Carbazole                  |          | 4.4  | 10 U                 | 10   | 10 U                 | 10   | 11 U                 | 11   | 11 U                 | 11   | 11 U                 | 11   | 12 U                 | 12   |
| Di-n-butylphthalate        | 900      | 6.5  | 10 U                 | 10   | 10 U                 | 10   | 11 U                 | 11   | 11 U                 | 11   | 11 U                 | 11   | 12 U                 | 12   |
| Fluoranthene               | 300      | 6.0  | 10 U                 | 10   | 10 U                 | 10   | 11 U                 | 11   | 11 U                 | 11   | 11 U                 | 11   | 12 U                 | 12   |
| Pyrene                     | 200      | 5.4  | 10 U                 | 10   | 10 U                 | 10   | 11 U                 | 11   | 11 U                 | 11   | 11 U                 | 11   | 12 U                 | 12   |
| Butylbenzylphthalate       | 100      | 5.3  | 10 U                 | 10   | 10 U                 | 10   | 11 U                 | 11   | 11 U                 | 11   | 11 U                 | 11   | 12 U                 | 12   |
| 3,3'-Dichlorobenzidine     | 60       | 2.8  | 10 U                 | 10   | 10 U                 | 10   | 11 U                 | 11   | 11 U                 | 11   | 11 U                 | 11   | 12 U                 | 12   |
| Benzo(a)anthracene         | 10       | 4.9  | 10 U                 | 10   | 10 U                 | 10   | 11 U                 | 11   | 11 U                 | 11   | 11 U                 | 11   | 12 U                 | 12   |
| Chrysene                   | 20       | 4.4  | 10 U                 | 10   | 10 U                 | 10   | 11 U                 | 11   | 11 U                 | 11   | 11 U                 | 11   | 12 U                 | 12   |
| bis(2-Ethylhexy)phthalate  | 30       | 9.7  | 10 U                 | 10   | 10 U                 | 10   | 11 U                 | 11   | 11 U                 | 11   | 11 U                 | 11   | 12 U                 | 12   |
| Di-n-octyl phthalate       | 100      | 5.6  | 10 U                 | 10   | 10 U                 | 10   | 11 U                 | 11   | 11 U                 | 11   | 11 U                 | 11   | 12 U                 | 12   |
| Benzo(b)fluoranthene       | 2        | 5.7  | 10 U                 | 10   | 10 U                 | 10   | 11 U                 | 11   | 11 U                 | 11   | 11 U                 | 11   | 12 U                 | 12   |
| Benzo(k)fluoranthene       | 2        | 6.2  | 10 U                 | 10   | 10 U                 | 10   | 11 U                 | 11   | 11 U                 | 11   | 11 U                 | 11   | 12 U                 | 12   |
| Benzo(a)pyrene             | 20       | 4.9  | 10 U                 | 10   | 10 U                 | 10   | 11 U                 | 11   | 11 U                 | 11   | 11 U                 | 11   | 12 U                 | 12   |
| Indeno(1,2,3-cd)pyrene     | 20       | 7.1  | 10 U                 | 10   | 10 U                 | 10   | 11 U                 | 11   | 11 U                 | 11   | 11 U                 | 11   | 12 U                 | 12   |
| Dibenzo(a,h)anthracene     | 20       | 6.0  | 10 U                 | 10   | 10 U                 | 10   | 11 U                 | 11   | 11 U                 | 11   | 11 U                 | 11   | 12 U                 | 12   |
| Benzo(g,h,i)perylene       | 20       | 6.8  | 10 U                 | 10   | 10 U                 | 10   | 11 U                 | 11   | 11 U                 | 11   | 11 U                 | 11   | 12 U                 | 12   |
| Petroleum hydrocarbons     |          |      |                      |      |                      |      |                      |      |                      |      |                      |      |                      |      |
| Total Est. Conc. of TIC    |          |      | 17 J                 |      |                      |      |                      |      | 2 JA                 |      |                      |      | 11 JA                |      |
| Dilution Factor            |          |      |                      |      |                      |      |                      |      |                      |      |                      |      |                      |      |
| Method: TCL Semivolatiles  |          |      |                      |      |                      |      |                      |      |                      |      |                      |      |                      |      |

**MAIN POST  
GROUNDWATER SEMIVOLATILES**

| Geographical Location        |          |      | M4            |      | M4            |      | M4            |      | M4            |      | M5            |      | M5            |      |
|------------------------------|----------|------|---------------|------|---------------|------|---------------|------|---------------|------|---------------|------|---------------|------|
| Sample                       |          |      | MP04-MW08-A01 |      | MP04-MW08-A02 |      | MP04-MW09-A01 |      | MP04-MW09-A02 |      | MP05-MW10-A01 |      | MP05-MW10-A02 |      |
| Sample Type                  |          |      |               |      |               |      |               |      |               |      |               |      |               |      |
| Batch#                       |          |      | 9502G219      |      | 9503G642      |      | 9502G219      |      | 9503G660      |      | 9502G238      |      | 9503G660      |      |
| Prep#                        |          |      | 95GB0111      |      | 95GB0172      |      | 95GB0111      |      | 95GB0174      |      | 95GB0112      |      | 95GB0174      |      |
| RFW#                         |          |      | 014           |      | 007           |      | 016           |      | 009           |      | 010           |      | 011           |      |
| Dilution Factor              |          |      | 1.00          |      | 1.00          |      | 1.00          |      | 1.00          |      | 1.00          |      | 1.00          |      |
| Matrix                       |          |      | water         |      | water         |      | water         |      | water         |      | water         |      | water         |      |
| Units                        | ug/l     | ug/l | ug/l          |      | ug/l          |      | ug/l          |      | ug/l          |      | ug/l          |      | ug/l          |      |
| Sampling Date                |          |      | 2/16/95       |      | 3/8/95        |      | 2/16/95       |      | 3/9/95        |      | 2/17/95       |      | 3/9/95        |      |
| Analysis Date                |          |      | 3/9/95        |      | 3/24/95       |      | 3/9/95        |      | 3/26/95       |      | 2/27/95       |      | 3/26/95       |      |
| Analysis                     | Standard | MDL  | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL |
|                              |          |      | Result        |      | Result        |      | Result        |      | Result        |      | Result        |      | Result        |      |
| Phenol                       | 4000     | 7.1  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| bis(2-Chloroethyl) ether     | 10       | 9.7  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| 2-Chlorophenol               | 40       | 7.3  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| 1,3-Dichlorobenzene          | 600      | 5.3  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| 1,4-Dichlorobenzene          | 75       | 4.8  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| 1,2-Dichlorobenzene          | 600      | 5.7  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| 2-Methylphenol               |          | 6.7  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| 2,2'-oxybis(1-Chloropropane) |          | 7.0  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| 4-Methylphenol               |          | 12.9 | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| N-Nitroso-di-n-propylamine   | 20       | 8.0  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| Hexachloroethane             | 10       | 5.3  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| Nitrobenzene                 | 10       | 7.4  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| Isophorone                   | 100      | 3.9  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| 2-Nitrophenol                |          | 7.0  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| 2,4-Dimethylphenol           | 100      | 4.8  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| bis(2-Chloroethoxy) methane  |          | 6.1  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| 2,4-Dichlorophenol           | 20       | 4.4  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| 1,2,4-Trichlorobenzene       | 9        | 9.6  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| Naphthalene                  |          | 8.4  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| 4-Chloroaniline              |          | 2.9  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| Hexachlorobutadiene          | 1        | 4.6  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| 4-Chloro-3-methylphenol      | 20       | 3.1  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| 2-Methylnaphthalene          |          | 8.7  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| Hexachlorocyclopentadiene    | 50       | 3.6  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| 2,4,6-Trichlorophenol        |          | 5.6  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| 2,4,5-Trichlorophenol        | 700      | 4.7  | 26 U          | 26   | 26 U          | 26   | 28 U          | 28   | 26 U          | 26   | 27 U          | 27   | 27 U          | 27   |
| 2-Chloronaphthalene          |          | 8.2  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| 2-Nitroaniline               |          | 6.1  | 26 U          | 26   | 26 U          | 26   | 28 U          | 28   | 26 U          | 26   | 27 U          | 27   | 27 U          | 27   |
| Dimethylphthalate            | 7000     | 4.4  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| Acenaphthylene               | 10       | 6.0  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| 2,6-Dinitrotoluene           | 10       | 5.2  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| 3-Nitroaniline               |          | 5.2  | 26 U          | 26   | 26 U          | 26   | 28 U          | 28   | 26 U          | 26   | 27 U          | 27   | 27 U          | 27   |
| Acenaphthene                 | 400      | 6.7  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| 2,4-Dinitrophenol            | 40       | 4.6  | 26 U          | 26   | 26 U          | 26   | 28 U          | 28   | 26 U          | 26   | 27 U          | 27   | 27 U          | 27   |

**MAIN POST  
GROUNDWATER SEMIVOLATILES**

| Geographical Location      |          |      | M4            |      | M4            |      | M4            |      | M4            |      | M5            |      | M5            |      |
|----------------------------|----------|------|---------------|------|---------------|------|---------------|------|---------------|------|---------------|------|---------------|------|
| Sample                     |          |      | MP04-MW08-A01 |      | MP04-MW08-A02 |      | MP04-MW09-A01 |      | MP04-MW09-A02 |      | MP05-MW10-A01 |      | MP05-MW10-A02 |      |
| Sample Type                |          |      |               |      |               |      |               |      |               |      |               |      |               |      |
| Batch#                     |          |      | 9502G219      |      | 9503G642      |      | 9502G219      |      | 9503G660      |      | 9502G238      |      | 9503G660      |      |
| Prep#                      |          |      | 95GB0111      |      | 95GB0172      |      | 95GB0111      |      | 95GB0174      |      | 95GB0112      |      | 95GB0174      |      |
| RFW#                       |          |      | 014           |      | 007           |      | 016           |      | 009           |      | 010           |      | 011           |      |
| Dilution Factor            |          |      | 1.00          |      | 1.00          |      | 1.00          |      | 1.00          |      | 1.00          |      | 1.00          |      |
| Matrix                     |          |      | water         |      | water         |      | water         |      | water         |      | water         |      | water         |      |
| Units                      | ug/l     | ug/l | ug/l          |      | ug/l          |      | ug/l          |      | ug/l          |      | ug/l          |      | ug/l          |      |
| Sampling Date              |          |      | 2/16/95       |      | 3/8/95        |      | 2/16/95       |      | 3/9/95        |      | 2/17/95       |      | 3/9/95        |      |
| Analysis Date              |          |      | 3/9/95        |      | 3/24/95       |      | 3/9/95        |      | 3/26/95       |      | 2/27/95       |      | 3/26/95       |      |
| Analysis                   | Standard | MDL  | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL |
|                            |          |      | Result        |      | Result        |      | Result        |      | Result        |      | Result        |      | Result        |      |
| 4-Nitrophenol              |          | 7.5  | 26 U          | 26   | 26 U          | 26   | 28 U          | 28   | 26 U          | 26   | 27 U          | 27   | 27 U          | 27   |
| Dibenzofuran               |          | 6.5  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| 2,4-Dinitrotoluene         | 10       | 5.8  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| Diethylphthalate           | 5000     | 5.4  | 10 U          | 10   | 2 JB          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| 4-Chlorophenyl-phenylether |          | 7.0  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| Fluorene                   | 300      | 6.3  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| 4-Nitroaniline             |          | 6.4  | 26 U          | 26   | 26 U          | 26   | 28 U          | 28   | 26 U          | 26   | 27 U          | 27   | 27 U          | 27   |
| 4,6-Dinitro-2-methylphenol |          | 5.3  | 26 U          | 26   | 26 U          | 26   | 28 U          | 28   | 26 U          | 26   | 27 U          | 27   | 27 U          | 27   |
| N-Nitrosodiphenylamine (1) | 20       | 4.2  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| 4-Bromophenyl-phenylether  |          | 5.3  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| Hexachlorobenzene          | 10       | 5.5  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| Pentachlorophenol          | 1        | 4.0  | 26 U          | 26   | 26 U          | 26   | 28 U          | 28   | 26 U          | 26   | 27 U          | 27   | 27 U          | 27   |
| Phenanthrene               | 10       | 5.0  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| Anthracene                 | 2000     | 4.6  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| Carbazole                  |          | 4.4  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| Di-n-butylphthalate        | 900      | 6.5  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| Fluoranthene               | 300      | 6.0  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| Pyrene                     | 200      | 5.4  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| Butylbenzylphthalate       | 100      | 5.3  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| 3,3'-Dichlorobenzidine     | 60       | 2.8  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| Benzo(a)anthracene         | 10       | 4.9  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| Chrysene                   | 20       | 4.4  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| bis(2-Ethylhexy)phthalate  | 30       | 9.7  | 10 U          | 10   | 3 J           | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| Di-n-octyl phthalate       | 100      | 5.6  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| Benzo(b)fluoranthene       | 2        | 5.7  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| Benzo(k)fluoranthene       | 2        | 6.2  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| Benzo(a)pyrene             | 20       | 4.9  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| Indeno(1,2,3-cd)pyrene     | 20       | 7.1  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| Dibenzo(a,h)anthracene     | 20       | 6.0  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| Benzo(g,h,i)perylene       | 20       | 6.8  | 10 U          | 10   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| Petroleum hydrocarbons     |          |      |               |      |               |      |               |      |               |      |               |      |               |      |
| Total Est. Conc. of TIC    |          |      | 5 J           |      |               |      | 4 J           |      |               |      | 4 J           |      | 8 J           |      |
| Dilution Factor            |          |      |               |      |               |      |               |      |               |      |               |      |               |      |
| Method: TCL Semivolatiles  |          |      |               |      |               |      |               |      |               |      |               |      |               |      |

**MAIN POST  
GROUNDWATER SEMIVOLATILES**

| Geographical Location        |          |      | M5                |      | M5                |      | M5                  |      | M8                |      | M8                |      |
|------------------------------|----------|------|-------------------|------|-------------------|------|---------------------|------|-------------------|------|-------------------|------|
| Sample                       |          |      | MP05-MW11-A01     |      | MP05-MW11-A02     |      | MP05-MW11-E02       |      | MP08-MW12-A01     |      | MP08-MW12-A02     |      |
| Sample Type                  |          |      |                   |      |                   |      | Field Rinsate Blank |      |                   |      |                   |      |
| Batch#                       |          |      | 9502G238          |      | 9503G660          |      | 9503G660            |      | 9502G238          |      | 9503G767          |      |
| Prep#                        |          |      | 95GB0112          |      | 95GB0174          |      | 95GB0174            |      | 95GB0112          |      | 95GP0263          |      |
| RFW#                         |          |      | 012               |      | 013               |      | 016                 |      | 014               |      | 001               |      |
| Dilution Factor              |          |      | 1.00              |      | 1.00              |      | 1.00                |      | 1.00              |      | 1.00              |      |
| Matrix                       |          |      | water             |      | water             |      | water               |      | water             |      | water             |      |
| Units                        | ug/l     | ug/l | ug/l              |      | ug/l              |      | ug/l                |      | ug/l              |      | ug/l              |      |
| Sampling Date                |          |      | 2/17/95           |      | 3/9/95            |      | 3/9/95              |      | 2/17/95           |      | 3/15/95           |      |
| Analysis Date                |          |      | 2/27/95           |      | 3/26/95           |      | 3/27/95             |      | 2/28/95           |      | 4/15/95           |      |
| Analysis                     | Standard | MDL  | Analytical Result | CRQL | Analytical Result | CRQL | Analytical Result   | CRQL | Analytical Result | CRQL | Analytical Result | CRQL |
| Phenol                       | 4000     | 7.1  | 10 U              | 10   | 12 U              | 12   | 10 U                | 10   | 11 U              | 11   | 11 U              | 11   |
| bis(2-Chloroethyl) ether     | 10       | 9.7  | 10 U              | 10   | 12 U              | 12   | 10 U                | 10   | 11 U              | 11   | 11 U              | 11   |
| 2-Chlorophenol               | 40       | 7.3  | 10 U              | 10   | 12 U              | 12   | 10 U                | 10   | 11 U              | 11   | 11 U              | 11   |
| 1,3-Dichlorobenzene          | 600      | 5.3  | 10 U              | 10   | 12 U              | 12   | 10 U                | 10   | 11 U              | 11   | 11 U              | 11   |
| 1,4-Dichlorobenzene          | 75       | 4.8  | 10 U              | 10   | 12 U              | 12   | 10 U                | 10   | 11 U              | 11   | 11 U              | 11   |
| 1,2-Dichlorobenzene          | 600      | 5.7  | 10 U              | 10   | 12 U              | 12   | 10 U                | 10   | 11 U              | 11   | 11 U              | 11   |
| 2-Methylphenol               |          | 6.7  | 10 U              | 10   | 12 U              | 12   | 10 U                | 10   | 11 U              | 11   | 11 U              | 11   |
| 2,2'-oxybis(1-Chloropropane) |          | 7.0  | 10 U              | 10   | 12 U              | 12   | 10 U                | 10   | 11 U              | 11   | 11 U              | 11   |
| 4-Methylphenol               |          | 12.9 | 10 U              | 10   | 12 U              | 12   | 10 U                | 10   | 11 U              | 11   | 11 U              | 11   |
| N-Nitroso-di-n-propylamine   | 20       | 8.0  | 10 U              | 10   | 12 U              | 12   | 10 U                | 10   | 11 U              | 11   | 11 U              | 11   |
| Hexachloroethane             | 10       | 5.3  | 10 U              | 10   | 12 U              | 12   | 10 U                | 10   | 11 U              | 11   | 11 U              | 11   |
| Nitrobenzene                 | 10       | 7.4  | 10 U              | 10   | 12 U              | 12   | 10 U                | 10   | 11 U              | 11   | 11 U              | 11   |
| Isophorone                   | 100      | 3.9  | 10 U              | 10   | 12 U              | 12   | 10 U                | 10   | 11 U              | 11   | 11 U              | 11   |
| 2-Nitrophenol                |          | 7.0  | 10 U              | 10   | 12 U              | 12   | 10 U                | 10   | 11 U              | 11   | 11 U              | 11   |
| 2,4-Dimethylphenol           | 100      | 4.8  | 10 U              | 10   | 12 U              | 12   | 10 U                | 10   | 11 U              | 11   | 11 U              | 11   |
| bis(2-Chloroethoxy) methane  |          | 6.1  | 10 U              | 10   | 12 U              | 12   | 10 U                | 10   | 11 U              | 11   | 11 U              | 11   |
| 2,4-Dichlorophenol           | 20       | 4.4  | 10 U              | 10   | 12 U              | 12   | 10 U                | 10   | 11 U              | 11   | 11 U              | 11   |
| 1,2,4-Trichlorobenzene       | 9        | 9.6  | 10 U              | 10   | 12 U              | 12   | 10 U                | 10   | 11 U              | 11   | 11 U              | 11   |
| Naphthalene                  |          | 8.4  | 10 U              | 10   | 12 U              | 12   | 10 U                | 10   | 11 U              | 11   | 11 U              | 11   |
| 4-Chloroaniline              |          | 2.9  | 10 U              | 10   | 12 U              | 12   | 10 U                | 10   | 11 U              | 11   | 11 U              | 11   |
| Hexachlorobutadiene          | 1        | 4.6  | 10 U              | 10   | 12 U              | 12   | 10 U                | 10   | 11 U              | 11   | 11 U              | 11   |
| 4-Chloro-3-methylphenol      | 20       | 3.1  | 10 U              | 10   | 12 U              | 12   | 10 U                | 10   | 11 U              | 11   | 11 U              | 11   |
| 2-Methylnaphthalene          |          | 8.7  | 10 U              | 10   | 12 U              | 12   | 10 U                | 10   | 11 U              | 11   | 11 U              | 11   |
| Hexachlorocyclopentadiene    | 50       | 3.6  | 10 U              | 10   | 12 U              | 12   | 10 U                | 10   | 11 U              | 11   | 11 U              | 11   |
| 2,4,6-Trichlorophenol        |          | 5.6  | 10 U              | 10   | 12 U              | 12   | 10 U                | 10   | 11 U              | 11   | 11 U              | 11   |
| 2,4,5-Trichlorophenol        | 700      | 4.7  | 26 U              | 26   | 31 U              | 31   | 26 U                | 26   | 26 U              | 26   | 26 U              | 26   |
| 2-Chloronaphthalene          |          | 8.2  | 10 U              | 10   | 12 U              | 12   | 10 U                | 10   | 11 U              | 11   | 11 U              | 11   |
| 2-Nitroaniline               |          | 6.1  | 26 U              | 26   | 31 U              | 31   | 26 U                | 26   | 26 U              | 26   | 26 U              | 26   |
| Dimethylphthalate            | 7000     | 4.4  | 10 U              | 10   | 12 U              | 12   | 10 U                | 10   | 11 U              | 11   | 11 U              | 11   |
| Acenaphthylene               | 10       | 6.0  | 10 U              | 10   | 12 U              | 12   | 10 U                | 10   | 11 U              | 11   | 11 U              | 11   |
| 2,6-Dinitrotoluene           | 10       | 5.2  | 10 U              | 10   | 12 U              | 12   | 10 U                | 10   | 11 U              | 11   | 11 U              | 11   |
| 3-Nitroaniline               |          | 5.2  | 26 U              | 26   | 31 U              | 31   | 26 U                | 26   | 26 U              | 26   | 26 U              | 26   |
| Acenaphthene                 | 400      | 6.7  | 10 U              | 10   | 12 U              | 12   | 10 U                | 10   | 11 U              | 11   | 11 U              | 11   |
| 2,4-Dinitrophenol            | 40       | 4.6  | 26 U              | 26   | 31 U              | 31   | 26 U                | 26   | 26 U              | 26   | 26 U              | 26   |

**MAIN POST  
GROUNDWATER SEMIVOLATILES**

| Geographical Location      |          |      | M5            |      | M5            |      | M5                  |      | M8            |      | M8            |      |
|----------------------------|----------|------|---------------|------|---------------|------|---------------------|------|---------------|------|---------------|------|
| Sample                     |          |      | MP05-MW11-A01 |      | MP05-MW11-A02 |      | MP05-MW11-E02       |      | MP08-MW12-A01 |      | MP08-MW12-A02 |      |
| Sample Type                |          |      |               |      |               |      | Field Rinsate Blank |      |               |      |               |      |
| Batch#                     |          |      | 9502G238      |      | 9503G660      |      | 9503G660            |      | 9502G238      |      | 9503G767      |      |
| Prep#                      |          |      | 95GB0112      |      | 95GB0174      |      | 95GB0174            |      | 95GB0112      |      | 95GP0263      |      |
| RFW#                       |          |      | 012           |      | 013           |      | 016                 |      | 014           |      | 001           |      |
| Dilution Factor            |          |      | 1.00          |      | 1.00          |      | 1.00                |      | 1.00          |      | 1.00          |      |
| Matrix                     |          |      | water         |      | water         |      | water               |      | water         |      | water         |      |
| Units                      | ug/l     | ug/l | ug/l          |      | ug/l          |      | ug/l                |      | ug/l          |      | ug/l          |      |
| Sampling Date              |          |      | 2/17/95       |      | 3/9/95        |      | 3/9/95              |      | 2/17/95       |      | 3/15/95       |      |
| Analysis Date              |          |      | 2/27/95       |      | 3/26/95       |      | 3/27/95             |      | 2/28/95       |      | 4/15/95       |      |
| Analysis                   | Standard | MDL  | Analytical    | CRQL | Analytical    | CRQL | Analytical          | CRQL | Analytical    | CRQL | Analytical    | CRQL |
|                            |          |      | Result        |      | Result        |      | Result              |      | Result        |      | Result        |      |
| 4-Nitrophenol              |          | 7.5  | 26 U          | 26   | 31 U          | 31   | 26 U                | 26   | 26 U          | 26   | 26 U          | 26   |
| Dibenzofuran               |          | 6.5  | 10 U          | 10   | 12 U          | 12   | 10 U                | 10   | 11 U          | 11   | 11 U          | 11   |
| 2,4-Dinitrotoluene         | 10       | 5.8  | 10 U          | 10   | 12 U          | 12   | 10 U                | 10   | 11 U          | 11   | 11 U          | 11   |
| Diethylphthalate           | 5000     | 5.4  | 10 U          | 10   | 12 U          | 12   | 10 U                | 10   | 11 U          | 11   | 11 U          | 11   |
| 4-Chlorophenyl-phenylether |          | 7.0  | 10 U          | 10   | 12 U          | 12   | 10 U                | 10   | 11 U          | 11   | 11 U          | 11   |
| Fluorene                   | 300      | 6.3  | 10 U          | 10   | 12 U          | 12   | 10 U                | 10   | 11 U          | 11   | 11 U          | 11   |
| 4-Nitroaniline             |          | 6.4  | 26 U          | 26   | 31 U          | 31   | 26 U                | 26   | 26 U          | 26   | 26 U          | 26   |
| 4,6-Dinitro-2-methylphenol |          | 5.3  | 26 U          | 26   | 31 U          | 31   | 26 U                | 26   | 26 U          | 26   | 26 U          | 26   |
| N-Nitrosodiphenylamine (1) | 20       | 4.2  | 10 U          | 10   | 12 U          | 12   | 10 U                | 10   | 11 U          | 11   | 11 U          | 11   |
| 4-Bromophenyl-phenylether  |          | 5.3  | 10 U          | 10   | 12 U          | 12   | 10 U                | 10   | 11 U          | 11   | 11 U          | 11   |
| Hexachlorobenzene          | 10       | 5.5  | 10 U          | 10   | 12 U          | 12   | 10 U                | 10   | 11 U          | 11   | 11 U          | 11   |
| Pentachlorophenol          | 1        | 4.0  | 26 U          | 26   | 31 U          | 31   | 26 U                | 26   | 26 U          | 26   | 26 U          | 26   |
| Phenanthrene               | 10       | 5.0  | 10 U          | 10   | 12 U          | 12   | 10 U                | 10   | 11 U          | 11   | 11 U          | 11   |
| Anthracene                 | 2000     | 4.6  | 10 U          | 10   | 12 U          | 12   | 10 U                | 10   | 11 U          | 11   | 11 U          | 11   |
| Carbazole                  |          | 4.4  | 10 U          | 10   | 12 U          | 12   | 10 U                | 10   | 11 U          | 11   | 11 U          | 11   |
| Di-n-butylphthalate        | 900      | 6.5  | 10 U          | 10   | 12 U          | 12   | 10 U                | 10   | 11 U          | 11   | 11 U          | 11   |
| Fluoranthene               | 300      | 6.0  | 10 U          | 10   | 12 U          | 12   | 10 U                | 10   | 11 U          | 11   | 11 U          | 11   |
| Pyrene                     | 200      | 5.4  | 10 U          | 10   | 12 U          | 12   | 10 U                | 10   | 11 U          | 11   | 11 U          | 11   |
| Butylbenzylphthalate       | 100      | 5.3  | 10 U          | 10   | 12 U          | 12   | 10 U                | 10   | 11 U          | 11   | 11 U          | 11   |
| 3,3'-Dichlorobenzidine     | 60       | 2.8  | 10 U          | 10   | 12 U          | 12   | 10 U                | 10   | 11 U          | 11   | 11 U          | 11   |
| Benzo(a)anthracene         | 10       | 4.9  | 10 U          | 10   | 12 U          | 12   | 10 U                | 10   | 11 U          | 11   | 11 U          | 11   |
| Chrysene                   | 20       | 4.4  | 10 U          | 10   | 12 U          | 12   | 10 U                | 10   | 11 U          | 11   | 11 U          | 11   |
| bis(2-Ethylhexy)phthalate  | 30       | 9.7  | 2 J           | 10   | 12 U          | 12   | 10 U                | 10   | 11 U          | 11   | 11 U          | 11   |
| Di-n-octyl phthalate       | 100      | 5.6  | 10 U          | 10   | 12 U          | 12   | 10 U                | 10   | 11 U          | 11   | 11 U          | 11   |
| Benzo(b)fluoranthene       | 2        | 5.7  | 10 U          | 10   | 12 U          | 12   | 10 U                | 10   | 11 U          | 11   | 11 U          | 11   |
| Benzo(k)fluoranthene       | 2        | 6.2  | 10 U          | 10   | 12 U          | 12   | 10 U                | 10   | 11 U          | 11   | 11 U          | 11   |
| Benzo(a)pyrene             | 20       | 4.9  | 10 U          | 10   | 12 U          | 12   | 10 U                | 10   | 11 U          | 11   | 11 U          | 11   |
| Indeno(1,2,3-cd)pyrene     | 20       | 7.1  | 10 U          | 10   | 12 U          | 12   | 10 U                | 10   | 11 U          | 11   | 11 U          | 11   |
| Dibenzo(a,h)anthracene     | 20       | 6.0  | 10 U          | 10   | 12 U          | 12   | 10 U                | 10   | 11 U          | 11   | 11 U          | 11   |
| Benzo(g,h,i)perylene       | 20       | 6.8  | 10 U          | 10   | 12 U          | 12   | 10 U                | 10   | 11 U          | 11   | 11 U          | 11   |
| Petroleum hydrocarbons     |          |      |               |      |               |      |                     |      |               |      |               |      |
| Total Est. Conc. of TIC    |          |      | 35 J          |      | 37 J          |      | 9 J                 |      | 18 J          |      | 20 J          |      |
| Dilution Factor            |          |      |               |      |               |      |                     |      |               |      |               |      |
| Method: TCL Semivolatiles  |          |      |               |      |               |      |                     |      |               |      |               |      |



**MAIN POST**  
**GROUNDWATER SEMIVOLATILES**

| Geographical Location        |          |      | M8            |      | M8                  |      | M8            |      | M8              |      | M8            |      |
|------------------------------|----------|------|---------------|------|---------------------|------|---------------|------|-----------------|------|---------------|------|
| Sample                       |          |      | MP08-MW12-C02 |      | MP08-MW12-E02       |      | MP08-MW13-A01 |      | MP08-MW13-A01RE |      | MP08-MW13-A02 |      |
| Sample Type                  |          |      | Duplicate     |      | Field Rinsate Blank |      |               |      |                 |      |               |      |
| Batch#                       |          |      | 9503G767      |      | 9503G767            |      | 9502G403      |      | 9502G403        |      | 9503G767      |      |
| Prep#                        |          |      | 95GP0263      |      | 95GP0263            |      | 95GB0129      |      | 95GB0129        |      | 95GP0263      |      |
| RFW#                         |          |      | 003           |      | 006                 |      | 001           |      | 001 RE          |      | 008           |      |
| Dilution Factor              |          |      | 1.00          |      | 1.00                |      | 1.00          |      | 1.00            |      | 1.00          |      |
| Matrix                       |          |      | water         |      | water               |      | water         |      | water           |      | water         |      |
| Units                        | ug/l     | ug/l | ug/l          |      | ug/l                |      | ug/l          |      | ug/l            |      | ug/l          |      |
| Sampling Date                |          |      | 3/15/95       |      | 3/15/95             |      | 2/22/95       |      | 2/22/95         |      | 3/15/95       |      |
| Analysis Date                |          |      | 4/15/95       |      | 4/15/95             |      | 3/15/95       |      | 3/16/95         |      | 4/15/95       |      |
| Analysis                     | Standard | MDL  | Analytical    | CRQL | Analytical          | CRQL | Analytical    | CRQL | Analytical      | CRQL | Analytical    | CRQL |
|                              |          |      | Result        |      | Result              |      | Result        |      | Result          |      | Result        |      |
| Phenol                       | 4000     | 7.1  | 10 U          | 10   | 10 U                | 10   | 11 U          | 11   | 11 U            | 11   | 11 U          | 11   |
| bis(2-Chloroethyl) ether     | 10       | 9.7  | 10 U          | 10   | 10 U                | 10   | 11 U          | 11   | 11 U            | 11   | 11 U          | 11   |
| 2-Chlorophenol               | 40       | 7.3  | 10 U          | 10   | 10 U                | 10   | 11 U          | 11   | 11 U            | 11   | 11 U          | 11   |
| 1,3-Dichlorobenzene          | 600      | 5.3  | 10 U          | 10   | 10 U                | 10   | 11 U          | 11   | 11 U            | 11   | 11 U          | 11   |
| 1,4-Dichlorobenzene          | 75       | 4.8  | 10 U          | 10   | 10 U                | 10   | 11 U          | 11   | 11 U            | 11   | 11 U          | 11   |
| 1,2-Dichlorobenzene          | 600      | 5.7  | 10 U          | 10   | 10 U                | 10   | 11 U          | 11   | 11 U            | 11   | 11 U          | 11   |
| 2-Methylphenol               |          | 6.7  | 10 U          | 10   | 10 U                | 10   | 11 U          | 11   | 11 U            | 11   | 11 U          | 11   |
| 2,2'-oxybis(1-Chloropropane) |          | 7.0  | 10 U          | 10   | 10 U                | 10   | 11 U          | 11   | 11 U            | 11   | 11 U          | 11   |
| 4-Methylphenol               |          | 12.9 | 10 U          | 10   | 10 U                | 10   | 11 U          | 11   | 11 U            | 11   | 11 U          | 11   |
| N-Nitroso-di-n-propylamine   | 20       | 8.0  | 10 U          | 10   | 10 U                | 10   | 11 U          | 11   | 11 U            | 11   | 11 U          | 11   |
| Hexachloroethane             | 10       | 5.3  | 10 U          | 10   | 10 U                | 10   | 11 U          | 11   | 11 U            | 11   | 11 U          | 11   |
| Nitrobenzene                 | 10       | 7.4  | 10 U          | 10   | 10 U                | 10   | 11 U          | 11   | 11 U            | 11   | 11 U          | 11   |
| Isophorone                   | 100      | 3.9  | 10 U          | 10   | 10 U                | 10   | 11 U          | 11   | 11 U            | 11   | 11 U          | 11   |
| 2-Nitrophenol                |          | 7.0  | 10 U          | 10   | 10 U                | 10   | 11 U          | 11   | 11 U            | 11   | 11 U          | 11   |
| 2,4-Dimethylphenol           | 100      | 4.8  | 10 U          | 10   | 10 U                | 10   | 11 U          | 11   | 11 U            | 11   | 11 U          | 11   |
| bis(2-Chloroethoxy) methane  |          | 6.1  | 10 U          | 10   | 10 U                | 10   | 11 U          | 11   | 11 U            | 11   | 11 U          | 11   |
| 2,4-Dichlorophenol           | 20       | 4.4  | 10 U          | 10   | 10 U                | 10   | 11 U          | 11   | 11 U            | 11   | 11 U          | 11   |
| 1,2,4-Trichlorobenzene       | 9        | 9.6  | 10 U          | 10   | 10 U                | 10   | 11 U          | 11   | 11 U            | 11   | 11 U          | 11   |
| Naphthalene                  |          | 8.4  | 10 U          | 10   | 10 U                | 10   | 11 U          | 11   | 11 U            | 11   | 11 U          | 11   |
| 4-Chloroaniline              |          | 2.9  | 10 U          | 10   | 10 U                | 10   | 11 U          | 11   | 11 U            | 11   | 11 U          | 11   |
| Hexachlorobutadiene          | 1        | 4.6  | 10 U          | 10   | 10 U                | 10   | 11 U          | 11   | 11 U            | 11   | 11 U          | 11   |
| 4-Chloro-3-methylphenol      | 20       | 3.1  | 10 U          | 10   | 10 U                | 10   | 11 U          | 11   | 11 U            | 11   | 11 U          | 11   |
| 2-Methylnaphthalene          |          | 8.7  | 10 U          | 10   | 10 U                | 10   | 11 U          | 11   | 11 U            | 11   | 11 U          | 11   |
| Hexachlorocyclopentadiene    | 50       | 3.6  | 10 U          | 10   | 10 U                | 10   | 11 U          | 11   | 11 U            | 11   | 11 U          | 11   |
| 2,4,6-Trichlorophenol        |          | 5.6  | 10 U          | 10   | 10 U                | 10   | 11 U          | 11   | 11 U            | 11   | 11 U          | 11   |
| 2,4,5-Trichlorophenol        | 700      | 4.7  | 26 U          | 26   | 26 U                | 26   | 26 U          | 26   | 26 U            | 26   | 26 U          | 26   |
| 2-Chloronaphthalene          |          | 8.2  | 10 U          | 10   | 10 U                | 10   | 11 U          | 11   | 11 U            | 11   | 11 U          | 11   |
| 2-Nitroaniline               |          | 6.1  | 26 U          | 26   | 26 U                | 26   | 26 U          | 26   | 26 U            | 26   | 26 U          | 26   |
| Dimethylphthalate            | 7000     | 4.4  | 10 U          | 10   | 10 U                | 10   | 11 U          | 11   | 11 U            | 11   | 11 U          | 11   |
| Acenaphthylene               | 10       | 6.0  | 10 U          | 10   | 10 U                | 10   | 11 U          | 11   | 11 U            | 11   | 11 U          | 11   |
| 2,6-Dinitrotoluene           | 10       | 5.2  | 10 U          | 10   | 10 U                | 10   | 11 U          | 11   | 11 U            | 11   | 11 U          | 11   |
| 3-Nitroaniline               |          | 5.2  | 26 U          | 26   | 26 U                | 26   | 26 U          | 26   | 26 U            | 26   | 26 U          | 26   |
| Acenaphthene                 | 400      | 6.7  | 10 U          | 10   | 10 U                | 10   | 11 U          | 11   | 11 U            | 11   | 11 U          | 11   |
| 2,4-Dinitrophenol            | 40       | 4.6  | 26 U          | 26   | 26 U                | 26   | 26 U          | 26   | 26 U            | 26   | 26 U          | 26   |

**MAIN POST  
GROUNDWATER SEMIVOLATILES**

| Geographical Location      |          |      | M8            |      | M8                  |      | M8            |      | M8              |      | M8            |      |
|----------------------------|----------|------|---------------|------|---------------------|------|---------------|------|-----------------|------|---------------|------|
| Sample                     |          |      | MP08-MW12-C02 |      | MP08-MW12-E02       |      | MP08-MW13-A01 |      | MP08-MW13-A01RE |      | MP08-MW13-A02 |      |
| Sample Type                |          |      | Duplicate     |      | Field Rinsate Blank |      |               |      |                 |      |               |      |
| Batch#                     |          |      | 9503G767      |      | 9503G767            |      | 9502G403      |      | 9502G403        |      | 9503G767      |      |
| Prep#                      |          |      | 95GP0263      |      | 95GP0263            |      | 95GB0129      |      | 95GB0129        |      | 95GP0263      |      |
| RFW#                       |          |      | 003           |      | 006                 |      | 001           |      | 001 RE          |      | 008           |      |
| Dilution Factor            |          |      | 1.00          |      | 1.00                |      | 1.00          |      | 1.00            |      | 1.00          |      |
| Matrix                     |          |      | water         |      | water               |      | water         |      | water           |      | water         |      |
| Units                      | ug/l     | ug/l | ug/l          |      | ug/l                |      | ug/l          |      | ug/l            |      | ug/l          |      |
| Sampling Date              |          |      | 3/15/95       |      | 3/15/95             |      | 2/22/95       |      | 2/22/95         |      | 3/15/95       |      |
| Analysis Date              |          |      | 4/15/95       |      | 4/15/95             |      | 3/15/95       |      | 3/16/95         |      | 4/15/95       |      |
| Analysis                   | Standard | MDL  | Analytical    | CRQL | Analytical          | CRQL | Analytical    | CRQL | Analytical      | CRQL | Analytical    | CRQL |
|                            |          |      | Result        |      | Result              |      | Result        |      | Result          |      | Result        |      |
| 4-Nitrophenol              |          | 7.5  | 26 U          | 26   | 26 U                | 26   | 26 U          | 26   | 26 U            | 26   | 26 U          | 26   |
| Dibenzofuran               |          | 6.5  | 10 U          | 10   | 10 U                | 10   | 11 U          | 11   | 11 U            | 11   | 11 U          | 11   |
| 2,4-Dinitrotoluene         | 10       | 5.8  | 10 U          | 10   | 10 U                | 10   | 11 U          | 11   | 11 U            | 11   | 11 U          | 11   |
| Diethylphthalate           | 5000     | 5.4  | 10 U          | 10   | 10 U                | 10   | 11 U          | 11   | 11 U            | 11   | 11 U          | 11   |
| 4-Chlorophenyl-phenylether |          | 7.0  | 10 U          | 10   | 10 U                | 10   | 11 U          | 11   | 11 U            | 11   | 11 U          | 11   |
| Fluorene                   | 300      | 6.3  | 10 U          | 10   | 10 U                | 10   | 11 U          | 11   | 11 U            | 11   | 11 U          | 11   |
| 4-Nitroaniline             |          | 6.4  | 26 U          | 26   | 26 U                | 26   | 26 U          | 26   | 26 U            | 26   | 26 U          | 26   |
| 4,6-Dinitro-2-methylphenol |          | 5.3  | 26 U          | 26   | 26 U                | 26   | 26 U          | 26   | 26 U            | 26   | 26 U          | 26   |
| N-Nitrosodiphenylamine (1) | 20       | 4.2  | 10 U          | 10   | 10 U                | 10   | 11 U          | 11   | 11 U            | 11   | 11 U          | 11   |
| 4-Bromophenyl-phenylether  |          | 5.3  | 10 U          | 10   | 10 U                | 10   | 11 U          | 11   | 11 U            | 11   | 11 U          | 11   |
| Hexachlorobenzene          | 10       | 5.5  | 10 U          | 10   | 10 U                | 10   | 11 U          | 11   | 11 U            | 11   | 11 U          | 11   |
| Pentachlorophenol          | 1        | 4.0  | 26 U          | 26   | 26 U                | 26   | 26 U          | 26   | 26 U            | 26   | 26 U          | 26   |
| Phenanthrene               | 10       | 5.0  | 10 U          | 10   | 10 U                | 10   | 11 U          | 11   | 11 U            | 11   | 11 U          | 11   |
| Anthracene                 | 2000     | 4.6  | 10 U          | 10   | 10 U                | 10   | 11 U          | 11   | 11 U            | 11   | 11 U          | 11   |
| Carbazole                  |          | 4.4  | 10 U          | 10   | 10 U                | 10   | 11 U          | 11   | 11 U            | 11   | 11 U          | 11   |
| Di-n-butylphthalate        | 900      | 6.5  | 10 U          | 10   | 10 U                | 10   | 11 U          | 11   | 11 U            | 11   | 11 U          | 11   |
| Fluoranthene               | 300      | 6.0  | 10 U          | 10   | 10 U                | 10   | 11 U          | 11   | 11 U            | 11   | 11 U          | 11   |
| Pyrene                     | 200      | 5.4  | 10 U          | 10   | 10 U                | 10   | 11 U          | 11   | 11 U            | 11   | 11 U          | 11   |
| Butylbenzylphthalate       | 100      | 5.3  | 10 U          | 10   | 10 U                | 10   | 11 U          | 11   | 11 U            | 11   | 11 U          | 11   |
| 3,3'-Dichlorobenzidine     | 60       | 2.8  | 10 U          | 10   | 10 U                | 10   | 11 U          | 11   | 11 U            | 11   | 11 U          | 11   |
| Benzo(a)anthracene         | 10       | 4.9  | 10 U          | 10   | 10 U                | 10   | 11 U          | 11   | 11 U            | 11   | 11 U          | 11   |
| Chrysene                   | 20       | 4.4  | 10 U          | 10   | 10 U                | 10   | 11 U          | 11   | 11 U            | 11   | 11 U          | 11   |
| bis(2-Ethylhexyl)phthalate | 30       | 9.7  | 10 U          | 10   | 2 J                 | 10   | 2 JB          | 11   | 1 JB            | 11   | 11 U          | 11   |
| Di-n-octyl phthalate       | 100      | 5.6  | 10 U          | 10   | 10 U                | 10   | 11 U          | 11   | 11 U            | 11   | 11 U          | 11   |
| Benzo(b)fluoranthene       | 2        | 5.7  | 10 U          | 10   | 10 U                | 10   | 11 U          | 11   | 11 U            | 11   | 11 U          | 11   |
| Benzo(k)fluoranthene       | 2        | 6.2  | 10 U          | 10   | 10 U                | 10   | 11 U          | 11   | 11 U            | 11   | 11 U          | 11   |
| Benzo(a)pyrene             | 20       | 4.9  | 10 U          | 10   | 10 U                | 10   | 11 U          | 11   | 11 U            | 11   | 11 U          | 11   |
| Indeno(1,2,3-cd)pyrene     | 20       | 7.1  | 10 U          | 10   | 10 U                | 10   | 11 U          | 11   | 11 U            | 11   | 11 U          | 11   |
| Dibenzo(a,h)anthracene     | 20       | 6.0  | 10 U          | 10   | 10 U                | 10   | 11 U          | 11   | 11 U            | 11   | 11 U          | 11   |
| Benzo(g,h,i)perylene       | 20       | 6.8  | 10 U          | 10   | 10 U                | 10   | 11 U          | 11   | 11 U            | 11   | 11 U          | 11   |
| Petroleum hydrocarbons     |          |      |               |      |                     |      |               |      |                 |      |               |      |
| Total Est. Conc. of TIC    |          |      | 22 J          |      | 10 J                |      | 17 JA         |      | 20 JA           |      |               |      |
| Dilution Factor            |          |      |               |      |                     |      |               |      |                 |      |               |      |
| Method:TCL Semivolatiles   |          |      |               |      |                     |      |               |      |                 |      |               |      |

**MAIN POST  
GROUNDWATER SEMIVOLATILES**

| Geographical Location        |          |      | M8            |      | M8            |      | M8              |      | M8            |      | M8            |      |
|------------------------------|----------|------|---------------|------|---------------|------|-----------------|------|---------------|------|---------------|------|
| Sample                       |          |      | MP08-MW14-A01 |      | MP08-MW14-A02 |      | MP08-MW14-A02RE |      | MP08-MW15-A01 |      | MP08-MW15-A02 |      |
| Sample Type                  |          |      |               |      |               |      |                 |      |               |      |               |      |
| Batch#                       |          |      | 9502G219      |      | 9503G767      |      | 9503G767        |      | 9502G403      |      | 9503G767      |      |
| Prep#                        |          |      | 95GB0111      |      | 95GP0263      |      | 95GP0263        |      | 95GB0129      |      | 95GP0263      |      |
| RFW#                         |          |      | 018           |      | 010           |      | 010             |      | 003           |      | 012           |      |
| Dilution Factor              |          |      | 1.00          |      | 1.00          |      | 1.00            |      | 1.00          |      | 1.00          |      |
| Matrix                       |          |      | water         |      | water         |      | water           |      | water         |      | water         |      |
| Units                        | ug/l     | ug/l | ug/l          |      | ug/l          |      | ug/l            |      | ug/l          |      | ug/l          |      |
| Sampling Date                |          |      | 2/16/95       |      | 3/15/95       |      | 3/15/95         |      | 2/22/95       |      | 3/15/95       |      |
| Analysis Date                |          |      | 3/13/95       |      | 4/15/95       |      | 4/15/95         |      | 3/16/95       |      | 4/15/95       |      |
| Analysis                     | Standard | MDL  | Analytical    | CRQL | Analytical    | CRQL | Analytical      | CRQL | Analytical    | CRQL | Analytical    | CRQL |
|                              |          |      | Result        |      | Result        |      | Result          |      | Result        |      | Result        |      |
| Phenol                       | 4000     | 7.1  | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 11 U          | 11   | 12 U          | 12   |
| bis(2-Chloroethyl) ether     | 10       | 9.7  | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 11 U          | 11   | 12 U          | 12   |
| 2-Chlorophenol               | 40       | 7.3  | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 11 U          | 11   | 12 U          | 12   |
| 1,3-Dichlorobenzene          | 600      | 5.3  | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 2 J           | 11   | 12 U          | 12   |
| 1,4-Dichlorobenzene          | 75       | 4.8  | 3 J           | 10   | 3 J           | 10   | 3 J             | 10   | 5 J           | 11   | 4 J           | 12   |
| 1,2-Dichlorobenzene          | 600      | 5.7  | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 1 J           | 11   | 12 U          | 12   |
| 2-Methylphenol               |          | 6.7  | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 11 U          | 11   | 12 U          | 12   |
| 2,2'-oxybis(1-Chloropropane) |          | 7.0  | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 11 U          | 11   | 12 U          | 12   |
| 4-Methylphenol               |          | 12.9 | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 11 U          | 11   | 12 U          | 12   |
| N-Nitroso-di-n-propylamine   | 20       | 8.0  | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 11 U          | 11   | 12 U          | 12   |
| Hexachloroethane             | 10       | 5.3  | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 11 U          | 11   | 12 U          | 12   |
| Nitrobenzene                 | 10       | 7.4  | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 11 U          | 11   | 12 U          | 12   |
| Isophorone                   | 100      | 3.9  | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 11 U          | 11   | 12 U          | 12   |
| 2-Nitrophenol                |          | 7.0  | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 11 U          | 11   | 12 U          | 12   |
| 2,4-Dimethylphenol           | 100      | 4.8  | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 11 U          | 11   | 12 U          | 12   |
| bis(2-Chloroethoxy) methane  |          | 6.1  | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 11 U          | 11   | 12 U          | 12   |
| 2,4-Dichlorophenol           | 20       | 4.4  | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 11 U          | 11   | 12 U          | 12   |
| 1,2,4-Trichlorobenzene       | 9        | 9.6  | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 11 U          | 11   | 12 U          | 12   |
| Naphthalene                  |          | 8.4  | 10 U          | 10   | 10 U          | 10   | 1 J             | 10   | 1 J           | 11   | 12 U          | 12   |
| 4-Chloroaniline              |          | 2.9  | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 11 U          | 11   | 12 U          | 12   |
| Hexachlorobutadiene          | 1        | 4.6  | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 11 U          | 11   | 12 U          | 12   |
| 4-Chloro-3-methylphenol      | 20       | 3.1  | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 11 U          | 11   | 12 U          | 12   |
| 2-Methylnaphthalene          |          | 8.7  | 1 J           | 10   | 1 J           | 10   | 10 U            | 10   | 2 J           | 11   | 1 J           | 12   |
| Hexachlorocyclopentadiene    | 50       | 3.6  | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 11 U          | 11   | 12 U          | 12   |
| 2,4,6-Trichlorophenol        |          | 5.6  | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 11 U          | 11   | 12 U          | 12   |
| 2,4,5-Trichlorophenol        | 700      | 4.7  | 24 U          | 24   | 25 U          | 25   | 24 U            | 24   | 26 U          | 26   | 30 U          | 30   |
| 2-Chloronaphthalene          |          | 8.2  | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 11 U          | 11   | 12 U          | 12   |
| 2-Nitroaniline               |          | 6.1  | 24 U          | 24   | 25 U          | 25   | 24 U            | 24   | 26 U          | 26   | 30 U          | 30   |
| Dimethylphthalate            | 7000     | 4.4  | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 11 U          | 11   | 12 U          | 12   |
| Acenaphthylene               | 10       | 6.0  | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 11 U          | 11   | 12 U          | 12   |
| 2,6-Dinitrotoluene           | 10       | 5.2  | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 11 U          | 11   | 12 U          | 12   |
| 3-Nitroaniline               |          | 5.2  | 24 U          | 24   | 25 U          | 25   | 24 U            | 24   | 26 U          | 26   | 30 U          | 30   |
| Acenaphthene                 | 400      | 6.7  | 2 J           | 10   | 2 J           | 10   | 2 J             | 10   | 17            | 11   | 14            | 12   |
| 2,4-Dinitrophenol            | 40       | 4.6  | 24 U          | 24   | 25 U          | 25   | 24 U            | 24   | 26 U          | 26   | 30 U          | 30   |

**MAIN POST  
GROUNDWATER SEMIVOLATILES**

| Geographical Location      |          |      | M8            |      | M8            |      | M8              |      | M8            |      | M8            |      |
|----------------------------|----------|------|---------------|------|---------------|------|-----------------|------|---------------|------|---------------|------|
| Sample                     |          |      | MP08-MW14-A01 |      | MP08-MW14-A02 |      | MP08-MW14-A02RE |      | MP08-MW15-A01 |      | MP08-MW15-A02 |      |
| Sample Type                |          |      |               |      |               |      |                 |      |               |      |               |      |
| Batch#                     |          |      | 9502G219      |      | 9503G767      |      | 9503G767        |      | 9502G403      |      | 9503G767      |      |
| Prep#                      |          |      | 95GB0111      |      | 95GP0263      |      | 95GP0263        |      | 95GB0129      |      | 95GP0263      |      |
| RFW#                       |          |      | 018           |      | 010           |      | 010             |      | 003           |      | 012           |      |
| Dilution Factor            |          |      | 1.00          |      | 1.00          |      | 1.00            |      | 1.00          |      | 1.00          |      |
| Matrix                     |          |      | water         |      | water         |      | water           |      | water         |      | water         |      |
| Units                      | ug/l     | ug/l | ug/l          |      | ug/l          |      | ug/l            |      | ug/l          |      | ug/l          |      |
| Sampling Date              |          |      | 2/16/95       |      | 3/15/95       |      | 3/15/95         |      | 2/22/95       |      | 3/15/95       |      |
| Analysis Date              |          |      | 3/13/95       |      | 4/15/95       |      | 4/15/95         |      | 3/16/95       |      | 4/15/95       |      |
| Analysis                   | Standard | MDL  | Analytical    | CRQL | Analytical    | CRQL | Analytical      | CRQL | Analytical    | CRQL | Analytical    | CRQL |
|                            |          |      | Result        |      | Result        |      | Result          |      | Result        |      | Result        |      |
| 4-Nitrophenol              |          | 7.5  | 24 U          | 24   | 25 U          | 25   | 24 U            | 24   | 26 U          | 26   | 30 U          | 30   |
| Dibenzofuran               |          | 6.5  | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 7 J           | 11   | 5 J           | 12   |
| 2,4-Dinitrotoluene         | 10       | 5.8  | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 11 U          | 11   | 12 U          | 12   |
| Diethylphthalate           | 5000     | 5.4  | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 11 U          | 11   | 12 U          | 12   |
| 4-Chlorophenyl-phenylether |          | 7.0  | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 11 U          | 11   | 12 U          | 12   |
| Fluorene                   | 300      | 6.3  | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 9 J           | 11   | 7 J           | 12   |
| 4-Nitroaniline             |          | 6.4  | 24 U          | 24   | 25 U          | 25   | 24 U            | 24   | 26 U          | 26   | 30 U          | 30   |
| 4,6-Dinitro-2-methylphenol |          | 5.3  | 24 U          | 24   | 25 U          | 25   | 24 U            | 24   | 26 U          | 26   | 30 U          | 30   |
| N-Nitrosodiphenylamine (1) | 20       | 4.2  | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 11 U          | 11   | 12 U          | 12   |
| 4-Bromophenyl-phenylether  |          | 5.3  | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 11 U          | 11   | 12 U          | 12   |
| Hexachlorobenzene          | 10       | 5.5  | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 11 U          | 11   | 12 U          | 12   |
| Pentachlorophenol          | 1        | 4.0  | 24 U          | 24   | 25 U          | 25   | 24 U            | 24   | 26 U          | 26   | 30 U          | 30   |
| Phenanthrene               | 10       | 5.0  | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 11 U          | 11   | 12 U          | 12   |
| Anthracene                 | 2000     | 4.6  | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 11 U          | 11   | 12 U          | 12   |
| Carbazole                  |          | 4.4  | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 1 J           | 11   | 12 U          | 12   |
| Di-n-butylphthalate        | 900      | 6.5  | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 11 U          | 11   | 12 U          | 12   |
| Fluoranthene               | 300      | 6.0  | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 11 U          | 11   | 12 U          | 12   |
| Pyrene                     | 200      | 5.4  | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 11 U          | 11   | 12 U          | 12   |
| Butylbenzylphthalate       | 100      | 5.3  | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 11 U          | 11   | 12 U          | 12   |
| 3,3'-Dichlorobenzidine     | 60       | 2.8  | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 11 U          | 11   | 12 U          | 12   |
| Benzo(a)anthracene         | 10       | 4.9  | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 11 U          | 11   | 12 U          | 12   |
| Chrysene                   | 20       | 4.4  | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 1 JB          | 11   | 12 U          | 12   |
| bis(2-Ethylhexy)phthalate  | 30       | 9.7  | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 11 U          | 11   | 12 U          | 12   |
| Di-n-octyl phthalate       | 100      | 5.6  | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 11 U          | 11   | 12 U          | 12   |
| Benzo(b)fluoranthene       | 2        | 5.7  | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 11 U          | 11   | 12 U          | 12   |
| Benzo(k)fluoranthene       | 2        | 6.2  | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 11 U          | 11   | 12 U          | 12   |
| Benzo(a)pyrene             | 20       | 4.9  | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 11 U          | 11   | 12 U          | 12   |
| Indeno(1,2,3-cd)pyrene     | 20       | 7.1  | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 11 U          | 11   | 12 U          | 12   |
| Dibenzo(a,h)anthracene     | 20       | 6.0  | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 11 U          | 11   | 12 U          | 12   |
| Benzo(g,h,i)perylene       | 20       | 6.8  | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 11 U          | 11   | 12 U          | 12   |
| Petroleum hydrocarbons     |          |      |               |      |               |      |                 |      |               |      |               |      |
| Total Est. Conc. of TIC    |          |      | 143 J         |      | 142 J         |      | 170 J           |      | 205 JA        |      | 89 J          |      |
| Dilution Factor            |          |      |               |      |               |      |                 |      |               |      |               |      |
| Method: TCL Semivolatiles  |          |      |               |      |               |      |                 |      |               |      |               |      |

**MAIN POST  
GROUNDWATER SEMIVOLATILES**

| Geographical Location        |          |      | M8            |                 | M8                  |                     | M8                  |                     | M8                  |                     | M12                 |                     |
|------------------------------|----------|------|---------------|-----------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| Sample                       |          |      | MP08-MW15-C01 | MP08-MW15-C01RE | MP08-MW15-E01       | MP08-MW15-E01RE     | MP08-MW15-E01       | MP08-MW15-E01RE     | MP08-MW15-E01       | MP08-MW15-E01RE     | MP12-MW16-A01       | MP12-MW16-A01       |
| Sample Type                  |          |      | Duplicate     | Duplicate       | Field Rinsate Blank | Field Rinsate Blank | Field Rinsate Blank | Field Rinsate Blank | Field Rinsate Blank | Field Rinsate Blank | Field Rinsate Blank | Field Rinsate Blank |
| Batch#                       |          |      | 9502G403      | 9502G403        | 9502G403            | 9502G403            | 9502G403            | 9502G403            | 9502G403            | 9502G403            | 9502G299            | 9502G299            |
| Prep#                        |          |      | 95GB0129      | 95GB0129        | 95GB0129            | 95GB0129            | 95GB0129            | 95GB0129            | 95GB0129            | 95GB0129            | 95GB0118            | 95GB0118            |
| RFW#                         |          |      | 005           | 005 RE          | 008                 | 008 RE              | 008                 | 008 RE              | 008                 | 008 RE              | 001                 | 001                 |
| Dilution Factor              |          |      | 1.00          | 1.00            | 1.00                | 1.00                | 1.00                | 1.00                | 1.00                | 1.00                | 1.00                | 1.00                |
| Matrix                       |          |      | water         | water           | water               | water               | water               | water               | water               | water               | water               | water               |
| Units                        | ug/l     | ug/l | ug/l          | ug/l            | ug/l                | ug/l                | ug/l                | ug/l                | ug/l                | ug/l                | ug/l                | ug/l                |
| Sampling Date                |          |      | 2/22/95       | 2/22/95         | 2/22/95             | 2/22/95             | 2/22/95             | 2/22/95             | 2/22/95             | 2/22/95             | 2/20/95             | 2/20/95             |
| Analysis Date                |          |      | 3/16/95       | 3/16/95         | 3/16/95             | 3/16/95             | 3/16/95             | 3/16/95             | 3/16/95             | 3/16/95             | 3/11/95             | 3/11/95             |
| Analysis                     | Standard | MDL  | Analytical    | CRQL            | Analytical          | CRQL                | Analytical          | CRQL                | Analytical          | CRQL                | Analytical          | CRQL                |
|                              |          |      | Result        |                 | Result              |                     | Result              |                     | Result              |                     | Result              |                     |
| Phenol                       | 4000     | 7.1  | 10 U          | 10              | 10 U                | 10                  | 12 U                | 12                  | 12 U                | 12                  | 11 U                | 11                  |
| bis(2-Chloroethyl) ether     | 10       | 9.7  | 10 U          | 10              | 10 U                | 10                  | 12 U                | 12                  | 12 U                | 12                  | 11 U                | 11                  |
| 2-Chlorophenol               | 40       | 7.3  | 10 U          | 10              | 10 U                | 10                  | 12 U                | 12                  | 12 U                | 12                  | 11 U                | 11                  |
| 1,3-Dichlorobenzene          | 600      | 5.3  | 2 J           | 10              | 2 J                 | 10                  | 12 U                | 12                  | 12 U                | 12                  | 11 U                | 11                  |
| 1,4-Dichlorobenzene          | 75       | 4.8  | 4 J           | 10              | 5 J                 | 10                  | 12 U                | 12                  | 12 U                | 12                  | 11 U                | 11                  |
| 1,2-Dichlorobenzene          | 600      | 5.7  | 10 U          | 10              | 1 J                 | 10                  | 12 U                | 12                  | 12 U                | 12                  | 11 U                | 11                  |
| 2-Methylphenol               |          | 6.7  | 10 U          | 10              | 10 U                | 10                  | 12 U                | 12                  | 12 U                | 12                  | 11 U                | 11                  |
| 2,2'-oxybis(1-Chloropropane) |          | 7.0  | 10 U          | 10              | 10 U                | 10                  | 12 U                | 12                  | 12 U                | 12                  | 11 U                | 11                  |
| 4-Methylphenol               |          | 12.9 | 10 U          | 10              | 10 U                | 10                  | 12 U                | 12                  | 12 U                | 12                  | 11 U                | 11                  |
| N-Nitroso-di-n-propylamine   | 20       | 8.0  | 10 U          | 10              | 10 U                | 10                  | 12 U                | 12                  | 12 U                | 12                  | 11 U                | 11                  |
| Hexachloroethane             | 10       | 5.3  | 10 U          | 10              | 10 U                | 10                  | 12 U                | 12                  | 12 U                | 12                  | 11 U                | 11                  |
| Nitrobenzene                 | 10       | 7.4  | 10 U          | 10              | 10 U                | 10                  | 12 U                | 12                  | 12 U                | 12                  | 11 U                | 11                  |
| Isophorone                   | 100      | 3.9  | 10 U          | 10              | 10 U                | 10                  | 12 U                | 12                  | 12 U                | 12                  | 11 U                | 11                  |
| 2-Nitrophenol                |          | 7.0  | 10 U          | 10              | 10 U                | 10                  | 12 U                | 12                  | 12 U                | 12                  | 11 U                | 11                  |
| 2,4-Dimethylphenol           | 100      | 4.8  | 10 U          | 10              | 10 U                | 10                  | 12 U                | 12                  | 12 U                | 12                  | 11 U                | 11                  |
| bis(2-Chloroethoxy) methane  |          | 6.1  | 10 U          | 10              | 10 U                | 10                  | 12 U                | 12                  | 12 U                | 12                  | 11 U                | 11                  |
| 2,4-Dichlorophenol           | 20       | 4.4  | 10 U          | 10              | 10 U                | 10                  | 12 U                | 12                  | 12 U                | 12                  | 11 U                | 11                  |
| 1,2,4-Trichlorobenzene       | 9        | 9.6  | 10 U          | 10              | 10 U                | 10                  | 12 U                | 12                  | 12 U                | 12                  | 11 U                | 11                  |
| Naphthalene                  |          | 8.4  | 10 U          | 10              | 10 U                | 10                  | 12 U                | 12                  | 12 U                | 12                  | 11 U                | 11                  |
| 4-Chloroaniline              |          | 2.9  | 10 U          | 10              | 10 U                | 10                  | 12 U                | 12                  | 12 U                | 12                  | 11 U                | 11                  |
| Hexachlorobutadiene          | 1        | 4.6  | 10 U          | 10              | 10 U                | 10                  | 12 U                | 12                  | 12 U                | 12                  | 11 U                | 11                  |
| 4-Chloro-3-methylphenol      | 20       | 3.1  | 10 U          | 10              | 10 U                | 10                  | 12 U                | 12                  | 12 U                | 12                  | 11 U                | 11                  |
| 2-Methylnaphthalene          |          | 8.7  | 10 U          | 10              | 2 J                 | 10                  | 12 U                | 12                  | 12 U                | 12                  | 11 U                | 11                  |
| Hexachlorocyclopentadiene    | 50       | 3.6  | 10 U          | 10              | 10 U                | 10                  | 12 U                | 12                  | 12 U                | 12                  | 11 U                | 11                  |
| 2,4,6-Trichlorophenol        |          | 5.6  | 10 U          | 10              | 10 U                | 10                  | 12 U                | 12                  | 12 U                | 12                  | 11 U                | 11                  |
| 2,4,5-Trichlorophenol        | 700      | 4.7  | 26 U          | 26              | 26 U                | 26                  | 30 U                | 30                  | 30 U                | 30                  | 26 U                | 26                  |
| 2-Chloronaphthalene          |          | 8.2  | 10 U          | 10              | 10 U                | 10                  | 12 U                | 12                  | 12 U                | 12                  | 11 U                | 11                  |
| 2-Nitroaniline               |          | 6.1  | 26 U          | 26              | 26 U                | 26                  | 30 U                | 30                  | 30 U                | 30                  | 26 U                | 26                  |
| Dimethylphthalate            | 7000     | 4.4  | 10 U          | 10              | 10 U                | 10                  | 12 U                | 12                  | 12 U                | 12                  | 11 U                | 11                  |
| Acenaphthylene               | 10       | 6.0  | 10 U          | 10              | 10 U                | 10                  | 12 U                | 12                  | 12 U                | 12                  | 11 U                | 11                  |
| 2,6-Dinitrotoluene           | 10       | 5.2  | 10 U          | 10              | 10 U                | 10                  | 12 U                | 12                  | 12 U                | 12                  | 11 U                | 11                  |
| 3-Nitroaniline               |          | 5.2  | 26 U          | 26              | 26 U                | 26                  | 30 U                | 30                  | 30 U                | 30                  | 26 U                | 26                  |
| Acenaphthene                 | 400      | 6.7  | 16            | 10              | 14                  | 10                  | 12 U                | 12                  | 12 U                | 12                  | 11 U                | 11                  |
| 2,4-Dinitrophenol            | 40       | 4.6  | 26 U          | 26              | 26 U                | 26                  | 30 U                | 30                  | 30 U                | 30                  | 26 U                | 26                  |

**MAIN POST  
GROUNDWATER SEMIVOLATILES**

| Geographical Location      |          |      | M8            |      | M8              |      | M8                  |      | M8                  |      | M12           |      |
|----------------------------|----------|------|---------------|------|-----------------|------|---------------------|------|---------------------|------|---------------|------|
| Sample                     |          |      | MP08-MW15-C01 |      | MP08-MW15-C01RE |      | MP08-MW15-E01       |      | MP08-MW15-E01RE     |      | MP12-MW16-A01 |      |
| Sample Type                |          |      | Duplicate     |      | Duplicate       |      | Field Rinsate Blank |      | Field Rinsate Blank |      |               |      |
| Batch#                     |          |      | 9502G403      |      | 9502G403        |      | 9502G403            |      | 9502G403            |      | 9502G299      |      |
| Prep#                      |          |      | 95GB0129      |      | 95GB0129        |      | 95GB0129            |      | 95GB0129            |      | 95GB0118      |      |
| RFW#                       |          |      | 005           |      | 005 RE          |      | 008                 |      | 008 RE              |      | 001           |      |
| Dilution Factor            |          |      | 1.00          |      | 1.00            |      | 1.00                |      | 1.00                |      | 1.00          |      |
| Matrix                     |          |      | water         |      | water           |      | water               |      | water               |      | water         |      |
| Units                      | ug/l     | ug/l | ug/l          |      | ug/l            |      | ug/l                |      | ug/l                |      | ug/l          |      |
| Sampling Date              |          |      | 2/22/95       |      | 2/22/95         |      | 2/22/95             |      | 2/22/95             |      | 2/20/95       |      |
| Analysis Date              |          |      | 3/16/95       |      | 3/16/95         |      | 3/16/95             |      | 3/16/95             |      | 3/11/95       |      |
| Analysis                   | Standard | MDL  | Analytical    | CRQL | Analytical      | CRQL | Analytical          | CRQL | Analytical          | CRQL | Analytical    | CRQL |
|                            |          |      | Result        |      | Result          |      | Result              |      | Result              |      | Result        |      |
| 4-Nitrophenol              |          | 7.5  | 26 U          | 26   | 26 U            | 26   | 30 U                | 30   | 30 U                | 30   | 26 U          | 26   |
| Dibenzofuran               |          | 6.5  | 6 J           | 10   | 6 J             | 10   | 12 U                | 12   | 12 U                | 12   | 11 U          | 11   |
| 2,4-Dinitrotoluene         | 10       | 5.8  | 10 U          | 10   | 10 U            | 10   | 12 U                | 12   | 12 U                | 12   | 11 U          | 11   |
| Diethylphthalate           | 5000     | 5.4  | 10 U          | 10   | 10 U            | 10   | 12 U                | 12   | 12 U                | 12   | 11 U          | 11   |
| 4-Chlorophenyl-phenylether |          | 7.0  | 10 U          | 10   | 10 U            | 10   | 12 U                | 12   | 12 U                | 12   | 11 U          | 11   |
| Fluorene                   | 300      | 6.3  | 8 J           | 10   | 8 J             | 10   | 12 U                | 12   | 12 U                | 12   | 11 U          | 11   |
| 4-Nitroaniline             |          | 6.4  | 26 U          | 26   | 26 U            | 26   | 30 U                | 30   | 30 U                | 30   | 26 U          | 26   |
| 4,6-Dinitro-2-methylphenol |          | 5.3  | 26 U          | 26   | 26 U            | 26   | 30 U                | 30   | 30 U                | 30   | 26 U          | 26   |
| N-Nitrosodiphenylamine (1) | 20       | 4.2  | 10 U          | 10   | 10 U            | 10   | 12 U                | 12   | 12 U                | 12   | 11 U          | 11   |
| 4-Bromophenyl-phenylether  |          | 5.3  | 10 U          | 10   | 10 U            | 10   | 12 U                | 12   | 12 U                | 12   | 11 U          | 11   |
| Hexachlorobenzene          | 10       | 5.5  | 10 U          | 10   | 10 U            | 10   | 12 U                | 12   | 12 U                | 12   | 11 U          | 11   |
| Pentachlorophenol          | 1        | 4.0  | 26 U          | 26   | 26 U            | 26   | 30 U                | 30   | 30 U                | 30   | 26 U          | 26   |
| Phenanthrene               | 10       | 5.0  | 10 U          | 10   | 10 U            | 10   | 12 U                | 12   | 12 U                | 12   | 11 U          | 11   |
| Anthracene                 | 2000     | 4.6  | 10 U          | 10   | 10 U            | 10   | 12 U                | 12   | 12 U                | 12   | 11 U          | 11   |
| Carbazole                  |          | 4.4  | 1 J           | 10   | 1 J             | 10   | 12 U                | 12   | 12 U                | 12   | 11 U          | 11   |
| Di-n-butylphthalate        | 900      | 6.5  | 10 U          | 10   | 10 U            | 10   | 12 U                | 12   | 12 U                | 12   | 11 U          | 11   |
| Fluoranthene               | 300      | 6.0  | 10 U          | 10   | 10 U            | 10   | 12 U                | 12   | 12 U                | 12   | 11 U          | 11   |
| Pyrene                     | 200      | 5.4  | 10 U          | 10   | 10 U            | 10   | 12 U                | 12   | 12 U                | 12   | 11 U          | 11   |
| Butylbenzylphthalate       | 100      | 5.3  | 10 U          | 10   | 10 U            | 10   | 12 U                | 12   | 12 U                | 12   | 11 U          | 11   |
| 3,3'-Dichlorobenzidine     | 60       | 2.8  | 10 U          | 10   | 10 U            | 10   | 12 U                | 12   | 12 U                | 12   | 11 U          | 11   |
| Benzo(a)anthracene         | 10       | 4.9  | 10 U          | 10   | 10 U            | 10   | 12 U                | 12   | 12 U                | 12   | 11 U          | 11   |
| Chrysene                   | 20       | 4.4  | 10 U          | 10   | 10 U            | 10   | 12 U                | 12   | 12 U                | 12   | 11 U          | 11   |
| bis(2-Ethylhexyl)phthalate | 30       | 9.7  | 1 JB          | 10   | 10 U            | 10   | 3 JB                | 12   | 3 JB                | 12   | 4 J           | 11   |
| Di-n-octyl phthalate       | 100      | 5.6  | 10 U          | 10   | 10 U            | 10   | 12 U                | 12   | 12 U                | 12   | 11 U          | 11   |
| Benzo(b)fluoranthene       | 2        | 5.7  | 10 U          | 10   | 10 U            | 10   | 12 U                | 12   | 12 U                | 12   | 11 U          | 11   |
| Benzo(k)fluoranthene       | 2        | 6.2  | 10 U          | 10   | 10 U            | 10   | 12 U                | 12   | 12 U                | 12   | 11 U          | 11   |
| Benzo(a)pyrene             | 20       | 4.9  | 10 U          | 10   | 10 U            | 10   | 12 U                | 12   | 12 U                | 12   | 11 U          | 11   |
| Indeno(1,2,3-cd)pyrene     | 20       | 7.1  | 10 U          | 10   | 10 U            | 10   | 12 U                | 12   | 12 U                | 12   | 11 U          | 11   |
| Dibenzo(a,h)anthracene     | 20       | 6.0  | 10 U          | 10   | 10 U            | 10   | 12 U                | 12   | 12 U                | 12   | 11 U          | 11   |
| Benzo(g,h,i)perylene       | 20       | 6.8  | 10 U          | 10   | 10 U            | 10   | 12 U                | 12   | 12 U                | 12   | 11 U          | 11   |
| Petroleum hydrocarbons     |          |      |               |      |                 |      |                     |      |                     |      |               |      |
| Total Est. Conc. of TIC    |          |      | 189 J         |      | 143 J           |      | 17 JA               |      | 15 JA               |      | 8 J           |      |
| Dilution Factor            |          |      |               |      |                 |      |                     |      |                     |      |               |      |
| Method:TCL Semivolatiles   |          |      |               |      |                 |      |                     |      |                     |      |               |      |

**MAIN POST  
GROUNDWATER SEMIVOLATILES**

| Geographical Location        |          |      | M12           |      | M12           |      | M12             |      | M12           |      | M12           |      |
|------------------------------|----------|------|---------------|------|---------------|------|-----------------|------|---------------|------|---------------|------|
| Sample                       |          |      | MP12-MW16-A02 |      | MP12-MW17-A01 |      | MP12-MW17-A01RE |      | MP12-MW17-A02 |      | MP12-MW18-A01 |      |
| Sample Type                  |          |      |               |      |               |      |                 |      |               |      |               |      |
| Batch#                       |          |      | 9502G681      |      | 9502G299      |      | 9502G299        |      | 9502G681      |      | 9502G299      |      |
| Prep#                        |          |      | 95GB0175      |      | 95GB0118      |      | 95GB0175        |      | 95GB0175      |      | 95GB0118      |      |
| RFV#                         |          |      | 001           |      | 003           |      | 003             |      | 003           |      | 005           |      |
| Dilution Factor              |          |      | 1.00          |      | 1.00          |      | 1.00            |      | 1.00          |      | 1.00          |      |
| Matrix                       |          |      | water         |      | water         |      | water           |      | water         |      | water         |      |
| Units                        | ug/l     | ug/l | ug/l          |      | ug/l          |      | ug/l            |      | ug/l          |      | ug/l          |      |
| Sampling Date                |          |      | 3/10/95       |      | 2/20/95       |      | 2/20/95         |      | 3/10/95       |      | 2/20/95       |      |
| Analysis Date                |          |      | 3/28/95       |      | 3/11/95       |      | 3/16/95         |      | 3/26/95       |      | 3/11/95       |      |
| Analysis                     | Standard | MDL  | Analytical    | CRQL | Analytical    | CRQL | Analytical      | CRQL | Analytical    | CRQL | Analytical    | CRQL |
|                              |          |      | Result        |      | Result        |      | Result          |      | Result        |      | Result        |      |
| Phenol                       | 4000     | 7.1  | 11 U          | 11   | 12 U          | 12   | 11 U            | 11   | 12 U          | 12   | 11 U          | 11   |
| bis(2-Chloroethyl) ether     | 10       | 9.7  | 11 U          | 11   | 12 U          | 12   | 11 U            | 11   | 12 U          | 12   | 11 U          | 11   |
| 2-Chlorophenol               | 40       | 7.3  | 11 U          | 11   | 12 U          | 12   | 11 U            | 11   | 12 U          | 12   | 11 U          | 11   |
| 1,3-Dichlorobenzene          | 600      | 5.3  | 11 U          | 11   | 12 U          | 12   | 11 U            | 11   | 12 U          | 12   | 11 U          | 11   |
| 1,4-Dichlorobenzene          | 75       | 4.8  | 11 U          | 11   | 12 U          | 12   | 11 U            | 11   | 12 U          | 12   | 11 U          | 11   |
| 1,2-Dichlorobenzene          | 600      | 5.7  | 11 U          | 11   | 12 U          | 12   | 11 U            | 11   | 12 U          | 12   | 11 U          | 11   |
| 2-Methylphenol               |          | 6.7  | 11 U          | 11   | 12 U          | 12   | 11 U            | 11   | 12 U          | 12   | 11 U          | 11   |
| 2,2'-oxybis(1-Chloropropane) |          | 7.0  | 11 U          | 11   | 12 U          | 12   | 11 U            | 11   | 12 U          | 12   | 11 U          | 11   |
| 4-Methylphenol               |          | 12.9 | 11 U          | 11   | 12 U          | 12   | 11 U            | 11   | 12 U          | 12   | 11 U          | 11   |
| N-Nitroso-di-n-propylamine   | 20       | 8.0  | 11 U          | 11   | 12 U          | 12   | 11 U            | 11   | 12 U          | 12   | 11 U          | 11   |
| Hexachloroethane             | 10       | 5.3  | 11 U          | 11   | 12 U          | 12   | 11 U            | 11   | 12 U          | 12   | 11 U          | 11   |
| Nitrobenzene                 | 10       | 7.4  | 11 U          | 11   | 12 U          | 12   | 11 U            | 11   | 12 U          | 12   | 11 U          | 11   |
| Isophorone                   | 100      | 3.9  | 11 U          | 11   | 12 U          | 12   | 11 U            | 11   | 12 U          | 12   | 11 U          | 11   |
| 2-Nitrophenol                |          | 7.0  | 11 U          | 11   | 12 U          | 12   | 11 U            | 11   | 12 U          | 12   | 11 U          | 11   |
| 2,4-Dimethylphenol           | 100      | 4.8  | 11 U          | 11   | 12 U          | 12   | 11 U            | 11   | 12 U          | 12   | 11 U          | 11   |
| bis(2-Chloroethoxy) methane  |          | 6.1  | 11 U          | 11   | 12 U          | 12   | 11 U            | 11   | 12 U          | 12   | 11 U          | 11   |
| 2,4-Dichlorophenol           | 20       | 4.4  | 11 U          | 11   | 12 U          | 12   | 11 U            | 11   | 12 U          | 12   | 11 U          | 11   |
| 1,2,4-Trichlorobenzene       | 9        | 9.6  | 11 U          | 11   | 12 U          | 12   | 11 U            | 11   | 12 U          | 12   | 11 U          | 11   |
| Naphthalene                  |          | 8.4  | 11 U          | 11   | 12 U          | 12   | 11 U            | 11   | 12 U          | 12   | 11 U          | 11   |
| 4-Chloroaniline              |          | 2.9  | 11 U          | 11   | 12 U          | 12   | 11 U            | 11   | 12 U          | 12   | 11 U          | 11   |
| Hexachlorobutadiene          | 1        | 4.6  | 11 U          | 11   | 12 U          | 12   | 11 U            | 11   | 12 U          | 12   | 11 U          | 11   |
| 4-Chloro-3-methylphenol      | 20       | 3.1  | 11 U          | 11   | 12 U          | 12   | 11 U            | 11   | 12 U          | 12   | 11 U          | 11   |
| 2-Methylnaphthalene          |          | 8.7  | 11 U          | 11   | 12 U          | 12   | 11 U            | 11   | 12 U          | 12   | 11 U          | 11   |
| Hexachlorocyclopentadiene    | 50       | 3.6  | 11 U          | 11   | 12 U          | 12   | 11 U            | 11   | 12 U          | 12   | 11 U          | 11   |
| 2,4,6-Trichlorophenol        |          | 5.6  | 11 U          | 11   | 12 U          | 12   | 11 U            | 11   | 12 U          | 12   | 11 U          | 11   |
| 2,4,5-Trichlorophenol        | 700      | 4.7  | 26 U          | 26   | 31 U          | 31   | 26 U            | 26   | 31 U          | 31   | 28 U          | 28   |
| 2-Chloronaphthalene          |          | 8.2  | 11 U          | 11   | 12 U          | 12   | 11 U            | 11   | 12 U          | 12   | 11 U          | 11   |
| 2-Nitroaniline               |          | 6.1  | 26 U          | 26   | 31 U          | 31   | 26 U            | 26   | 31 U          | 31   | 28 U          | 28   |
| Dimethylphthalate            | 7000     | 4.4  | 11 U          | 11   | 12 U          | 12   | 11 U            | 11   | 12 U          | 12   | 11 U          | 11   |
| Acenaphthylene               | 10       | 6.0  | 11 U          | 11   | 12 U          | 12   | 11 U            | 11   | 12 U          | 12   | 11 U          | 11   |
| 2,6-Dinitrotoluene           | 10       | 5.2  | 11 U          | 11   | 12 U          | 12   | 11 U            | 11   | 12 U          | 12   | 11 U          | 11   |
| 3-Nitroaniline               |          | 5.2  | 26 U          | 26   | 31 U          | 31   | 26 U            | 26   | 31 U          | 31   | 28 U          | 28   |
| Acenaphthene                 | 400      | 6.7  | 11 U          | 11   | 12 U          | 12   | 11 U            | 11   | 12 U          | 12   | 11 U          | 11   |
| 2,4-Dinitrophenol            | 40       | 4.6  | 26 U          | 26   | 31 U          | 31   | 26 U            | 26   | 31 U          | 31   | 28 U          | 28   |

**MAIN POST  
GROUNDWATER SEMIVOLATILES**

| Geographical Location      |          |      | M12           |      | M12           |      | M12             |      | M12           |      | M12           |      |
|----------------------------|----------|------|---------------|------|---------------|------|-----------------|------|---------------|------|---------------|------|
| Sample                     |          |      | MP12-MW16-A02 |      | MP12-MW17-A01 |      | MP12-MW17-A01RE |      | MP12-MW17-A02 |      | MP12-MW18-A01 |      |
| Sample Type                |          |      |               |      |               |      |                 |      |               |      |               |      |
| Batch#                     |          |      | 9502G681      |      | 9502G299      |      | 9502G299        |      | 9502G681      |      | 9502G299      |      |
| Prep#                      |          |      | 95GB0175      |      | 95GB0118      |      | 95GB0175        |      | 95GB0175      |      | 95GB0118      |      |
| RFW#                       |          |      | 001           |      | 003           |      | 003             |      | 003           |      | 005           |      |
| Dilution Factor            |          |      | 1.00          |      | 1.00          |      | 1.00            |      | 1.00          |      | 1.00          |      |
| Matrix                     |          |      | water         |      | water         |      | water           |      | water         |      | water         |      |
| Units                      | ug/l     | ug/l | ug/l          |      | ug/l          |      | ug/l            |      | ug/l          |      | ug/l          |      |
| Sampling Date              |          |      | 3/10/95       |      | 2/20/95       |      | 2/20/95         |      | 3/10/95       |      | 2/20/95       |      |
| Analysis Date              |          |      | 3/28/95       |      | 3/11/95       |      | 3/16/95         |      | 3/26/95       |      | 3/11/95       |      |
| Analysis                   | Standard | MDL  | Analytical    | CRQL | Analytical    | CRQL | Analytical      | CRQL | Analytical    | CRQL | Analytical    | CRQL |
|                            |          |      | Result        |      | Result        |      | Result          |      | Result        |      | Result        |      |
| 4-Nitrophenol              |          | 7.5  | 26 U          | 26   | 31 U          | 31   | 26 U            | 26   | 31 U          | 31   | 28 U          | 28   |
| Dibenzofuran               |          | 6.5  | 11 U          | 11   | 12 U          | 12   | 11 U            | 11   | 12 U          | 12   | 11 U          | 11   |
| 2,4-Dinitrotoluene         | 10       | 5.8  | 11 U          | 11   | 12 U          | 12   | 11 U            | 11   | 12 U          | 12   | 11 U          | 11   |
| Diethylphthalate           | 5000     | 5.4  | 11 U          | 11   | 12 U          | 12   | 11 U            | 11   | 12 U          | 12   | 11 U          | 11   |
| 4-Chlorophenyl-phenylether |          | 7.0  | 11 U          | 11   | 12 U          | 12   | 11 U            | 11   | 12 U          | 12   | 11 U          | 11   |
| Fluorene                   | 300      | 6.3  | 11 U          | 11   | 12 U          | 12   | 11 U            | 11   | 12 U          | 12   | 11 U          | 11   |
| 4-Nitroaniline             |          | 6.4  | 26 U          | 26   | 31 U          | 31   | 26 U            | 26   | 31 U          | 31   | 28 U          | 28   |
| 4,6-Dinitro-2-methylphenol |          | 5.3  | 26 U          | 26   | 31 U          | 31   | 26 U            | 26   | 31 U          | 31   | 28 U          | 28   |
| N-Nitrosodiphenylamine (1) | 20       | 4.2  | 11 U          | 11   | 12 U          | 12   | 11 U            | 11   | 12 U          | 12   | 11 U          | 11   |
| 4-Bromophenyl-phenylether  |          | 5.3  | 11 U          | 11   | 12 U          | 12   | 11 U            | 11   | 12 U          | 12   | 11 U          | 11   |
| Hexachlorobenzene          | 10       | 5.5  | 11 U          | 11   | 12 U          | 12   | 11 U            | 11   | 12 U          | 12   | 11 U          | 11   |
| Pentachlorophenol          | 1        | 4.0  | 26 U          | 26   | 31 U          | 31   | 26 U            | 26   | 31 U          | 31   | 28 U          | 28   |
| Phenanthrene               | 10       | 5.0  | 11 U          | 11   | 12 U          | 12   | 11 U            | 11   | 12 U          | 12   | 11 U          | 11   |
| Anthracene                 | 2000     | 4.6  | 11 U          | 11   | 12 U          | 12   | 11 U            | 11   | 12 U          | 12   | 11 U          | 11   |
| Carbazole                  |          | 4.4  | 11 U          | 11   | 12 U          | 12   | 11 U            | 11   | 12 U          | 12   | 11 U          | 11   |
| Di-n-butylphthalate        | 900      | 6.5  | 11 U          | 11   | 12 U          | 12   | 11 U            | 11   | 12 U          | 12   | 11 U          | 11   |
| Fluoranthene               | 300      | 6.0  | 11 U          | 11   | 12 U          | 12   | 11 U            | 11   | 12 U          | 12   | 11 U          | 11   |
| Pyrene                     | 200      | 5.4  | 11 U          | 11   | 12 U          | 12   | 11 U            | 11   | 12 U          | 12   | 11 U          | 11   |
| Butylbenzylphthalate       | 100      | 5.3  | 11 U          | 11   | 12 U          | 12   | 11 U            | 11   | 12 U          | 12   | 11 U          | 11   |
| 3,3'-Dichlorobenzidine     | 60       | 2.8  | 11 U          | 11   | 12 U          | 12   | 11 U            | 11   | 12 U          | 12   | 11 U          | 11   |
| Benzo(a)anthracene         | 10       | 4.9  | 11 U          | 11   | 12 U          | 12   | 11 U            | 11   | 12 U          | 12   | 11 U          | 11   |
| Chrysene                   | 20       | 4.4  | 11 U          | 11   | 12 U          | 12   | 11 U            | 11   | 12 U          | 12   | 11 U          | 11   |
| bis(2-Ethylhexy)phthalate  | 30       | 9.7  | 2 J           | 11   | 12 U          | 12   | 3 J             | 11   | 1 J           | 12   | 3 J           | 11   |
| Di-n-octyl phthalate       | 100      | 5.6  | 11 U          | 11   | 12 U          | 12   | 11 U            | 11   | 12 U          | 12   | 11 U          | 11   |
| Benzo(b)fluoranthene       | 2        | 5.7  | 11 U          | 11   | 12 U          | 12   | 11 U            | 11   | 12 U          | 12   | 11 U          | 11   |
| Benzo(k)fluoranthene       | 2        | 6.2  | 11 U          | 11   | 12 U          | 12   | 11 U            | 11   | 12 U          | 12   | 11 U          | 11   |
| Benzo(a)pyrene             | 20       | 4.9  | 11 U          | 11   | 12 U          | 12   | 11 U            | 11   | 12 U          | 12   | 11 U          | 11   |
| Indeno(1,2,3-cd)pyrene     | 20       | 7.1  | 11 U          | 11   | 12 U          | 12   | 11 U            | 11   | 12 U          | 12   | 11 U          | 11   |
| Dibenzo(a,h)anthracene     | 20       | 6.0  | 11 U          | 11   | 12 U          | 12   | 11 U            | 11   | 12 U          | 12   | 11 U          | 11   |
| Benzo(g,h,i)perylene       | 20       | 6.8  | 11 U          | 11   | 12 U          | 12   | 11 U            | 11   | 12 U          | 12   | 11 U          | 11   |
| Petroleum hydrocarbons     |          |      |               |      |               |      |                 |      |               |      |               |      |
| Total Est. Conc. of TIC    |          |      | 5 J           |      | 52 J          |      | 22 J            |      | 10 J          |      | 3 J           |      |
| Dilution Factor            |          |      |               |      |               |      |                 |      |               |      |               |      |
| Method:TCL Semivolatiles   |          |      |               |      |               |      |                 |      |               |      |               |      |



**MAIN POST  
GROUNDWATER SEMIVOLATILES**

| Geographical Location        |          |      | M12           |      | M14           |      | M14           |      | -M14          |      | M14           |      |
|------------------------------|----------|------|---------------|------|---------------|------|---------------|------|---------------|------|---------------|------|
| Sample                       |          |      | MP12-MW18-A02 |      | MP14-MW19-A01 |      | MP14-MW19-A02 |      | MP14-MW20-A01 |      | MP14-MW20-A02 |      |
| Sample Type                  |          |      |               |      |               |      |               |      |               |      |               |      |
| Batch#                       |          |      | 9502G681      |      | 9502G299      |      | 9502G681      |      | 9502G403      |      | 9503G722      |      |
| Prep#                        |          |      | 95GB0175      |      | 95GB0118      |      | 95GB0175      |      | 95GB0129      |      | 95GB0181      |      |
| RFW#                         |          |      | 005           |      | 007           |      | 007           |      | 010           |      | 001           |      |
| Dilution Factor              |          |      | 1.00          |      | 1.00          |      | 1.00          |      | 1.00          |      | 1.00          |      |
| Matrix                       |          |      | water         |      | water         |      | water         |      | water         |      | water         |      |
| Units                        | ug/l     | ug/l | ug/l          |      | ug/l          |      | ug/l          |      | ug/l          |      | ug/l          |      |
| Sampling Date                |          |      | 3/10/95       |      | 2/20/95       |      | 3/10/95       |      | 2/22/95       |      | 3/13/95       |      |
| Analysis Date                |          |      | 3/26/95       |      | 3/12/95       |      | 3/27/95       |      | 3/16/95       |      | 3/29/95       |      |
| Analysis                     | Standard | MDL  | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL |
|                              |          |      | Result        |      | Result        |      | Result        |      | Result        |      | Result        |      |
| Phenol                       | 4000     | 7.1  | 12 U          | 12   | 11 U          | 11   | 12 U          | 12   | 10 U          | 10   | 10 U          | 10   |
| bis(2-Chloroethyl) ether     | 10       | 9.7  | 12 U          | 12   | 11 U          | 11   | 12 U          | 12   | 10 U          | 10   | 10 U          | 10   |
| 2-Chlorophenol               | 40       | 7.3  | 12 U          | 12   | 11 U          | 11   | 12 U          | 12   | 10 U          | 10   | 10 U          | 10   |
| 1,3-Dichlorobenzene          | 600      | 5.3  | 12 U          | 12   | 11 U          | 11   | 12 U          | 12   | 10 U          | 10   | 10 U          | 10   |
| 1,4-Dichlorobenzene          | 75       | 4.8  | 12 U          | 12   | 11 U          | 11   | 12 U          | 12   | 10 U          | 10   | 10 U          | 10   |
| 1,2-Dichlorobenzene          | 600      | 5.7  | 12 U          | 12   | 11 U          | 11   | 12 U          | 12   | 10 U          | 10   | 10 U          | 10   |
| 2-Methylphenol               |          | 6.7  | 12 U          | 12   | 11 U          | 11   | 12 U          | 12   | 10 U          | 10   | 10 U          | 10   |
| 2,2'-oxybis(1-Chloropropane) |          | 7.0  | 12 U          | 12   | 11 U          | 11   | 12 U          | 12   | 10 U          | 10   | 10 U          | 10   |
| 4-Methylphenol               |          | 12.9 | 12 U          | 12   | 11 U          | 11   | 12 U          | 12   | 10 U          | 10   | 10 U          | 10   |
| N-Nitroso-di-n-propylamine   | 20       | 8.0  | 12 U          | 12   | 11 U          | 11   | 12 U          | 12   | 10 U          | 10   | 10 U          | 10   |
| Hexachloroethane             | 10       | 5.3  | 12 U          | 12   | 11 U          | 11   | 12 U          | 12   | 10 U          | 10   | 10 U          | 10   |
| Nitrobenzene                 | 10       | 7.4  | 12 U          | 12   | 11 U          | 11   | 12 U          | 12   | 10 U          | 10   | 10 U          | 10   |
| Isophorone                   | 100      | 3.9  | 12 U          | 12   | 11 U          | 11   | 12 U          | 12   | 10 U          | 10   | 10 U          | 10   |
| 2-Nitrophenol                |          | 7.0  | 12 U          | 12   | 11 U          | 11   | 12 U          | 12   | 10 U          | 10   | 10 U          | 10   |
| 2,4-Dimethylphenol           | 100      | 4.8  | 12 U          | 12   | 11 U          | 11   | 12 U          | 12   | 10 U          | 10   | 10 U          | 10   |
| bis(2-Chloroethoxy) methane  |          | 6.1  | 12 U          | 12   | 11 U          | 11   | 12 U          | 12   | 10 U          | 10   | 10 U          | 10   |
| 2,4-Dichlorophenol           | 20       | 4.4  | 12 U          | 12   | 11 U          | 11   | 12 U          | 12   | 10 U          | 10   | 10 U          | 10   |
| 1,2,4-Trichlorobenzene       | 9        | 9.6  | 12 U          | 12   | 11 U          | 11   | 12 U          | 12   | 10 U          | 10   | 10 U          | 10   |
| Naphthalene                  |          | 8.4  | 12 U          | 12   | 11 U          | 11   | 12 U          | 12   | 10 U          | 10   | 10 U          | 10   |
| 4-Chloroaniline              |          | 2.9  | 12 U          | 12   | 11 U          | 11   | 12 U          | 12   | 10 U          | 10   | 10 U          | 10   |
| Hexachlorobutadiene          | 1        | 4.6  | 12 U          | 12   | 11 U          | 11   | 12 U          | 12   | 10 U          | 10   | 10 U          | 10   |
| 4-Chloro-3-methylphenol      | 20       | 3.1  | 12 U          | 12   | 11 U          | 11   | 12 U          | 12   | 10 U          | 10   | 10 U          | 10   |
| 2-Methylnaphthalene          |          | 8.7  | 12 U          | 12   | 11 U          | 11   | 12 U          | 12   | 10 U          | 10   | 10 U          | 10   |
| Hexachlorocyclopentadiene    | 50       | 3.6  | 12 U          | 12   | 11 U          | 11   | 12 U          | 12   | 10 U          | 10   | 10 U          | 10   |
| 2,4,6-Trichlorophenol        |          | 5.6  | 12 U          | 12   | 11 U          | 11   | 12 U          | 12   | 10 U          | 10   | 10 U          | 10   |
| 2,4,5-Trichlorophenol        | 700      | 4.7  | 31 U          | 31   | 26 U          | 26   | 31 U          | 31   | 24 U          | 24   | 26 U          | 26   |
| 2-Chloronaphthalene          |          | 8.2  | 12 U          | 12   | 11 U          | 11   | 12 U          | 12   | 10 U          | 10   | 10 U          | 10   |
| 2-Nitroaniline               |          | 6.1  | 31 U          | 31   | 26 U          | 26   | 31 U          | 31   | 24 U          | 24   | 26 U          | 26   |
| Dimethylphthalate            | 7000     | 4.4  | 12 U          | 12   | 11 U          | 11   | 12 U          | 12   | 10 U          | 10   | 10 U          | 10   |
| Acenaphthylene               | 10       | 6.0  | 12 U          | 12   | 11 U          | 11   | 12 U          | 12   | 10 U          | 10   | 10 U          | 10   |
| 2,6-Dinitrotoluene           | 10       | 5.2  | 12 U          | 12   | 11 U          | 11   | 12 U          | 12   | 10 U          | 10   | 10 U          | 10   |
| 3-Nitroaniline               |          | 5.2  | 31 U          | 31   | 26 U          | 26   | 31 U          | 31   | 24 U          | 24   | 26 U          | 26   |
| Acenaphthene                 | 400      | 6.7  | 12 U          | 12   | 11 U          | 11   | 12 U          | 12   | 10 U          | 10   | 10 U          | 10   |
| 2,4-Dinitrophenol            | 40       | 4.6  | 31 U          | 31   | 26 U          | 26   | 31 U          | 31   | 24 U          | 24   | 26 U          | 26   |

**MAIN POST  
GROUNDWATER SEMIVOLATILES**

| Geographical Location      |          |      | M12               |      | M14               |      | M14               |      | M14               |      | M14               |      |
|----------------------------|----------|------|-------------------|------|-------------------|------|-------------------|------|-------------------|------|-------------------|------|
| Sample                     |          |      | MP12-MW18-A02     |      | MP14-MW19-A01     |      | MP14-MW19-A02     |      | MP14-MW20-A01     |      | MP14-MW20-A02     |      |
| Sample Type                |          |      |                   |      |                   |      |                   |      |                   |      |                   |      |
| Batch#                     |          |      | 9502G681          |      | 9502G299          |      | 9502G681          |      | 9502G403          |      | 9503G722          |      |
| Prep#                      |          |      | 95GB0175          |      | 95GB0118          |      | 95GB0175          |      | 95GB0129          |      | 95GB0181          |      |
| RFV#                       |          |      | 005               |      | 007               |      | 007               |      | 010               |      | 001               |      |
| Dilution Factor            |          |      | 1.00              |      | 1.00              |      | 1.00              |      | 1.00              |      | 1.00              |      |
| Matrix                     |          |      | water             |      | water             |      | water             |      | water             |      | water             |      |
| Units                      | ug/l     | ug/l | ug/l              |      | ug/l              |      | ug/l              |      | ug/l              |      | ug/l              |      |
| Sampling Date              |          |      | 3/10/95           |      | 2/20/95           |      | 3/10/95           |      | 2/22/95           |      | 3/13/95           |      |
| Analysis Date              |          |      | 3/26/95           |      | 3/12/95           |      | 3/27/95           |      | 3/16/95           |      | 3/29/95           |      |
| Analysis                   | Standard | MDL  | Analytical Result | CRQL | Analytical Result | CRQL | Analytical Result | CRQL | Analytical Result | CRQL | Analytical Result | CRQL |
| 4-Nitrophenol              |          | 7.5  | 31 U              | 31   | 26 U              | 26   | 31 U              | 31   | 24 U              | 24   | 26 U              | 26   |
| Dibenzofuran               |          | 6.5  | 12 U              | 12   | 11 U              | 11   | 12 U              | 12   | 10 U              | 10   | 10 U              | 10   |
| 2,4-Dinitrotoluene         | 10       | 5.8  | 12 U              | 12   | 11 U              | 11   | 12 U              | 12   | 10 U              | 10   | 10 U              | 10   |
| Diethylphthalate           | 5000     | 5.4  | 12 U              | 12   | 11 U              | 11   | 12 U              | 12   | 10 U              | 10   | 10 U              | 10   |
| 4-Chlorophenyl-phenylether |          | 7.0  | 12 U              | 12   | 11 U              | 11   | 12 U              | 12   | 10 U              | 10   | 10 U              | 10   |
| Fluorene                   | 300      | 6.3  | 12 U              | 12   | 11 U              | 11   | 12 U              | 12   | 10 U              | 10   | 10 U              | 10   |
| 4-Nitroaniline             |          | 6.4  | 31 U              | 31   | 26 U              | 26   | 31 U              | 31   | 24 U              | 24   | 26 U              | 26   |
| 4,6-Dinitro-2-methylphenol |          | 5.3  | 31 U              | 31   | 26 U              | 26   | 31 U              | 31   | 24 U              | 24   | 26 U              | 26   |
| N-Nitrosodiphenylamine (1) | 20       | 4.2  | 12 U              | 12   | 11 U              | 11   | 12 U              | 12   | 10 U              | 10   | 10 U              | 10   |
| 4-Bromophenyl-phenylether  |          | 5.3  | 12 U              | 12   | 11 U              | 11   | 12 U              | 12   | 10 U              | 10   | 10 U              | 10   |
| Hexachlorobenzene          | 10       | 5.5  | 12 U              | 12   | 11 U              | 11   | 12 U              | 12   | 10 U              | 10   | 10 U              | 10   |
| Pentachlorophenol          | 1        | 4.0  | 31 U              | 31   | 26 U              | 26   | 31 U              | 31   | 24 U              | 24   | 26 U              | 26   |
| Phenanthrene               | 10       | 5.0  | 12 U              | 12   | 11 U              | 11   | 12 U              | 12   | 10 U              | 10   | 10 U              | 10   |
| Anthracene                 | 2000     | 4.6  | 12 U              | 12   | 11 U              | 11   | 12 U              | 12   | 10 U              | 10   | 10 U              | 10   |
| Carbazole                  |          | 4.4  | 12 U              | 12   | 11 U              | 11   | 12 U              | 12   | 10 U              | 10   | 10 U              | 10   |
| Di-n-butylphthalate        | 900      | 6.5  | 12 U              | 12   | 11 U              | 11   | 12 U              | 12   | 10 U              | 10   | 10 U              | 10   |
| Fluoranthene               | 300      | 6.0  | 12 U              | 12   | 11 U              | 11   | 12 U              | 12   | 10 U              | 10   | 10 U              | 10   |
| Pyrene                     | 200      | 5.4  | 12 U              | 12   | 11 U              | 11   | 12 U              | 12   | 10 U              | 10   | 10 U              | 10   |
| Butylbenzylphthalate       | 100      | 5.3  | 12 U              | 12   | 11 U              | 11   | 12 U              | 12   | 10 U              | 10   | 10 U              | 10   |
| 3,3'-Dichlorobenzidine     | 60       | 2.8  | 12 U              | 12   | 11 U              | 11   | 12 U              | 12   | 10 U              | 10   | 10 U              | 10   |
| Benzo(a)anthracene         | 10       | 4.9  | 12 U              | 12   | 11 U              | 11   | 12 U              | 12   | 10 U              | 10   | 10 U              | 10   |
| Chrysene                   | 20       | 4.4  | 12 U              | 12   | 11 U              | 11   | 12 U              | 12   | 10 U              | 10   | 10 U              | 10   |
| bis(2-Ethylhexy)phthalate  | 30       | 9.7  | 12 U              | 12   | 3 J               | 11   | 12 U              | 12   | 1 JB              | 10   | 10 U              | 10   |
| Di-n-octyl phthalate       | 100      | 5.6  | 12 U              | 12   | 11 U              | 11   | 12 U              | 12   | 10 U              | 10   | 10 U              | 10   |
| Benzo(b)fluoranthene       | 2        | 5.7  | 12 U              | 12   | 11 U              | 11   | 12 U              | 12   | 10 U              | 10   | 10 U              | 10   |
| Benzo(k)fluoranthene       | 2        | 6.2  | 12 U              | 12   | 11 U              | 11   | 12 U              | 12   | 10 U              | 10   | 10 U              | 10   |
| Benzo(a)pyrene             | 20       | 4.9  | 12 U              | 12   | 11 U              | 11   | 12 U              | 12   | 10 U              | 10   | 10 U              | 10   |
| Indeno(1,2,3-cd)pyrene     | 20       | 7.1  | 12 U              | 12   | 11 U              | 11   | 12 U              | 12   | 10 U              | 10   | 10 U              | 10   |
| Dibenzo(a,h)anthracene     | 20       | 6.0  | 12 U              | 12   | 11 U              | 11   | 12 U              | 12   | 10 U              | 10   | 10 U              | 10   |
| Benzo(g,h,i)perylene       | 20       | 6.8  | 12 U              | 12   | 11 U              | 11   | 12 U              | 12   | 10 U              | 10   | 10 U              | 10   |
| Petroleum hydrocarbons     |          |      |                   |      |                   |      |                   |      |                   |      |                   |      |
| Total Est. Conc. of TIC    |          |      |                   |      | 22 J              |      | 5 J               |      | 12 J              |      | 28 J              |      |
| Dilution Factor            |          |      |                   |      |                   |      |                   |      |                   |      |                   |      |
| Method:TCL Semivolatiles   |          |      |                   |      |                   |      |                   |      |                   |      |                   |      |

**MAIN POST  
GROUNDWATER SEMIVOLATILES**

| Geographical Location        |          |      | M14                 |      | M14           |      | M14           |      | M14             |      | M16           |      |
|------------------------------|----------|------|---------------------|------|---------------|------|---------------|------|-----------------|------|---------------|------|
| Sample                       |          |      | MP14-MW20-E02       |      | MP14-MW21-A01 |      | MP14-MW21-A02 |      | MP14-MW21-A01RE |      | MP16-MW22-A01 |      |
| Sample Type                  |          |      | Field Rinsate Blank |      |               |      |               |      |                 |      |               |      |
| Batch#                       |          |      | 9503G722            |      | 9502G403      |      | 9503G660      |      | 9502G403        |      | 9502G238      |      |
| Prep#                        |          |      | 95GB0181            |      | 95GB0129      |      | 95GB0174      |      | 95GB0129        |      | 95GB0112      |      |
| RFW#                         |          |      | 003                 |      | 012           |      | 019           |      | 012 RE          |      | 016           |      |
| Dilution Factor              |          |      | 1.00                |      | 1.00          |      | 1.00          |      | 1.00            |      | 1.00          |      |
| Matrix                       |          |      | water               |      | water         |      | water         |      | water           |      | water         |      |
| Units                        | ug/l     | ug/l | ug/l                |      | ug/l          |      | ug/l          |      | ug/l            |      | ug/l          |      |
| Sampling Date                |          |      | 3/13/95             |      | 2/22/95       |      | 3/9/95        |      | 2/22/95         |      | 2/17/95       |      |
| Analysis Date                |          |      | 3/18/95             |      | 3/16/95       |      | 3/27/95       |      | 3/5/95          |      | 2/28/95       |      |
| Analysis                     | Standard | MDL  | Analytical          | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical      | CRQL | Analytical    | CRQL |
|                              |          |      | Result              |      | Result        |      | Result        |      | Result          |      | Result        |      |
| Phenol                       | 4000     | 7.1  | 11 U                | 11   | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 10 U          | 10   |
| bis(2-Chloroethyl) ether     | 10       | 9.7  | 11 U                | 11   | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 10 U          | 10   |
| 2-Chlorophenol               | 40       | 7.3  | 11 U                | 11   | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 10 U          | 10   |
| 1,3-Dichlorobenzene          | 600      | 5.3  | 11 U                | 11   | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 10 U          | 10   |
| 1,4-Dichlorobenzene          | 75       | 4.8  | 11 U                | 11   | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 10 U          | 10   |
| 1,2-Dichlorobenzene          | 600      | 5.7  | 11 U                | 11   | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 10 U          | 10   |
| 2-Methylphenol               |          | 6.7  | 11 U                | 11   | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 10 U          | 10   |
| 2,2'-oxybis(1-Chloropropane) |          | 7.0  | 11 U                | 11   | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 10 U          | 10   |
| 4-Methylphenol               |          | 12.9 | 11 U                | 11   | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 10 U          | 10   |
| N-Nitroso-di-n-propylamine   | 20       | 8.0  | 11 U                | 11   | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 10 U          | 10   |
| Hexachloroethane             | 10       | 5.3  | 11 U                | 11   | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 10 U          | 10   |
| Nitrobenzene                 | 10       | 7.4  | 11 U                | 11   | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 10 U          | 10   |
| Isophorone                   | 100      | 3.9  | 11 U                | 11   | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 10 U          | 10   |
| 2-Nitrophenol                |          | 7.0  | 11 U                | 11   | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 10 U          | 10   |
| 2,4-Dimethylphenol           | 100      | 4.8  | 11 U                | 11   | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 10 U          | 10   |
| bis(2-Chloroethoxy) methane  |          | 6.1  | 11 U                | 11   | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 10 U          | 10   |
| 2,4-Dichlorophenol           | 20       | 4.4  | 11 U                | 11   | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 10 U          | 10   |
| 1,2,4-Trichlorobenzene       | 9        | 9.6  | 11 U                | 11   | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 10 U          | 10   |
| Naphthalene                  |          | 8.4  | 11 U                | 11   | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 10 U          | 10   |
| 4-Chloroaniline              |          | 2.9  | 11 U                | 11   | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 10 U          | 10   |
| Hexachlorobutadiene          | 1        | 4.6  | 11 U                | 11   | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 10 U          | 10   |
| 4-Chloro-3-methylphenol      | 20       | 3.1  | 11 U                | 11   | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 10 U          | 10   |
| 2-Methylnaphthalene          |          | 8.7  | 11 U                | 11   | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 10 U          | 10   |
| Hexachlorocyclopentadiene    | 50       | 3.6  | 11 U                | 11   | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 10 U          | 10   |
| 2,4,6-Trichlorophenol        |          | 5.6  | 11 U                | 11   | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 10 U          | 10   |
| 2,4,5-Trichlorophenol        | 700      | 4.7  | 27 U                | 27   | 24 U          | 24   | 24 U          | 24   | 24 U            | 24   | 25 U          | 25   |
| 2-Chloronaphthalene          |          | 8.2  | 11 U                | 11   | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 10 U          | 10   |
| 2-Nitroaniline               |          | 6.1  | 27 U                | 27   | 24 U          | 24   | 24 U          | 24   | 24 U            | 24   | 25 U          | 25   |
| Dimethylphthalate            | 7000     | 4.4  | 11 U                | 11   | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 10 U          | 10   |
| Acenaphthylene               | 10       | 6.0  | 11 U                | 11   | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 10 U          | 10   |
| 2,6-Dinitrotoluene           | 10       | 5.2  | 11 U                | 11   | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 10 U          | 10   |
| 3-Nitroaniline               |          | 5.2  | 27 U                | 27   | 24 U          | 24   | 24 U          | 24   | 24 U            | 24   | 25 U          | 25   |
| Acenaphthene                 | 400      | 6.7  | 11 U                | 11   | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 10 U          | 10   |
| 2,4-Dinitrophenol            | 40       | 4.6  | 27 U                | 27   | 24 U          | 24   | 24 U          | 24   | 24 U            | 24   | 25 U          | 25   |

**MAIN POST  
GROUNDWATER SEMIVOLATILES**

| Geographical Location      |          |      | M14               |      | M14           |      | M14           |      | M14             |      | M16           |      |
|----------------------------|----------|------|-------------------|------|---------------|------|---------------|------|-----------------|------|---------------|------|
| Sample                     |          |      | MP14-MW20-E02     |      | MP14-MW21-A01 |      | MP14-MW21-A02 |      | MP14-MW21-A01RE |      | MP16-MW22-A01 |      |
| Sample Type                |          |      | Field Rinse Blank |      |               |      |               |      |                 |      |               |      |
| Batch#                     |          |      | 9503G722          |      | 9502G403      |      | 9503G860      |      | 9502G403        |      | 9502G238      |      |
| Prep#                      |          |      | 95GB0181          |      | 95GB0129      |      | 95GB0174      |      | 95GB0129        |      | 95GB0112      |      |
| RFW#                       |          |      | 003               |      | 012           |      | 019           |      | 012 RE          |      | 016           |      |
| Dilution Factor            |          |      | 1.00              |      | 1.00          |      | 1.00          |      | 1.00            |      | 1.00          |      |
| Matrix                     |          |      | water             |      | water         |      | water         |      | water           |      | water         |      |
| Units                      | ug/l     | ug/l | ug/l              |      | ug/l          |      | ug/l          |      | ug/l            |      | ug/l          |      |
| Sampling Date              |          |      | 3/13/95           |      | 2/22/95       |      | 3/9/95        |      | 2/22/95         |      | 2/17/95       |      |
| Analyte Date               |          |      | 3/18/95           |      | 3/18/95       |      | 3/27/95       |      | 3/5/95          |      | 2/28/95       |      |
| Analyte                    | Standard | MDL  | Analytical        | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical      | CRQL | Analytical    | CRQL |
|                            |          |      | Result            |      | Result        |      | Result        |      | Result          |      | Result        |      |
| 4-Nitrophenol              |          | 7.5  | 27 U              | 27   | 24 U          | 24   | 24 U          | 24   | 24 U            | 24   | 25 U          | 25   |
| Dibenzofuran               |          | 6.5  | 11 U              | 11   | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 10 U          | 10   |
| 2,4-Dinitrotoluene         | 10       | 5.8  | 11 U              | 11   | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 10 U          | 10   |
| Diethylphthalate           | 5000     | 5.4  | 11 U              | 11   | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 10 U          | 10   |
| 4-Chlorophenyl-phenylether |          | 7.0  | 11 U              | 11   | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 10 U          | 10   |
| Fluorene                   | 300      | 6.3  | 11 U              | 11   | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 10 U          | 10   |
| 4-Nitroaniline             |          | 6.4  | 27 U              | 27   | 24 U          | 24   | 24 U          | 24   | 24 U            | 24   | 25 U          | 25   |
| 4,6-Dinitro-2-methylphenol |          | 5.3  | 27 U              | 27   | 24 U          | 24   | 24 U          | 24   | 24 U            | 24   | 25 U          | 25   |
| N-Nitrosodiphenylamine (1) | 20       | 4.2  | 11 U              | 11   | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 10 U          | 10   |
| 4-Bromophenyl-phenylether  |          | 5.3  | 11 U              | 11   | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 10 U          | 10   |
| Hexachlorobenzene          | 10       | 5.5  | 11 U              | 11   | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 10 U          | 10   |
| Pentachlorophenol          | 1        | 4.0  | 27 U              | 27   | 24 U          | 24   | 24 U          | 24   | 24 U            | 24   | 25 U          | 25   |
| Phenanthrene               | 10       | 5.0  | 11 U              | 11   | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 10 U          | 10   |
| Anthracene                 | 2000     | 4.8  | 11 U              | 11   | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 10 U          | 10   |
| Carbazole                  |          | 4.4  | 11 U              | 11   | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 10 U          | 10   |
| Di-n-butylphthalate        | 900      | 6.5  | 11 U              | 11   | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 10 U          | 10   |
| Fluoranthene               | 300      | 6.0  | 11 U              | 11   | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 10 U          | 10   |
| Pyrene                     | 200      | 5.4  | 11 U              | 11   | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 10 U          | 10   |
| Butylbenzylphthalate       | 100      | 5.3  | 11 U              | 11   | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 10 U          | 10   |
| 3,3'-Dichlorobenzidine     | 60       | 2.8  | 11 U              | 11   | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 10 U          | 10   |
| Benzo(a)anthracene         | 10       | 4.9  | 11 U              | 11   | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 10 U          | 10   |
| Chrysene                   | 20       | 4.4  | 11 U              | 11   | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 10 U          | 10   |
| bis(2-Ethylhexy)phthalate  | 30       | 9.7  | 11 U              | 11   | 1 JB          | 10   | 10 U          | 10   | 10 U            | 10   | 10 U          | 10   |
| Di-n-octyl phthalate       | 100      | 5.8  | 11 U              | 11   | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 10 U          | 10   |
| Benzo(b)fluoranthene       | 2        | 5.7  | 11 U              | 11   | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 10 U          | 10   |
| Benzo(k)fluoranthene       | 2        | 6.2  | 11 U              | 11   | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 10 U          | 10   |
| Benzo(a)pyrene             | 20       | 4.9  | 11 U              | 11   | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 10 U          | 10   |
| Indeno(1,2,3-cd)pyrene     | 20       | 7.1  | 11 U              | 11   | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 10 U          | 10   |
| Dibenzo(a,h)anthracene     | 20       | 6.0  | 11 U              | 11   | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 10 U          | 10   |
| Benzo(g,h,i)perylene       | 20       | 6.8  | 11 U              | 11   | 10 U          | 10   | 10 U          | 10   | 10 U            | 10   | 10 U          | 10   |
| Petroleum hydrocarbons     |          |      |                   |      |               |      |               |      |                 |      |               |      |
| Total Est. Conc. of TIC    |          |      |                   |      | 7 J           |      |               |      | 6 J             |      | 83 J          |      |
| Dilution Factor            |          |      |                   |      |               |      |               |      |                 |      |               |      |
| Method:TCL Semivolatiles   |          |      |                   |      |               |      |               |      |                 |      |               |      |

**MAIN POST  
GROUNDWATER SEMIVOLATILES**

| Geographical Location        |          |      | M16           |      | M18           |      | M18                 |      | M18           |      | M18           |      | M18           |      |
|------------------------------|----------|------|---------------|------|---------------|------|---------------------|------|---------------|------|---------------|------|---------------|------|
| Sample                       |          |      | MP16-MW22-A02 |      | MP18-MW03-A01 |      | MP18-MW03-E01       |      | MP18-MW03-A02 |      | MP18-MW24-A01 |      | MP18-MW24-A02 |      |
| Sample Type                  |          |      |               |      |               |      | Field Rinsate Blank |      |               |      |               |      |               |      |
| Batch#                       |          |      | 9503G660      |      | 9505G825      |      | 9505G825            |      | 9505G139      |      | 9502G238      |      | 9502G681      |      |
| Prep#                        |          |      | 95GB0174      |      | 95GIR081      |      | 95GIR081            |      | 95GB0112      |      | 95GB0112      |      | 95GB0175      |      |
| RFW#                         |          |      | 018           |      | 001           |      | 004                 |      | 001           |      | 001           |      | 009           |      |
| Dilution Factor              |          |      | 1.00          |      | 1.00          |      | 1.00                |      | 1.00          |      | 1.00          |      | 1.00          |      |
| Matrix                       |          |      | water         |      | water         |      | water               |      | water         |      | water         |      | water         |      |
| Units                        | ug/l     | ug/l | ug/l          |      | ug/l          |      | ug/l                |      | ug/l          |      | ug/l          |      | ug/l          |      |
| Sampling Date                |          |      | 3/9/95        |      | 5/10/95       |      | 5/10/95             |      | 2/17/95       |      | 2/17/95       |      | 3/10/95       |      |
| Analysis Date                |          |      | 3/27/95       |      | 5/30/95       |      | 5/29/95             |      | 3/1/95        |      | 3/1/95        |      | 3/28/95       |      |
| Analysis                     | Standard | MDL  | Analytical    | CRQL | Analytical    | CRQL | Analytical          | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL |
|                              |          |      | Result        |      | Result        |      | Result              |      | Result        |      | Result        |      | Result        |      |
| Phenol                       | 4000     | 7.1  | 10 U          | 10   | 11 U          | 11   | 11 U                | 11   | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   |
| bis(2-Chloroethyl) ether     | 10       | 9.7  | 10 U          | 10   | 11 U          | 11   | 11 U                | 11   | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   |
| 2-Chlorophenol               | 40       | 7.3  | 10 U          | 10   | 11 U          | 11   | 11 U                | 11   | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   |
| 1,3-Dichlorobenzene          | 600      | 5.3  | 10 U          | 10   | 11 U          | 11   | 11 U                | 11   | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   |
| 1,4-Dichlorobenzene          | 75       | 4.8  | 10 U          | 10   | 11 U          | 11   | 11 U                | 11   | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   |
| 1,2-Dichlorobenzene          | 600      | 5.7  | 10 U          | 10   | 11 U          | 11   | 11 U                | 11   | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   |
| 2-Methylphenol               |          | 6.7  | 10 U          | 10   | 11 U          | 11   | 11 U                | 11   | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   |
| 2,2'-oxybis(1-Chloropropane) |          | 7.0  | 10 U          | 10   | 11 U          | 11   | 11 U                | 11   | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   |
| 4-Methylphenol               |          | 12.9 | 10 U          | 10   | 11 U          | 11   | 11 U                | 11   | 10 U          | 10   | 10 U          | 10   | 2 J           | 11   |
| N-Nitroso-di-n-propylamine   | 20       | 8.0  | 10 U          | 10   | 11 U          | 11   | 11 U                | 11   | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   |
| Hexachloroethane             | 10       | 5.3  | 10 U          | 10   | 11 U          | 11   | 11 U                | 11   | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   |
| Nitrobenzene                 | 10       | 7.4  | 10 U          | 10   | 11 U          | 11   | 11 U                | 11   | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   |
| Isophorone                   | 100      | 3.9  | 10 U          | 10   | 11 U          | 11   | 11 U                | 11   | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   |
| 2-Nitrophenol                |          | 7.0  | 10 U          | 10   | 11 U          | 11   | 11 U                | 11   | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   |
| 2,4-Dimethylphenol           | 100      | 4.8  | 10 U          | 10   | 11 U          | 11   | 11 U                | 11   | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   |
| bis(2-Chloroethoxy) methane  |          | 6.1  | 10 U          | 10   | 11 U          | 11   | 11 U                | 11   | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   |
| 2,4-Dichlorophenol           | 20       | 4.4  | 10 U          | 10   | 11 U          | 11   | 11 U                | 11   | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   |
| 1,2,4-Trichlorobenzene       | 9        | 9.6  | 10 U          | 10   | 11 U          | 11   | 11 U                | 11   | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   |
| Naphthalene                  |          | 8.4  | 10 U          | 10   | 11 U          | 11   | 11 U                | 11   | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   |
| 4-Chloroaniline              |          | 2.9  | 10 U          | 10   | 11 U          | 11   | 11 U                | 11   | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   |
| Hexachlorobutadiene          | 1        | 4.6  | 10 U          | 10   | 11 U          | 11   | 11 U                | 11   | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   |
| 4-Chloro-3-methylphenol      | 20       | 3.1  | 10 U          | 10   | 11 U          | 11   | 11 U                | 11   | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   |
| 2-Methylnaphthalene          |          | 8.7  | 10 U          | 10   | 11 U          | 11   | 11 U                | 11   | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   |
| Hexachlorocyclopentadiene    | 50       | 3.6  | 10 U          | 10   | 11 U          | 11   | 11 U                | 11   | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   |
| 2,4,6-Trichlorophenol        |          | 5.6  | 10 U          | 10   | 11 U          | 11   | 11 U                | 11   | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   |
| 2,4,5-Trichlorophenol        | 700      | 4.7  | 24 U          | 24   | 27 U          | 27   | 28 U                | 28   | 24 U          | 24   | 24 U          | 24   | 26 U          | 26   |
| 2-Chloronaphthalene          |          | 8.2  | 10 U          | 10   | 11 U          | 11   | 11 U                | 11   | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   |
| 2-Nitroaniline               |          | 6.1  | 24 U          | 24   | 27 U          | 27   | 28 U                | 28   | 24 U          | 24   | 24 U          | 24   | 26 U          | 26   |
| Dimethylphthalate            | 7000     | 4.4  | 10 U          | 10   | 11 U          | 11   | 11 U                | 11   | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   |
| Acenaphthylene               | 10       | 6.0  | 10 U          | 10   | 11 U          | 11   | 11 U                | 11   | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   |
| 2,6-Dinitrotoluene           | 10       | 5.2  | 10 U          | 10   | 11 U          | 11   | 11 U                | 11   | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   |
| 3-Nitroaniline               |          | 5.2  | 24 U          | 24   | 27 U          | 27   | 28 U                | 28   | 24 U          | 24   | 24 U          | 24   | 26 U          | 26   |
| Acenaphthene                 | 400      | 6.7  | 10 U          | 10   | 11 U          | 11   | 11 U                | 11   | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   |
| 2,4-Dinitrophenol            | 40       | 4.6  | 24 U          | 24   | 27 U          | 27   | 28 U                | 28   | 24 U          | 24   | 24 U          | 24   | 26 U          | 26   |

**MAIN POST  
GROUNDWATER SEMIVOLATILES**

| Geographical Location      |          |      | M16           |      | M18           |      | M18                 |      | M18           |      | M18           |      | M18           |      |
|----------------------------|----------|------|---------------|------|---------------|------|---------------------|------|---------------|------|---------------|------|---------------|------|
| Sample                     |          |      | MP16-MW22-A02 |      | MP18-MW03-A01 |      | MP18-MW03-E01       |      | MP18-MW03-A02 |      | MP18-MW24-A01 |      | MP18-MW24-A02 |      |
| Sample Type                |          |      |               |      |               |      | Field Rinsate Blank |      |               |      |               |      |               |      |
| Batch#                     |          |      | 9503G660      |      | 9505G825      |      | 9505G825            |      | 9505G139      |      | 9502G238      |      | 9502G681      |      |
| Prep#                      |          |      | 95GB0174      |      | 95GIR081      |      | 95GIR081            |      | 95GB0112      |      | 95GB0112      |      | 95GB0175      |      |
| RFW#                       |          |      | 018           |      | 001           |      | 004                 |      | 001           |      | 001           |      | 009           |      |
| Dilution Factor            |          |      | 1.00          |      | 1.00          |      | 1.00                |      | 1.00          |      | 1.00          |      | 1.00          |      |
| Matrix                     |          |      | water         |      | water         |      | water               |      | water         |      | water         |      | water         |      |
| Units                      | ug/l     | ug/l | ug/l          |      | ug/l          |      | ug/l                |      | ug/l          |      | ug/l          |      | ug/l          |      |
| Sampling Date              |          |      | 3/9/95        |      | 5/10/95       |      | 5/10/95             |      | 2/17/95       |      | 2/17/95       |      | 3/10/95       |      |
| Analysis Date              |          |      | 3/27/95       |      | 5/30/95       |      | 5/29/95             |      | 3/1/95        |      | 3/1/95        |      | 3/28/95       |      |
| Analysis                   | Standard | MDL  | Analytical    | CRQL | Analytical    | CRQL | Analytical          | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL |
|                            |          |      | Result        |      | Result        |      | Result              |      | Result        |      | Result        |      | Result        |      |
| 4-Nitrophenol              |          | 7.5  | 24 U          | 24   | 27 U          | 27   | 28 U                | 28   | 24 U          | 24   | 24 U          | 24   | 26 U          | 26   |
| Dibenzofuran               |          | 6.5  | 10 U          | 10   | 11 U          | 11   | 11 U                | 11   | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   |
| 2,4-Dinitrotoluene         | 10       | 5.8  | 10 U          | 10   | 11 U          | 11   | 11 U                | 11   | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   |
| Diethylphthalate           | 5000     | 5.4  | 10 U          | 10   | 11 U          | 11   | 11 U                | 11   | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   |
| 4-Chlorophenyl-phenylether |          | 7.0  | 10 U          | 10   | 11 U          | 11   | 11 U                | 11   | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   |
| Fluorene                   | 300      | 6.3  | 10 U          | 10   | 11 U          | 11   | 11 U                | 11   | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   |
| 4-Nitroaniline             |          | 6.4  | 24 U          | 24   | 27 U          | 27   | 28 U                | 28   | 24 U          | 24   | 24 U          | 24   | 26 U          | 26   |
| 4,6-Dinitro-2-methylphenol |          | 5.3  | 24 U          | 24   | 27 U          | 27   | 28 U                | 28   | 24 U          | 24   | 24 U          | 24   | 26 U          | 26   |
| N-Nitrosodiphenylamine (1) | 20       | 4.2  | 10 U          | 10   | 11 U          | 11   | 11 U                | 11   | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   |
| 4-Bromophenyl-phenylether  |          | 5.3  | 10 U          | 10   | 11 U          | 11   | 11 U                | 11   | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   |
| Hexachlorobenzene          | 10       | 5.5  | 10 U          | 10   | 11 U          | 11   | 11 U                | 11   | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   |
| Pentachlorophenol          | 1        | 4.0  | 24 U          | 24   | 27 U          | 27   | 28 U                | 28   | 24 U          | 24   | 24 U          | 24   | 26 U          | 26   |
| Phenanthrene               | 10       | 5.0  | 10 U          | 10   | 11 U          | 11   | 11 U                | 11   | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   |
| Anthracene                 | 2000     | 4.6  | 10 U          | 10   | 11 U          | 11   | 11 U                | 11   | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   |
| Carbazole                  |          | 4.4  | 10 U          | 10   | 11 U          | 11   | 11 U                | 11   | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   |
| Di-n-butylphthalate        | 900      | 6.5  | 10 U          | 10   | 11 U          | 11   | 11 U                | 11   | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   |
| Fluoranthene               | 300      | 6.0  | 10 U          | 10   | 11 U          | 11   | 11 U                | 11   | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   |
| Pyrene                     | 200      | 5.4  | 10 U          | 10   | 11 U          | 11   | 11 U                | 11   | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   |
| Butylbenzylphthalate       | 100      | 5.3  | 10 U          | 10   | 11 U          | 11   | 11 U                | 11   | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   |
| 3,3'-Dichlorobenzidine     | 60       | 2.8  | 10 U          | 10   | 11 U          | 11   | 11 U                | 11   | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   |
| Benzo(a)anthracene         | 10       | 4.9  | 10 U          | 10   | 11 U          | 11   | 11 U                | 11   | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   |
| Chrysene                   | 20       | 4.4  | 10 U          | 10   | 11 U          | 11   | 11 U                | 11   | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   |
| bis(2-Ethylhexy)phthalate  | 30       | 9.7  | 1 J           | 10   | 90 B          | 43   | 2 JB                | 43   | 2 JB          | 10   | 4             | 10   | 1 J           | 11   |
| Di-n-octyl phthalate       | 100      | 5.6  | 10 U          | 10   | 11 U          | 11   | 11 U                | 11   | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   |
| Benzo(b)fluoranthene       | 2        | 5.7  | 10 U          | 10   | 11 U          | 11   | 11 U                | 11   | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   |
| Benzo(k)fluoranthene       | 2        | 6.2  | 10 U          | 10   | 11 U          | 11   | 11 U                | 11   | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   |
| Benzo(a)pyrene             | 20       | 4.9  | 10 U          | 10   | 11 U          | 11   | 11 U                | 11   | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   |
| Indeno(1,2,3-cd)pyrene     | 20       | 7.1  | 10 U          | 10   | 11 U          | 11   | 11 U                | 11   | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   |
| Dibenzo(a,h)anthracene     | 20       | 6.0  | 10 U          | 10   | 11 U          | 11   | 11 U                | 11   | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   |
| Benzo(g,h,i)perylene       | 20       | 6.8  | 10 U          | 10   | 11 U          | 11   | 11 U                | 11   | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   |
| Petroleum hydrocarbons     |          |      |               |      | 0.26 U        | 0.26 | 0.27 U              | 0.27 | 0.26 U        | 0.26 | 1.3           | 0.27 | 0.62          | 0.26 |
| Total Est. Conc. of TIC    |          |      | 88 J          |      | 5 JB          |      | 10 J                |      | 29 J          |      | 12 J          |      | 29 J          |      |
| Dilution Factor            |          |      |               |      |               |      |                     |      |               |      |               |      |               |      |
| Method:TCL Semivolatiles   |          |      |               |      |               |      |                     |      |               |      |               |      |               |      |

**MAIN POST  
GROUNDWATER SEMIVOLATILES**

| Geographical Location        |          |      | M18           |      | M18             |      | M18                 |      | M18                 |      | M18           |      | M18           |      |
|------------------------------|----------|------|---------------|------|-----------------|------|---------------------|------|---------------------|------|---------------|------|---------------|------|
| Sample                       |          |      | MP18-MW24-C02 |      | MP18-MW24-C02RE |      | MP18-MW24-E01       |      | MP18-MW24-E02       |      | MP18-MW25-A01 |      | MP18-MW25-A02 |      |
| Sample Type                  |          |      | Duplicate     |      | Duplicate       |      | Field Rinsate Blank |      | Field Rinsate Blank |      |               |      |               |      |
| Batch#                       |          |      | 9502G681      |      | 9502G681        |      | 9502G238            |      | 9502G681            |      | 9502G238      |      | 9502G681      |      |
| Prep#                        |          |      | 95GB0175      |      | 95GB0175        |      | 95GB0112            |      | 95GB0175            |      | 95GB0112      |      | 95GB0175      |      |
| RFW#                         |          |      | 011           |      | 011 RE          |      | 004                 |      | 014                 |      | 006           |      | 016           |      |
| Dilution Factor              |          |      | 1.00          |      | 1.00            |      | 1.00                |      | 1.00                |      | 1.00          |      | 1.00          |      |
| Matrix                       |          |      | water         |      | water           |      | water               |      | water               |      | water         |      | water         |      |
| Units                        | ug/l     | ug/l | ug/l          |      | ug/l            |      | ug/l                |      | ug/l                |      | ug/l          |      | ug/l          |      |
| Sampling Date                |          |      | 3/10/95       |      | 3/10/95         |      | 2/17/95             |      | 3/10/95             |      | 2/17/95       |      | 3/10/95       |      |
| Analysis Date                |          |      | 3/27/95       |      | 3/28/95         |      | 2/27/95             |      | 3/27/95             |      | 2/28/95       |      | 3/28/95       |      |
| Analysis                     | Standard | MDL  | Analytical    | CRQL | Analytical      | CRQL | Analytical          | CRQL | Analytical          | CRQL | Analytical    | CRQL | Analytical    | CRQL |
|                              |          |      | Result        |      | Result          |      | Result              |      | Result              |      | Result        |      | Result        |      |
| Phenol                       | 4000     | 7.1  | 11 U          | 11   | 11 U            | 11   | 10 U                | 10   | 11 U                | 11   | 10 U          | 10   | 12 U          | 12   |
| bis(2-Chloroethyl) ether     | 10       | 9.7  | 11 U          | 11   | 11 U            | 11   | 10 U                | 10   | 11 U                | 11   | 10 U          | 10   | 12 U          | 12   |
| 2-Chlorophenol               | 40       | 7.3  | 11 U          | 11   | 11 U            | 11   | 10 U                | 10   | 11 U                | 11   | 10 U          | 10   | 12 U          | 12   |
| 1,3-Dichlorobenzene          | 600      | 5.3  | 11 U          | 11   | 11 U            | 11   | 10 U                | 10   | 11 U                | 11   | 10 U          | 10   | 12 U          | 12   |
| 1,4-Dichlorobenzene          | 75       | 4.8  | 11 U          | 11   | 11 U            | 11   | 10 U                | 10   | 11 U                | 11   | 10 U          | 10   | 12 U          | 12   |
| 1,2-Dichlorobenzene          | 600      | 5.7  | 11 U          | 11   | 11 U            | 11   | 10 U                | 10   | 11 U                | 11   | 10 U          | 10   | 12 U          | 12   |
| 2-Methylphenol               |          | 6.7  | 11 U          | 11   | 11 U            | 11   | 10 U                | 10   | 11 U                | 11   | 10 U          | 10   | 12 U          | 12   |
| 2,2'-oxybis(1-Chloropropane) |          | 7.0  | 11 U          | 11   | 11 U            | 11   | 10 U                | 10   | 11 U                | 11   | 10 U          | 10   | 12 U          | 12   |
| 4-Methylphenol               |          | 12.9 | 2 J           | 11   | 2 J             | 11   | 10 U                | 10   | 11 U                | 11   | 10 U          | 10   | 12 U          | 12   |
| N-Nitroso-di-n-propylamine   | 20       | 8.0  | 11 U          | 11   | 11 U            | 11   | 10 U                | 10   | 11 U                | 11   | 10 U          | 10   | 12 U          | 12   |
| Hexachloroethane             | 10       | 5.3  | 11 U          | 11   | 11 U            | 11   | 10 U                | 10   | 11 U                | 11   | 10 U          | 10   | 12 U          | 12   |
| Nitrobenzene                 | 10       | 7.4  | 11 U          | 11   | 11 U            | 11   | 10 U                | 10   | 11 U                | 11   | 10 U          | 10   | 12 U          | 12   |
| Isophorone                   | 100      | 3.9  | 11 U          | 11   | 11 U            | 11   | 10 U                | 10   | 11 U                | 11   | 10 U          | 10   | 12 U          | 12   |
| 2-Nitrophenol                |          | 7.0  | 11 U          | 11   | 11 U            | 11   | 10 U                | 10   | 11 U                | 11   | 10 U          | 10   | 12 U          | 12   |
| 2,4-Dimethylphenol           | 100      | 4.8  | 11 U          | 11   | 11 U            | 11   | 10 U                | 10   | 11 U                | 11   | 10 U          | 10   | 12 U          | 12   |
| bis(2-Chloroethoxy) methane  |          | 6.1  | 11 U          | 11   | 11 U            | 11   | 10 U                | 10   | 11 U                | 11   | 10 U          | 10   | 12 U          | 12   |
| 2,4-Dichlorophenol           | 20       | 4.4  | 11 U          | 11   | 11 U            | 11   | 10 U                | 10   | 11 U                | 11   | 10 U          | 10   | 12 U          | 12   |
| 1,2,4-Trichlorobenzene       | 9        | 9.6  | 11 U          | 11   | 11 U            | 11   | 10 U                | 10   | 11 U                | 11   | 10 U          | 10   | 12 U          | 12   |
| Naphthalene                  |          | 8.4  | 11 U          | 11   | 11 U            | 11   | 10 U                | 10   | 11 U                | 11   | 10 U          | 10   | 12 U          | 12   |
| 4-Chloroaniline              |          | 2.9  | 11 U          | 11   | 11 U            | 11   | 10 U                | 10   | 11 U                | 11   | 10 U          | 10   | 12 U          | 12   |
| Hexachlorobutadiene          | 1        | 4.6  | 11 U          | 11   | 11 U            | 11   | 10 U                | 10   | 11 U                | 11   | 10 U          | 10   | 12 U          | 12   |
| 4-Chloro-3-methylphenol      | 20       | 3.1  | 11 U          | 11   | 11 U            | 11   | 10 U                | 10   | 11 U                | 11   | 10 U          | 10   | 12 U          | 12   |
| 2-Methylnaphthalene          |          | 8.7  | 11 U          | 11   | 11 U            | 11   | 10 U                | 10   | 11 U                | 11   | 10 U          | 10   | 12 U          | 12   |
| Hexachlorocyclopentadiene    | 50       | 3.6  | 11 U          | 11   | 11 U            | 11   | 10 U                | 10   | 11 U                | 11   | 10 U          | 10   | 12 U          | 12   |
| 2,4,6-Trichlorophenol        |          | 5.6  | 11 U          | 11   | 11 U            | 11   | 10 U                | 10   | 11 U                | 11   | 10 U          | 10   | 12 U          | 12   |
| 2,4,5-Trichlorophenol        | 700      | 4.7  | 26 U          | 26   | 26 U            | 26   | 26 U                | 26   | 28 U                | 28   | 26 U          | 26   | 31 U          | 31   |
| 2-Chloronaphthalene          |          | 8.2  | 11 U          | 11   | 11 U            | 11   | 10 U                | 10   | 11 U                | 11   | 10 U          | 10   | 12 U          | 12   |
| 2-Nitroaniline               |          | 6.1  | 26 U          | 26   | 26 U            | 26   | 26 U                | 26   | 28 U                | 28   | 26 U          | 26   | 31 U          | 31   |
| Dimethylphthalate            | 7000     | 4.4  | 11 U          | 11   | 11 U            | 11   | 10 U                | 10   | 11 U                | 11   | 10 U          | 10   | 12 U          | 12   |
| Acenaphthylene               | 10       | 6.0  | 11 U          | 11   | 11 U            | 11   | 10 U                | 10   | 11 U                | 11   | 10 U          | 10   | 12 U          | 12   |
| 2,6-Dinitrotoluene           | 10       | 5.2  | 11 U          | 11   | 11 U            | 11   | 10 U                | 10   | 11 U                | 11   | 10 U          | 10   | 12 U          | 12   |
| 3-Nitroaniline               |          | 5.2  | 26 U          | 26   | 26 U            | 26   | 26 U                | 26   | 28 U                | 28   | 26 U          | 26   | 31 U          | 31   |
| Acenaphthene                 | 400      | 6.7  | 11 U          | 11   | 11 U            | 11   | 10 U                | 10   | 11 U                | 11   | 10 U          | 10   | 12 U          | 12   |
| 2,4-Dinitrophenol            | 40       | 4.6  | 26 U          | 26   | 26 U            | 26   | 26 U                | 26   | 28 U                | 28   | 26 U          | 26   | 31 U          | 31   |

**MAIN POST  
GROUNDWATER SEMIVOLATILES**

| Geographical Location      |          |      | M18           |      | M18             |      | M18                 |      | M18                 |      | M18           |      | M18           |      |
|----------------------------|----------|------|---------------|------|-----------------|------|---------------------|------|---------------------|------|---------------|------|---------------|------|
| Sample                     |          |      | MP18-MW24-C02 |      | MP18-MW24-C02RE |      | MP18-MW24-E01       |      | MP18-MW24-E02       |      | MP18-MW25-A01 |      | MP18-MW25-A02 |      |
| Sample Type                |          |      | Duplicate     |      | Duplicate       |      | Field Rinsate Blank |      | Field Rinsate Blank |      |               |      |               |      |
| Batch#                     |          |      | 9502G681      |      | 9502G681        |      | 9502G238            |      | 9502G681            |      | 9502G238      |      | 9502G681      |      |
| Prep#                      |          |      | 95GB0175      |      | 95GB0175        |      | 95GB0112            |      | 95GB0175            |      | 95GB0112      |      | 95GB0175      |      |
| RFW#                       |          |      | 011           |      | 011 RE          |      | 004                 |      | 014                 |      | 006           |      | 016           |      |
| Dilution Factor            |          |      | 1.00          |      | 1.00            |      | 1.00                |      | 1.00                |      | 1.00          |      | 1.00          |      |
| Matrix                     |          |      | water         |      | water           |      | water               |      | water               |      | water         |      | water         |      |
| Units                      | ug/l     | ug/l | ug/l          |      | ug/l            |      | ug/l                |      | ug/l                |      | ug/l          |      | ug/l          |      |
| Sampling Date              |          |      | 3/10/95       |      | 3/10/95         |      | 2/17/95             |      | 3/10/95             |      | 2/17/95       |      | 3/10/95       |      |
| Analysis Date              |          |      | 3/27/95       |      | 3/28/95         |      | 2/27/95             |      | 3/27/95             |      | 2/28/95       |      | 3/28/95       |      |
| Analysis                   | Standard | MDL  | Analytical    | CRQL | Analytical      | CRQL | Analytical          | CRQL | Analytical          | CRQL | Analytical    | CRQL | Analytical    | CRQL |
|                            |          |      | Result        |      | Result          |      | Result              |      | Result              |      | Result        |      | Result        |      |
| 4-Nitrophenol              |          | 7.5  | 26 U          | 26   | 26 U            | 26   | 26 U                | 26   | 28 U                | 28   | 26 U          | 26   | 31 U          | 31   |
| Dibenzofuran               |          | 6.5  | 11 U          | 11   | 11 U            | 11   | 10 U                | 10   | 11 U                | 11   | 10 U          | 10   | 12 U          | 12   |
| 2,4-Dinitrotoluene         | 10       | 5.8  | 11 U          | 11   | 11 U            | 11   | 10 U                | 10   | 11 U                | 11   | 10 U          | 10   | 12 U          | 12   |
| Diethylphthalate           | 5000     | 5.4  | 11 U          | 11   | 11 U            | 11   | 10 U                | 10   | 11 U                | 11   | 10 U          | 10   | 12 U          | 12   |
| 4-Chlorophenyl-phenylether |          | 7.0  | 11 U          | 11   | 11 U            | 11   | 10 U                | 10   | 11 U                | 11   | 10 U          | 10   | 12 U          | 12   |
| Fluorene                   | 300      | 6.3  | 11 U          | 11   | 11 U            | 11   | 10 U                | 10   | 11 U                | 11   | 10 U          | 10   | 12 U          | 12   |
| 4-Nitroaniline             |          | 6.4  | 26 U          | 26   | 26 U            | 26   | 26 U                | 26   | 28 U                | 28   | 26 U          | 26   | 31 U          | 31   |
| 4,6-Dinitro-2-methylphenol |          | 5.3  | 26 U          | 26   | 26 U            | 26   | 26 U                | 26   | 28 U                | 28   | 26 U          | 26   | 31 U          | 31   |
| N-Nitrosodiphenylamine (1) | 20       | 4.2  | 11 U          | 11   | 11 U            | 11   | 10 U                | 10   | 11 U                | 11   | 10 U          | 10   | 12 U          | 12   |
| 4-Bromophenyl-phenylether  |          | 5.3  | 11 U          | 11   | 11 U            | 11   | 10 U                | 10   | 11 U                | 11   | 10 U          | 10   | 12 U          | 12   |
| Hexachlorobenzene          | 10       | 5.5  | 11 U          | 11   | 11 U            | 11   | 10 U                | 10   | 11 U                | 11   | 10 U          | 10   | 12 U          | 12   |
| Pentachlorophenol          | 1        | 4.0  | 26 U          | 26   | 26 U            | 26   | 26 U                | 26   | 28 U                | 28   | 26 U          | 26   | 31 U          | 31   |
| Phenanthrene               | 10       | 5.0  | 11 U          | 11   | 11 U            | 11   | 10 U                | 10   | 11 U                | 11   | 10 U          | 10   | 12 U          | 12   |
| Anthracene                 | 2000     | 4.6  | 11 U          | 11   | 11 U            | 11   | 10 U                | 10   | 11 U                | 11   | 10 U          | 10   | 12 U          | 12   |
| Carbazole                  |          | 4.4  | 11 U          | 11   | 11 U            | 11   | 10 U                | 10   | 11 U                | 11   | 10 U          | 10   | 12 U          | 12   |
| Di-n-butylphthalate        | 900      | 6.5  | 11 U          | 11   | 11 U            | 11   | 10 U                | 10   | 11 U                | 11   | 10 U          | 10   | 12 U          | 12   |
| Fluoranthene               | 300      | 6.0  | 11 U          | 11   | 11 U            | 11   | 10 U                | 10   | 11 U                | 11   | 10 U          | 10   | 12 U          | 12   |
| Pyrene                     | 200      | 5.4  | 11 U          | 11   | 11 U            | 11   | 10 U                | 10   | 11 U                | 11   | 10 U          | 10   | 12 U          | 12   |
| Butylbenzylphthalate       | 100      | 5.3  | 11 U          | 11   | 11 U            | 11   | 10 U                | 10   | 11 U                | 11   | 10 U          | 10   | 12 U          | 12   |
| 3,3'-Dichlorobenzidine     | 60       | 2.8  | 11 U          | 11   | 11 U            | 11   | 10 U                | 10   | 11 U                | 11   | 10 U          | 10   | 12 U          | 12   |
| Benzo(a)anthracene         | 10       | 4.9  | 11 U          | 11   | 11 U            | 11   | 10 U                | 10   | 11 U                | 11   | 10 U          | 10   | 12 U          | 12   |
| Chrysene                   | 20       | 4.4  | 11 U          | 11   | 11 U            | 11   | 10 U                | 10   | 11 U                | 11   | 10 U          | 10   | 12 U          | 12   |
| bis(2-Ethylhexy)phthalate  | 30       | 9.7  | 11 U          | 11   | 11 U            | 11   | 10 U                | 10   | 140                 | 22 * | 10 U          | 10   | 12 U          | 12   |
| Di-n-octyl phthalate       | 100      | 5.6  | 11 U          | 11   | 11 U            | 11   | 10 U                | 10   | 11 U                | 11   | 10 U          | 10   | 12 U          | 12   |
| Benzo(b)fluoranthene       | 2        | 5.7  | 11 U          | 11   | 11 U            | 11   | 10 U                | 10   | 11 U                | 11   | 10 U          | 10   | 12 U          | 12   |
| Benzo(k)fluoranthene       | 2        | 6.2  | 11 U          | 11   | 11 U            | 11   | 10 U                | 10   | 11 U                | 11   | 10 U          | 10   | 12 U          | 12   |
| Benzo(a)pyrene             | 20       | 4.9  | 11 U          | 11   | 11 U            | 11   | 10 U                | 10   | 11 U                | 11   | 10 U          | 10   | 12 U          | 12   |
| Indeno(1,2,3-cd)pyrene     | 20       | 7.1  | 11 U          | 11   | 11 U            | 11   | 10 U                | 10   | 11 U                | 11   | 10 U          | 10   | 12 U          | 12   |
| Dibenzo(a,h)anthracene     | 20       | 6.0  | 11 U          | 11   | 11 U            | 11   | 10 U                | 10   | 11 U                | 11   | 10 U          | 10   | 12 U          | 12   |
| Benzo(g,h,i)perylene       | 20       | 6.8  | 11 U          | 11   | 11 U            | 11   | 10 U                | 10   | 11 U                | 11   | 10 U          | 10   | 12 U          | 12   |
| Petroleum hydrocarbons     |          |      | 0.94          | 0.27 | 0.94            | 0.27 | 0.28                | 0.26 | 0.29 U              | 0.29 | 0.28          | 0.27 | 0.58          | 0.27 |
| Total Est. Conc. of TIC    |          |      | 38 J          |      | 24 J            |      | 4 J                 |      | 7 J                 |      | 72 J          |      | 59 J          |      |
| Dilution Factor            |          |      |               |      |                 |      |                     |      | * = 2.00            |      |               |      |               |      |
| Method:TCL Semivolatiles   |          |      |               |      |                 |      |                     |      |                     |      |               |      |               |      |



**MAIN POST  
GROUNDWATER SEMIVOLATILES**

| Geographical Location        |          |      | M18           |      | B1           |      | B1           |      | B2           |      | B2           |      | B3           |      |
|------------------------------|----------|------|---------------|------|--------------|------|--------------|------|--------------|------|--------------|------|--------------|------|
| Sample                       |          |      | MP18-MW25-C01 |      | B1-MW01B-A01 |      | B1-MW01B-A02 |      | B2-MW02B-A01 |      | B2-MW02B-A02 |      | B3-MW03B-A01 |      |
| Sample Type                  |          |      | Duplicate     |      |              |      |              |      |              |      |              |      |              |      |
| Batch#                       |          |      | 9502G238      |      | 9502G169     |      | 9503G616     |      | 9502G169     |      | 9503G616     |      | 9502G169     |      |
| Prep#                        |          |      | 95GB0112      |      | 95GB0103     |      | 95GB0166     |      | 95GB0103     |      | 95GB0166     |      | 95GB0103     |      |
| RFW#                         |          |      | 008           |      | 001          |      | 008          |      | 003          |      | 010          |      | 005          |      |
| Dilution Factor              |          |      | 1.00          |      | 1.00         |      | 1.00         |      | 1.00         |      | 1.00         |      | 1.00         |      |
| Matrix                       |          |      | water         |      | water        |      | water        |      | water        |      | water        |      | water        |      |
| Units                        | ug/l     | ug/l | ug/l          |      | ug/l         |      | ug/l         |      | ug/l         |      | ug/l         |      | ug/l         |      |
| Sampling Date                |          |      | 2/17/95       |      | 2/14/95      |      | 3/7/95       |      | 2/14/95      |      | 3/7/95       |      | 2/14/95      |      |
| Analysis Date                |          |      | 2/28/95       |      | 3/7/95       |      | 3/26/95      |      | 3/7/95       |      | 3/30/95      |      | 3/7/95       |      |
| Analysis                     | Standard | MDL  | Analytical    | CRQL | Analytical   | CRQL | Analytical   | CRQL | Analytical   | CRQL | Analytical   | CRQL | Analytical   | CRQL |
|                              |          |      | Result        |      | Result       |      | Result       |      | Result       |      | Result       |      | Result       |      |
| Phenol                       | 4000     | 7.1  | 11 U          | 11   | 12 U         | 12   | 12 U         | 12   | 10 U         | 10   | 12 U         | 12   | 10 U         | 10   |
| bis(2-Chloroethyl) ether     | 10       | 9.7  | 11 U          | 11   | 12 U         | 12   | 12 U         | 12   | 10 U         | 10   | 12 U         | 12   | 10 U         | 10   |
| 2-Chlorophenol               | 40       | 7.3  | 11 U          | 11   | 12 U         | 12   | 12 U         | 12   | 10 U         | 10   | 12 U         | 12   | 10 U         | 10   |
| 1,3-Dichlorobenzene          | 600      | 5.3  | 11 U          | 11   | 12 U         | 12   | 12 U         | 12   | 10 U         | 10   | 12 U         | 12   | 10 U         | 10   |
| 1,4-Dichlorobenzene          | 75       | 4.8  | 11 U          | 11   | 12 U         | 12   | 12 U         | 12   | 10 U         | 10   | 12 U         | 12   | 10 U         | 10   |
| 1,2-Dichlorobenzene          | 600      | 5.7  | 11 U          | 11   | 12 U         | 12   | 12 U         | 12   | 10 U         | 10   | 12 U         | 12   | 10 U         | 10   |
| 2-Methylphenol               |          | 6.7  | 11 U          | 11   | 12 U         | 12   | 12 U         | 12   | 10 U         | 10   | 12 U         | 12   | 10 U         | 10   |
| 2,2'-oxybis(1-Chloropropane) |          | 7.0  | 11 U          | 11   | 12 U         | 12   | 12 U         | 12   | 10 U         | 10   | 12 U         | 12   | 10 U         | 10   |
| 4-Methylphenol               |          | 12.9 | 11 U          | 11   | 12 U         | 12   | 12 U         | 12   | 10 U         | 10   | 12 U         | 12   | 10 U         | 10   |
| N-Nitroso-di-n-propylamine   | 20       | 8.0  | 11 U          | 11   | 12 U         | 12   | 12 U         | 12   | 10 U         | 10   | 12 U         | 12   | 10 U         | 10   |
| Hexachloroethane             | 10       | 5.3  | 11 U          | 11   | 12 U         | 12   | 12 U         | 12   | 10 U         | 10   | 12 U         | 12   | 10 U         | 10   |
| Nitrobenzene                 | 10       | 7.4  | 11 U          | 11   | 12 U         | 12   | 12 U         | 12   | 10 U         | 10   | 12 U         | 12   | 10 U         | 10   |
| Isophorone                   | 100      | 3.9  | 11 U          | 11   | 12 U         | 12   | 12 U         | 12   | 10 U         | 10   | 12 U         | 12   | 10 U         | 10   |
| 2-Nitrophenol                |          | 7.0  | 11 U          | 11   | 12 U         | 12   | 12 U         | 12   | 10 U         | 10   | 12 U         | 12   | 10 U         | 10   |
| 2,4-Dimethylphenol           | 100      | 4.8  | 11 U          | 11   | 12 U         | 12   | 12 U         | 12   | 10 U         | 10   | 12 U         | 12   | 10 U         | 10   |
| bis(2-Chloroethoxy) methane  |          | 6.1  | 11 U          | 11   | 12 U         | 12   | 12 U         | 12   | 10 U         | 10   | 12 U         | 12   | 10 U         | 10   |
| 2,4-Dichlorophenol           | 20       | 4.4  | 11 U          | 11   | 12 U         | 12   | 12 U         | 12   | 10 U         | 10   | 12 U         | 12   | 10 U         | 10   |
| 1,2,4-Trichlorobenzene       | 9        | 9.6  | 11 U          | 11   | 12 U         | 12   | 12 U         | 12   | 10 U         | 10   | 12 U         | 12   | 10 U         | 10   |
| Naphthalene                  |          | 8.4  | 11 U          | 11   | 12 U         | 12   | 12 U         | 12   | 10 U         | 10   | 12 U         | 12   | 10 U         | 10   |
| 4-Chloroaniline              |          | 2.9  | 11 U          | 11   | 12 U         | 12   | 12 U         | 12   | 10 U         | 10   | 12 U         | 12   | 10 U         | 10   |
| Hexachlorobutadiene          | 1        | 4.6  | 11 U          | 11   | 12 U         | 12   | 12 U         | 12   | 10 U         | 10   | 12 U         | 12   | 10 U         | 10   |
| 4-Chloro-3-methylphenol      | 20       | 3.1  | 11 U          | 11   | 12 U         | 12   | 12 U         | 12   | 10 U         | 10   | 12 U         | 12   | 10 U         | 10   |
| 2-Methylnaphthalene          |          | 8.7  | 11 U          | 11   | 12 U         | 12   | 12 U         | 12   | 10 U         | 10   | 12 U         | 12   | 10 U         | 10   |
| Hexachlorocyclopentadiene    | 50       | 3.6  | 11 U          | 11   | 12 U         | 12   | 12 U         | 12   | 10 U         | 10   | 12 U         | 12   | 10 U         | 10   |
| 2,4,6-Trichlorophenol        |          | 5.6  | 11 U          | 11   | 12 U         | 12   | 12 U         | 12   | 10 U         | 10   | 12 U         | 12   | 10 U         | 10   |
| 2,4,5-Trichlorophenol        | 700      | 4.7  | 26 U          | 26   | 30 U         | 30   | 30 U         | 30   | 24 U         | 24   | 31 U         | 31   | 25 U         | 25   |
| 2-Chloronaphthalene          |          | 8.2  | 11 U          | 11   | 12 U         | 12   | 12 U         | 12   | 10 U         | 10   | 12 U         | 12   | 10 U         | 10   |
| 2-Nitroaniline               |          | 6.1  | 26 U          | 26   | 30 U         | 30   | 30 U         | 30   | 24 U         | 24   | 31 U         | 31   | 25 U         | 25   |
| Dimethylphthalate            | 7000     | 4.4  | 11 U          | 11   | 12 U         | 12   | 12 U         | 12   | 10 U         | 10   | 12 U         | 12   | 10 U         | 10   |
| Acenaphthylene               | 10       | 6.0  | 11 U          | 11   | 12 U         | 12   | 12 U         | 12   | 10 U         | 10   | 12 U         | 12   | 10 U         | 10   |
| 2,6-Dinitrotoluene           | 10       | 5.2  | 11 U          | 11   | 12 U         | 12   | 12 U         | 12   | 10 U         | 10   | 12 U         | 12   | 10 U         | 10   |
| 3-Nitroaniline               |          | 5.2  | 26 U          | 26   | 30 U         | 30   | 30 U         | 30   | 24 U         | 24   | 31 U         | 31   | 25 U         | 25   |
| Acenaphthene                 | 400      | 6.7  | 11 U          | 11   | 12 U         | 12   | 12 U         | 12   | 10 U         | 10   | 12 U         | 12   | 10 U         | 10   |
| 2,4-Dinitrophenol            | 40       | 4.6  | 26 U          | 26   | 30 U         | 30   | 30 U         | 30   | 24 U         | 24   | 31 U         | 31   | 25 U         | 25   |

**MAIN POST  
GROUNDWATER SEMIVOLATILES**

| Geographical Location      |          |      | M18           |      | B1           |      | B1           |      | B2           |      | B2           |      | B3           |      |
|----------------------------|----------|------|---------------|------|--------------|------|--------------|------|--------------|------|--------------|------|--------------|------|
| Sample                     |          |      | MP18-MW25-C01 |      | B1-MW01B-A01 |      | B1-MW01B-A02 |      | B2-MW02B-A01 |      | B2-MW02B-A02 |      | B3-MW03B-A01 |      |
| Sample Type                |          |      | Duplicate     |      |              |      |              |      |              |      |              |      |              |      |
| Batch#                     |          |      | 9502G238      |      | 9502G169     |      | 9503G616     |      | 9502G169     |      | 9503G616     |      | 9502G169     |      |
| Prep#                      |          |      | 95GB0112      |      | 95GB0103     |      | 95GB0166     |      | 95GB0103     |      | 95GB0166     |      | 95GB0103     |      |
| RFW#                       |          |      | 008           |      | 001          |      | 008          |      | 003          |      | 010          |      | 005          |      |
| Dilution Factor            |          |      | 1.00          |      | 1.00         |      | 1.00         |      | 1.00         |      | 1.00         |      | 1.00         |      |
| Matrix                     |          |      | water         |      | water        |      | water        |      | water        |      | water        |      | water        |      |
| Units                      | ug/l     | ug/l | ug/l          |      | ug/l         |      | ug/l         |      | ug/l         |      | ug/l         |      | ug/l         |      |
| Sampling Date              |          |      | 2/17/95       |      | 2/14/95      |      | 3/7/95       |      | 2/14/95      |      | 3/7/95       |      | 2/14/95      |      |
| Analysis Date              |          |      | 2/28/95       |      | 3/7/95       |      | 3/26/95      |      | 3/7/95       |      | 3/30/95      |      | 3/7/95       |      |
| Analysis                   | Standard | MDL  | Analytical    | CRQL | Analytical   | CRQL | Analytical   | CRQL | Analytical   | CRQL | Analytical   | CRQL | Analytical   | CRQL |
|                            |          |      | Result        |      | Result       |      | Result       |      | Result       |      | Result       |      | Result       |      |
| 4-Nitrophenol              |          | 7.5  | 26 U          | 26   | 30 U         | 30   | 30 U         | 30   | 24 U         | 24   | 31 U         | 31   | 25 U         | 25   |
| Dibenzofuran               |          | 6.5  | 11 U          | 11   | 12 U         | 12   | 12 U         | 12   | 10 U         | 10   | 12 U         | 12   | 10 U         | 10   |
| 2,4-Dinitrotoluene         | 10       | 5.8  | 11 U          | 11   | 12 U         | 12   | 12 U         | 12   | 10 U         | 10   | 12 U         | 12   | 10 U         | 10   |
| Diethylphthalate           | 5000     | 5.4  | 11 U          | 11   | 12 U         | 12   | 12 U         | 12   | 10 U         | 10   | 12 U         | 12   | 10 U         | 10   |
| 4-Chlorophenyl-phenylether |          | 7.0  | 11 U          | 11   | 12 U         | 12   | 12 U         | 12   | 10 U         | 10   | 12 U         | 12   | 10 U         | 10   |
| Fluorene                   | 300      | 6.3  | 11 U          | 11   | 12 U         | 12   | 12 U         | 12   | 10 U         | 10   | 12 U         | 12   | 10 U         | 10   |
| 4-Nitroaniline             |          | 6.4  | 26 U          | 26   | 30 U         | 30   | 30 U         | 30   | 24 U         | 24   | 31 U         | 31   | 25 U         | 25   |
| 4,6-Dinitro-2-methylphenol |          | 5.3  | 26 U          | 26   | 30 U         | 30   | 30 U         | 30   | 24 U         | 24   | 31 U         | 31   | 25 U         | 25   |
| N-Nitrosodiphenylamine (1) | 20       | 4.2  | 11 U          | 11   | 12 U         | 12   | 12 U         | 12   | 10 U         | 10   | 12 U         | 12   | 10 U         | 10   |
| 4-Bromophenyl-phenylether  |          | 5.3  | 11 U          | 11   | 12 U         | 12   | 12 U         | 12   | 10 U         | 10   | 12 U         | 12   | 10 U         | 10   |
| Hexachlorobenzene          | 10       | 5.5  | 11 U          | 11   | 12 U         | 12   | 12 U         | 12   | 10 U         | 10   | 12 U         | 12   | 10 U         | 10   |
| Pentachlorophenol          | 1        | 4.0  | 26 U          | 26   | 30 U         | 30   | 30 U         | 30   | 24 U         | 24   | 31 U         | 31   | 25 U         | 25   |
| Phenanthrene               | 10       | 5.0  | 11 U          | 11   | 12 U         | 12   | 12 U         | 12   | 10 U         | 10   | 12 U         | 12   | 10 U         | 10   |
| Anthracene                 | 2000     | 4.6  | 11 U          | 11   | 12 U         | 12   | 12 U         | 12   | 10 U         | 10   | 12 U         | 12   | 10 U         | 10   |
| Carbazole                  |          | 4.4  | 11 U          | 11   | 12 U         | 12   | 12 U         | 12   | 10 U         | 10   | 12 U         | 12   | 10 U         | 10   |
| Di-n-butylphthalate        | 900      | 6.5  | 11 U          | 11   | 12 U         | 12   | 12 U         | 12   | 10 U         | 10   | 12 U         | 12   | 10 U         | 10   |
| Fluoranthene               | 300      | 6.0  | 11 U          | 11   | 12 U         | 12   | 12 U         | 12   | 10 U         | 10   | 12 U         | 12   | 10 U         | 10   |
| Pyrene                     | 200      | 5.4  | 11 U          | 11   | 12 U         | 12   | 12 U         | 12   | 10 U         | 10   | 12 U         | 12   | 10 U         | 10   |
| Butylbenzylphthalate       | 100      | 5.3  | 11 U          | 11   | 12 U         | 12   | 12 U         | 12   | 10 U         | 10   | 12 U         | 12   | 10 U         | 10   |
| 3,3'-Dichlorobenzidine     | 60       | 2.8  | 11 U          | 11   | 12 U         | 12   | 12 U         | 12   | 10 U         | 10   | 12 U         | 12   | 10 U         | 10   |
| Benzo(a)anthracene         | 10       | 4.9  | 11 U          | 11   | 12 U         | 12   | 12 U         | 12   | 10 U         | 10   | 12 U         | 12   | 10 U         | 10   |
| Chrysene                   | 20       | 4.4  | 3 J           | 11   | 12 U         | 12   | 12 U         | 12   | 10 U         | 10   | 12 U         | 12   | 10 U         | 10   |
| bis(2-Ethylhexy)phthalate  | 30       | 9.7  | 11 U          | 11   | 12 U         | 12   | 12 U         | 12   | 10 U         | 10   | 12 U         | 12   | 100 B        | 20 * |
| Di-n-octyl phthalate       | 100      | 5.6  | 11 U          | 11   | 12 U         | 12   | 12 U         | 12   | 10 U         | 10   | 12 U         | 12   | 10 U         | 10   |
| Benzo(b)fluoranthene       | 2        | 5.7  | 11 U          | 11   | 12 U         | 12   | 12 U         | 12   | 10 U         | 10   | 12 U         | 12   | 10 U         | 10   |
| Benzo(k)fluoranthene       | 2        | 6.2  | 11 U          | 11   | 12 U         | 12   | 12 U         | 12   | 10 U         | 10   | 12 U         | 12   | 10 U         | 10   |
| Benzo(a)pyrene             | 20       | 4.9  | 11 U          | 11   | 12 U         | 12   | 12 U         | 12   | 10 U         | 10   | 12 U         | 12   | 10 U         | 10   |
| Indeno(1,2,3-cd)pyrene     | 20       | 7.1  | 11 U          | 11   | 12 U         | 12   | 12 U         | 12   | 10 U         | 10   | 12 U         | 12   | 10 U         | 10   |
| Dibenzo(a,h)anthracene     | 20       | 6.0  | 11 U          | 11   | 12 U         | 12   | 12 U         | 12   | 10 U         | 10   | 12 U         | 12   | 10 U         | 10   |
| Benzo(g,h,i)perylene       | 20       | 6.8  | 11 U          | 11   | 12 U         | 12   | 12 U         | 12   | 10 U         | 10   | 12 U         | 12   | 10 U         | 10   |
| Petroleum hydrocarbons     |          |      | 0.30          | 0.27 |              |      |              |      |              |      |              |      |              |      |
| Total Est. Conc. of TIC    |          |      | 114 J         |      | 4            |      | 5 J          |      | 6            |      | 7 J          |      | 10           |      |
| Dilution Factor            |          |      |               |      |              |      |              |      |              |      |              |      |              |      |
| Method: TCL Semivolatiles  |          |      |               |      |              |      |              |      |              |      |              |      |              |      |

**MAIN POST  
GROUNDWATER SEMIVOLATILES**

| Geographical Location        |          |      | B3           |      | B3                  |      | B3                  |      | B4           |      | B4           |      |
|------------------------------|----------|------|--------------|------|---------------------|------|---------------------|------|--------------|------|--------------|------|
| Sample                       |          |      | B3-MW03B-A02 |      | B3-MW03B-E01        |      | B3-MW03B-E02        |      | B4-MW04B-A01 |      | B4-MW04B-A02 |      |
| Sample Type                  |          |      |              |      | Field Rinsate Blank |      | Field Rinsate Blank |      |              |      |              |      |
| Batch#                       |          |      | 9503G740     |      | 9502G169            |      | 9503G616            |      | 9502G169     |      | 9503G616     |      |
| Prep#                        |          |      | 95GB0181     |      | 95GB0103            |      | 95GB0166            |      | 95GB0103     |      | 95GB0166     |      |
| RFW#                         |          |      | 001          |      | 008                 |      | 006                 |      | 010          |      | 012          |      |
| Dilution Factor              |          |      | 1.00         |      | 1.00                |      | 1.00                |      | 1.00         |      | 1.00         |      |
| Matrix                       |          |      | water        |      | water               |      | water               |      | water        |      | water        |      |
| Units                        | ug/l     | ug/l | ug/l         |      | ug/l                |      | ug/l                |      | ug/l         |      | ug/l         |      |
| Sampling Date                |          |      | 3/14/95      |      | 2/13/95             |      | 3/7/95              |      | 2/13/95      |      | 3/7/95       |      |
| Analysis Date                |          |      | 3/29/95      |      | 3/7/95              |      | 3/25/95             |      | 3/7/95       |      | 3/26/95      |      |
| Analysis                     | Standard | MDL  | Analytical   | CRQL | Analytical          | CRQL | Analytical          | CRQL | Analytical   | CRQL | Analytical   | CRQL |
|                              |          |      | Result       |      | Result              |      | Result              |      | Result       |      | Result       |      |
| Phenol                       | 4000     | 7.1  | 10 U         | 10   | 10 U                | 10   | 10 U                | 10   | 11 U         | 11   | 12 U         | 12   |
| bis(2-Chloroethyl) ether     | 10       | 9.7  | 10 U         | 10   | 10 U                | 10   | 10 U                | 10   | 11 U         | 11   | 12 U         | 12   |
| 2-Chlorophenol               | 40       | 7.3  | 10 U         | 10   | 10 U                | 10   | 10 U                | 10   | 11 U         | 11   | 12 U         | 12   |
| 1,3-Dichlorobenzene          | 600      | 5.3  | 10 U         | 10   | 10 U                | 10   | 10 U                | 10   | 11 U         | 11   | 12 U         | 12   |
| 1,4-Dichlorobenzene          | 75       | 4.8  | 10 U         | 10   | 10 U                | 10   | 10 U                | 10   | 11 U         | 11   | 12 U         | 12   |
| 1,2-Dichlorobenzene          | 600      | 5.7  | 10 U         | 10   | 10 U                | 10   | 10 U                | 10   | 11 U         | 11   | 12 U         | 12   |
| 2-Methylphenol               |          | 6.7  | 10 U         | 10   | 10 U                | 10   | 10 U                | 10   | 11 U         | 11   | 12 U         | 12   |
| 2,2'-oxybis(1-Chloropropane) |          | 7.0  | 10 U         | 10   | 10 U                | 10   | 10 U                | 10   | 11 U         | 11   | 12 U         | 12   |
| 4-Methylphenol               |          | 12.9 | 10 U         | 10   | 10 U                | 10   | 10 U                | 10   | 11 U         | 11   | 12 U         | 12   |
| N-Nitroso-di-n-propylamine   | 20       | 8.0  | 10 U         | 10   | 10 U                | 10   | 10 U                | 10   | 11 U         | 11   | 12 U         | 12   |
| Hexachloroethane             | 10       | 5.3  | 10 U         | 10   | 10 U                | 10   | 10 U                | 10   | 11 U         | 11   | 12 U         | 12   |
| Nitrobenzene                 | 10       | 7.4  | 10 U         | 10   | 10 U                | 10   | 10 U                | 10   | 11 U         | 11   | 12 U         | 12   |
| Isophorone                   | 100      | 3.9  | 10 U         | 10   | 10 U                | 10   | 10 U                | 10   | 11 U         | 11   | 12 U         | 12   |
| 2-Nitrophenol                |          | 7.0  | 10 U         | 10   | 10 U                | 10   | 10 U                | 10   | 11 U         | 11   | 12 U         | 12   |
| 2,4-Dimethylphenol           | 100      | 4.8  | 10 U         | 10   | 10 U                | 10   | 10 U                | 10   | 11 U         | 11   | 12 U         | 12   |
| bis(2-Chloroethoxy) methane  |          | 6.1  | 10 U         | 10   | 10 U                | 10   | 10 U                | 10   | 11 U         | 11   | 12 U         | 12   |
| 2,4-Dichlorophenol           | 20       | 4.4  | 10 U         | 10   | 10 U                | 10   | 10 U                | 10   | 11 U         | 11   | 12 U         | 12   |
| 1,2,4-Trichlorobenzene       | 9        | 9.6  | 10 U         | 10   | 10 U                | 10   | 10 U                | 10   | 11 U         | 11   | 12 U         | 12   |
| Naphthalene                  |          | 8.4  | 10 U         | 10   | 10 U                | 10   | 10 U                | 10   | 11 U         | 11   | 12 U         | 12   |
| 4-Chloroaniline              |          | 2.9  | 10 U         | 10   | 10 U                | 10   | 10 U                | 10   | 11 U         | 11   | 12 U         | 12   |
| Hexachlorobutadiene          | 1        | 4.6  | 10 U         | 10   | 10 U                | 10   | 10 U                | 10   | 11 U         | 11   | 12 U         | 12   |
| 4-Chloro-3-methylphenol      | 20       | 3.1  | 10 U         | 10   | 10 U                | 10   | 10 U                | 10   | 11 U         | 11   | 12 U         | 12   |
| 2-Methylnaphthalene          |          | 8.7  | 10 U         | 10   | 10 U                | 10   | 10 U                | 10   | 11 U         | 11   | 12 U         | 12   |
| Hexachlorocyclopentadiene    | 50       | 3.6  | 10 U         | 10   | 10 U                | 10   | 10 U                | 10   | 11 U         | 11   | 12 U         | 12   |
| 2,4,6-Trichlorophenol        |          | 5.6  | 10 U         | 10   | 10 U                | 10   | 10 U                | 10   | 11 U         | 11   | 12 U         | 12   |
| 2,4,5-Trichlorophenol        | 700      | 4.7  | 25 U         | 25   | 26 U                | 26   | 24 U                | 24   | 27 U         | 27   | 31 U         | 31   |
| 2-Chloronaphthalene          |          | 8.2  | 10 U         | 10   | 10 U                | 10   | 10 U                | 10   | 11 U         | 11   | 12 U         | 12   |
| 2-Nitroaniline               |          | 6.1  | 25 U         | 25   | 26 U                | 26   | 24 U                | 24   | 27 U         | 27   | 31 U         | 31   |
| Dimethylphthalate            | 7000     | 4.4  | 10 U         | 10   | 10 U                | 10   | 10 U                | 10   | 11 U         | 11   | 12 U         | 12   |
| Acenaphthylene               | 10       | 6.0  | 10 U         | 10   | 10 U                | 10   | 10 U                | 10   | 11 U         | 11   | 12 U         | 12   |
| 2,6-Dinitrotoluene           | 10       | 5.2  | 10 U         | 10   | 10 U                | 10   | 10 U                | 10   | 11 U         | 11   | 12 U         | 12   |
| 3-Nitroaniline               |          | 5.2  | 25 U         | 25   | 26 U                | 26   | 24 U                | 24   | 27 U         | 27   | 31 U         | 31   |
| Acenaphthene                 | 400      | 6.7  | 10 U         | 10   | 10 U                | 10   | 10 U                | 10   | 11 U         | 11   | 12 U         | 12   |
| 2,4-Dinitrophenol            | 40       | 4.6  | 25 U         | 25   | 26 U                | 26   | 24 U                | 24   | 27 U         | 27   | 31 U         | 31   |

**MAIN POST  
GROUNDWATER SEMIVOLATILES**

| Geographical Location      |          |      | B3           |      | B3                  |      | B3                  |      | B4           |      | B4           |      |
|----------------------------|----------|------|--------------|------|---------------------|------|---------------------|------|--------------|------|--------------|------|
| Sample                     |          |      | B3-MW03B-A02 |      | B3-MW03B-E01        |      | B3-MW03B-E02        |      | B4-MW04B-A01 |      | B4-MW04B-A02 |      |
| Sample Type                |          |      |              |      | Field Rinsate Blank |      | Field Rinsate Blank |      |              |      |              |      |
| Batch#                     |          |      | 9503G740     |      | 9502G169            |      | 9503G616            |      | 9502G169     |      | 9503G616     |      |
| Prep#                      |          |      | 95GB0181     |      | 95GB0103            |      | 95GB0166            |      | 95GB0103     |      | 95GB0166     |      |
| RFW#                       |          |      | 001          |      | 008                 |      | 006                 |      | 010          |      | 012          |      |
| Dilution Factor            |          |      | 1.00         |      | 1.00                |      | 1.00                |      | 1.00         |      | 1.00         |      |
| Matrix                     |          |      | water        |      | water               |      | water               |      | water        |      | water        |      |
| Units                      | ug/l     | ug/l | ug/l         |      | ug/l                |      | ug/l                |      | ug/l         |      | ug/l         |      |
| Sampling Date              |          |      | 3/14/95      |      | 2/13/95             |      | 3/7/95              |      | 2/13/95      |      | 3/7/95       |      |
| Analysis Date              |          |      | 3/29/95      |      | 3/7/95              |      | 3/25/95             |      | 3/7/95       |      | 3/26/95      |      |
| Analysis                   | Standard | MDL  | Analytical   | CRQL | Analytical          | CRQL | Analytical          | CRQL | Analytical   | CRQL | Analytical   | CRQL |
|                            |          |      | Result       |      | Result              |      | Result              |      | Result       |      | Result       |      |
| 4-Nitrophenol              |          | 7.5  | 25 U         | 25   | 26 U                | 26   | 24 U                | 24   | 27 U         | 27   | 31 U         | 31   |
| Dibenzofuran               |          | 6.5  | 10 U         | 10   | 10 U                | 10   | 10 U                | 10   | 11 U         | 11   | 12 U         | 12   |
| 2,4-Dinitrotoluene         | 10       | 5.8  | 10 U         | 10   | 10 U                | 10   | 10 U                | 10   | 11 U         | 11   | 12 U         | 12   |
| Diethylphthalate           | 5000     | 5.4  | 10 U         | 10   | 10 U                | 10   | 10 U                | 10   | 11 U         | 11   | 12 U         | 12   |
| 4-Chlorophenyl-phenylether |          | 7.0  | 10 U         | 10   | 10 U                | 10   | 10 U                | 10   | 11 U         | 11   | 12 U         | 12   |
| Fluorene                   | 300      | 6.3  | 10 U         | 10   | 10 U                | 10   | 10 U                | 10   | 11 U         | 11   | 12 U         | 12   |
| 4-Nitroaniline             |          | 6.4  | 25 U         | 25   | 26 U                | 26   | 24 U                | 24   | 27 U         | 27   | 31 U         | 31   |
| 4,6-Dinitro-2-methylphenol |          | 5.3  | 25 U         | 25   | 26 U                | 26   | 24 U                | 24   | 27 U         | 27   | 31 U         | 31   |
| N-Nitrosodiphenylamine (1) | 20       | 4.2  | 10 U         | 10   | 10 U                | 10   | 10 U                | 10   | 11 U         | 11   | 12 U         | 12   |
| 4-Bromophenyl-phenylether  |          | 5.3  | 10 U         | 10   | 10 U                | 10   | 10 U                | 10   | 11 U         | 11   | 12 U         | 12   |
| Hexachlorobenzene          | 10       | 5.5  | 10 U         | 10   | 10 U                | 10   | 10 U                | 10   | 11 U         | 11   | 12 U         | 12   |
| Pentachlorophenol          | 1        | 4.0  | 25 U         | 25   | 26 U                | 26   | 24 U                | 24   | 27 U         | 27   | 31 U         | 31   |
| Phenanthrene               | 10       | 5.0  | 10 U         | 10   | 10 U                | 10   | 10 U                | 10   | 11 U         | 11   | 12 U         | 12   |
| Anthracene                 | 2000     | 4.6  | 10 U         | 10   | 10 U                | 10   | 10 U                | 10   | 11 U         | 11   | 12 U         | 12   |
| Carbazole                  |          | 4.4  | 10 U         | 10   | 10 U                | 10   | 10 U                | 10   | 11 U         | 11   | 12 U         | 12   |
| Di-n-butylphthalate        | 900      | 6.5  | 10 U         | 10   | 10 U                | 10   | 10 U                | 10   | 11 U         | 11   | 12 U         | 12   |
| Fluoranthene               | 300      | 6.0  | 10 U         | 10   | 10 U                | 10   | 10 U                | 10   | 11 U         | 11   | 12 U         | 12   |
| Pyrene                     | 200      | 5.4  | 10 U         | 10   | 10 U                | 10   | 10 U                | 10   | 11 U         | 11   | 12 U         | 12   |
| Butylbenzylphthalate       | 100      | 5.3  | 10 U         | 10   | 10 U                | 10   | 10 U                | 10   | 11 U         | 11   | 12 U         | 12   |
| 3,3'-Dichlorobenzidine     | 60       | 2.8  | 10 U         | 10   | 10 U                | 10   | 10 U                | 10   | 11 U         | 11   | 12 U         | 12   |
| Benzo(a)anthracene         | 10       | 4.9  | 10 U         | 10   | 10 U                | 10   | 10 U                | 10   | 11 U         | 11   | 12 U         | 12   |
| Chrysene                   | 20       | 4.4  | 10 U         | 10   | 10 U                | 10   | 10 U                | 10   | 11 U         | 11   | 12 U         | 12   |
| bis(2-Ethylhexy)phthalate  | 30       | 9.7  | 5 J          | 10   | 10 U                | 10   | 10 U                | 10   | 11 U         | 11   | 12 U         | 12   |
| Di-n-octyl phthalate       | 100      | 5.6  | 10 U         | 10   | 10 U                | 10   | 10 U                | 10   | 11 U         | 11   | 12 U         | 12   |
| Benzo(b)fluoranthene       | 2        | 5.7  | 10 U         | 10   | 10 U                | 10   | 10 U                | 10   | 11 U         | 11   | 12 U         | 12   |
| Benzo(k)fluoranthene       | 2        | 6.2  | 10 U         | 10   | 10 U                | 10   | 10 U                | 10   | 11 U         | 11   | 12 U         | 12   |
| Benzo(a)pyrene             | 20       | 4.9  | 10 U         | 10   | 10 U                | 10   | 10 U                | 10   | 11 U         | 11   | 12 U         | 12   |
| Indeno(1,2,3-cd)pyrene     | 20       | 7.1  | 10 U         | 10   | 10 U                | 10   | 10 U                | 10   | 11 U         | 11   | 12 U         | 12   |
| Dibenzo(a,h)anthracene     | 20       | 6.0  | 10 U         | 10   | 10 U                | 10   | 10 U                | 10   | 11 U         | 11   | 12 U         | 12   |
| Benzo(g,h,i)perylene       | 20       | 6.8  | 10 U         | 10   | 10 U                | 10   | 10 U                | 10   | 11 U         | 11   | 12 U         | 12   |
| Petroleum hydrocarbons     |          |      |              |      |                     |      |                     |      |              |      |              |      |
| Total Est. Conc. of TIC    |          |      | 52 J         |      | 8                   |      | 10 J                |      | 6            |      | 6 J          |      |
| Dilution Factor            |          |      | * = 2.00     |      |                     |      |                     |      |              |      |              |      |
| Method:TCL Semivolatiles   |          |      |              |      |                     |      |                     |      |              |      |              |      |

**MAIN POST**  
**GROUNDWATER SEMIVOLATILES**

| Geographical Location        |          |      | B5           |      | B5           |      |
|------------------------------|----------|------|--------------|------|--------------|------|
| Sample                       |          |      | B5-MW05B-A01 |      | B5-MW05B-A02 |      |
| Sample Type                  |          |      |              |      |              |      |
| Batch#                       |          |      | 9502G169     |      | 9503G616     |      |
| Prep#                        |          |      | 95GB0103     |      | 95GB0166     |      |
| RFW#                         |          |      | 012          |      | 001          |      |
| Dilution Factor              |          |      | 1.00         |      | 1.00         |      |
| Matrix                       |          |      | water        |      | water        |      |
| Units                        | ug/l     | ug/l | ug/l         |      | ug/l         |      |
| Sampling Date                |          |      | 2/13/95      |      | 3/7/95       |      |
| Analysis Date                |          |      | 3/7/95       |      | 3/25/95      |      |
| Analysis                     | Standard | MDL  | Analytical   | CRQL | Analytical   | CRQL |
|                              |          |      | Result       |      | Result       |      |
| Phenol                       | 4000     | 7.1  | 11 U         | 11   | 10 U         | 10   |
| bis(2-Chloroethyl) ether     | 10       | 9.7  | 11 U         | 11   | 10 U         | 10   |
| 2-Chlorophenol               | 40       | 7.3  | 11 U         | 11   | 10 U         | 10   |
| 1,3-Dichlorobenzene          | 600      | 5.3  | 11 U         | 11   | 10 U         | 10   |
| 1,4-Dichlorobenzene          | 75       | 4.8  | 11 U         | 11   | 10 U         | 10   |
| 1,2-Dichlorobenzene          | 600      | 5.7  | 11 U         | 11   | 10 U         | 10   |
| 2-Methylphenol               |          | 6.7  | 11 U         | 11   | 10 U         | 10   |
| 2,2'-oxybis(1-Chloropropane) |          | 7.0  | 11 U         | 11   | 10 U         | 10   |
| 4-Methylphenol               |          | 12.9 | 11 U         | 11   | 10 U         | 10   |
| N-Nitroso-di-n-propylamine   | 20       | 8.0  | 11 U         | 11   | 10 U         | 10   |
| Hexachloroethane             | 10       | 5.3  | 11 U         | 11   | 10 U         | 10   |
| Nitrobenzene                 | 10       | 7.4  | 11 U         | 11   | 10 U         | 10   |
| Isophorone                   | 100      | 3.9  | 11 U         | 11   | 10 U         | 10   |
| 2-Nitrophenol                |          | 7.0  | 11 U         | 11   | 10 U         | 10   |
| 2,4-Dimethylphenol           | 100      | 4.8  | 11 U         | 11   | 10 U         | 10   |
| bis(2-Chloroethoxy) methane  |          | 6.1  | 11 U         | 11   | 10 U         | 10   |
| 2,4-Dichlorophenol           | 20       | 4.4  | 11 U         | 11   | 10 U         | 10   |
| 1,2,4-Trichlorobenzene       | 9        | 9.6  | 11 U         | 11   | 10 U         | 10   |
| Naphthalene                  |          | 8.4  | 11 U         | 11   | 10 U         | 10   |
| 4-Chloroaniline              |          | 2.9  | 11 U         | 11   | 10 U         | 10   |
| Hexachlorobutadiene          | 1        | 4.6  | 11 U         | 11   | 10 U         | 10   |
| 4-Chloro-3-methylphenol      | 20       | 3.1  | 11 U         | 11   | 10 U         | 10   |
| 2-Methylnaphthalene          |          | 8.7  | 11 U         | 11   | 10 U         | 10   |
| Hexachlorocyclopentadiene    | 50       | 3.6  | 11 U         | 11   | 10 U         | 10   |
| 2,4,6-Trichlorophenol        |          | 5.6  | 11 U         | 11   | 10 U         | 10   |
| 2,4,5-Trichlorophenol        | 700      | 4.7  | 26 U         | 26   | 25 U         | 25   |
| 2-Chloronaphthalene          |          | 8.2  | 11 U         | 11   | 10 U         | 10   |
| 2-Nitroaniline               |          | 6.1  | 26 U         | 26   | 25 U         | 25   |
| Dimethylphthalate            | 7000     | 4.4  | 11 U         | 11   | 10 U         | 10   |
| Acenaphthylene               | 10       | 6.0  | 11 U         | 11   | 10 U         | 10   |
| 2,6-Dinitrotoluene           | 10       | 5.2  | 11 U         | 11   | 10 U         | 10   |
| 3-Nitroaniline               |          | 5.2  | 26 U         | 26   | 25 U         | 25   |
| Acenaphthene                 | 400      | 6.7  | 11 U         | 11   | 10 U         | 10   |
| 2,4-Dinitrophenol            | 40       | 4.6  | 26 U         | 26   | 25 U         | 25   |

**MAIN POST  
GROUNDWATER SEMIVOLATILES**

|                            |          |      |              |      |              |      |
|----------------------------|----------|------|--------------|------|--------------|------|
| Geographical Location      |          |      | B5           |      | B5           |      |
| Sample                     |          |      | B5-MW05B-A01 |      | B5-MW05B-A02 |      |
| Sample Type                |          |      |              |      |              |      |
| Batch#                     |          |      | 9502G169     |      | 9503G616     |      |
| Prep#                      |          |      | 95GB0103     |      | 95GB0166     |      |
| RFW#                       |          |      | 012          |      | 001          |      |
| Dilution Factor            |          |      | 1.00         |      | 1.00         |      |
| Matrix                     |          |      | water        |      | water        |      |
| Units                      | ug/l     | ug/l | ug/l         |      | ug/l         |      |
| Sampling Date              |          |      | 2/13/95      |      | 3/7/95       |      |
| Analysis Date              |          |      | 3/7/95       |      | 3/25/95      |      |
| Analysis                   | Standard | MDL  | Analytical   | CRQL | Analytical   | CRQL |
|                            |          |      | Result       |      | Result       |      |
| 4-Nitrophenol              |          | 7.5  | 26 U         | 26   | 25 U         | 25   |
| Dibenzofuran               |          | 6.5  | 11 U         | 11   | 10 U         | 10   |
| 2,4-Dinitrotoluene         | 10       | 5.8  | 11 U         | 11   | 10 U         | 10   |
| Diethylphthalate           | 5000     | 5.4  | 11 U         | 11   | 10 U         | 10   |
| 4-Chlorophenyl-phenylether |          | 7.0  | 11 U         | 11   | 10 U         | 10   |
| Fluorene                   | 300      | 6.3  | 11 U         | 11   | 10 U         | 10   |
| 4-Nitroaniline             |          | 6.4  | 26 U         | 26   | 25 U         | 25   |
| 4,6-Dinitro-2-methylphenol |          | 5.3  | 26 U         | 26   | 25 U         | 25   |
| N-Nitrosodiphenylamine (1) | 20       | 4.2  | 11 U         | 11   | 10 U         | 10   |
| 4-Bromophenyl-phenylether  |          | 5.3  | 11 U         | 11   | 10 U         | 10   |
| Hexachlorobenzene          | 10       | 5.5  | 11 U         | 11   | 10 U         | 10   |
| Pentachlorophenol          | 1        | 4.0  | 26 U         | 26   | 25 U         | 25   |
| Phenanthrene               | 10       | 5.0  | 11 U         | 11   | 10 U         | 10   |
| Anthracene                 | 2000     | 4.6  | 11 U         | 11   | 10 U         | 10   |
| Carbazole                  |          | 4.4  | 11 U         | 11   | 10 U         | 10   |
| Di-n-butylphthalate        | 900      | 6.5  | 11 U         | 11   | 10 U         | 10   |
| Fluoranthene               | 300      | 6.0  | 11 U         | 11   | 10 U         | 10   |
| Pyrene                     | 200      | 5.4  | 11 U         | 11   | 10 U         | 10   |
| Butylbenzylphthalate       | 100      | 5.3  | 11 U         | 11   | 10 U         | 10   |
| 3,3'-Dichlorobenzidine     | 60       | 2.8  | 11 U         | 11   | 10 U         | 10   |
| Benzo(a)anthracene         | 10       | 4.9  | 11 U         | 11   | 10 U         | 10   |
| Chrysene                   | 20       | 4.4  | 11 U         | 11   | 10 U         | 10   |
| bis(2-Ethylhexy)phthalate  | 30       | 9.7  | 11 U         | 11   | 10 U         | 10   |
| Di-n-octyl phthalate       | 100      | 5.6  | 11 U         | 11   | 10 U         | 10   |
| Benzo(b)fluoranthene       | 2        | 5.7  | 11 U         | 11   | 10 U         | 10   |
| Benzo(k)fluoranthene       | 2        | 6.2  | 11 U         | 11   | 10 U         | 10   |
| Benzo(a)pyrene             | 20       | 4.9  | 11 U         | 11   | 10 U         | 10   |
| Indeno(1,2,3-cd)pyrene     | 20       | 7.1  | 11 U         | 11   | 10 U         | 10   |
| Dibenzo(a,h)anthracene     | 20       | 6.0  | 11 U         | 11   | 10 U         | 10   |
| Benzo(g,h,i)perylene       | 20       | 6.8  | 11 U         | 11   | 10 U         | 10   |
| Petroleum hydrocarbons     |          |      |              |      |              |      |
| Total Est. Conc. of TIC    |          |      | 5            |      | 4 J          |      |
| Dilution Factor            |          |      |              |      |              |      |
| Method: TCL Semivolatiles  |          |      |              |      |              |      |

# POST GROUNDWATER INORGANICS

| Geographical Location       |          | M2            |      | M2                |      | M2            |      | M2                |      | M2            |      | M2                |      | M2            |      |
|-----------------------------|----------|---------------|------|-------------------|------|---------------|------|-------------------|------|---------------|------|-------------------|------|---------------|------|
| Sample                      |          | MP02-MW01-A01 |      | MP02-MW01-A01 SOL |      | MP02-MW01-A02 |      | MP02-MW01-A02 SOL |      | MP02-MW02-A01 |      | MP02-MW02-A01 SOL |      | MP02-MW02-A02 |      |
| Sample Type                 |          | Total         |      | Soluble           |      | Total         |      | Soluble           |      | Total         |      | Soluble           |      | Total         |      |
| Batch#                      |          | 9502G197      |      | 9502G197          |      | 9503G642      |      | 9503G642          |      | 9502G197      |      | 9502G197          |      | 9503G642      |      |
| Prep#                       |          | 95GI426       |      | 95GI426           |      | 95GI479       |      | 95GI479           |      | 95GI426       |      | 95GI426           |      | 95GI479       |      |
| RFW#                        |          | 001           |      | 002               |      | 001           |      | 002               |      | 003           |      | 004               |      | 003           |      |
| Dilution Factor             |          | 1.00          |      | 1.00              |      | 1.00          |      | 1.00              |      | 1.00          |      | 1.00              |      | 1.00          |      |
| Matrix                      |          | water         |      | water, filtered   |      | water         |      | water, filtered   |      | water         |      | water, filtered   |      | water         |      |
| Units                       | ug/l     | ug/l          |      | ug/l              |      | ug/l          |      | ug/l              |      | ug/l          |      | ug/l              |      | ug/l          |      |
| Sampling Date               |          | 2/15/95       |      | 2/15/95           |      | 3/8/95        |      | 3/8/95            |      | 2/15/95       |      | 2/15/95           |      | 3/8/95        |      |
| Analysis Date               |          | 2/23/95       |      | 2/28/95           |      | 3/10/95       |      | 3/10/95           |      | 2/23/95       |      | 2/28/95           |      | 3/10/95       |      |
| Analysis                    | Standard | Analytical    | MDL  | Analytical        | MDL  | Analytical    | MDL  | Analytical        | MDL  | Analytical    | MDL  | Analytical        | MDL  | Analytical    | MDL  |
|                             |          | Result        |      | Result            |      | Result        |      | Result            |      | Result        |      | Result            |      | Result        |      |
| Silver                      | 20       | 3.0 U         | 3.0  | 3.0 U             | 3.0  | 3.0 U         | 3.0  | 3.0 U             | 3.0  | 3.0 U         | 3.0  | 3.0 U             | 3.0  | 3.0 U         | 3.0  |
| Aluminum                    | 200      | 5400          | 24.0 | 310               | 24.0 | 5310          | 24.0 | 379               | 24.0 | 633           | 24.0 | 40.2              | 24.0 | 3490          | 24.0 |
| Arsenic                     | 8        | 9.3           | 1.9  | 1.9 U             | 1.9  | 8.6           | 1.6  | 1.6 U             | 1.6  | 1.9 U         | 1.9  | 1.9 U             | 1.9  | 7.7           | 1.6  |
| Barium                      | 2000     | 141           | 1.7  | 104               | 1.7  | 129           | 1.7  | 88.5              | 1.7  | 484           | 1.7  | 436               | 1.7  | 397           | 1.7  |
| Beryllium                   | 20       | 1.1           | 0.90 | 0.90 U            | 0.90 | 0.90 U        | 0.90 | 0.90 U            | 0.90 | 0.90 U        | 0.90 | 0.90 U            | 0.90 | 0.90 U        | 0.90 |
| Calcium                     |          | 14000         | 10.4 | 13800             | 10.4 | 14300         | 10.4 | 14100             | 10.4 | 98600         | 10.4 | 94800             | 10.4 | 80100         | 10.4 |
| Cadmium                     | 4        | 2.8 U         | 2.8  | 2.8 U             | 2.8  | 2.8 U         | 2.8  | 2.8 U             | 2.8  | 2.8 U         | 2.8  | 2.8 U             | 2.8  | 4.0           | 2.8  |
| Cobalt                      |          | 7.9           | 3.0  | 5.8               | 3.0  | 5.6           | 3.0  | 6.9               | 3.0  | 3.0 U         | 3.0  | 3.0 U             | 3.0  | 6.2           | 3.0  |
| Chromium                    | 100      | 68.4          | 2.9  | 2.9 U             | 2.9  | 63.6          | 2.9  | 2.9 U             | 2.9  | 7.5           | 2.9  | 2.9 U             | 2.9  | 37.5          | 2.9  |
| Copper                      | 1000     | 4.3           | 1.9  | 2.8               | 1.9  | 6.3           | 1.9  | 1.9               | 1.9  | 1.9 U         | 1.9  | 1.9 U             | 1.9  | 12.2          | 1.9  |
| Iron                        | 300      | 16600         | 6.4  | 39.8              | 6.4  | 15200         | 6.4  | 33.7              | 6.4  | 64700         | 6.4  | 58900             | 6.4  | 57800         | 6.4  |
| Mercury                     | 2        | 0.20 U        | 0.20 | 0.20 U            | 0.20 | 0.20 U        | 0.20 | 0.20 U            | 0.20 | 0.29          | 0.20 | 0.20 U            | 0.20 | 0.21          | 0.20 |
| Potassium                   |          | 6710          | 685  | 3680              | 685  | 7680          | 685  | 4050              | 685  | 12000         | 685  | 11400             | 685  | 12000         | 685  |
| Magnesium                   |          | 8370          | 18.3 | 6290              | 18.3 | 8260          | 18.3 | 6250              | 18.3 | 12100         | 18.3 | 11400             | 18.3 | 10700         | 18.3 |
| Manganese                   | 50       | 79.5          | 1.8  | 67.0              | 1.8  | 77.6          | 1.8  | 66.4              | 1.8  | 314           | 1.8  | 301               | 1.8  | 259           | 1.8  |
| Sodium                      | 50000    | 12600         | 30.5 | 13500             | 30.5 | 13600         | 30.5 | 13900             | 30.5 | 11200         | 30.5 | 10900             | 30.5 | 9580          | 30.5 |
| Nickel                      | 100      | 19.1          | 10.8 | 16.6              | 10.8 | 20.5          | 10.8 | 14.0              | 10.8 | 10.8 U        | 10.8 | 20.0              | 10.8 | 10.8 U        | 10.8 |
| Lead                        | 10       | 4.9           | 1.1  | 1.1 U             | 1.1  | 3.9           | 1.2  | 1.2 U             | 1.2  | 4.4           | 1.1  | 1.1 U             | 1.1  | 18.7          | 1.2  |
| Antimony                    | 20       | 20.7 U        | 20.7 | 20.7 U            | 20.7 | 20.7 U        | 20.7 | 20.7 U            | 20.7 | 20.7 U        | 20.7 | 22.6              | 20.7 | 20.7 U        | 20.7 |
| Selenium                    | 50       | 1.8           | 1.5  | 1.5 U             | 1.5  | 2.0           | 1.8  | 1.8 U             | 1.8  | 1.5 U         | 1.5  | 1.5 U             | 1.5  | 1.8 U         | 1.8  |
| Thallium                    | 10       | 0.70 U        | 0.70 | 0.70 U            | 0.70 | 1.1 U         | 1.1  | 1.1 U             | 1.1  | 0.70 U        | 0.70 | 0.70 U            | 0.70 | 1.1 U         | 1.1  |
| Vanadium                    |          | 21.6          | 2.3  | 2.3 U             | 2.3  | 20.9          | 2.3  | 2.4               | 2.3  | 6.2           | 2.3  | 2.3 U             | 2.3  | 21.1          | 2.3  |
| Zinc                        | 5000     | 455           | 3.8  | 402               | 3.8  | 489           | 3.8  | 463               | 3.8  | 15.7          | 3.8  | 5.1               | 3.8  | 79.0          | 3.8  |
| Cyanide                     | 200      | 10 U          | 10   |                   |      | 10 U          | 10   |                   |      | 10 U          | 10   |                   |      | 10 U          | 10   |
| Ammonia as Nitrogen         |          |               |      |                   |      |               |      |                   |      |               |      |                   |      |               |      |
| Sulfate                     |          |               |      |                   |      |               |      |                   |      |               |      |                   |      |               |      |
| Dilution Factor             |          |               |      |                   |      |               |      |                   |      |               |      |                   |      |               |      |
| Method: TAL Metals, Cyanide |          |               |      |                   |      |               |      |                   |      |               |      |                   |      |               |      |

**MAIN POST  
GROUNDWATER INORGANICS**

| Geographical Location       |          | M2                |       | M2            |      | M2                |      | M2            |      | M2                |      | M3            |      | M3                |      |
|-----------------------------|----------|-------------------|-------|---------------|------|-------------------|------|---------------|------|-------------------|------|---------------|------|-------------------|------|
| Sample                      |          | MP02-MW02-A02 SOL |       | MP02-MW03-A01 |      | MP02-MW03-A01 SOL |      | MP02-MW03-A02 |      | MP02-MW03-A02 SOL |      | MP03-MW04-A01 |      | MP03-MW04-A01 SOL |      |
| Sample Type                 |          | Soluble           |       | Total         |      | Soluble           |      | Total         |      | Soluble           |      | Total         |      | Soluble           |      |
| Batch#                      |          | 9503G642          |       | 9502G197      |      | 9502G197          |      | 9503G642      |      | 9503G642          |      | 9502G219      |      | 9502G219          |      |
| Prep#                       |          | 95GI479           |       | 95GI426       |      | 95GI426           |      | 95GI479       |      | 95GI479           |      | 95GI439       |      | 95GI439           |      |
| RFW#                        |          | 004               |       | 005           |      | 006               |      | 005           |      | 006               |      | 001           |      | 002               |      |
| Dilution Factor             |          | 1.00              |       | 1.00          |      | 1.00              |      | 1.00          |      | 1.00              |      | 1.00          |      | 1.00              |      |
| Matrix                      |          | water, filtered   |       | water         |      | water, filtered   |      | water         |      | water, filtered   |      | water         |      | water, filtered   |      |
| Units                       | ug/l     | ug/l              |       | ug/l          |      | ug/l              |      | ug/l          |      | ug/l              |      | ug/l          |      | ug/l              |      |
| Sampling Date               |          | 3/8/95            |       | 2/15/95       |      | 2/15/95           |      | 3/8/95        |      | 3/8/95            |      | 2/16/95       |      | 2/16/95           |      |
| Analysis Date               |          | 3/10/95           |       | 2/23/95       |      | 2/28/95           |      | 3/10/95       |      | 3/10/95           |      | 3/1/95        |      | 3/3/95            |      |
| Analysis                    | Standard | Analytical        | MDL   | Analytical    | MDL  | Analytical        | MDL  | Analytical    | MDL  | Analytical        | MDL  | Analytical    | MDL  | Analytical        | MDL  |
|                             |          | Result            |       | Result        |      | Result            |      | Result        |      | Result            |      | Result        |      | Result            |      |
| Silver                      | 20       | 3.0 U             | 3.0   | 3.0 U         | 3.0  | 3.0 U             | 3.0  | 3.0 U         | 3.0  | 3.0 U             | 3.0  | 2.5 U         | 2.5  | 2.5 U             | 2.5  |
| Aluminum                    | 200      | 30.9              | 24.0  | 693           | 24.0 | 28.3              | 24.0 | 2540          | 24.0 | 24.0 U            | 24.0 | 611           | 16.8 | 29.3              | 16.8 |
| Arsenic                     | 8        | 1.8               | 1.6   | 1.9 U         | 1.9  | 1.9 U             | 1.9  | 3.4           | 1.6  | 1.6 U             | 1.6  | 1.9 U         | 1.9  | 1.9 U             | 1.9  |
| Barium                      | 2000     | 298               | 1.7   | 79.1          | 1.7  | 64.8              | 1.7  | 132           | 1.7  | 55.9              | 1.7  | 43.6          | 0.80 | 39.7              | 0.80 |
| Beryllium                   | 20       | 0.90 U            | 0.90  | 0.90 U        | 0.90 | 0.90 U            | 0.90 | 0.90 U        | 0.90 | 0.90 U            | 0.90 | 0.30 U        | 0.30 | 0.30 U            | 0.30 |
| Calcium                     |          | 80000             | 10.4  | 63300         | 10.4 | 63800             | 10.4 | 65800         | 10.4 | 60600             | 10.4 | 32300         | 8.4  | 32300             | 8.4  |
| Cadmium                     | 4        | 2.8 U             | 2.8   | 2.8 U         | 2.8  | 2.8 U             | 2.8  | 2.8 U         | 2.8  | 2.8 U             | 2.8  | 2.9 U         | 2.9  | 2.9 U             | 2.9  |
| Cobalt                      |          | 3.0 U             | 3.0   | 3.0 U         | 3.0  | 3.0 U             | 3.0  | 3.5           | 3.0  | 3.0 U             | 3.0  | 2.3 U         | 2.3  | 2.3 U             | 2.3  |
| Chromium                    | 100      | 2.9 U             | 2.9   | 5.6           | 2.9  | 2.9 U             | 2.9  | 24.9          | 2.9  | 2.9 U             | 2.9  | 8.1           | 4.7  | 4.7 U             | 4.7  |
| Copper                      | 1000     | 4.2               | 1.9   | 2.1           | 1.9  | 1.9 U             | 1.9  | 9.6           | 1.9  | 2.8               | 1.9  | 4.0 U         | 4.0  | 4.0 U             | 4.0  |
| Iron                        | 300      | 42500             | 6.4   | 15500         | 6.4  | 12000             | 6.4  | 25400         | 6.4  | 11800             | 6.4  | 2610          | 2.5  | 1030              | 2.5  |
| Mercury                     | 2        | 0.20 U            | 0.20  | 0.20 U        | 0.20 | 0.20 U            | 0.20 | 0.29          | 0.20 | 0.20 U            | 0.20 | 0.20 U        | 0.20 | 0.20 U            | 0.20 |
| Potassium                   |          | 10000             | 685   | 10400         | 685  | 10200             | 685  | 11900         | 685  | 9540              | 685  | 7540          | 67.9 | 6730              | 67.9 |
| Magnesium                   |          | 9600              | 18.3  | 5180          | 18.3 | 5090              | 18.3 | 5960          | 18.3 | 4940              | 18.3 | 4210          | 34.3 | 3920              | 34.3 |
| Manganese                   | 50       | 248               | 1.8   | 455           | 1.8  | 453               | 1.8  | 512           | 1.8  | 455               | 1.8  | 32.7          | 0.90 | 34.1              | 0.90 |
| Sodium                      | 50000    | 9710              | 30.5  | 8940          | 30.5 | 8990              | 30.5 | 9400          | 30.5 | 8770              | 30.5 | 12600         | 19.1 | 12600             | 19.1 |
| Nickel                      | 100      | 10.8 U            | 10.8  | 10.8 U        | 10.8 | 10.8 U            | 10.8 | 10.8 U        | 10.8 | 10.8 U            | 10.8 | 5.9           | 4.2  | 4.2 U             | 4.2  |
| Lead                        | 10       | 1.2 U             | 1.2   | 8.0           | 1.1  | 1.1 U             | 1.1  | 21.6          | 1.2  | 3.9               | 1.2  | 1.6 U         | 1.6  | 1.6 U             | 1.6  |
| Antimony                    | 20       | 20.7 U            | 20.7  | 20.7 U        | 20.7 | 20.7 U            | 20.7 | 20.7 U        | 20.7 | 20.7 U            | 20.7 | 10.9 U        | 10.9 | 10.9 U            | 10.9 |
| Selenium                    | 50       | 1.8 U             | 1.8   | 1.5 U         | 1.5  | 1.5 U             | 1.5  | 1.8 U         | 1.8  | 1.8 U             | 1.8  | 1.5 U         | 1.5  | 1.5 U             | 1.5  |
| Thallium                    | 10       | 5.5 U             | 5.5 * | 0.70 U        | 0.70 | 0.70 U            | 0.70 | 1.1 U         | 1.1  | 1.1 U             | 1.1  | 0.70 U        | 0.70 | 0.70 U            | 0.70 |
| Vanadium                    |          | 2.3 U             | 2.3   | 5.1           | 2.3  | 2.3 U             | 2.3  | 14.3          | 2.3  | 2.3 U             | 2.3  | 4.0           | 2.1  | 2.6               | 2.1  |
| Zinc                        | 5000     | 6.6               | 3.8   | 36.6          | 3.8  | 4.1               | 3.8  | 122           | 3.8  | 9.3               | 3.8  | 17.9          | 1.9  | 8.5               | 1.9  |
| Cyanide                     | 200      |                   |       | 10 U          | 10   |                   |      | 10 U          | 10   |                   |      | 10 U          | 10   |                   |      |
| Ammonia as Nitrogen         |          |                   |       |               |      |                   |      |               |      |                   |      |               |      |                   |      |
| Sulfate                     |          |                   |       |               |      |                   |      |               |      |                   |      |               |      |                   |      |
| Dilution Factor             |          | * = 5.0           |       |               |      |                   |      |               |      |                   |      |               |      |                   |      |
| Method: TAL Metals, Cyanide |          |                   |       |               |      |                   |      |               |      |                   |      |               |      |                   |      |



# POST GROUNDWATER INORGANICS

| Geographical Location       |          | M3            |      | M3                |      | M3            |      | M3                |      | M3            |        | M3                |      | M3            |      |
|-----------------------------|----------|---------------|------|-------------------|------|---------------|------|-------------------|------|---------------|--------|-------------------|------|---------------|------|
| Sample                      |          | MP03-MW04-A02 |      | MP03-MW04-A02 SOL |      | MP03-MW05-A01 |      | MP03-MW05-A01 SOL |      | MP03-MW05-A02 |        | MP03-MW05-A02 SOL |      | MP03-MW06-A01 |      |
| Sample Type                 |          | Total         |      | Soluble           |      | Total         |      | Soluble           |      | Total         |        | Soluble           |      | Total         |      |
| Batch#                      |          | 9503G642      |      | 9503G642          |      | 9502G219      |      | 9502G219          |      | 9503G660      |        | 9503G660          |      | 9502G219      |      |
| Prep#                       |          | 95GI479       |      | 95GI479           |      | 95GI439       |      | 95GI439           |      | 95GI488       |        | 95GI488           |      | 95GI439       |      |
| RFW#                        |          | 009           |      | 010               |      | 003           |      | 004               |      | 003           |        | 004               |      | 005           |      |
| Dilution Factor             |          | 1.00          |      | 1.00              |      | 1.00          |      | 1.00              |      | 1.00          |        | 1.00              |      | 1.00          |      |
| Matrix                      |          | water         |      | water, filtered   |      | water         |      | water, filtered   |      | water         |        | water, filtered   |      | water         |      |
| Units                       | ug/l     | ug/l          |      | ug/l              |      | ug/l          |      | ug/l              |      | ug/l          |        | ug/l              |      | ug/l          |      |
| Sampling Date               |          | 3/8/95        |      | 3/8/95            |      | 2/16/95       |      | 2/16/95           |      | 3/9/95        |        | 3/9/95            |      | 2/16/95       |      |
| Analysis Date               |          | 3/10/95       |      | 3/10/95           |      | 3/1/95        |      | 3/3/95            |      | 3/13/95       |        | 3/13/95           |      | 3/1/95        |      |
| Analysis                    | Standard | Analytical    | MDL  | Analytical        | MDL  | Analytical    | MDL  | Analytical        | MDL  | Analytical    | MDL    | Analytical        | MDL  | Analytical    | MDL  |
|                             |          | Result        |      | Result            |      | Result        |      | Result            |      | Result        |        | Result            |      | Result        |      |
| Silver                      | 20       | 3.0 U         | 3.0  | 3.0 U             | 3.0  | 2.5 U         | 2.5  | 2.5 U             | 2.5  | 3.0 U         | 3.0    | 3.0 U             | 3.0  | 2.5 U         | 2.5  |
| Aluminum                    | 200      | 799           | 24.0 | 24.0 U            | 24.0 | 768           | 16.8 | 16.8 U            | 16.8 | 4220          | 24.0   | 24.0 U            | 24.0 | 132           | 16.8 |
| Arsenic                     | 8        | 1.9           | 1.6  | 2.0               | 1.6  | 1.9 U         | 1.9  | 1.9 U             | 1.9  | 4.3           | 1.3    | 1.3 U             | 1.3  | 1.9 U         | 1.9  |
| Barium                      | 2000     | 51.2          | 1.7  | 42.8              | 1.7  | 520.0         | 0.80 | 466               | 0.80 | 648           | 1.7    | 536               | 1.7  | 119           | 0.80 |
| Beryllium                   | 20       | 0.90 U        | 0.90 | 0.90 U            | 0.90 | 0.30 U        | 0.30 | 0.30 U            | 0.30 | 0.90 U        | 0.90   | 0.90 U            | 0.90 | 0.30 U        | 0.30 |
| Calcium                     |          | 35200         | 10.4 | 32400             | 10.4 | 93200         | 8.4  | 90000             | 8.4  | 98000         | 10.4   | 97900             | 10.4 | 119000        | 8.4  |
| Cadmium                     | 4        | 2.8 U         | 2.8  | 2.8 U             | 2.8  | 2.9 U         | 2.9  | 2.9 U             | 2.9  | 4.2           | 2.8    | 2.8 U             | 2.8  | 2.9 U         | 2.9  |
| Cobalt                      |          | 3.0 U         | 3.0  | 3.0 U             | 3.0  | 3.0           | 2.3  | 3.6               | 2.3  | 3.0 U         | 3.0    | 3.0 U             | 3.0  | 2.3 U         | 2.3  |
| Chromium                    | 100      | 10            | 2.9  | 2.9 U             | 2.9  | 7.3           | 4.7  | 4.7 U             | 4.7  | 32.9          | 2.9    | 2.9 U             | 2.9  | 7.3           | 4.7  |
| Copper                      | 1000     | 2.0           | 1.9  | 3.0               | 1.9  | 8.5           | 4.0  | 4.0 U             | 4.0  | 36.9          | 1.9    | 1.9 U             | 1.9  | 4.0 U         | 4.0  |
| Iron                        | 300      | 3320          | 6.4  | 48.7              | 6.4  | 79700         | 2.5  | 71300             | 2.5  | 100000        | 6.4    | 78700             | 6.4  | 17800         | 2.5  |
| Mercury                     | 2        | 0.20 U        | 0.20 | 0.20 U            | 0.20 | 0.20 U        | 0.20 | 0.20 U            | 0.20 | 0.63          | 0.20   | 0.20 U            | 0.20 | 0.20 U        | 0.20 |
| Potassium                   |          | 8110          | 685  | 6450              | 685  | 12900         | 67.9 | 12300             | 67.9 | 13700         | 685    | 11700             | 685  | 10100         | 67.9 |
| Magnesium                   |          | 4970          | 18.3 | 4170              | 18.3 | 17800         | 34.3 | 17200             | 34.3 | 18100         | 18.3   | 17100             | 18.3 | 28100         | 34.3 |
| Manganese                   | 50       | 35.9          | 1.8  | 32.1              | 1.8  | 1150          | 0.90 | 1100              | 0.90 | 1080          | 1.8    | 1030              | 1.8  | 659           | 0.90 |
| Sodium                      | 50000    | 13700         | 30.5 | 12500             | 30.5 | 16300         | 19.1 | 16200             | 19.1 | 15300         | 30.5   | 15800             | 30.5 | 35000         | 19.1 |
| Nickel                      | 100      | 10.8 U        | 10.8 | 10.8 U            | 10.8 | 4.2 U         | 4.2  | 4.2 U             | 4.2  | 10.8 U        | 10.8   | 10.8 U            | 10.8 | 4.2 U         | 4.2  |
| Lead                        | 10       | 1.2 U         | 1.2  | 1.2 U             | 1.2  | 26.6          | 3.2  | 1.6 U             | 1.6  | 130           | 16.0 * | 1.6 U             | 1.6  | 1.6 U         | 1.6  |
| Antimony                    | 20       | 20.7 U        | 20.7 | 20.7 U            | 20.7 | 10.9 U        | 10.9 | 10.9 U            | 10.9 | 20.7 U        | 20.7   | 20.7 U            | 20.7 | 10.9 U        | 10.9 |
| Selenium                    | 50       | 1.8 U         | 1.8  | 1.8 U             | 1.8  | 1.5 U         | 1.5  | 1.5 U             | 1.5  | 1.8 U         | 1.8    | 1.8 U             | 1.8  | 1.5 U         | 1.5  |
| Thallium                    | 10       | 1.1 U         | 1.1  | 1.1 U             | 1.1  | 0.70 U        | 0.70 | 0.70 U            | 0.70 | 1.7 U         | 1.7    | 1.7 U             | 1.7  | 0.70 U        | 0.70 |
| Vanadium                    |          | 2.6           | 2.3  | 2.3 U             | 2.3  | 4.9           | 2.1  | 2.1 U             | 2.1  | 19.1          | 2.3    | 2.3 U             | 2.3  | 2.1 U         | 2.1  |
| Zinc                        | 5000     | 17.8          | 3.8  | 10.2              | 3.8  | 86.1          | 1.9  | 12.5              | 1.9  | 382           | 3.8    | 11.4              | 3.8  | 64.2          | 1.9  |
| Cyanide                     | 200      | 10 U          | 10   |                   |      | 10 U          | 10   |                   |      | 10 U          | 10     |                   |      | 10 U          | 10   |
| Ammonia as Nitrogen         |          |               |      |                   |      |               |      |                   |      |               |        |                   |      |               |      |
| Sulfate                     |          |               |      |                   |      |               |      |                   |      |               |        |                   |      |               |      |
| Dilution Factor             |          |               |      |                   |      |               |      |                   |      | * = 10        |        |                   |      |               |      |
| Method: TAL Metals, Cyanide |          |               |      |                   |      |               |      |                   |      |               |        |                   |      |               |      |

**MAIN POST  
GROUNDWATER INORGANICS**

| Geographical Location       |          | M3                |      | M3            |      | M3                |      | M4            |      | M4                |      | M4            |      | M4                |      |
|-----------------------------|----------|-------------------|------|---------------|------|-------------------|------|---------------|------|-------------------|------|---------------|------|-------------------|------|
| Sample                      |          | MP03-MW06-A01 SOL |      | MP03-MW06-A02 |      | MP03-MW06-A02 SOL |      | MP04-MW07-A01 |      | MP04-MW07-A01 SOL |      | MP04-MW07-A02 |      | MP04-MW07-A02 SOL |      |
| Sample Type                 |          | Soluble           |      | Total         |      | Soluble           |      | Total         |      | Soluble           |      | Total         |      | Soluble           |      |
| Batch#                      |          | 9502G219          |      | 9503G660      |      | 9503G660          |      | 9502G219      |      | 9502G219          |      | 9503G660      |      | 9503G660          |      |
| Prep#                       |          | 95GI439           |      | 95GI488       |      | 95GI488           |      | 95GI439       |      | 95GI439           |      | 95GI488       |      | 95GI488           |      |
| RFW#                        |          | 006               |      | 001           |      | 002               |      | 007           |      | 008               |      | 005           |      | 006               |      |
| Dilution Factor             |          | 1.00              |      | 1.00          |      | 1.00              |      | 1.00          |      | 1.00              |      | 1.00          |      | 1.00              |      |
| Matrix                      |          | water, filtered   |      | water         |      | water, filtered   |      | water         |      | water, filtered   |      | water         |      | water, filtered   |      |
| Units                       | ug/l     | ug/l              |      | ug/l          |      | ug/l              |      | ug/l          |      | ug/l              |      | ug/l          |      | ug/l              |      |
| Sampling Date               |          | 2/16/95           |      | 3/9/95        |      | 3/9/95            |      | 2/16/95       |      | 2/16/95           |      | 3/9/95        |      | 3/9/95            |      |
| Analysis Date               |          | 3/3/95            |      | 3/13/95       |      | 3/13/95           |      | 3/1/95        |      | 3/3/95            |      | 3/13/95       |      | 3/13/95           |      |
| Analysis                    | Standard | Analytical        | MDL  | Analytical    | MDL  | Analytical        | MDL  | Analytical    | MDL  | Analytical        | MDL  | Analytical    | MDL  | Analytical        | MDL  |
|                             |          | Result            |      | Result        |      | Result            |      | Result        |      | Result            |      | Result        |      | Result            |      |
| Silver                      | 20       | 2.5 U             | 2.5  | 3.0 U         | 3.0  | 3.0 U             | 3.0  | 2.5 U         | 2.5  | 2.5 U             | 2.5  | 3.0 U         | 3.0  | 3.0 U             | 3.0  |
| Aluminum                    | 200      | 16.8 U            | 16.8 | 816           | 24.0 | 24.0 U            | 24.0 | 9440          | 16.8 | 823               | 16.8 | 3150          | 24.0 | 851               | 24.0 |
| Arsenic                     | 8        | 1.9 U             | 1.9  | 1.3 U         | 1.3  | 1.3 U             | 1.3  | 8.0           | 1.9  | 1.9 U             | 1.9  | 2.2           | 1.3  | 1.3 U             | 1.3  |
| Barium                      | 2000     | 112               | 0.80 | 129           | 1.7  | 113               | 1.7  | 91.6          | 0.80 | 60.5              | 0.80 | 68.5          | 1.7  | 62.3              | 1.7  |
| Beryllium                   | 20       | 0.30 U            | 0.30 | 0.90 U        | 0.90 | 0.90 U            | 0.90 | 0.69          | 0.30 | 0.40              | 0.30 | 0.90 U        | 0.90 | 0.90 U            | 0.90 |
| Calcium                     |          | 117000            | 8.4  | 126000        | 10.4 | 126000            | 10.4 | 18600         | 8.4  | 18100             | 8.4  | 18100         | 10.4 | 18600             | 10.4 |
| Cadmium                     | 4        | 2.9 U             | 2.9  | 2.8 U         | 2.8  | 2.8 U             | 2.8  | 2.9 U         | 2.9  | 2.9 U             | 2.9  | 2.8 U         | 2.8  | 2.8 U             | 2.8  |
| Cobalt                      |          | 2.3 U             | 2.3  | 3.0 U         | 3.0  | 3.0 U             | 3.0  | 6.0           | 2.3  | 3.5               | 2.3  | 3.0 U         | 3.0  | 3.0 U             | 3.0  |
| Chromium                    | 100      | 4.7 U             | 4.7  | 8.2           | 2.9  | 2.9 U             | 2.9  | 94.9          | 4.7  | 4.7 U             | 4.7  | 22.1          | 2.9  | 2.9 U             | 2.9  |
| Copper                      | 1000     | 4.0 U             | 4.0  | 1.9 U         | 1.9  | 1.9 U             | 1.9  | 9.5           | 4.0  | 4.0 U             | 4.0  | 1.9 U         | 1.9  | 1.9 U             | 1.9  |
| Iron                        | 300      | 15900             | 2.5  | 23200         | 6.4  | 17200             | 6.4  | 29000         | 2.5  | 57.2              | 2.5  | 6870          | 6.4  | 169               | 6.4  |
| Mercury                     | 2        | 0.20 U            | 0.20 | 0.20 U        | 0.20 | 0.20 U            | 0.20 | 0.20 U        | 0.20 | 0.20 U            | 0.20 | 0.20 U        | 0.20 | 0.20 U            | 0.20 |
| Potassium                   |          | 9750              | 67.9 | 10500         | 685  | 10200             | 685  | 6810          | 67.9 | 1970              | 67.9 | 3150          | 685  | 2420              | 685  |
| Magnesium                   |          | 27400             | 34.3 | 29500         | 18.3 | 29100             | 18.3 | 9020          | 34.3 | 7090              | 34.3 | 7550          | 18.3 | 7290              | 18.3 |
| Manganese                   | 50       | 643               | 0.90 | 713           | 1.8  | 703               | 1.8  | 65.6          | 0.90 | 51.5              | 0.90 | 57.0          | 1.8  | 55.3              | 1.8  |
| Sodium                      | 50000    | 34400             | 19.1 | 33600         | 30.5 | 33400             | 30.5 | 54300         | 19.1 | 53000             | 19.1 | 46100         | 30.5 | 47400             | 30.5 |
| Nickel                      | 100      | 4.2 U             | 4.2  | 10.8 U        | 10.8 | 10.8 U            | 10.8 | 13.7          | 4.2  | 10.0              | 4.2  | 10.8 U        | 10.8 | 10.8 U            | 10.8 |
| Lead                        | 10       | 1.6 U             | 1.6  | 4.1           | 1.6  | 1.6 U             | 1.6  | 15.8          | 1.6  | 1.6 U             | 1.6  | 1.8           | 1.6  | 1.6 U             | 1.6  |
| Antimony                    | 20       | 10.9 U            | 10.9 | 20.7 U        | 20.7 | 20.7 U            | 20.7 | 10.9 U        | 10.9 | 10.9 U            | 10.9 | 20.7 U        | 20.7 | 20.7 U            | 20.7 |
| Selenium                    | 50       | 1.5 U             | 1.5  | 1.8 U         | 1.8  | 1.8 U             | 1.8  | 1.5 U         | 1.5  | 1.5 U             | 1.5  | 1.8 U         | 1.8  | 1.8 U             | 1.8  |
| Thallium                    | 10       | 0.70 U            | 0.70 | 1.7 U         | 1.7  | 1.7 U             | 1.7  | 0.70 U        | 0.70 | 0.70 U            | 0.70 | 1.7 U         | 1.7  | 1.7 U             | 1.7  |
| Vanadium                    |          | 2.1 U             | 2.1  | 6.2           | 2.3  | 2.3 U             | 2.3  | 54.1          | 2.1  | 2.8               | 2.1  | 13.8          | 2.3  | 2.3 U             | 2.3  |
| Zinc                        | 5000     | 53.3              | 1.9  | 59.9          | 3.8  | 34.4              | 3.8  | 60.1          | 1.9  | 34.2              | 1.9  | 38.4          | 3.8  | 34.6              | 3.8  |
| Cyanide                     | 200      |                   |      | 10 U          | 10   |                   |      | 10 U          | 10   |                   |      | 10 U          | 10   |                   |      |
| Ammonia as Nitrogen         |          |                   |      |               |      |                   |      |               |      |                   |      |               |      |                   |      |
| Sulfate                     |          |                   |      |               |      |                   |      |               |      |                   |      |               |      |                   |      |
| Dilution Factor             |          |                   |      |               |      |                   |      |               |      |                   |      |               |      |                   |      |
| Method: TAL Metals, Cyanide |          |                   |      |               |      |                   |      |               |      |                   |      |               |      |                   |      |

# POST GROUNDWATER INORGANICS

| Geographical Location       |          | M4                |      | M4                  |      | M4                |      | M4                  |      | M4                    |      | M4                      |      | M4            |      |
|-----------------------------|----------|-------------------|------|---------------------|------|-------------------|------|---------------------|------|-----------------------|------|-------------------------|------|---------------|------|
| Sample                      |          | MP04-MW07-C01     |      | MP04-MW07-C01 SOL   |      | MP04-MW07-C02     |      | MP04-MW07-C02 SOL   |      | MP04-MW07-E01         |      | MP04-MW07-E01 SOL       |      | MP04-MW08-A01 |      |
| Sample Type                 |          | Duplicate - Total |      | Duplicate - Soluble |      | Duplicate - Total |      | Duplicate - Soluble |      | Field Rinsate - Total |      | Field Rinsate - Soluble |      | Total         |      |
| Batch#                      |          | 9502G219          |      | 9502G219            |      | 9503G660          |      | 9503G660            |      | 9502G219              |      | 9502G219                |      | 9502G219      |      |
| Prep#                       |          | 95GI439           |      | 95GI439             |      | 95GI488           |      | 95GI488             |      | 95GI439               |      | 95GI439                 |      | 95GI439       |      |
| RFW#                        |          | 009               |      | 010                 |      | 007               |      | 008                 |      | 012                   |      | 013                     |      | 014           |      |
| Dilution Factor             |          | 1.00              |      | 1.00                |      | 1.00              |      | 1.00                |      | 1.00                  |      | 1.00                    |      | 1.00          |      |
| Matrix                      |          | water             |      | water, filtered     |      | water             |      | water, filtered     |      | water                 |      | water, filtered         |      | water         |      |
| Units                       | ug/l     | ug/l              |      | ug/l                |      | ug/l              |      | ug/l                |      | ug/l                  |      | ug/l                    |      | ug/l          |      |
| Sampling Date               |          | 2/16/95           |      | 2/16/95             |      | 3/9/95            |      | 3/9/95              |      | 2/16/95               |      | 2/16/95                 |      | 2/16/95       |      |
| Analysis Date               |          | 3/1/95            |      | 3/3/95              |      | 3/13/95           |      | 3/13/95             |      | 3/1/95                |      | 3/1/95                  |      | 3/1/95        |      |
| Analysis                    | Standard | Analytical        | MDL  | Analytical          | MDL  | Analytical        | MDL  | Analytical          | MDL  | Analytical            | MDL  | Analytical              | MDL  | Analytical    | MDL  |
|                             |          | Result            |      | Result              |      | Result            |      | Result              |      | Result                |      | Result                  |      | Result        |      |
| Silver                      | 20       | 2.5 U             | 2.5  | 2.5 U               | 2.5  | 3.0 U             | 3.0  | 3.0 U               | 3.0  | 2.5 U                 | 2.5  | 2.5 U                   | 2.5  | 2.5 U         | 2.5  |
| Aluminum                    | 200      | 9950              | 16.8 | 807                 | 16.8 | 2890              | 24.0 | 856                 | 24.0 | 18.1                  | 16.8 | 16.8 U                  | 16.8 | 1570          | 16.8 |
| Arsenic                     | 8        | 7.2               | 1.9  | 1.9 U               | 1.9  | 2.2               | 1.3  | 1.3 U               | 1.3  | 1.9 U                 | 1.9  | 1.9 U                   | 1.9  | 1.9 U         | 1.9  |
| Barium                      | 2000     | 89.7              | 0.80 | 60.1                | 0.80 | 70.3              | 1.7  | 61.6                | 1.7  | 0.81                  | 0.80 | 0.80 U                  | 0.80 | 38.8          | 0.80 |
| Beryllium                   | 20       | 0.69              | 0.30 | 0.51                | 0.30 | 0.99              | 0.90 | 0.90 U              | 0.90 | 0.30 U                | 0.30 | 0.31                    | 0.30 | 0.30 U        | 0.30 |
| Calcium                     |          | 18200             | 8.4  | 17900               | 8.4  | 19000             | 10.4 | 18900               | 10.4 | 57.4                  | 8.4  | 82.6                    | 8.4  | 32700         | 8.4  |
| Cadmium                     | 4        | 2.9 U             | 2.9  | 2.9 U               | 2.9  | 2.8 U             | 2.8  | 2.8 U               | 2.8  | 2.9 U                 | 2.9  | 2.9 U                   | 2.9  | 2.9 U         | 2.9  |
| Cobalt                      |          | 5.8               | 2.3  | 5.3                 | 2.3  | 3.4               | 3.0  | 3.0 U               | 3.0  | 2.3 U                 | 2.3  | 2.3 U                   | 2.3  | 2.8           | 2.3  |
| Chromium                    | 100      | 103               | 4.7  | 4.7 U               | 4.7  | 18.2              | 2.9  | 2.9 U               | 2.9  | 4.7 U                 | 4.7  | 4.7 U                   | 4.7  | 17.9          | 4.7  |
| Copper                      | 1000     | 6.3               | 4.0  | 4.0 U               | 4.0  | 1.9 U             | 1.9  | 1.9 U               | 1.9  | 4.0 U                 | 4.0  | 4.0 U                   | 4.0  | 4.0 U         | 4.0  |
| Iron                        | 300      | 30000             | 2.5  | 62.3                | 2.5  | 6420              | 6.4  | 131                 | 6.4  | 62.7                  | 2.5  | 4.3                     | 2.5  | 17700         | 2.5  |
| Mercury                     | 2        | 0.20 U            | 0.20 | 0.20 U              | 0.20 | 0.20 U            | 0.20 | 0.20 U              | 0.20 | 0.20 U                | 0.20 | 0.20 U                  | 0.20 | 0.20 U        | 0.20 |
| Potassium                   |          | 6690              | 67.9 | 1990                | 67.9 | 3230              | 685  | 2240                | 685  | 67.9 U                | 67.9 | 68.8                    | 67.9 | 7500          | 67.9 |
| Magnesium                   |          | 9110              | 34.3 | 6990                | 34.3 | 7690              | 18.3 | 7430                | 18.3 | 34.3 U                | 34.3 | 34.3 U                  | 34.3 | 5970          | 34.3 |
| Manganese                   | 50       | 64.6              | 0.90 | 51.0                | 0.90 | 58.2              | 1.8  | 55.2                | 1.8  | 0.90 U                | 0.90 | 0.90 U                  | 0.90 | 110           | 0.90 |
| Sodium                      | 50000    | 52700             | 19.1 | 52100               | 19.1 | 47600             | 30.5 | 48600               | 30.5 | 116                   | 19.1 | 81.4                    | 19.1 | 9450          | 19.1 |
| Nickel                      | 100      | 12.0              | 4.2  | 9.2                 | 4.2  | 10.8 U            | 10.8 | 10.8 U              | 10.8 | 4.2 U                 | 4.2  | 4.2 U                   | 4.2  | 4.2 U         | 4.2  |
| Lead                        | 10       | 15.8              | 1.6  | 1.6 U               | 1.6  | 2.2               | 1.6  | 1.6 U               | 1.6  | 1.6 U                 | 1.6  | 1.6 U                   | 1.6  | 7.4           | 1.6  |
| Antimony                    | 20       | 10.9 U            | 10.9 | 10.9 U              | 10.9 | 20.7 U            | 20.7 | 20.7 U              | 20.7 | 10.9 U                | 10.9 | 10.9 U                  | 10.9 | 10.9 U        | 10.9 |
| Selenium                    | 50       | 1.5 U             | 1.5  | 1.5 U               | 1.5  | 1.8 U             | 1.8  | 1.8 U               | 1.8  | 1.5 U                 | 1.5  | 1.5 U                   | 1.5  | 1.5 U         | 1.5  |
| Thallium                    | 10       | 0.70 U            | 0.70 | 0.70 U              | 0.70 | 1.7 U             | 1.7  | 1.7 U               | 1.7  | 0.70 U                | 0.70 | 0.70 U                  | 0.70 | 0.70 U        | 0.70 |
| Vanadium                    |          | 56.1              | 2.1  | 2.1 U               | 2.1  | 12.2              | 2.3  | 2.3 U               | 2.3  | 2.1 U                 | 2.1  | 2.1 U                   | 2.1  | 6.0           | 2.1  |
| Zinc                        | 5000     | 59.6              | 1.9  | 34.0                | 1.9  | 39.2              | 3.8  | 33.2                | 3.8  | 3.8                   | 1.9  | 2.4                     | 1.9  | 30.0          | 1.9  |
| Cyanide                     | 200      | 10 U              | 10   |                     |      | 10 U              | 10   |                     |      | 10 U                  | 10   |                         |      | 10 U          | 10   |
| Ammonia as Nitrogen         |          |                   |      |                     |      |                   |      |                     |      |                       |      |                         |      |               |      |
| Sulfate                     |          |                   |      |                     |      |                   |      |                     |      |                       |      |                         |      |               |      |
| Dilution Factor             |          |                   |      |                     |      |                   |      |                     |      |                       |      |                         |      |               |      |
| Method: TAL Metals, Cyanide |          |                   |      |                     |      |                   |      |                     |      |                       |      |                         |      |               |      |

**MAIN POST  
GROUNDWATER INORGANICS**

| Geographical Location      |          | M4                |      | M4            |      | M4                |      | M4            |      | M4                |      | M4            |      | M4                |      |
|----------------------------|----------|-------------------|------|---------------|------|-------------------|------|---------------|------|-------------------|------|---------------|------|-------------------|------|
| Sample                     |          | MP04-MW08-A01 SOL |      | MP04-MW08-A02 |      | MP04-MW08-A02 SOL |      | MP04-MW09-A01 |      | MP04-MW09-A01 SOL |      | MP04-MW09-A02 |      | MP04-MW09-A02 SOL |      |
| Sample Type                |          | Soluble           |      | Total         |      | Soluble           |      | Total         |      | Soluble           |      | Total         |      | Soluble           |      |
| Batch#                     |          | 9502G219          |      | 9503G642      |      | 9503G642          |      | 9502G219      |      | 9502G219          |      | 9503G660      |      | 9503G660          |      |
| Prep#                      |          | 95GI439           |      | 95GI479       |      | 95GI479           |      | 95GCN045      |      | 95GI439           |      | 95GI488       |      | 95GI488           |      |
| RFW#                       |          | 015               |      | 007           |      | 008               |      | 016           |      | 017               |      | 009           |      | 010               |      |
| Dilution Factor            |          | 1.00              |      | 1.00          |      | 1.00              |      | 1.00          |      | 1.00              |      | 1.00          |      | 1.00              |      |
| Matrix                     |          | water, filtered   |      | water         |      | water, filtered   |      | water         |      | water, filtered   |      | water         |      | water, filtered   |      |
| Units                      | ug/l     | ug/l              |      | ug/l          |      | ug/l              |      | ug/l          |      | ug/l              |      | ug/l          |      | ug/l              |      |
| Sampling Date              |          | 2/16/95           |      | 3/8/95        |      | 3/8/95            |      | 2/16/95       |      | 2/16/95           |      | 3/9/95        |      | 3/9/95            |      |
| Analysis Date              |          | 3/3/95            |      | 3/10/95       |      | 3/10/95           |      | 3/1/95        |      | 3/3/95            |      | 3/13/95       |      | 3/13/95           |      |
| Analysis                   | Standard | Analytical        | MDL  | Analytical    | MDL  | Analytical        | MDL  | Analytical    | MDL  | Analytical        | MDL  | Analytical    | MDL  | Analytical        | MDL  |
|                            |          | Result            |      | Result        |      | Result            |      | Result        |      | Result            |      | Result        |      | Result            |      |
| Silver                     | 20       | 2.5 U             | 2.5  | 3.0 U         | 3.0  | 3.0 U             | 3.0  | 2.5 U         | 2.5  | 2.5 U             | 2.5  | 3.0 U         | 3.0  | 3.0 U             | 3.0  |
| Aluminum                   | 200      | 16.8 U            | 16.8 | 1640          | 24.0 | 24.0 U            | 24.0 | 182           | 16.8 | 16.8 U            | 16.8 | 76.2          | 24.0 | 24.0 U            | 24.0 |
| Arsenic                    | 8        | 1.9 U             | 1.9  | 2.1           | 1.6  | 1.6 U             | 1.6  | 1.9 U         | 1.9  | 1.9 U             | 1.9  | 1.3 U         | 1.3  | 1.3 U             | 1.3  |
| Barium                     | 2000     | 27.7              | 0.80 | 41.0          | 1.7  | 28.0              | 1.7  | 60.0          | 0.80 | 39.3              | 0.80 | 55.8          | 1.7  | 38.8              | 1.7  |
| Beryllium                  | 20       | 0.30 U            | 0.30 | 0.90 U        | 0.90 | 0.90 U            | 0.90 | 0.30 U        | 0.30 | 0.30 U            | 0.30 | 0.90 U        | 0.90 | 0.90 U            | 0.90 |
| Calcium                    |          | 31900             | 8.4  | 33500         | 10.4 | 33100             | 10.4 | 45300         | 8.4  | 44000             | 8.4  | 47700         | 10.4 | 46300             | 10.4 |
| Cadmium                    | 4        | 2.9 U             | 2.9  | 2.8 U         | 2.8  | 2.8 U             | 2.8  | 2.9 U         | 2.9  | 2.9 U             | 2.9  | 2.8 U         | 2.8  | 2.8 U             | 2.8  |
| Cobalt                     |          | 2.3 U             | 2.3  | 3.8           | 3.0  | 3.0 U             | 3.0  | 2.3 U         | 2.3  | 2.3 U             | 2.3  | 3.0 U         | 3.0  | 3.0 U             | 3.0  |
| Chromium                   | 100      | 4.7 U             | 4.7  | 16.6          | 2.9  | 2.9 U             | 2.9  | 6.0           | 4.7  | 4.7 U             | 4.7  | 2.9 U         | 2.9  | 2.9 U             | 2.9  |
| Copper                     | 1000     | 4.0 U             | 4.0  | 3.0           | 1.9  | 2.6               | 1.9  | 4.0 U         | 4.0  | 4.0 U             | 4.0  | 1.9 U         | 1.9  | 1.9 U             | 1.9  |
| Iron                       | 300      | 10900             | 2.5  | 18100         | 6.4  | 10600             | 6.4  | 21500         | 2.5  | 12500             | 2.5  | 21900         | 6.4  | 13500             | 6.4  |
| Mercury                    | 2        | 0.20 U            | 0.20 | 0.20 U        | 0.20 | 0.20 U            | 0.20 | 0.20 U        | 0.20 | 0.20 U            | 0.20 | 0.20 U        | 0.20 | 0.20 U            | 0.20 |
| Potassium                  |          | 6150              | 67.9 | 7670          | 685  | 6570              | 685  | 8640          | 67.9 | 8350              | 67.9 | 9210          | 685  | 8010              | 685  |
| Magnesium                  |          | 5290              | 34.3 | 6320          | 18.3 | 5760              | 18.3 | 6070          | 34.3 | 5870              | 34.3 | 6420          | 18.3 | 6170              | 18.3 |
| Manganese                  | 50       | 101               | 0.90 | 111           | 1.8  | 104               | 1.8  | 81.3          | 0.90 | 77.2              | 0.90 | 88.7          | 1.8  | 85.5              | 1.8  |
| Sodium                     | 50000    | 9230              | 19.1 | 9550          | 30.5 | 9580              | 30.5 | 9760          | 19.1 | 9580              | 19.1 | 10800         | 30.5 | 10500             | 30.5 |
| Nickel                     | 100      | 4.2 U             | 4.2  | 10.8 U        | 10.8 | 10.8 U            | 10.8 | 4.2 U         | 4.2  | 4.2 U             | 4.2  | 10.8 U        | 10.8 | 10.8 U            | 10.8 |
| Lead                       | 10       | 1.6 U             | 1.6  | 6.7           | 1.2  | 1.2 U             | 1.2  | 1.6 U         | 1.6  | 1.6 U             | 1.6  | 1.6 U         | 1.6  | 1.6 U             | 1.6  |
| Antimony                   | 20       | 10.9 U            | 10.9 | 20.7 U        | 20.7 | 20.7 U            | 20.7 | 10.9 U        | 10.9 | 10.9 U            | 10.9 | 20.7 U        | 20.7 | 20.7 U            | 20.7 |
| Selenium                   | 50       | 1.5 U             | 1.5  | 1.8 U         | 1.8  | 1.8 U             | 1.8  | 1.5 U         | 1.5  | 1.5 U             | 1.5  | 1.8 U         | 1.8  | 1.8 U             | 1.8  |
| Thallium                   | 10       | 0.70 U            | 0.70 | 1.1 U         | 1.1  | 1.1 U             | 1.1  | 0.70 U        | 0.70 | 0.70 U            | 0.70 | 1.7 U         | 1.7  | 1.7 U             | 1.7  |
| Vanadium                   |          | 2.1 U             | 2.1  | 7.9           | 2.3  | 2.3 U             | 2.3  | 2.1 U         | 2.1  | 2.1 U             | 2.1  | 2.3 U         | 2.3  | 2.3 U             | 2.3  |
| Zinc                       | 5000     | 3.0               | 1.9  | 33.5          | 3.8  | 5.7               | 3.8  | 3.9           | 1.9  | 1.9 U             | 1.9  | 3.8 U         | 3.8  | 4.5               | 3.8  |
| Cyanide                    | 200      |                   |      | 10 U          | 10   |                   |      | 10 U          | 10   |                   |      | 10 U          | 10   |                   |      |
| Ammonia as Nitrogen        |          |                   |      |               |      |                   |      |               |      |                   |      |               |      |                   |      |
| Sulfate                    |          |                   |      |               |      |                   |      |               |      |                   |      |               |      |                   |      |
| Dilution Factor            |          |                   |      |               |      |                   |      |               |      |                   |      |               |      |                   |      |
| Method:TAL Metals, Cyanide |          |                   |      |               |      |                   |      |               |      |                   |      |               |      |                   |      |

# POST GROUNDWATER INORGANICS

| Geographical Location       |          | M5            |      | M5                |      | M5            |      | M5                |      | M5            |        | M5                |      | M5            |      |
|-----------------------------|----------|---------------|------|-------------------|------|---------------|------|-------------------|------|---------------|--------|-------------------|------|---------------|------|
| Sample                      |          | MP05-MW10-A01 |      | MP05-MW10-A01 SOL |      | MP05-MW10-A02 |      | MP05-MW10-A02 SOL |      | MP05-MW11-A01 |        | MP05-MW11-A01 SOL |      | MP05-MW11-A02 |      |
| Sample Type                 |          | Total         |      | Soluble           |      | Total         |      | Soluble           |      | Total         |        | Soluble           |      | Total         |      |
| Batch#                      |          | 9502G238      |      | 9502G238          |      | 9503G660      |      | 9503G660          |      | 9502G238      |        | 9502G238          |      | 9503G660      |      |
| Prep#                       |          | 95GCN045      |      | 95GI397           |      | 95GI488       |      | 95GI488           |      | 95GCN045      |        | 95GI397           |      | 95GI488       |      |
| RFW#                        |          | 010           |      | 011               |      | 011           |      | 012               |      | 012           |        | 013               |      | 013           |      |
| Dilution Factor             |          | 1.00          |      | 1.00              |      | 1.00          |      | 1.00              |      | 1.00          |        | 1.00              |      | 1.00          |      |
| Matrix                      |          | water         |      | water, filtered   |      | water         |      | water, filtered   |      | water         |        | water, filtered   |      | water         |      |
| Units                       | ug/l     | ug/l          |      | ug/l              |      | ug/l          |      | ug/l              |      | ug/l          |        | ug/l              |      | ug/l          |      |
| Sampling Date               |          | 2/17/95       |      | 2/17/95           |      | 3/9/95        |      | 3/9/95            |      | 2/17/95       |        | 2/17/95           |      | 3/9/95        |      |
| Analysis Date               |          | 3/1/95        |      | 2/22/95           |      | 3/13/95       |      | 3/13/95           |      | 3/1/95        |        | 2/22/95           |      | 3/13/95       |      |
| Analysis                    | Standard | Analytical    | MDL  | Analytical        | MDL  | Analytical    | MDL  | Analytical        | MDL  | Analytical    | MDL    | Analytical        | MDL  | Analytical    | MDL  |
|                             |          | Result        |      | Result            |      | Result        |      | Result            |      | Result        |        | Result            |      | Result        |      |
| Silver                      | 20       | 3.0 U         | 3.0  | 3.0 U             | 3.0  | 3.0 U         | 3.0  | 3.0 U             | 3.0  | 3.0 U         | 3.0    | 3.0 U             | 3.0  | 3.0 U         | 3.0  |
| Aluminum                    | 200      | 212           | 24.0 | 30.7              | 24.0 | 99.6          | 24.0 | 24.0 U            | 24.0 | 1160          | 24.0   | 57.4              | 24.0 | 945           | 24.0 |
| Arsenic                     | 8        | 1.9 U         | 1.9  | 1.9 U             | 1.9  | 1.3 U         | 1.3  | 1.3 U             | 1.3  | 1.9 U         | 1.9    | 1.9 U             | 1.9  | 1.3 U         | 1.3  |
| Barium                      | 2000     | 101           | 1.7  | 36.7              | 1.7  | 131           | 1.7  | 44.9              | 1.7  | 16.8          | 1.7    | 13.2              | 1.7  | 15.3          | 1.7  |
| Beryllium                   | 20       | 0.90 U        | 0.90 | 0.90 U            | 0.90 | 0.90 U        | 0.90 | 0.90 U            | 0.90 | 0.90 U        | 0.90   | 0.90 U            | 0.90 | 0.90 U        | 0.90 |
| Calcium                     |          | 16000         | 10.4 | 15400             | 10.4 | 17000         | 10.4 | 15900             | 10.4 | 11100         | 10.4   | 11100             | 10.4 | 11100         | 10.4 |
| Cadmium                     | 4        | 2.8 U         | 2.8  | 2.8 U             | 2.8  | 2.8 U         | 2.8  | 2.8 U             | 2.8  | 2.8 U         | 2.8    | 2.8 U             | 2.8  | 2.8 U         | 2.8  |
| Cobalt                      |          | 3.0 U         | 3.0  | 3.0 U             | 3.0  | 3.0 U         | 3.0  | 3.0 U             | 3.0  | 3.0 U         | 3.0    | 3.0 U             | 3.0  | 3.0 U         | 3.0  |
| Chromium                    | 100      | 5.5           | 2.9  | 2.9 U             | 2.9  | 2.9 U         | 2.9  | 2.9 U             | 2.9  | 15.4          | 2.9    | 2.9 U             | 2.9  | 10.4          | 2.9  |
| Copper                      | 1000     | 10.9          | 1.9  | 2.5               | 1.9  | 3.2           | 1.9  | 1.9 U             | 1.9  | 2.9           | 1.9    | 2.0               | 1.9  | 1.9 U         | 1.9  |
| Iron                        | 300      | 8310          | 6.4  | 4200              | 6.4  | 10100         | 6.4  | 4490              | 6.4  | 5150          | 6.4    | 19.3              | 6.4  | 4220          | 6.4  |
| Mercury                     | 2        | 0.20 U        | 0.20 | 0.20 U            | 0.20 | 0.20 U        | 0.20 | 0.20 U            | 0.20 | 0.20 U        | 0.20   | 0.20 U            | 0.20 | 0.20 U        | 0.20 |
| Potassium                   |          | 10100         | 685  | 10000             | 685  | 7600          | 685  | 7430              | 685  | 3590          | 685    | 2230              | 685  | 3020          | 685  |
| Magnesium                   |          | 14100         | 18.3 | 14100             | 18.3 | 13000         | 18.3 | 12400             | 18.3 | 4260          | 18.3   | 3760              | 18.3 | 4180          | 18.3 |
| Manganese                   | 50       | 127           | 1.8  | 117               | 1.8  | 166           | 1.8  | 148               | 1.8  | 14.8          | 1.8    | 12.0              | 1.8  | 14.2          | 1.8  |
| Sodium                      | 50000    | 85400         | 30.5 | 85100             | 30.5 | 80200         | 30.5 | 77000             | 30.5 | 18400         | 30.5   | 18500             | 30.5 | 17500         | 30.5 |
| Nickel                      | 100      | 10.8 U        | 10.8 | 10.8 U            | 10.8 | 10.8 U        | 10.8 | 10.8 U            | 10.8 | 10.8 U        | 10.8   | 12.4              | 10.8 | 10.8 U        | 10.8 |
| Lead                        | 10       | 5.4           | 1.6  | 1.6 U             | 1.6  | 5.9           | 1.6  | 1.6 U             | 1.6  | 2.2           | 1.6    | 1.6 U             | 1.6  | 1.6 U         | 1.6  |
| Antimony                    | 20       | 20.7 U        | 20.7 | 20.7 U            | 20.7 | 20.7 U        | 20.7 | 20.8              | 20.7 | 20.7 U        | 20.7   | 20.7 U            | 20.7 | 20.7 U        | 20.7 |
| Selenium                    | 50       | 1.5 U         | 1.5  | 1.5 U             | 1.5  | 1.8 U         | 1.8  | 1.8 U             | 1.8  | 1.5 U         | 1.5    | 1.5 U             | 1.5  | 1.8 U         | 1.8  |
| Thallium                    | 10       | 0.70 U        | 0.70 | 0.70 U            | 0.70 | 1.7 U         | 1.7  | 1.7 U             | 1.7  | 0.70 U        | 0.70   | 0.70 U            | 0.70 | 1.7 U         | 1.7  |
| Vanadium                    |          | 2.3 U         | 2.3  | 2.3 U             | 2.3  | 2.6           | 2.3  | 2.3 U             | 2.3  | 5.5           | 2.3    | 2.3 U             | 2.3  | 6.2           | 2.3  |
| Zinc                        | 5000     | 10.5          | 3.8  | 5.9               | 3.8  | 5.0           | 3.8  | 4.3               | 3.8  | 168           | 3.8    | 160               | 3.8  | 178.0         | 3.8  |
| Cyanide                     | 200      | 10 U          | 10   |                   |      | 10 U          | 10   |                   |      | 10 U          | 10     |                   |      | 10 U          | 10   |
| Ammonia as Nitrogen         |          |               |      |                   |      |               |      |                   |      |               |        |                   |      |               |      |
| Sulfate                     |          | 18.8          | 5.0  |                   |      | 10.8          | 5.0  |                   |      | 49.2          | 10.0 * |                   |      | 38.3          | 10.0 |
| Dilution Factor             |          |               |      |                   |      |               |      |                   |      | *=2           |        |                   |      |               |      |
| Method: TAL Metals, Cyanide |          |               |      |                   |      |               |      |                   |      |               |        |                   |      |               |      |

**MAIN POST  
GROUNDWATER INORGANICS**

| Geographical Location       |          | M5                |      | M5                    |      | M5                      |      | M8            |      | M8                |      | M8            |      |
|-----------------------------|----------|-------------------|------|-----------------------|------|-------------------------|------|---------------|------|-------------------|------|---------------|------|
| Sample                      |          | MP05-MW11-A02 SOL |      | MP05-MW11-E02         |      | MP05-MW11-E02 SOL       |      | MP08-MW12-A01 |      | MP08-MW12-A01 SOL |      | MP08-MW12-A02 |      |
| Sample Type                 |          | Soluble           |      | Field Rinsate - Total |      | Field Rinsate - Soluble |      | Total         |      | Soluble           |      | Total         |      |
| Batch#                      |          | 9503G660          |      | 9503G660              |      | 9503G660                |      | 9502G238      |      | 9502G238          |      | 9503G767      |      |
| Prep#                       |          | 95GI488           |      | 95GI488               |      | 95GI488                 |      | 95GCN045      |      | 95GI397           |      | 95GI509       |      |
| RFW#                        |          | 014               |      | 016                   |      | 017                     |      | 014           |      | 015               |      | 001           |      |
| Dilution Factor             |          | 1.00              |      | 1.00                  |      | 1.00                    |      | 1.00          |      | 1.00              |      | 1.00          |      |
| Matrix                      |          | water, filtered   |      | water                 |      | water, filtered         |      | water         |      | water, filtered   |      | water         |      |
| Units                       | ug/l     | ug/l              |      | ug/l                  |      | ug/l                    |      | ug/l          |      | ug/l              |      | ug/l          |      |
| Sampling Date               |          | 3/9/95            |      | 3/9/95                |      | 3/9/95                  |      | 2/17/95       |      | 2/17/95           |      | 3/15/95       |      |
| Analysis Date               |          | 3/13/95           |      | 3/13/95               |      | 3/13/95                 |      | 3/1/95        |      | 2/22/95           |      | 3/21/95       |      |
| Analysis                    | Standard | Analytical        | MDL  | Analytical            | MDL  | Analytical              | MDL  | Analytical    | MDL  | Analytical        | MDL  | Analytical    | MDL  |
|                             |          | Result            |      | Result                |      | Result                  |      | Result        |      | Result            |      | Result        |      |
| Silver                      | 20       | 3.0 U             | 3.0  | 3.0 U                 | 3.0  | 3.0 U                   | 3.0  | 3.0 U         | 3.0  | 3.0 U             | 3.0  | 3.0 U         | 3.0  |
| Aluminum                    | 200      | 45.8              | 24.0 | 24.0 U                | 24.0 | 24.0 U                  | 24.0 | 186           | 24.0 | 25.8              | 24.0 | 1290          | 24.0 |
| Arsenic                     | 8        | 1.3 U             | 1.3  | 1.3 U                 | 1.3  | 1.3 U                   | 1.3  | 1.9 U         | 1.9  | 1.9 U             | 1.9  | 1.9 U         | 1.9  |
| Barium                      | 2000     | 11.7              | 1.7  | 1.7 U                 | 1.7  | 1.7 U                   | 1.7  | 6.8           | 1.7  | 4.6               | 1.7  | 10.8          | 1.7  |
| Beryllium                   | 20       | 0.90 U            | 0.90 | 0.90 U                | 0.90 | 0.90 U                  | 0.90 | 0.90 U        | 0.90 | 0.90 U            | 0.90 | 0.90 U        | 0.90 |
| Calcium                     |          | 10900             | 10.4 | 289                   | 10.4 | 55.4                    | 10.4 | 9210          | 10.4 | 8940              | 10.4 | 8580          | 10.4 |
| Cadmium                     | 4        | 2.8 U             | 2.8  | 2.8 U                 | 2.8  | 2.8 U                   | 2.8  | 2.8 U         | 2.8  | 2.8 U             | 2.8  | 2.8 U         | 2.8  |
| Cobalt                      |          | 3.0 U             | 3.0  | 3.0 U                 | 3.0  | 3.0 U                   | 3.0  | 3.0 U         | 3.0  | 3.0 U             | 3.0  | 3.0 U         | 3.0  |
| Chromium                    | 100      | 2.9 U             | 2.9  | 2.9 U                 | 2.9  | 2.9 U                   | 2.9  | 2.9 U         | 2.9  | 2.9 U             | 2.9  | 14.5          | 2.9  |
| Copper                      | 1000     | 1.9 U             | 1.9  | 1.9 U                 | 1.9  | 1.9 U                   | 1.9  | 3.2           | 1.9  | 2.4               | 1.9  | 1.9 U         | 1.9  |
| Iron                        | 300      | 17.3              | 6.4  | 6.4 U                 | 6.4  | 6.4 U                   | 6.4  | 529           | 6.4  | 23.6              | 6.4  | 5430          | 6.4  |
| Mercury                     | 2        | 0.20 U            | 0.20 | 0.20 U                | 0.20 | 0.20 U                  | 0.20 | 0.20 U        | 0.20 | 0.20 U            | 0.20 | 0.20 U        | 0.20 |
| Potassium                   |          | 2320              | 685  | 737                   | 685  | 685 U                   | 685  | 2540          | 685  | 2460              | 685  | 3090          | 685  |
| Magnesium                   |          | 3670              | 18.3 | 18.3 U                | 18.3 | 18.3 U                  | 18.3 | 2400          | 18.3 | 2290              | 18.3 | 2570          | 18.3 |
| Manganese                   | 50       | 9.5               | 1.8  | 1.8 U                 | 1.8  | 1.8 U                   | 1.8  | 9.9           | 1.8  | 8.0               | 1.8  | 10.6          | 1.8  |
| Sodium                      | 50000    | 17200             | 30.5 | 165                   | 30.5 | 147                     | 30.5 | 22000         | 30.5 | 21200             | 30.5 | 20500         | 30.5 |
| Nickel                      | 100      | 10.8 U            | 10.8 | 10.8 U                | 10.8 | 10.8 U                  | 10.8 | 10.8 U        | 10.8 | 10.8 U            | 10.8 | 10.8 U        | 10.8 |
| Lead                        | 10       | 1.6 U             | 1.6  | 1.6 U                 | 1.6  | 1.6 U                   | 1.6  | 1.6 U         | 1.6  | 1.6 U             | 1.6  | 1.0           | 1.0  |
| Antimony                    | 20       | 20.7 U            | 20.7 | 20.7 U                | 20.7 | 20.7 U                  | 20.7 | 20.7 U        | 20.7 | 20.7 U            | 20.7 | 20.7 U        | 20.7 |
| Selenium                    | 50       | 1.8 U             | 1.8  | 1.8 U                 | 1.8  | 1.8 U                   | 1.8  | 1.5 U         | 1.5  | 1.5 U             | 1.5  | 1.5 U         | 1.5  |
| Thallium                    | 10       | 1.7 U             | 1.7  | 1.7 U                 | 1.7  | 1.7 U                   | 1.7  | 0.70 U        | 0.70 | 0.70 U            | 0.70 | 1.1 U         | 1.1  |
| Vanadium                    |          | 2.3 U             | 2.3  | 2.3 U                 | 2.3  | 2.3 U                   | 2.3  | 2.3 U         | 2.3  | 2.3 U             | 2.3  | 11.4          | 2.3  |
| Zinc                        | 5000     | 165               | 3.8  | 3.8 U                 | 3.8  | 3.8 U                   | 3.8  | 4.4           | 3.8  | 3.8 U             | 3.8  | 7.7           | 3.8  |
| Cyanide                     | 200      |                   |      | 10 U                  | 10   |                         |      | 10 U          | 10   |                   |      | 10 U          | 10   |
| Ammonia as Nitrogen         |          |                   |      |                       |      |                         |      | 0.20 U        | 0.20 |                   |      | 0.20 U        | 0.20 |
| Sulfate                     |          |                   |      | 5.0 U                 | 5.0  |                         |      | 40.4          | 10.0 |                   |      | 35.9          | 5.0  |
| Dilution Factor             |          |                   |      |                       |      |                         |      | *2            |      |                   |      |               |      |
| Method: TAL Metals, Cyanide |          |                   |      |                       |      |                         |      |               |      |                   |      |               |      |

# POST GROUNDWATER INORGANICS

| Geographical Location      |          | M8                |      | M8                |        | M8                  |      | M8                    |      | M8                      |      | M8            |      | M8                |      |
|----------------------------|----------|-------------------|------|-------------------|--------|---------------------|------|-----------------------|------|-------------------------|------|---------------|------|-------------------|------|
| Sample                     |          | MP08-MW12-A02 SOL |      | MP08-MW12-C02     |        | MP08-MW12-C02 SOL   |      | MP08-MW12-E02         |      | MP08-MW12-E02 SOL       |      | MP08-MW13-A01 |      | MP08-MW13-A01 SOL |      |
| Sample Type                |          | Soluble           |      | Duplicate - Total |        | Duplicate - Soluble |      | Field Rinsate - Total |      | Field Rinsate - Soluble |      | Total         |      | Soluble           |      |
| Batch#                     |          | 9503G767          |      | 9503G767          |        | 9503G767            |      | 9503G767              |      | 9503G767                |      | 9502G403      |      | 9502G403          |      |
| Prep#                      |          | 95GI510           |      | 95GI511           |        | 95GI512             |      | 95GI513               |      | 95GI514                 |      | 95GCN053      |      | 95GI460           |      |
| RFW#                       |          | 002               |      | 003               |        | 004                 |      | 006                   |      | 007                     |      | 001           |      | 002               |      |
| Dilution Factor            |          | 1.00              |      | 1.00              |        | 1.00                |      | 1.00                  |      | 1.00                    |      | 1.00          |      | 1.00              |      |
| Matrix                     |          | water, filtered   |      | water             |        | water, filtered     |      | water                 |      | water, filtered         |      | water         |      | water, filtered   |      |
| Units                      | ug/l     | ug/l              |      | ug/l              |        | ug/l                |      | ug/l                  |      | ug/l                    |      | ug/l          |      | ug/l              |      |
| Sampling Date              |          | 3/15/95           |      | 3/15/95           |        | 3/15/95             |      | 3/15/95               |      | 3/15/95                 |      | 2/22/95       |      | 2/22/95           |      |
| Analysis Date              |          | 3/21/95           |      | 3/21/95           |        | 3/21/95             |      | 3/21/95               |      | 3/21/95                 |      | 3/7/95        |      | 3/8/95            |      |
| Analysis                   | Standard | Analytical        | MDL  | Analytical        | MDL    | Analytical          | MDL  | Analytical            | MDL  | Analytical              | MDL  | Analytical    | MDL  | Analytical        | MDL  |
|                            |          | Result            |      | Result            |        | Result              |      | Result                |      | Result                  |      | Result        |      | Result            |      |
| Silver                     | 20       | 3.0 U             | 3.0  | 3.0 U             | 3.0    | 3.0 U               | 3.0  | 3.0 U                 | 3.0  | 3.0 U                   | 3.0  | 3.0 U         | 3.0  | 3.0 U             | 3.0  |
| Aluminum                   | 200      | 24.0 U            | 24.0 | 1090              | 24.0   | 36.1                | 24.0 | 27.0                  | 24.0 | 24.0 U                  | 24.0 | 363           | 24.0 | 24.0 U            | 24.0 |
| Arsenic                    | 8        | 1.9 U             | 1.9  | 1.9 U             | 1.9    | 1.9 U               | 1.9  | 1.9 U                 | 1.9  | 1.9 U                   | 1.9  | 1.9 U         | 1.9  | 1.9 U             | 1.9  |
| Barium                     | 2000     | 4.0               | 1.7  | 10.8              | 1.7    | 3.9                 | 1.7  | 1.7 U                 | 1.7  | 1.7 U                   | 1.7  | 204           | 1.7  | 174               | 1.7  |
| Beryllium                  | 20       | 0.90 U            | 0.90 | 0.90 U            | 0.90   | 0.90 U              | 0.90 | 0.90 U                | 0.90 | 0.90 U                  | 0.90 | 0.90 U        | 0.90 | 0.90 U            | 0.90 |
| Calcium                    |          | 7980              | 10.4 | 8750              | 10.4   | 8550                | 10.4 | 109                   | 10.4 | 95.7                    | 10.4 | 144000        | 10.4 | 139000            | 10.4 |
| Cadmium                    | 4        | 2.8 U             | 2.8  | 2.8 U             | 2.8    | 2.8 U               | 2.8  | 2.8 U                 | 2.8  | 2.8 U                   | 2.8  | 2.8 U         | 2.8  | 2.8 U             | 2.8  |
| Cobalt                     |          | 3.0 U             | 3.0  | 3.0 U             | 3.0    | 3.0 U               | 3.0  | 3.0 U                 | 3.0  | 3.0 U                   | 3.0  | 3.0 U         | 3.0  | 3.0 U             | 3.0  |
| Chromium                   | 100      | 2.9 U             | 2.9  | 11.1              | 2.9    | 3.3                 | 2.9  | 2.9 U                 | 2.9  | 2.9 U                   | 2.9  | 4.1           | 2.9  | 2.9 U             | 2.9  |
| Copper                     | 1000     | 2.5               | 1.9  | 1.9 U             | 1.9    | 2.3                 | 1.9  | 2.1                   | 1.9  | 1.9 U                   | 1.9  | 7.9           | 1.9  | 1.9 U             | 1.9  |
| Iron                       | 300      | 26.6              | 6.4  | 4780              | 6.4    | 21.3                | 6.4  | 13.2                  | 6.4  | 7.4                     | 6.4  | 31900         | 6.4  | 25600             | 6.4  |
| Mercury                    | 2        | 0.20 U            | 0.20 | 0.20 U            | 0.20   | 0.20 U              | 0.20 | 0.20 U                | 0.20 | 0.20 U                  | 0.20 | 0.62          | 0.20 | 0.20 U            | 0.20 |
| Potassium                  |          | 1980              | 685  | 2920              | 685    | 2660                | 685  | 685 U                 | 685  | 685 U                   | 685  | 22100         | 685  | 21300             | 685  |
| Magnesium                  |          | 1960              | 18.3 | 2450              | 18.3   | 2160                | 18.3 | 18.3 U                | 18.3 | 18.3 U                  | 18.3 | 69600         | 18.3 | 67900             | 18.3 |
| Manganese                  | 50       | 7.9               | 1.8  | 10.6              | 1.8    | 7.0                 | 1.8  | 1.8 U                 | 1.8  | 1.8 U                   | 1.8  | 573           | 1.8  | 550               | 1.8  |
| Sodium                     | 50000    | 19500             | 30.5 | 21100             | 30.5   | 20900               | 30.5 | 87.3                  | 30.5 | 120                     | 30.5 | 295000        | 30.5 | 288000            | 30.5 |
| Nickel                     | 100      | 10.8 U            | 10.8 | 10.8 U            | 10.8   | 10.8 U              | 10.8 | 10.8 U                | 10.8 | 10.8 U                  | 10.8 | 10.8 U        | 10.8 | 10.8 U            | 10.8 |
| Lead                       | 10       | 1.0 U             | 1.0  | 1.0 U             | 1.0    | 1.0 U               | 1.0  | 1.0 U                 | 1.0  | 1.0 U                   | 1.0  | 2.8           | 1.6  | 1.6 U             | 1.6  |
| Antimony                   | 20       | 20.7 U            | 20.7 | 20.7 U            | 20.7   | 20.7 U              | 20.7 | 20.7 U                | 20.7 | 20.7 U                  | 20.7 | 20.7 U        | 20.7 | 20.7 U            | 20.7 |
| Selenium                   | 50       | 1.5 U             | 1.5  | 1.5 U             | 1.5    | 1.5 U               | 1.5  | 1.5 U                 | 1.5  | 1.5 U                   | 1.5  | 1.5 U         | 1.5  | 1.5 U             | 1.5  |
| Thallium                   | 10       | 1.1 U             | 1.1  | 1.1 U             | 1.1    | 1.1 U               | 1.1  | 1.1 U                 | 1.1  | 1.1 U                   | 1.1  | 0.70 U        | 0.70 | 0.70 U            | 0.70 |
| Vanadium                   |          | 3.2               | 2.3  | 8.6               | 2.3    | 3.8                 | 2.3  | 3.0                   | 2.3  | 2.3 U                   | 2.3  | 5.6           | 2.3  | 3.4               | 2.3  |
| Zinc                       | 5000     | 8.6               | 3.8  | 8.7               | 3.8    | 4.2                 | 3.8  | 3.8 U                 | 3.8  | 4.1                     | 3.8  | 11.9          | 3.8  | 3.8 U             | 3.8  |
| Cyanide                    | 200      |                   |      | 10 U              | 10     |                     |      | 10 U                  | 10   |                         |      | 10 U          | 10   |                   |      |
| Ammonia as Nitrogen        |          |                   |      | 0.20 U            | 0.20   |                     |      | 0.20 U                | 0.20 |                         |      | 2.6           | 0.20 |                   |      |
| Sulfate                    |          |                   |      | 41.4              | 10.0 * |                     |      | 5.0 U                 | 5.0  |                         |      | 14.0          | 5.0  |                   |      |
| Dilution Factor            |          |                   |      |                   | *=2    |                     |      |                       |      |                         |      |               |      |                   |      |
| Method:TAL Metals, Cyanide |          |                   |      |                   |        |                     |      |                       |      |                         |      |               |      |                   |      |

**MAIN POST  
GROUNDWATER INORGANICS**

| Geographical Location       |          | M8            |        | M8                |      | M8            |        | M8                |      | M8            |        | M8                |       |
|-----------------------------|----------|---------------|--------|-------------------|------|---------------|--------|-------------------|------|---------------|--------|-------------------|-------|
| Sample                      |          | MP08-MW13-A02 |        | MP08-MW13-A02 SOL |      | MP08-MW14-A01 |        | MP08-MW14-A01 SOL |      | MP08-MW14-A02 |        | MP08-MW14-A02 SOL |       |
| Sample Type                 |          | Total         |        | Soluble           |      | Total         |        | Soluble           |      | Total         |        | Soluble           |       |
| Batch#                      |          | 9503G767      |        | 9503G767          |      | 9502G219      |        | 9502G219          |      | 9503G767      |        | 9503G767          |       |
| Prep#                       |          | 95GI515       |        | 95GI516           |      | 95GCN045      |        | 95GI439           |      | 95GI517       |        | 95GI518           |       |
| RFW#                        |          | 008           |        | 009               |      | 018           |        | 019               |      | 010           |        | 011               |       |
| Dilution Factor             |          | 1.00          |        | 1.00              |      | 1.00          |        | 1.00              |      | 1.00          |        | 1.00              |       |
| Matrix                      |          | water         |        | water, filtered   |      | water         |        | water, filtered   |      | water         |        | water, filtered   |       |
| Units                       | ug/l     | ug/l          |        | ug/l              |      | ug/l          |        | ug/l              |      | ug/l          |        | ug/l              |       |
| Sampling Date               |          | 3/15/95       |        | 3/15/95           |      | 2/16/95       |        | 2/16/95           |      | 3/15/95       |        | 3/15/95           |       |
| Analysis Date               |          | 3/21/95       |        | 3/21/95           |      | 3/1/95        |        | 3/3/95            |      | 3/21/95       |        | 3/21/95           |       |
| Analysis                    | Standard | Analytical    | MDL    | Analytical        | MDL  | Analytical    | MDL    | Analytical        | MDL  | Analytical    | MDL    | Analytical        | MDL   |
|                             |          | Result        |        | Result            |      | Result        |        | Result            |      | Result        |        | Result            |       |
| Silver                      | 20       | 3.0 U         | 3.0    | 3.0 U             | 3.0  | 2.5 U         | 2.5    | 2.5 U             | 2.5  | 3.0 U         | 3.0    | 3.0 U             | 3.0   |
| Aluminum                    | 200      | 661           | 24.0   | 44.4              | 24.0 | 2220          | 16.8   | 30.4              | 16.8 | 2480          | 24.0   | 46.9              | 24.0  |
| Arsenic                     | 8        | 1.9 U         | 1.9    | 1.9 U             | 1.9  | 4.3           | 1.9    | 1.9 U             | 1.9  | 3.2           | 1.9    | 1.9 U             | 1.9   |
| Barium                      | 2000     | 260           | 1.7    | 180               | 1.7  | 372           | 0.80   | 304               | 0.80 | 448           | 1.7    | 356               | 1.7   |
| Beryllium                   | 20       | 0.90 U        | 0.90   | 0.90 U            | 0.90 | 0.70          | 0.30   | 0.39              | 0.30 | 0.90 U        | 0.90   | 0.90 U            | 0.90  |
| Calcium                     |          | 171000        | 10.4   | 165000            | 10.4 | 162000        | 8.4    | 165000            | 8.4  | 157000        | 10.4   | 164000            | 10.4  |
| Cadmium                     | 4        | 2.8 U         | 2.8    | 2.8 U             | 2.8  | 3.0           | 2.9    | 2.9 U             | 2.9  | 2.9           | 2.8    | 2.8 U             | 2.8   |
| Cobalt                      |          | 3.0 U         | 3.0    | 3.0 U             | 3.0  | 4.8           | 2.3    | 2.5               | 2.3  | 3.8           | 3.0    | 3.0 U             | 3.0   |
| Chromium                    | 100      | 4.3           | 2.9    | 2.9 U             | 2.9  | 23.1          | 4.7    | 4.7 U             | 4.7  | 24.9          | 2.9    | 3.1               | 2.9   |
| Copper                      | 1000     | 5.1           | 1.9    | 1.9 U             | 1.9  | 4.0 U         | 4.0    | 4.0 U             | 4.0  | 5.2           | 1.9    | 4.4               | 1.9   |
| Iron                        | 300      | 48100         | 6.4    | 27900             | 6.4  | 57700         | 2.5    | 41400             | 2.5  | 57000         | 6.4    | 35100             | 6.4   |
| Mercury                     | 2        | 0.20 U        | 0.20   | 0.20 U            | 0.20 | 0.20 U        | 0.20   | 0.20 U            | 0.20 | 0.20 U        | 0.20   | 0.20 U            | 0.20  |
| Potassium                   |          | 17800         | 685    | 17200             | 685  | 65100         | 67.9   | 64300             | 67.9 | 65200         | 685    | 67500             | 685   |
| Magnesium                   |          | 58300         | 18.3   | 57500             | 18.3 | 79000         | 34.3   | 78700             | 34.3 | 75100         | 18.3   | 78200             | 18.3  |
| Manganese                   | 50       | 737           | 1.8    | 703               | 1.8  | 277           | 0.90   | 263               | 0.90 | 275           | 1.8    | 271               | 1.8   |
| Sodium                      | 50000    | 171000        | 30.5   | 172000            | 30.5 | 421000        | 19.1   | 424000            | 19.1 | 346000        | 762 *  | 365000            | 762 * |
| Nickel                      | 100      | 10.8 U        | 10.8   | 10.8 U            | 10.8 | 4.9           | 4.2    | 4.2 U             | 4.2  | 10.8 U        | 10.8   | 10.8 U            | 10.8  |
| Lead                        | 10       | 3.7           | 1.0    | 1.0 U             | 1.0  | 9.3           | 1.6    | 1.6 U             | 1.6  | 10.2          | 1.0    | 1.0 U             | 1.0   |
| Antimony                    | 20       | 20.7 U        | 20.7   | 20.7 U            | 20.7 | 10.9 U        | 10.9   | 10.9 U            | 10.9 | 20.7 U        | 20.7   | 20.7 U            | 20.7  |
| Selenium                    | 50       | 1.5 U         | 1.5    | 1.5 U             | 1.5  | 1.5 U         | 1.5    | 1.5 U             | 1.5  | 1.5 U         | 1.5    | 1.5 U             | 1.5   |
| Thallium                    | 10       | 1.1 U         | 1.1    | 1.1 U             | 1.1  | 0.70 U        | 0.70   | 0.70 U            | 0.70 | 1.1 U         | 1.1    | 1.1 U             | 1.1   |
| Vanadium                    |          | 3.8           | 2.3    | 2.3 U             | 2.3  | 12.9          | 2.1    | 2.1 U             | 2.1  | 15.4          | 2.3    | 4.6               | 2.3   |
| Zinc                        | 5000     | 27.3          | 3.8    | 3.9               | 3.8  | 49.6          | 1.9    | 3.8               | 1.9  | 57.2          | 3.8    | 4.8               | 3.8   |
| Cyanide                     | 200      | 10 U          | 10     |                   |      | 10 U          | 10     |                   |      | 10 U          | 10     |                   |       |
| Ammonia as Nitrogen         |          | 2.9           | 0.20   |                   |      | 75.2          | 20.0 * |                   |      | 72.6          | 4.0 ** |                   |       |
| Sulfate                     |          | 34.3          | 10.0 * |                   |      | 6.8           | 5.0    |                   |      | 22.8          | 5.0    |                   |       |
| Dilution Factor             |          | *=2           |        |                   |      | *=100         |        |                   |      | *=25, **=20   |        | *=25              |       |
| Method: TAL Metals, Cyanide |          |               |        |                   |      |               |        |                   |      |               |        |                   |       |



# POST GROUNDWATER INORGANICS

| Geographical Location       |          | M8            |      | M8                |      | M8                |      | M8                  |      | M8                    |      | M8                      |      |
|-----------------------------|----------|---------------|------|-------------------|------|-------------------|------|---------------------|------|-----------------------|------|-------------------------|------|
| Sample                      |          | MP08-MW15-A01 |      | MP08-MW15-A01 SOL |      | MP08-MW15-C01     |      | MP08-MW15-C01 SOL   |      | MP08-MW15-E01         |      | MP08-MW15-E01 SOL       |      |
| Sample Type                 |          | Total         |      | Soluble           |      | Duplicate - Total |      | Duplicate - Soluble |      | Field Rinsate - Total |      | Field Rinsate - Soluble |      |
| Batch#                      |          | 9502G403      |      | 9502G403          |      | 9502G403          |      | 9502G403            |      | 9502G403              |      | 9502G403                |      |
| Prep#                       |          | 95GCN053      |      | 95GI460           |      | 95GCN053          |      | 95GI460             |      | 95GCN053              |      | 95GI460                 |      |
| RFW#                        |          | 003           |      | 004               |      | 005               |      | 006                 |      | 008                   |      | 009                     |      |
| Dilution Factor             |          | 1.00          |      | 1.00              |      | 1.00              |      | 1.00                |      | 1.00                  |      | 1.00                    |      |
| Matrix                      |          | water         |      | water, filtered   |      | water             |      | water, filtered     |      | water                 |      | water, filtered         |      |
| Units                       | ug/l     | ug/l          |      | ug/l              |      | ug/l              |      | ug/l                |      | ug/l                  |      | ug/l                    |      |
| Sampling Date               |          | 2/22/95       |      | 2/22/95           |      | 2/22/95           |      | 2/22/95             |      | 2/22/95               |      | 2/22/95                 |      |
| Analysis Date               |          | 3/7/95        |      | 3/8/95            |      | 3/7/95            |      | 3/8/95              |      | 3/7/95                |      | 3/8/95                  |      |
| Analysis                    | Standard | Analytical    | MDL  | Analytical        | MDL  | Analytical        | MDL  | Analytical          | MDL  | Analytical            | MDL  | Analytical              | MDL  |
|                             |          | Result        |      | Result            |      | Result            |      | Result              |      | Result                |      | Result                  |      |
| Silver                      | 20       | 3.0 U         | 3.0  | 3.0 U             | 3.0  | 3.0 U             | 3.0  | 3.0 U               | 3.0  | 3.0 U                 | 3.0  | 3.0 U                   | 3.0  |
| Aluminum                    | 200      | 540           | 24.0 | 24.0 U            | 24.0 | 515               | 24.0 | 24.0 U              | 24.0 | 24.0 U                | 24.0 | 24.0 U                  | 24.0 |
| Arsenic                     | 8        | 1.9 U         | 1.9  | 1.9 U             | 1.9  | 1.9 U             | 1.9  | 1.9 U               | 1.9  | 1.9 U                 | 1.9  | 1.9 U                   | 1.9  |
| Barium                      | 2000     | 260           | 1.7  | 173               | 1.7  | 261               | 1.7  | 174                 | 1.7  | 17 U                  | 1.7  | 17 U                    | 1.7  |
| Beryllium                   | 20       | 0.90 U        | 0.90 | 0.90 U            | 0.90 | 0.90 U            | 0.90 | 0.90 U              | 0.90 | 0.90 U                | 0.90 | 0.90 U                  | 0.90 |
| Calcium                     |          | 310000        | 10.4 | 305000            | 10.4 | 315000            | 10.4 | 315000              | 10.4 | 107                   | 10.4 | 57.1                    | 10.4 |
| Cadmium                     | 4        | 2.8 U         | 2.8  | 2.8 U             | 2.8  | 2.8 U             | 2.8  | 2.8 U               | 2.8  | 2.8 U                 | 2.8  | 2.8 U                   | 2.8  |
| Cobalt                      |          | 3.0 U         | 3.0  | 3.0 U             | 3.0  | 3.0 U             | 3.0  | 3.0 U               | 3.0  | 3.0 U                 | 3.0  | 3.0 U                   | 3.0  |
| Chromium                    | 100      | 3.9           | 2.9  | 2.9 U             | 2.9  | 4.3               | 2.9  | 2.9 U               | 2.9  | 2.9 U                 | 2.9  | 2.9 U                   | 2.9  |
| Copper                      | 1000     | 1.9 U         | 1.9  | 1.9 U             | 1.9  | 1.9 U             | 1.9  | 1.9 U               | 1.9  | 1.9 U                 | 1.9  | 1.9 U                   | 1.9  |
| Iron                        | 300      | 27200         | 6.4  | 18100             | 6.4  | 27300             | 6.4  | 18200               | 6.4  | 6.4 U                 | 6.4  | 6.4 U                   | 6.4  |
| Mercury                     | 2        | 0.20 U        | 0.20 | 0.20 U            | 0.20 | 0.20 U            | 0.20 | 0.20 U              | 0.20 | 0.20 U                | 0.20 | 0.20 U                  | 0.20 |
| Potassium                   |          | 34700         | 685  | 33500             | 685  | 34900             | 685  | 34000               | 685  | 685 U                 | 685  | 685 U                   | 685  |
| Magnesium                   |          | 71500         | 18.3 | 71000             | 18.3 | 73000             | 18.3 | 73000               | 18.3 | 18.3 U                | 18.3 | 18.3 U                  | 18.3 |
| Manganese                   | 50       | 375           | 1.8  | 363               | 1.8  | 380               | 1.8  | 375                 | 1.8  | 1.8 U                 | 1.8  | 1.8 U                   | 1.8  |
| Sodium                      | 50000    | 226000        | 30.5 | 225000            | 30.5 | 230000            | 30.5 | 231000              | 30.5 | 140                   | 30.5 | 156                     | 30.5 |
| Nickel                      | 100      | 10.8 U        | 10.8 | 10.8 U            | 10.8 | 10.8 U            | 10.8 | 10.8 U              | 10.8 | 11.4                  | 10.8 | 10.8 U                  | 10.8 |
| Lead                        | 10       | 2.9           | 1.6  | 1.6 U             | 1.6  | 2.6               | 1.6  | 11.1                | 1.6  | 1.6 U                 | 1.6  | 1.6 U                   | 1.6  |
| Antimony                    | 20       | 20.7 U        | 20.7 | 20.7 U            | 20.7 | 20.7 U            | 20.7 | 20.7 U              | 20.7 | 20.7 U                | 20.7 | 20.7 U                  | 20.7 |
| Selenium                    | 50       | 1.5 U         | 1.5  | 1.5 U             | 1.5  | 1.5 U             | 1.5  | 1.5 U               | 1.5  | 1.5 U                 | 1.5  | 1.5 U                   | 1.5  |
| Thallium                    | 10       | 0.70 U        | 0.70 | 0.70 U            | 0.70 | 0.70 U            | 0.70 | 0.70 U              | 0.70 | 0.70 U                | 0.70 | 0.70 U                  | 0.70 |
| Vanadium                    |          | 7.4           | 2.3  | 3.4               | 2.3  | 6.0               | 2.3  | 3.1                 | 2.3  | 2.3 U                 | 2.3  | 2.3 U                   | 2.3  |
| Zinc                        | 5000     | 13.5          | 3.8  | 3.8 U             | 3.8  | 13.9              | 3.8  | 3.8 U               | 3.8  | 3.8 U                 | 3.8  | 3.8 U                   | 3.8  |
| Cyanide                     | 200      | 10 U          | 10   |                   |      | 10 U              | 10   |                     |      | 10 U                  | 10   |                         |      |
| Ammonia as Nitrogen         |          | 31.8          | 0.20 |                   |      | 31.9              | 0.20 |                     |      | 0.20 U                | 0.20 |                         |      |
| Sulfate                     |          | 71.5          | 5.0  |                   |      | 72.7              | 5.0  |                     |      | 5.0 U                 | 5.0  |                         |      |
| Dilution Factor             |          |               |      |                   |      |                   |      |                     |      |                       |      |                         |      |
| Method: TAL Metals, Cyanide |          |               |      |                   |      |                   |      |                     |      |                       |      |                         |      |

**MAIN POST  
GROUNDWATER INORGANICS**

| Geographical Location      |          | M8            |         | M8                |      | M12           |      | M12               |      | M12           |      | M12               |      |
|----------------------------|----------|---------------|---------|-------------------|------|---------------|------|-------------------|------|---------------|------|-------------------|------|
| Sample                     |          | MP08-MW15-A02 |         | MP08-MW15-A02 SOL |      | MP12-MW16-A01 |      | MP12-MW16-A01 SOL |      | MP12-MW16-A02 |      | MP12-MW16-A02 SOL |      |
| Sample Type                |          | Total         |         | Soluble           |      | Total         |      | Soluble           |      | Total         |      | Soluble           |      |
| Batch#                     |          | 9503G767      |         | 9503G767          |      | 9502G299      |      | 9502G299          |      | 9503G681      |      | 9503G681          |      |
| Prep#                      |          | 95GI519       |         | 95GI519           |      | 95GI450       |      | 95GI450           |      | 95GI494       |      | 95GI494           |      |
| RFW#                       |          | 012           |         | 013               |      | 001           |      | 002               |      | 001           |      | 002               |      |
| Dilution Factor            |          | 1.00          |         | 1.00              |      | 1.00          |      | 1.00              |      | 1.00          |      | 1.00              |      |
| Matrix                     |          | water         |         | water, filtered   |      | water         |      | water, filtered   |      | water         |      | water, filtered   |      |
| Units                      | ug/l     | ug/l          |         | ug/l              |      | ug/l          |      | ug/l              |      | ug/l          |      | ug/l              |      |
| Sampling Date              |          | 3/15/95       |         | 3/15/95           |      | 2/20/95       |      | 2/20/95           |      | 3/10/95       |      | 3/10/95           |      |
| Analysis Date              |          | 3/21/95       |         | 3/21/95           |      | 3/6/95        |      | 3/6/95            |      | 3/15/95       |      | 3/15/95           |      |
| Analysis                   | Standard | Analytical    | MDL     | Analytical        | MDL  | Analytical    | MDL  | Analytical        | MDL  | Analytical    | MDL  | Analytical        | MDL  |
|                            |          | Result        |         | Result            |      | Result        |      | Result            |      | Result        |      | Result            |      |
| Silver                     | 20       | 3.0 U         | 3.0     | 3.0 U             | 3.0  | 2.5 U         | 2.5  | 2.5 U             | 2.5  | 2.5 U         | 2.5  | 2.5 U             | 2.5  |
| Aluminum                   | 200      | 596           | 24.0    | 28.9              | 24.0 | 1460          | 16.8 | 73.3              | 16.8 | 462           | 16.8 | 32.9              | 16.8 |
| Arsenic                    | 8        | 1.9 U         | 1.9     | 1.9 U             | 1.9  | 4.8           | 1.3  | 2.7               | 1.3  | 3.3           | 1.7  | 1.9               | 1.7  |
| Barium                     | 2000     | 277           | 1.7     | 190               | 1.7  | 50.3          | 0.80 | 40.7              | 0.80 | 43.9          | 0.80 | 38.6              | 0.80 |
| Beryllium                  | 20       | 0.90 U        | 0.90    | 0.90 U            | 0.90 | 0.30 U        | 0.30 | 0.30 U            | 0.30 | 0.30 U        | 0.30 | 0.30 U            | 0.30 |
| Calcium                    |          | 357000        | 10.4    | 328000            | 10.4 | 7840          | 8.4  | 7720              | 8.4  | 7880          | 8.4  | 8040              | 8.4  |
| Cadmium                    | 4        | 2.8 U         | 2.8     | 2.8 U             | 2.8  | 2.9 U         | 2.9  | 2.9 U             | 2.9  | 3.5           | 2.9  | 3.3               | 2.9  |
| Cobalt                     |          | 3.0 U         | 3.0     | 3.0 U             | 3.0  | 2.9           | 2.3  | 2.9               | 2.3  | 2.3 U         | 2.3  | 2.3 U             | 2.3  |
| Chromium                   | 100      | 4.2           | 2.9     | 2.9 U             | 2.9  | 21.7          | 4.7  | 4.7 U             | 4.7  | 4.7 U         | 4.7  | 4.7 U             | 4.7  |
| Copper                     | 1000     | 1.9 U         | 1.9     | 1.9 U             | 1.9  | 4.0 U         | 4.0  | 4.0 U             | 4.0  | 4.0 U         | 4.0  | 4.0 U             | 4.0  |
| Iron                       | 300      | 24300         | 6.4     | 15100             | 6.4  | 21000         | 2.5  | 15700             | 2.5  | 18300         | 2.5  | 15500             | 2.5  |
| Mercury                    | 2        | 0.20 U        | 0.20    | 0.20 U            | 0.20 | 0.31          | 0.20 | 0.20 U            | 0.20 | 0.20 U        | 0.20 | 0.20 U            | 0.20 |
| Potassium                  |          | 36000         | 685     | 32700             | 685  | 3360          | 67.9 | 2660              | 67.9 | 2720          | 67.9 | 2600              | 67.9 |
| Magnesium                  |          | 75000         | 18.3    | 69100             | 18.3 | 6320          | 34.3 | 5900              | 34.3 | 5920          | 34.3 | 5780              | 34.3 |
| Manganese                  | 50       | 382           | 1.8     | 345               | 1.8  | 47.0          | 0.90 | 44.3              | 0.90 | 45.1          | 0.90 | 43.7              | 0.90 |
| Sodium                     | 50000    | 228000        | 30.5    | 210000            | 30.5 | 17300         | 19.1 | 17500             | 19.1 | 17000         | 19.1 | 17000             | 19.1 |
| Nickel                     | 100      | 10.8 U        | 10.8    | 10.8 U            | 10.8 | 5.4           | 4.2  | 6.0               | 4.2  | 4.2 U         | 4.2  | 4.2 U             | 4.2  |
| Lead                       | 10       | 1.3           | 1.0     | 1.0 U             | 1.0  | 1.6 U         | 1.6  | 1.6 U             | 1.6  | 1.4           | 1.2  | 1.2 U             | 1.2  |
| Antimony                   | 20       | 20.7 U        | 20.7    | 20.7 U            | 20.7 | 10.9 U        | 10.9 | 10.9 U            | 10.9 | 10.9 U        | 10.9 | 10.9 U            | 10.9 |
| Selenium                   | 50       | 1.5 U         | 1.5     | 1.5 U             | 1.5  | 1.5 U         | 1.5  | 1.5 U             | 1.5  | 1.8 U         | 1.8  | 1.8 U             | 1.8  |
| Thallium                   | 10       | 1.1 U         | 1.1     | 1.1 U             | 1.1  | 0.70 U        | 0.70 | 0.70 U            | 0.70 | 0.70 U        | 0.70 | 0.70 U            | 0.70 |
| Vanadium                   |          | 8.0           | 2.3     | 3.3               | 2.3  | 8.8           | 2.1  | 2.1 U             | 2.1  | 3.9           | 2.1  | 2.1 U             | 2.1  |
| Zinc                       | 5000     | 28.3          | 3.8     | 3.8 U             | 3.8  | 22.4          | 1.9  | 18.2              | 1.9  | 19.1          | 1.9  | 19.2              | 1.9  |
| Cyanide                    | 200      | 10 U          | 10      |                   |      | 10 U          | 10   |                   |      | 10 U          | 10   |                   |      |
| Ammonia as Nitrogen        |          | 28.6          | 2.0 *   |                   |      |               |      |                   |      |               |      |                   |      |
| Sulfate                    |          | 90.0          | 25.0 ** |                   |      |               |      |                   |      |               |      |                   |      |
| Dilution Factor            |          | *=10, **=5    |         |                   |      |               |      |                   |      |               |      |                   |      |
| Method:TAL Metals, Cyanide |          |               |         |                   |      |               |      |                   |      |               |      |                   |      |

# POST GROUNDWATER INORGANICS

| Geographical Location       |          | M12           |      | M12               |      | M12           |      | M12               |      | M12           |      | M12               |      |
|-----------------------------|----------|---------------|------|-------------------|------|---------------|------|-------------------|------|---------------|------|-------------------|------|
| Sample                      |          | MP12-MW17-A01 |      | MP12-MW17-A01 SOL |      | MP12-MW17-A02 |      | MP12-MW17-A02 SOL |      | MP12-MW18-A01 |      | MP12-MW18-A01 SOL |      |
| Sample Type                 |          | Total         |      | Soluble           |      | Total         |      | Soluble           |      | Total         |      | Soluble           |      |
| Batch#                      |          | 9502G299      |      | 9502G299          |      | 9503G681      |      | 9503G681          |      | 9502G299      |      | 9502G299          |      |
| Prep#                       |          | 95GI450       |      | 95GI450           |      | 95GI494       |      | 95GI494           |      | 95GI450       |      | 95GI450           |      |
| RFW#                        |          | 003           |      | 004               |      | 003           |      | 004               |      | 005           |      | 006               |      |
| Dilution Factor             |          | 1.00          |      | 1.00              |      | 1.00          |      | 1.00              |      | 1.00          |      | 1.00              |      |
| Matrix                      |          | water         |      | water, filtered   |      | water         |      | water, filtered   |      | water         |      | water, filtered   |      |
| Units                       | ug/l     | ug/l          |      | ug/l              |      | ug/l          |      | ug/l              |      | ug/l          |      | ug/l              |      |
| Sampling Date               |          | 2/20/95       |      | 2/20/95           |      | 3/10/95       |      | 3/10/95           |      | 2/20/95       |      | 2/20/95           |      |
| Analysis Date               |          | 3/6/95        |      | 3/6/95            |      | 3/15/95       |      | 3/15/95           |      | 3/6/95        |      | 3/6/95            |      |
| Analysis                    | Standard | Analytical    | MDL  | Analytical        | MDL  | Analytical    | MDL  | Analytical        | MDL  | Analytical    | MDL  | Analytical        | MDL  |
|                             |          | Result        |      | Result            |      | Result        |      | Result            |      | Result        |      | Result            |      |
| Silver                      | 20       | 2.5 U         | 2.5  | 2.5 U             | 2.5  | 2.5 U         | 2.5  | 2.5 U             | 2.5  | 2.5 U         | 2.5  | 2.5 U             | 2.5  |
| Aluminum                    | 200      | 161           | 16.8 | 16.8 U            | 16.8 | 186           | 16.8 | 16.8 U            | 16.8 | 903           | 16.8 | 206               | 16.8 |
| Arsenic                     | 8        | 1.3 U         | 1.3  | 1.3 U             | 1.3  | 1.7 U         | 1.7  | 1.7 U             | 1.7  | 2.0           | 1.3  | 1.3 U             | 1.3  |
| Barium                      | 2000     | 111           | 0.80 | 108               | 0.80 | 257           | 0.80 | 258               | 0.80 | 136           | 0.80 | 113               | 0.80 |
| Beryllium                   | 20       | 0.30 U        | 0.30 | 0.30 U            | 0.30 | 0.30 U        | 0.30 | 0.30 U            | 0.30 | 0.30 U        | 0.30 | 0.30 U            | 0.30 |
| Calcium                     |          | 48500         | 8.4  | 48600             | 8.4  | 51900         | 8.4  | 51300             | 8.4  | 6360          | 8.4  | 6250              | 8.4  |
| Cadmium                     | 4        | 2.9 U         | 2.9  | 2.9 U             | 2.9  | 2.9 U         | 2.9  | 2.9 U             | 2.9  | 2.9 U         | 2.9  | 2.9 U             | 2.9  |
| Cobalt                      |          | 2.3 U         | 2.3  | 2.3 U             | 2.3  | 2.3 U         | 2.3  | 2.3 U             | 2.3  | 4.2           | 2.3  | 2.3 U             | 2.3  |
| Chromium                    | 100      | 6.5           | 4.7  | 4.7 U             | 4.7  | 4.7 U         | 4.7  | 4.7 U             | 4.7  | 13.0          | 4.7  | 4.7 U             | 4.7  |
| Copper                      | 1000     | 21.6          | 4.0  | 4.0 U             | 4.0  | 6.6           | 4.0  | 4.0 U             | 4.0  | 5.9           | 4.0  | 4.0 U             | 4.0  |
| Iron                        | 300      | 21700         | 2.5  | 21200             | 2.5  | 40800         | 2.5  | 40200             | 2.5  | 2370          | 2.5  | 140               | 2.5  |
| Mercury                     | 2        | 0.20 U        | 0.20 | 0.20 U            | 0.20 | 0.20 U        | 0.20 | 0.20 U            | 0.20 | 0.20 U        | 0.20 | 0.20 U            | 0.20 |
| Potassium                   |          | 4580          | 67.9 | 4440              | 67.9 | 4180          | 67.9 | 4100              | 67.9 | 5400          | 67.9 | 4950              | 67.9 |
| Magnesium                   |          | 3770          | 34.3 | 3760              | 34.3 | 5040          | 34.3 | 5040              | 34.3 | 3990          | 34.3 | 3770              | 34.3 |
| Manganese                   | 50       | 173           | 0.90 | 174               | 0.90 | 339           | 0.90 | 341               | 0.90 | 17.7          | 0.90 | 16.2              | 0.90 |
| Sodium                      | 50000    | 8670          | 19.1 | 8690              | 19.1 | 11900         | 19.1 | 12100             | 19.1 | 21200         | 19.1 | 21200             | 19.1 |
| Nickel                      | 100      | 4.2 U         | 4.2  | 4.2 U             | 4.2  | 4.2 U         | 4.2  | 4.2 U             | 4.2  | 9.2           | 4.2  | 8.4               | 4.2  |
| Lead                        | 10       | 1.6 U         | 1.6  | 1.6 U             | 1.6  | 1.8           | 1.2  | 1.2 U             | 1.2  | 1.6 U         | 1.6  | 1.6 U             | 1.6  |
| Antimony                    | 20       | 10.9 U        | 10.9 | 10.9 U            | 10.9 | 10.9 U        | 10.9 | 10.9 U            | 10.9 | 10.9 U        | 10.9 | 10.9 U            | 10.9 |
| Selenium                    | 50       | 1.5 U         | 1.5  | 1.5 U             | 1.5  | 1.8 U         | 1.8  | 1.8 U             | 1.8  | 1.5 U         | 1.5  | 1.5 U             | 1.5  |
| Thallium                    | 10       | 0.70 U        | 0.70 | 0.70 U            | 0.70 | 0.70 U        | 0.70 | 0.70 U            | 0.70 | 0.70 U        | 0.70 | 0.70 U            | 0.70 |
| Vanadium                    |          | 2.1 U         | 2.1  | 2.1 U             | 2.1  | 2.1 U         | 2.1  | 2.1 U             | 2.1  | 4.5           | 2.1  | 2.1 U             | 2.1  |
| Zinc                        | 5000     | 6.8           | 1.9  | 1.9 U             | 1.9  | 12.4          | 1.9  | 3.5               | 1.9  | 46.6          | 1.9  | 44.7              | 1.9  |
| Cyanide                     | 200      | 10 U          | 10   |                   |      | 10.0 U        | 10.0 |                   |      | 10 U          | 10   |                   |      |
| Ammonia as Nitrogen         |          |               |      |                   |      |               |      |                   |      |               |      |                   |      |
| Sulfate                     |          |               |      |                   |      |               |      |                   |      |               |      |                   |      |
| Dilution Factor             |          |               |      |                   |      |               |      |                   |      |               |      |                   |      |
| Method: TAL Metals, Cyanide |          |               |      |                   |      |               |      |                   |      |               |      |                   |      |

**MAIN POST  
GROUNDWATER INORGANICS**

| Geographical Location      |          | M12           |      | M12               |      | M14           |      | M14               |      | M14           |      | M14               |      |
|----------------------------|----------|---------------|------|-------------------|------|---------------|------|-------------------|------|---------------|------|-------------------|------|
| Sample                     |          | MP12-MW18-A02 |      | MP12-MW18-A02 SOL |      | MP14-MW19-A01 |      | MP14-MW19-A01 SOL |      | MP14-MW19-A02 |      | MP14-MW19-A02 SOL |      |
| Sample Type                |          | Total         |      | Soluble           |      | Total         |      | Soluble           |      | Total         |      | Soluble           |      |
| Batch#                     |          | 9503G681      |      | 9503G681          |      | 9502G299      |      | 9502G299          |      | 9503G681      |      | 9503G681          |      |
| Prep#                      |          | 95GI494       |      | 95GI494           |      | 95GI450       |      | 95GI450           |      | 95GI494       |      | 95GI494           |      |
| RFW#                       |          | 005           |      | 006               |      | 007           |      | 008               |      | 007           |      | 008               |      |
| Dilution Factor            |          | 1.00          |      | 1.00              |      | 1.00          |      | 1.00              |      | 1.00          |      | 1.00              |      |
| Matrix                     |          | water         |      | water, filtered   |      | water         |      | water, filtered   |      | water         |      | water, filtered   |      |
| Units                      | ug/l     | ug/l          |      | ug/l              |      | ug/l          |      | ug/l              |      | ug/l          |      | ug/l              |      |
| Sampling Date              |          | 3/10/95       |      | 3/10/95           |      | 2/20/95       |      | 2/20/95           |      | 3/10/95       |      | 3/10/95           |      |
| Analysis Date              |          | 3/15/95       |      | 3/15/95           |      | 3/6/95        |      | 3/6/95            |      | 3/15/95       |      | 3/15/95           |      |
| Analysis                   | Standard | Analytical    | MDL  | Analytical        | MDL  | Analytical    | MDL  | Analytical        | MDL  | Analytical    | MDL  | Analytical        | MDL  |
|                            |          | Result        |      | Result            |      | Result        |      | Result            |      | Result        |      | Result            |      |
| Silver                     | 20       | 2.5 U         | 2.5  | 2.5 U             | 2.5  | 2.5 U         | 2.5  | 2.5 U             | 2.5  | 2.5 U         | 2.5  | 2.5 U             | 2.5  |
| Aluminum                   | 200      | 563           | 16.8 | 195               | 16.8 | 266           | 16.8 | 27.2              | 16.8 | 520           | 16.8 | 16.8 U            | 16.8 |
| Arsenic                    | 8        | 1.7 U         | 1.7  | 1.7 U             | 1.7  | 1.3 U         | 1.3  | 1.3 U             | 1.3  | 1.7 U         | 1.7  | 1.7 U             | 1.7  |
| Barium                     | 2000     | 131           | 0.80 | 114               | 0.80 | 223           | 0.80 | 215               | 0.80 | 206           | 0.80 | 182               | 0.80 |
| Beryllium                  | 20       | 0.30 U        | 0.30 | 0.34              | 0.30 | 0.30 U        | 0.30 | 0.30 U            | 0.30 | 0.30 U        | 0.30 | 0.30 U            | 0.30 |
| Calcium                    |          | 6110          | 8.4  | 6250              | 8.4  | 37900         | 8.4  | 37700             | 8.4  | 39500         | 8.4  | 39000             | 8.4  |
| Cadmium                    | 4        | 3.4           | 2.9  | 3.5               | 2.9  | 2.9 U         | 2.9  | 2.9 U             | 2.9  | 2.9 U         | 2.9  | 2.9 U             | 2.9  |
| Cobalt                     |          | 2.3 U         | 2.3  | 2.3 U             | 2.3  | 2.9           | 2.3  | 2.3 U             | 2.3  | 2.3 U         | 2.3  | 2.3 U             | 2.3  |
| Chromium                   | 100      | 4.7 U         | 4.7  | 4.7 U             | 4.7  | 7.5           | 4.7  | 4.7 U             | 4.7  | 4.7 U         | 4.7  | 4.7 U             | 4.7  |
| Copper                     | 1000     | 4.3           | 4.0  | 4.8               | 4.0  | 8.6           | 4.0  | 4.0 U             | 4.0  | 7.7           | 4.0  | 4.0 U             | 4.0  |
| Iron                       | 300      | 1220          | 2.5  | 55.9              | 2.5  | 40900         | 2.5  | 38800             | 2.5  | 41900         | 2.5  | 37600             | 2.5  |
| Mercury                    | 2        | 0.20 U        | 0.20 | 0.20 U            | 0.20 | 0.20 U        | 0.20 | 0.20 U            | 0.20 | 0.20 U        | 0.20 | 0.20 U            | 0.20 |
| Potassium                  |          | 4830          | 67.9 | 4700              | 67.9 | 4640          | 67.9 | 4460              | 67.9 | 4680          | 67.9 | 4480              | 67.9 |
| Magnesium                  |          | 3880          | 34.3 | 3810              | 34.3 | 5240          | 34.3 | 5160              | 34.3 | 5130          | 34.3 | 4980              | 34.3 |
| Manganese                  | 50       | 15.9          | 0.90 | 15.0              | 0.90 | 547           | 0.90 | 543               | 0.90 | 554           | 0.90 | 538               | 0.90 |
| Sodium                     | 50000    | 20900         | 19.1 | 20900             | 19.1 | 8900          | 19.1 | 8940              | 19.1 | 8730          | 19.1 | 8440              | 19.1 |
| Nickel                     | 100      | 6.4           | 4.2  | 4.7               | 4.2  | 4.6           | 4.2  | 4.2 U             | 4.2  | 4.2 U         | 4.2  | 4.2 U             | 4.2  |
| Lead                       | 10       | 5.4           | 1.2  | 1.2 U             | 1.2  | 13.8          | 1.6  | 1.6 U             | 1.6  | 23.7          | 1.2  | 1.2 U             | 1.2  |
| Antimony                   | 20       | 10.9 U        | 10.9 | 10.9 U            | 10.9 | 10.9 U        | 10.9 | 10.9 U            | 10.9 | 10.9 U        | 10.9 | 10.9 U            | 10.9 |
| Selenium                   | 50       | 1.8 U         | 1.8  | 1.8 U             | 1.8  | 1.5 U         | 1.5  | 1.5 U             | 1.5  | 1.8 U         | 1.8  | 1.8 U             | 1.8  |
| Thallium                   | 10       | 0.70 U        | 0.70 | 0.70 U            | 0.70 | 0.70 U        | 0.70 | 0.70 U            | 0.70 | 0.70 U        | 0.70 | 0.70 U            | 0.70 |
| Vanadium                   |          | 2.1 U         | 2.1  | 2.1 U             | 2.1  | 2.1 U         | 2.1  | 2.1 U             | 2.1  | 2.1 U         | 2.1  | 2.1 U             | 2.1  |
| Zinc                       | 5000     | 44.0          | 1.9  | 42.5              | 1.9  | 66.9          | 1.9  | 1.9 U             | 1.9  | 112           | 1.9  | 3.3               | 1.9  |
| Cyanide                    | 200      | 10.0 U        | 10.0 |                   |      | 10 U          | 10   |                   |      | 10.0 U        | 10.0 |                   |      |
| Ammonia as Nitrogen        |          |               |      |                   |      |               |      |                   |      |               |      |                   |      |
| Sulfate                    |          |               |      |                   |      |               |      |                   |      |               |      |                   |      |
| Dilution Factor            |          |               |      |                   |      |               |      |                   |      |               |      |                   |      |
| Method:TAL Metals, Cyanide |          |               |      |                   |      |               |      |                   |      |               |      |                   |      |

# POST GROUNDWATER INORGANICS

| Geographical Location       |          | M14           |      | M14               |      | M14           |      | M14               |      | M14                   |      | M14                     |      | M14           |      |
|-----------------------------|----------|---------------|------|-------------------|------|---------------|------|-------------------|------|-----------------------|------|-------------------------|------|---------------|------|
| Sample                      |          | MP14-MW20-A01 |      | MP14-MW20-A01 SOL |      | MP14-MW20-A02 |      | MP14-MW20-A02 SOL |      | MP14-MW20-E02         |      | MP14-MW20-E02 SOL       |      | MP14-MW21-A01 |      |
| Sample Type                 |          | Total         |      | Soluble           |      | Total         |      | Soluble           |      | Field Rinsate - Total |      | Field Rinsate - Soluble |      | Total         |      |
| Batch#                      |          | 9502G403      |      | 9502G403          |      | 9503G722      |      | 9503G722          |      | 9503G722              |      | 9503G722                |      | 9502G403      |      |
| Prep#                       |          | 95GCN053      |      | 95GI460           |      | 95GI503       |      | 95GI503           |      | 95GI503               |      | 95GI503                 |      | 95GCN053      |      |
| RFW#                        |          | 010           |      | 011               |      | 001           |      | 002               |      | 003                   |      | 004                     |      | 012           |      |
| Dilution Factor             |          | 1.00          |      | 1.00              |      | 1.00          |      | 1.00              |      | 1.00                  |      | 1.00                    |      | 1.00          |      |
| Matrix                      |          | water         |      | water, filtered   |      | water         |      | water, filtered   |      | water                 |      | water, filtered         |      | water         |      |
| Units                       | ug/l     | ug/l          |      | ug/l              |      | ug/l          |      | ug/l              |      | ug/l                  |      | ug/l                    |      | ug/l          |      |
| Sampling Date               |          | 2/22/95       |      | 2/22/95           |      | 3/13/95       |      | 3/13/95           |      | 3/13/95               |      | 3/13/95                 |      | 2/22/95       |      |
| Analysis Date               |          | 3/7/95        |      | 3/8/95            |      | 3/15/95       |      | 3/15/95           |      | 3/15/95               |      | 3/15/95                 |      | 3/7/95        |      |
| Analysis                    | Standard | Analytical    | MDL  | Analytical        | MDL  | Analytical    | MDL  | Analytical        | MDL  | Analytical            | MDL  | Analytical              | MDL  | Analytical    | MDL  |
|                             |          | Result        |      | Result            |      | Result        |      | Result            |      | Result                |      | Result                  |      | Result        |      |
| Silver                      | 20       | 3.0 U         | 3.0  | 3.0 U             | 3.0  | 2.5 U         | 2.5  | 2.5 U             | 2.5  | 2.5 U                 | 2.5  | 2.5 U                   | 2.5  | 3.0 U         | 3.0  |
| Aluminum                    | 200      | 1290          | 24.0 | 63.0              | 24.0 | 517           | 16.8 | 85                | 16.8 | 16.8 U                | 16.8 | 16.8 U                  | 16.8 | 1130          | 24.0 |
| Arsenic                     | 8        | 2.4           | 1.9  | 1.9 U             | 1.9  | 10.2          | 1.3  | 8.8               | 1.3  | 1.3 U                 | 1.3  | 1.3 U                   | 1.3  | 1.9 U         | 1.9  |
| Barium                      | 2000     | 53.4          | 1.7  | 25.6              | 1.7  | 44.0          | 0.80 | 31.1              | 0.80 | 0.80 U                | 0.80 | 1.2                     | 0.80 | 27.0          | 1.7  |
| Beryllium                   | 20       | 0.90 U        | 0.90 | 0.90 U            | 0.90 | 0.34          | 0.30 | 0.30 U            | 0.30 | 0.30 U                | 0.30 | 0.30 U                  | 0.30 | 0.90 U        | 0.90 |
| Calcium                     |          | 30400         | 10.4 | 28300             | 10.4 | 33300         | 8.4  | 32500             | 8.4  | 103                   | 8.4  | 102                     | 8.4  | 32400         | 10.4 |
| Cadmium                     | 4        | 2.8 U         | 2.8  | 2.8 U             | 2.8  | 2.9 U         | 2.9  | 2.9 U             | 2.9  | 2.9 U                 | 2.9  | 2.9 U                   | 2.9  | 2.8 U         | 2.8  |
| Cobalt                      |          | 3.0 U         | 3.0  | 3.0 U             | 3.0  | 2.3 U         | 2.3  | 2.3 U             | 2.3  | 2.3 U                 | 2.3  | 2.3 U                   | 2.3  | 3.0 U         | 3.0  |
| Chromium                    | 100      | 16.9          | 2.9  | 2.9 U             | 2.9  | 4.7 U         | 4.7  | 4.7 U             | 4.7  | 4.7 U                 | 4.7  | 4.7 U                   | 4.7  | 10.8          | 2.9  |
| Copper                      | 1000     | 4.7           | 1.9  | 1.9 U             | 1.9  | 11.9          | 4.0  | 4.0 U             | 4.0  | 4.0 U                 | 4.0  | 4.0 U                   | 4.0  | 1.9 U         | 1.9  |
| Iron                        | 300      | 8890          | 6.4  | 4480              | 6.4  | 7030          | 2.5  | 5350              | 2.5  | 9.6                   | 2.5  | 9.2                     | 2.5  | 4880          | 6.4  |
| Mercury                     | 2        | 0.20 U        | 0.20 | 0.20 U            | 0.20 | 0.20 U        | 0.20 | 0.20 U            | 0.20 | 0.20 U                | 0.20 | 0.20 U                  | 0.20 | 0.20 U        | 0.20 |
| Potassium                   |          | 5340          | 685  | 4230              | 685  | 5292          | 67.9 | 3800              | 67.9 | 67.9 U                | 67.9 | 67.9 U                  | 67.9 | 6920          | 685  |
| Magnesium                   |          | 4330          | 18.3 | 3720              | 18.3 | 4210          | 34.3 | 4010              | 34.3 | 34.3 U                | 34.3 | 34.3 U                  | 34.3 | 3930          | 18.3 |
| Manganese                   | 50       | 186           | 1.8  | 171               | 1.8  | 213           | 0.90 | 209               | 0.90 | 0.90 U                | 0.90 | 0.90 U                  | 0.90 | 62.5          | 1.8  |
| Sodium                      | 50000    | 23300         | 30.5 | 22100             | 30.5 | 21900         | 19.1 | 20600             | 19.1 | 56.3                  | 19.1 | 142                     | 19.1 | 6360          | 30.5 |
| Nickel                      | 100      | 10.8 U        | 10.8 | 10.8 U            | 10.8 | 9.2           | 4.2  | 4.2 U             | 4.2  | 4.2 U                 | 4.2  | 4.2 U                   | 4.2  | 10.8 U        | 10.8 |
| Lead                        | 10       | 3.8           | 1.6  | 1.6 U             | 1.6  | 5.5           | 1.1  | 1.1 U             | 1.1  | 1.5                   | 1.1  | 1.1 U                   | 1.1  | 3.1           | 1.6  |
| Antimony                    | 20       | 20.7 U        | 20.7 | 20.7 U            | 20.7 | 10.9 U        | 10.9 | 10.9 U            | 10.9 | 10.9 U                | 10.9 | 10.9 U                  | 10.9 | 20.7 U        | 20.7 |
| Selenium                    | 50       | 1.5 U         | 1.5  | 1.5 U             | 1.5  | 1.5 U         | 1.5  | 1.5 U             | 1.5  | 1.5 U                 | 1.5  | 1.5 U                   | 1.5  | 1.5 U         | 1.5  |
| Thallium                    | 10       | 0.70 U        | 0.70 | 0.70 U            | 0.70 | 0.70 U        | 0.70 | 0.70 U            | 0.70 | 0.70 U                | 0.70 | 0.70 U                  | 0.70 | 0.70 U        | 0.70 |
| Vanadium                    |          | 8.5           | 2.3  | 4.0               | 2.3  | 4.0           | 2.1  | 3.1               | 2.1  | 2.1 U                 | 2.1  | 2.1 U                   | 2.1  | 7.1           | 2.3  |
| Zinc                        | 5000     | 7.2           | 3.8  | 3.8 U             | 3.8  | 21.8          | 1.9  | 10.1              | 1.9  | 3.9                   | 1.9  | 4.2                     | 1.9  | 11.1          | 3.8  |
| Cyanide                     | 200      | 10 U          | 10   |                   |      | 10 U          | 10   |                   |      | 10 U                  | 10   |                         |      | 10 U          | 10   |
| Ammonia as Nitrogen         |          |               |      |                   |      |               |      |                   |      |                       |      |                         |      |               |      |
| Sulfate                     |          |               |      |                   |      |               |      |                   |      |                       |      |                         |      |               |      |
| Dilution Factor             |          |               |      |                   |      |               |      |                   |      |                       |      |                         |      |               |      |
| Method: TAL Metals, Cyanide |          |               |      |                   |      |               |      |                   |      |                       |      |                         |      |               |      |

**MAIN POST  
GROUNDWATER INORGANICS**

| Geographical Location      |          | M14               |      | M14           |      | M14               |      | M18           |      | M18               |      | M18           |      | M18               |      |
|----------------------------|----------|-------------------|------|---------------|------|-------------------|------|---------------|------|-------------------|------|---------------|------|-------------------|------|
| Sample                     |          | MP14-MW21-A01 SOL |      | MP14-MW21-A02 |      | MP14-MW21-A02 SOL |      | MP18-MW03-A01 |      | MP18-MW03-A01 SOL |      | MP18-MW03-A02 |      | MP18-MW03-A02 SOL |      |
| Sample Type                |          | Soluble           |      | Total         |      | Soluble           |      | Total         |      | Soluble           |      | Total         |      | Soluble           |      |
| Batch#                     |          | 9502G403          |      | 9503G660      |      | 9503G660          |      | 9505G825      |      | 9505G825          |      | 9505G139      |      | 9505G139          |      |
| Prep#                      |          | 95GI460           |      | 95GI488       |      | 95GI488           |      | 95GI713       |      | 95GI713           |      | 95GI761       |      | 95GI761           |      |
| RFW#                       |          | 013               |      | 019           |      | 020               |      | 001           |      | 002               |      | 001           |      | 001               |      |
| Dilution Factor            |          | 1.00              |      | 1.00          |      | 1.00              |      | 1.00          |      | 1.00              |      | 1.00          |      | 1.00              |      |
| Matrix                     |          | water, filtered   |      | water         |      | water, filtered   |      | water         |      | water, filtered   |      | water         |      | water, filtered   |      |
| Units                      | ug/l     | ug/l              |      | ug/l          |      | ug/l              |      | ug/l          |      | ug/l              |      | ug/l          |      | ug/l              |      |
| Sampling Date              |          | 2/22/95           |      | 3/9/95        |      | 3/9/95            |      | 5/10/95       |      | 5/10/95           |      | 5/25/95       |      | 5/25/95           |      |
| Analysis Date              |          | 3/8/95            |      | 3/13/95       |      | 3/13/95           |      | 5/24/95       |      | 5/24/95           |      | 6/7/95        |      | 6/7/95            |      |
| Analysis                   | Standard | Analytical        | MDL  | Analytical    | MDL  | Analytical        | MDL  | Analytical    | MDL  | Analytical        | MDL  | Analytical    | MDL  | Analytical        | MDL  |
|                            |          | Result            |      | Result        |      | Result            |      | Result        |      | Result            |      | Result        |      | Result            |      |
| Silver                     | 20       | 3.0 U             | 3.0  | 3.0 U         | 3.0  | 3.0 U             | 3.0  | 1.9 U         | 1.9  | 1.9 U             | 1.9  | 1.9 U         | 1.9  | 1.9 U             | 1.9  |
| Aluminum                   | 200      | 24.0 U            | 24.0 | 1630          | 24.0 | 24.0 U            | 24.0 | 6410          | 15.7 | 368               | 15.7 | 8980          | 15.7 | 251               | 15.7 |
| Arsenic                    | 8        | 1.9 U             | 1.9  | 3.7           | 1.3  | 1.8               | 1.3  | 4.5           | 1.4  | 1.4 U             | 1.4  | 5.1           | 1.7  | 1.7 U             | 1.7  |
| Barium                     | 2000     | 23.3              | 1.7  | 43.4          | 1.7  | 22.4              | 1.7  | 12.1          | 0.80 | 2.3               | 0.80 | 15.2          | 0.80 | 1.5               | 0.80 |
| Beryllium                  | 20       | 0.90 U            | 0.90 | 0.90 U        | 0.90 | 0.90 U            | 0.90 | 0.77 U        | 0.30 | 0.30 U            | 0.30 | 1.2           | 0.30 | 0.30 U            | 0.30 |
| Calcium                    |          | 32600             | 10.4 | 33200         | 10.4 | 33900             | 10.4 | 5650          | 13.4 | 5270              | 13.4 | 5290          | 13.4 | 4320              | 13.4 |
| Cadmium                    | 4        | 2.8 U             | 2.8  | 2.8 U         | 2.8  | 2.8 U             | 2.8  | 3.9 U         | 3.9  | 3.9 U             | 3.9  | 3.9 U         | 3.9  | 4.7               | 3.9  |
| Cobalt                     |          | 3.0 U             | 3.0  | 3.0 U         | 3.0  | 3.0 U             | 3.0  | 3.3           | 1.4  | 2.5               | 1.4  | 5.0           | 1.4  | 3.1               | 1.4  |
| Chromium                   | 100      | 36.6              | 2.9  | 14.5          | 2.9  | 2.9 U             | 2.9  | 75.7 U        | 3.8  | 7.9               | 3.8  | 107.0         | 3.8  | 12.5              | 3.8  |
| Copper                     | 1000     | 1.9 U             | 1.9  | 2.7           | 1.9  | 1.9 U             | 1.9  | 2.7           | 1.8  | 3.1               | 1.8  | 3             | 1.8  | 1.8 U             | 1.8  |
| Iron                       | 300      | 625               | 6.4  | 6490          | 6.4  | 407               | 6.4  | 33000         | 3.6  | 2110              | 3.6  | 46900         | 3.6  | 1500              | 3.6  |
| Mercury                    | 2        | 0.20 U            | 0.20 | 0.20 U        | 0.20 | 0.20 U            | 0.20 | 0.20 U        | 0.20 | 0.20 U            | 0.20 | 0.20 U        | 0.20 | 0.20 U            | 0.20 |
| Potassium                  |          | 6610              | 685  | 8060          | 685  | 7110              | 685  | 9770          | 81.2 | 3340              | 81.2 | 11700         | 81.2 | 3280              | 81.2 |
| Magnesium                  |          | 3600              | 18.3 | 4190          | 18.3 | 3780              | 18.3 | 5850          | 37.2 | 3170              | 37.2 | 6440          | 37.2 | 2600              | 37.2 |
| Manganese                  | 50       | 56.4              | 1.8  | 66.4          | 1.8  | 56.7              | 1.8  | 32.6          | 0.70 | 18.6              | 0.70 | 44.0          | 0.70 | 16.7              | 0.70 |
| Sodium                     | 50000    | 6460              | 30.5 | 7040          | 30.5 | 7850              | 30.5 | 58700         | 11.8 | 58600             | 11.8 | 53200         | 11.8 | 53500             | 11.8 |
| Nickel                     | 100      | 10.8 U            | 10.8 | 10.8 U        | 10.8 | 10.8 U            | 10.8 | 6.4           | 5.4  | 5.4               | 5.4  | 8.2           | 5.4  | 6.0               | 5.4  |
| Lead                       | 10       | 1.6 U             | 1.6  | 3.8           | 1.6  | 1.6               | 1.6  | 6.1           | 0.80 | 0.80 U            | 0.80 | 10.3          | 0.90 | 0.90 U            | 0.90 |
| Antimony                   | 20       | 20.7 U            | 20.7 | 20.7 U        | 20.7 | 20.7 U            | 20.7 | 12.0 U        | 12.0 | 12.0 U            | 12.0 | 12.0 U        | 12.0 | 14.6              | 12.0 |
| Selenium                   | 50       | 1.5 U             | 1.5  | 1.8 U         | 1.8  | 1.8 U             | 1.8  | 1.8 U         | 1.8  | 1.8 U             | 1.8  | 1.8 U         | 1.8  | 1.8 U             | 1.8  |
| Thallium                   | 10       | 0.70 U            | 0.70 | 1.7 U         | 1.7  | 1.7 U             | 1.7  | 0.70 U        | 0.70 | 0.70 U            | 0.70 | 0.70 U        | 0.70 | 0.70 U            | 0.70 |
| Vanadium                   |          | 2.3 U             | 2.3  | 10.4          | 2.3  | 4.6               | 2.3  | 35.9          | 1.5  | 2.2               | 1.5  | 53.6          | 1.5  | 5.3               | 1.5  |
| Zinc                       | 5000     | 3.8 U             | 3.8  | 15.9          | 3.8  | 3.8 U             | 3.8  | 78.2          | 2.2  | 33.9              | 2.2  | 99.6          | 2.2  | 28.4              | 2.2  |
| Cyanide                    | 200      |                   |      | 10 U          | 10   |                   |      |               |      |                   |      |               |      |                   |      |
| Ammonia as Nitrogen        |          |                   |      |               |      |                   |      |               |      |                   |      |               |      |                   |      |
| Sulfate                    |          |                   |      |               |      |                   |      |               |      |                   |      |               |      |                   |      |
| Dilution Factor            |          |                   |      |               |      |                   |      |               |      |                   |      |               |      |                   |      |
| Method:TAL Metals, Cyanide |          |                   |      |               |      |                   |      |               |      |                   |      |               |      |                   |      |

# POST GROUNDWATER INORGANICS

| Geographical Location      |          | M18                   |      | M18                     |      | M18           |      | M18               |      | M18           |        | M18               |        |
|----------------------------|----------|-----------------------|------|-------------------------|------|---------------|------|-------------------|------|---------------|--------|-------------------|--------|
| Sample                     |          | MP18-MW03-E01         |      | MP18-MW03-E01 SOL       |      | MP18-MW24-A01 |      | MP18-MW24-A01 SOL |      | MP18-MW24-A02 |        | MP18-MW24-A02 SOL |        |
| Sample Type                |          | Field Rinsate - Total |      | Field Rinsate - Soluble |      | Total         |      | Soluble           |      | Total         |        | Soluble           |        |
| Batch#                     |          | 9505G825              |      | 9505G825                |      | 9502G238      |      | 9502G238          |      | 9503G681      |        | 9503G681          |        |
| Prep#                      |          | 95GI713               |      | 95GI713                 |      | 95GI397       |      | 95GI397           |      | 95GI494       |        | 95GI494           |        |
| RFW#                       |          | 004                   |      | 005                     |      | 001           |      | 002               |      | 009           |        | 010               |        |
| Dilution Factor            |          | 1.00                  |      | 1.00                    |      | 1.00          |      | 1.00              |      | 1.00          |        | 1.00              |        |
| Matrix                     |          | water                 |      | water, filtered         |      | water         |      | water, filtered   |      | water         |        | water, filtered   |        |
| Units                      | ug/l     | ug/l                  |      | ug/l                    |      | ug/l          |      | ug/l              |      | ug/l          |        | ug/l              |        |
| Sampling Date              |          | 5/10/95               |      | 5/10/95                 |      | 2/17/95       |      | 2/17/95           |      | 3/10/95       |        | 3/10/95           |        |
| Analysis Date              |          | 5/24/95               |      | 5/24/95                 |      | 2/22/95       |      | 2/22/95           |      | 3/15/95       |        | 3/15/95           |        |
| Analysis                   | Standard | Analytical            | MDL  | Analytical              | MDL  | Analytical    | MDL  | Analytical        | MDL  | Analytical    | MDL    | Analytical        | MDL    |
|                            |          | Result                |      | Result                  |      | Result        |      | Result            |      | Result        |        | Result            |        |
| Silver                     | 20       | 1.9 U                 | 1.9  | 1.9 U                   | 1.9  | 3.0 U         | 3.0  | 3.0 U             | 3.0  | 2.5 U         | 2.5    | 2.5 U             | 2.5    |
| Aluminum                   | 200      | 33.2                  | 15.7 | 20.5                    | 15.7 | 3790          | 24.0 | 46.2              | 24.0 | 7440          | 16.8   | 50.2              | 16.8   |
| Arsenic                    | 8        | 1.4 U                 | 1.4  | 1.4 U                   | 1.4  | 13.0          | 1.9  | 3.7               | 1.9  | 20.3          | 1.7    | 4.9               | 1.7    |
| Barium                     | 2000     | 0.92                  | 0.80 | 0.80 U                  | 0.80 | 272           | 1.7  | 183               | 1.7  | 262           | 0.80   | 169               | 0.80   |
| Beryllium                  | 20       | 0.30 U                | 0.30 | 0.30 U                  | 0.30 | 1.6           | 0.90 | 1.2               | 0.90 | 1.4           | 0.30   | 0.56              | 0.30   |
| Calcium                    |          | 65.6                  | 13.4 | 45.4                    | 13.4 | 714000        | 10.4 | 680000            | 10.4 | 787000        | 42.0 * | 748000            | 42.0 * |
| Cadmium                    | 4        | 3.9 U                 | 3.9  | 3.9 U                   | 3.9  | 2.8 U         | 2.8  | 2.8 U             | 2.8  | 2.9 U         | 2.9    | 2.9 U             | 2.9    |
| Cobalt                     |          | 2.2                   | 1.4  | 2.2                     | 1.4  | 3.0 U         | 3.0  | 3.0 U             | 3.0  | 2.3 U         | 2.3    | 2.3 U             | 2.3    |
| Chromium                   | 100      | 3.8 U                 | 3.8  | 4.1                     | 3.8  | 33.8          | 2.9  | 3.6               | 2.9  | 62.5          | 4.7    | 4.7 U             | 4.7    |
| Copper                     | 1000     | 2.9                   | 1.8  | 1.8 U                   | 1.8  | 9.4           | 1.9  | 4.6               | 1.9  | 7.5           | 4.0    | 4.0 U             | 4.0    |
| Iron                       | 300      | 19.3                  | 3.6  | 13.1                    | 3.6  | 37900         | 6.4  | 15300             | 6.4  | 42100         | 2.5    | 16300             | 2.5    |
| Mercury                    | 2        | 0.20 U                | 0.20 | 0.20 U                  | 0.20 | 0.20 U        | 0.20 | 0.20              | 0.20 | 0.20 U        | 0.20   | 0.20 U            | 0.20   |
| Potassium                  |          | 81.2 U                | 81.2 | 81.2 U                  | 81.2 | 18900         | 685  | 16800             | 685  | 19500         | 67.9   | 16200             | 67.9   |
| Magnesium                  |          | 37.2 U                | 37.2 | 37.2 U                  | 37.2 | 54300         | 18.3 | 51400             | 18.3 | 45200         | 34.3   | 47900             | 34.3   |
| Manganese                  | 50       | 1.1                   | 0.70 | 0.72                    | 0.70 | 756           | 1.8  | 697               | 1.8  | 668           | 0.90   | 666               | 0.90   |
| Sodium                     | 50000    | 101                   | 11.8 | 94.1                    | 11.8 | 47100         | 30.5 | 45700             | 30.5 | 36900         | 19.1   | 38400             | 19.1   |
| Nickel                     | 100      | 5.4 U                 | 5.4  | 5.4 U                   | 5.4  | 10.8 U        | 10.8 | 10.8 U            | 10.8 | 11.4          | 4.2    | 4.2 U             | 4.2    |
| Lead                       | 10       | 0.80 U                | 0.80 | 0.80 U                  | 0.80 | 28.6          | 1.6  | 1.6 U             | 1.6  | 40.8          | 2.4 ** | 1.2 U             | 1.2    |
| Antimony                   | 20       | 12.0 U                | 12.0 | 12.0 U                  | 12.0 | 20.7 U        | 20.7 | 20.7 U            | 20.7 | 10.9 U        | 10.9   | 10.9 U            | 10.9   |
| Selenium                   | 50       | 1.8 U                 | 1.8  | 1.8 U                   | 1.8  | 1.5 U         | 1.5  | 1.5 U             | 1.5  | 2.4           | 1.8    | 1.8 U             | 1.8    |
| Thallium                   | 10       | 0.70 U                | 0.70 | 0.70 U                  | 0.70 | 0.70 U        | 0.70 | 0.70 U            | 0.70 | 0.70 U        | 0.70   | 0.70 U            | 0.70   |
| Vanadium                   |          | 1.5 U                 | 1.5  | 1.5 U                   | 1.5  | 22.3          | 2.3  | 2.3 U             | 2.3  | 36.0          | 2.1    | 2.4               | 2.1    |
| Zinc                       | 5000     | 2.2 U                 | 2.2  | 2.2 U                   | 2.2  | 80.5          | 3.8  | 4.2               | 3.8  | 101           | 1.9    | 12.6              | 1.9    |
| Cyanide                    | 200      |                       |      |                         |      |               |      |                   |      |               |        |                   |        |
| Ammonia as Nitrogen        |          |                       |      |                         |      |               |      |                   |      |               |        |                   |        |
| Sulfate                    |          |                       |      |                         |      |               |      |                   |      |               |        |                   |        |
| Dilution Factor            |          |                       |      |                         |      |               |      |                   |      | * = 5, ** = 2 |        | * = 5             |        |
| Method:TAL Metals, Cyanide |          |                       |      |                         |      |               |      |                   |      |               |        |                   |        |

**MAIN POST  
GROUNDWATER INORGANICS**

| Geographical Location      |          | M18               |        | M18                 |        | M18                   |      | M18                     |      | M18                   |      | M18                     |      | M18           |      |
|----------------------------|----------|-------------------|--------|---------------------|--------|-----------------------|------|-------------------------|------|-----------------------|------|-------------------------|------|---------------|------|
| Sample                     |          | MP18-MW24-C02     |        | MP18-MW24-C02 SOL   |        | MP18-MW24-E01         |      | MP18-MW24-E01 SOL       |      | MP18-MW24-E02         |      | MP18-MW24-E02 SOL       |      | MP18-MW25-A01 |      |
| Sample Type                |          | Duplicate - Total |        | Duplicate - Soluble |        | Field Rinsate - Total |      | Field Rinsate - Soluble |      | Field Rinsate - Total |      | Field Rinsate - Soluble |      | Total         |      |
| Batch#                     |          | 9503G681          |        | 9503G681            |        | 9502G238              |      | 9502G238                |      | 9503G681              |      | 9503G681                |      | 9502G238      |      |
| Prep#                      |          | 95GI494           |        | 95GI494             |        | 95GI397               |      | 95GI397                 |      | 95GI494               |      | 95GI494                 |      | 95GI397       |      |
| RFW#                       |          | 011               |        | 012                 |        | 004                   |      | 005                     |      | 014                   |      | 015                     |      | 006           |      |
| Dilution Factor            |          | 1.00              |        | 1.00                |        | 1.00                  |      | 1.00                    |      | 1.00                  |      | 1.00                    |      | 1.00          |      |
| Matrix                     |          | water             |        | water, filtered     |        | water                 |      | water, filtered         |      | water                 |      | water, filtered         |      | water         |      |
| Units                      | ug/l     | ug/l              |        | ug/l                |        | ug/l                  |      | ug/l                    |      | ug/l                  |      | ug/l                    |      | ug/l          |      |
| Sampling Date              |          | 3/10/95           |        | 3/10/95             |        | 2/17/95               |      | 2/17/95                 |      | 3/10/95               |      | 3/10/95                 |      | 2/17/95       |      |
| Analysis Date              |          | 3/15/95           |        | 3/15/95             |        | 2/22/95               |      | 2/22/95                 |      | 3/15/95               |      | 3/15/95                 |      | 2/22/95       |      |
| Analysis                   | Standard | Analytical        | MDL    | Analytical          | MDL    | Analytical            | MDL  | Analytical              | MDL  | Analytical            | MDL  | Analytical              | MDL  | Analytical    | MDL  |
|                            |          | Result            |        | Result              |        | Result                |      | Result                  |      | Result                |      | Result                  |      | Result        |      |
| Silver                     | 20       | 2.5 U             | 2.5    | 2.5 U               | 2.5    | 3.0 U                 | 3.0  | 3.0 U                   | 3.0  | 2.5 U                 | 2.5  | 2.5 U                   | 2.5  | 3.0 U         | 3.0  |
| Aluminum                   | 200      | 7330              | 16.8   | 36.2                | 16.8   | 25.0                  | 24.0 | 28.4                    | 24.0 | 20.0                  | 16.8 | 16.8 U                  | 16.8 | 293           | 24.0 |
| Arsenic                    | 8        | 20.6              | 3.4 ** | 6.4                 | 1.7    | 1.9 U                 | 1.9  | 1.9 U                   | 1.9  | 1.7 U                 | 1.7  | 1.7 U                   | 1.7  | 6.3           | 1.9  |
| Barium                     | 2000     | 262               | 0.80   | 158                 | 0.80   | 1.7 U                 | 1.7  | 1.7 U                   | 1.7  | 0.80 U                | 0.80 | 0.80 U                  | 0.80 | 64.4          | 1.7  |
| Beryllium                  | 20       | 1.7               | 0.30   | 0.57                | 0.30   | 0.90 U                | 0.90 | 0.90 U                  | 0.90 | 0.30 U                | 0.30 | 0.30 U                  | 0.30 | 0.90 U        | 0.90 |
| Calcium                    |          | 780000            | 42.0 * | 727000              | 42.0 * | 282                   | 10.4 | 161                     | 10.4 | 460                   | 8.4  | 106                     | 8.4  | 167000        | 10.4 |
| Cadmium                    | 4        | 4.1               | 2.9    | 2.9                 | 2.9    | 2.8 U                 | 2.8  | 2.8 U                   | 2.8  | 2.9 U                 | 2.9  | 2.9 U                   | 2.9  | 2.8 U         | 2.8  |
| Cobalt                     |          | 2.8               | 2.3    | 2.3 U               | 2.3    | 3.0 U                 | 3.0  | 3.0 U                   | 3.0  | 2.3 U                 | 2.3  | 2.3 U                   | 2.3  | 3.0 U         | 3.0  |
| Chromium                   | 100      | 64.7              | 4.7    | 4.7 U               | 4.7    | 2.9 U                 | 2.9  | 2.9 U                   | 2.9  | 4.7 U                 | 4.7  | 4.7 U                   | 4.7  | 3.9           | 2.9  |
| Copper                     | 1000     | 9.2               | 4.0    | 4.0 U               | 4.0    | 1.9 U                 | 1.9  | 2.7                     | 1.9  | 5.4                   | 4.0  | 4.0                     | 4.0  | 2.1           | 1.9  |
| Iron                       | 300      | 43800             | 2.5    | 15200               | 2.5    | 13.4                  | 6.4  | 13.5                    | 6.4  | 24.5                  | 2.5  | 15.7                    | 2.5  | 7540          | 6.4  |
| Mercury                    | 2        | 0.20 U            | 0.20   | 0.20 U              | 0.20   | 0.20 U                | 0.20 | 0.20 U                  | 0.20 | 0.20 U                | 0.20 | 0.20 U                  | 0.20 | 0.20 U        | 0.20 |
| Potassium                  |          | 19100             | 67.9   | 15100               | 67.9   | 685 U                 | 685  | 685 U                   | 685  | 67.9 U                | 67.9 | 67.9 U                  | 67.9 | 26500         | 685  |
| Magnesium                  |          | 45100             | 34.3   | 44300               | 34.3   | 20.0                  | 18.3 | 23.9                    | 18.3 | 34.3 U                | 34.3 | 34.3 U                  | 34.3 | 63100         | 18.3 |
| Manganese                  | 50       | 680               | 0.90   | 634                 | 0.90   | 1.8 U                 | 1.8  | 1.8 U                   | 1.8  | 0.90 U                | 0.90 | 0.90 U                  | 0.90 | 1050          | 1.8  |
| Sodium                     | 50000    | 35800             | 19.1   | 35600               | 19.1   | 160                   | 30.5 | 118                     | 30.5 | 75.8                  | 19.1 | 97.2                    | 19.1 | 293000        | 30.5 |
| Nickel                     | 100      | 11.3              | 4.2    | 4.2 U               | 4.2    | 10.8 U                | 10.8 | 10.8 U                  | 10.8 | 4.2 U                 | 4.2  | 4.2 U                   | 4.2  | 10.8 U        | 10.8 |
| Lead                       | 10       | 44.6              | 2.4 ** | 1.2 U               | 1.2    | 1.6 U                 | 1.6  | 1.6 U                   | 1.6  | 1.2 U                 | 1.2  | 1.2 U                   | 1.2  | 1.6 U         | 1.6  |
| Antimony                   | 20       | 10.9 U            | 10.9   | 10.9 U              | 10.9   | 21                    | 20.7 | 20.7 U                  | 20.7 | 10.9 U                | 10.9 | 10.9 U                  | 10.9 | 20.7 U        | 20.7 |
| Selenium                   | 50       | 1.8               | 1.8    | 1.8 U               | 1.8    | 1.5 U                 | 1.5  | 1.5 U                   | 1.5  | 1.8 U                 | 1.8  | 1.8 U                   | 1.8  | 1.5 U         | 1.5  |
| Thallium                   | 10       | 0.70 U            | 0.70   | 0.70 U              | 0.70   | 0.70 U                | 0.70 | 0.70 U                  | 0.70 | 0.70 U                | 0.70 | 0.70 U                  | 0.70 | 0.70 U        | 0.70 |
| Vanadium                   |          | 37.1              | 2.1    | 2.1 U               | 2.1    | 2.3 U                 | 2.3  | 2.3 U                   | 2.3  | 2.1 U                 | 2.1  | 2.1 U                   | 2.1  | 6.7           | 2.3  |
| Zinc                       | 5000     | 103               | 1.9    | 13.7                | 1.9    | 3.8 U                 | 3.8  | 3.8 U                   | 3.8  | 1.9 U                 | 1.9  | 1.9 U                   | 1.9  | 4.0           | 3.8  |
| Cyanide                    | 200      |                   |        |                     |        |                       |      |                         |      |                       |      |                         |      |               |      |
| Ammonia as Nitrogen        |          |                   |        |                     |        |                       |      |                         |      |                       |      |                         |      |               |      |
| Sulfate                    |          |                   |        |                     |        |                       |      |                         |      |                       |      |                         |      |               |      |
| Dilution Factor            |          | * = 5, ** = 2     |        | * = 5               |        |                       |      |                         |      |                       |      |                         |      |               |      |
| Method:TAL Metals, Cyanide |          |                   |        |                     |        |                       |      |                         |      |                       |      |                         |      |               |      |



# POST GROUNDWATER INORGANICS

| Geographical Location      |          | M18               |      | M18           |       | M18               |      | M18               |      | M18                 |      |
|----------------------------|----------|-------------------|------|---------------|-------|-------------------|------|-------------------|------|---------------------|------|
| Sample                     |          | MP18-MW25-A01 SOL |      | MP18-MW25-A02 |       | MP18-MW25-A02 SOL |      | MP18-MW25-C01     |      | MP18-MW25-C01 SOL   |      |
| Sample Type                |          | Soluble           |      | Total         |       | Soluble           |      | Duplicate - Total |      | Duplicate - Soluble |      |
| Batch#                     |          | 9502G238          |      | 9503G681      |       | 9503G681          |      | 9502G238          |      | 9502G238            |      |
| Prep#                      |          | 95GI397           |      | 95GI494       |       | 95GI494           |      | 95GI397           |      | 95GI397             |      |
| RFW#                       |          | 007               |      | 016           |       | 015               |      | 008               |      | 009                 |      |
| Dilution Factor            |          | 1.00              |      | 1.00          |       | 1.00              |      | 1.00              |      | 1.00                |      |
| Matrix                     |          | water, filtered   |      | water         |       | water, filtered   |      | water             |      | water, filtered     |      |
| Units                      | ug/l     | ug/l              |      | ug/l          |       | ug/l              |      | ug/l              |      | ug/l                |      |
| Sampling Date              |          | 2/17/95           |      | 3/10/95       |       | 3/10/95           |      | 2/17/95           |      | 2/17/95             |      |
| Analysis Date              |          | 2/22/95           |      | 3/15/95       |       | 3/15/95           |      | 2/22/95           |      | 2/22/95             |      |
| Analysis                   | Standard | Analytical        | MDL  | Analytical    | MDL   | Analytical        | MDL  | Analytical        | MDL  | Analytical          | MDL  |
|                            |          | Result            |      | Result        |       | Result            |      | Result            |      | Result              |      |
| Silver                     | 20       | 3.0 U             | 3.0  | 2.5 U         | 2.5   | 2.5 U             | 2.5  | 3.0 U             | 3.0  | 3.0 U               | 3.0  |
| Aluminum                   | 200      | 30.8              | 24.0 | 7640          | 16.8  | 16.8 U            | 16.8 | 566               | 24.0 | 28.3                | 24.0 |
| Arsenic                    | 8        | 6.0               | 1.9  | 16.5          | 1.7   | 4.8               | 1.7  | 5.8               | 1.9  | 5.3                 | 1.9  |
| Barium                     | 2000     | 57.3              | 1.7  | 117           | 0.80  | 60.2              | 0.80 | 68.8              | 1.7  | 66.1                | 1.7  |
| Beryllium                  | 20       | 0.90 U            | 0.90 | 0.91          | 0.30  | 0.35              | 0.30 | 0.90 U            | 0.90 | 0.90 U              | 0.90 |
| Calcium                    |          | 163000            | 10.4 | 162000        | 8.4   | 161000            | 8.4  | 176000            | 10.4 | 159000              | 10.4 |
| Cadmium                    | 4        | 2.8 U             | 2.8  | 5.8           | 2.9   | 2.9 U             | 2.9  | 2.8 U             | 2.8  | 2.8 U               | 2.8  |
| Cobalt                     |          | 3.0 U             | 3.0  | 2.5           | 2.3   | 2.3 U             | 2.3  | 3.0 U             | 3.0  | 3.0 U               | 3.0  |
| Chromium                   | 100      | 2.9 U             | 2.9  | 40.7          | 4.7   | 4.7 U             | 4.7  | 5.7               | 2.9  | 2.9 U               | 2.9  |
| Copper                     | 1000     | 2.1               | 1.9  | 4.0 U         | 4.0   | 4.0 U             | 4.0  | 3.2               | 1.9  | 2.7                 | 1.9  |
| Iron                       | 300      | 5100              | 6.4  | 49700         | 2.5   | 11700             | 2.5  | 6650              | 6.4  | 11000               | 6.4  |
| Mercury                    | 2        | 0.20 U            | 0.20 | 0.20 U        | 0.20  | 0.20 U            | 0.20 | 0.20 U            | 0.20 | 0.20 U              | 0.20 |
| Potassium                  |          | 25000             | 685  | 33300         | 67.9  | 29400             | 67.9 | 26300             | 685  | 34700               | 685  |
| Magnesium                  |          | 60600             | 18.3 | 75000         | 34.3  | 70100             | 34.3 | 63100             | 18.3 | 81000               | 18.3 |
| Manganese                  | 50       | 1030              | 1.8  | 830           | 0.90  | 730               | 0.90 | 1030              | 1.8  | 874                 | 1.8  |
| Sodium                     | 50000    | 277000            | 30.5 | 434000        | 19.1  | 412000            | 19.1 | 284000            | 30.5 | 488000              | 30.5 |
| Nickel                     | 100      | 10.8 U            | 10.8 | 14.6          | 4.2   | 4.2 U             | 4.2  | 10.8 U            | 10.8 | 10.8 U              | 10.8 |
| Lead                       | 10       | 1.6 U             | 1.6  | 21.6          | 6.0 * | 1.2 U             | 1.2  | 1.7               | 1.6  | 1.6 U               | 1.6  |
| Antimony                   | 20       | 20.7 U            | 20.7 | 10.9 U        | 10.9  | 10.9 U            | 10.9 | 20.7 U            | 20.7 | 20.7 U              | 20.7 |
| Selenium                   | 50       | 1.5 U             | 1.5  | 1.8 U         | 1.8   | 1.8 U             | 1.8  | 1.5 U             | 1.5  | 1.5 U               | 1.5  |
| Thallium                   | 10       | 0.70 U            | 0.70 | 0.70 U        | 0.70  | 0.70 U            | 0.70 | 0.70 U            | 0.70 | 0.70 U              | 0.70 |
| Vanadium                   |          | 2.4               | 2.3  | 41.6          | 2.1   | 5.3               | 2.1  | 8.1               | 2.3  | 4.4                 | 2.3  |
| Zinc                       | 5000     | 3.8 U             | 3.8  | 62.4          | 1.9   | 3.4               | 1.9  | 4.7               | 3.8  | 3.8 U               | 3.8  |
| Cyanide                    | 200      |                   |      |               |       |                   |      |                   |      |                     |      |
| Ammonia as Nitrogen        |          |                   |      |               |       |                   |      |                   |      |                     |      |
| Sulfate                    |          |                   |      |               |       |                   |      |                   |      |                     |      |
| Dilution Factor            |          |                   |      | *=5           |       |                   |      |                   |      |                     |      |
| Method:TAL Metals, Cyanide |          |                   |      |               |       |                   |      |                   |      |                     |      |

# **MAIN POST** **GROUND WATER INORGANICS**

| Geographical Location      |          | B1           |      | B1               |      | B1           |      | B1               |      | B2           |      | B2               |      |
|----------------------------|----------|--------------|------|------------------|------|--------------|------|------------------|------|--------------|------|------------------|------|
| Sample                     |          | B1-MW01B-A01 |      | B1-MW01B-A01 SOL |      | B1-MW01B-A02 |      | B1-MW01B-A02 SOL |      | B2-MW02B-A01 |      | B2-MW02B-A01 SOL |      |
| Sample Type                |          | Total        |      | Soluble          |      | Total        |      | Soluble          |      | Total        |      | Soluble          |      |
| Batch#                     |          | 9502G169     |      | 9502G169         |      | 9503G616     |      | 9503G616         |      | 9502G169     |      | 9502G169         |      |
| Prep#                      |          | 95GI422      |      | 95GI422          |      | 95GI475      |      | 95GI475          |      | 95GI422      |      | 95GI422          |      |
| RFW#                       |          | 001          |      | 002              |      | 008          |      | 009              |      | 003          |      | 004              |      |
| Dilution Factor            |          | 1.00         |      | 1.00             |      | 1.00         |      | 1.00             |      | 1.00         |      | 1.00             |      |
| Matrix                     |          | water        |      | water, filtered  |      | water        |      | water, filtered  |      | water        |      | water, filtered  |      |
| Units                      | ug/l     | ug/l         |      | ug/l             |      | ug/l         |      | ug/l             |      | ug/l         |      | ug/l             |      |
| Sampling Date              |          | 2/14/95      |      | 2/14/95          |      | 3/7/95       |      | 3/7/95           |      | 2/15/95      |      | 2/15/95          |      |
| Analysis Date              |          | 2/23/95      |      | 2/27/95          |      | 3/13/95      |      | 3/13/95          |      | 2/23/95      |      | 2/27/95          |      |
| Analysis                   | Standard | Analytical   | MDL  | Analytical       | MDL  | Analytical   | MDL  | Analytical       | MDL  | Analytical   | MDL  | Analytical       | MDL  |
|                            |          | Result       |      | Result           |      | Result       |      | Result           |      | Result       |      | Result           |      |
| Silver                     | 20       | 2.5 U        | 2.5  | 2.5 U            | 2.5  | 2.5 U        | 2.5  | 2.5 U            | 2.5  | 2.5 U        | 2.5  | 2.5 U            | 2.5  |
| Aluminum                   | 200      | 2430         | 16.8 | 146              | 16.8 | 634          | 16.8 | 116              | 16.8 | 1070         | 16.8 | 40.9             | 16.8 |
| Arsenic                    | 8        | 1.9 U        | 1.9  | 1.9 U            | 1.9  | 1.9 U        | 1.9  | 1.9 U            | 1.9  | 4.8          | 1.9  | 1.9 U            | 1.9  |
| Barium                     | 2000     | 68.5         | 0.80 | 62.5             | 0.80 | 62.9         | 0.80 | 60.2             | 0.80 | 73.9         | 0.80 | 67.3             | 0.80 |
| Beryllium                  | 20       | 0.43         | 0.30 | 0.30 U           | 0.30 | 0.30 U       | 0.30 | 0.30 U           | 0.30 | 0.30 U       | 0.30 | 0.30 U           | 0.30 |
| Calcium                    |          | 5130         | 8.4  | 5090             | 8.4  | 4910         | 8.4  | 5040             | 8.4  | 40300        | 8.4  | 40200            | 8.4  |
| Cadmium                    | 4        | 2.9 U        | 2.9  | 2.9 U            | 2.9  | 2.9 U        | 2.9  | 2.9 U            | 2.9  | 2.9 U        | 2.9  | 2.9 U            | 2.9  |
| Cobalt                     |          | 6.4          | 2.3  | 4.6              | 2.3  | 4.5          | 2.3  | 4.9              | 2.3  | 4.0          | 2.3  | 2.3 U            | 2.3  |
| Chromium                   | 100      | 43.8         | 4.7  | 4.7 U            | 4.7  | 12.9         | 4.7  | 4.7 U            | 4.7  | 7.4          | 4.7  | 4.7 U            | 4.7  |
| Copper                     | 1000     | 4.0 U        | 4.0  | 4.0 U            | 4.0  | 4.0 U        | 4.0  | 4.0 U            | 4.0  | 4.0 U        | 4.0  | 4.0 U            | 4.0  |
| Iron                       | 300      | 12300        | 2.5  | 18.0             | 2.5  | 2430         | 2.5  | 20.9             | 2.5  | 40100        | 2.5  | 26600            | 2.5  |
| Mercury                    | 2        | 0.20 U       | 0.20 | 0.20 U           | 0.20 | 0.20 U       | 0.20 | 0.20 U           | 0.20 | 0.20 U       | 0.20 | 0.20 U           | 0.20 |
| Potassium                  |          | 3640         | 67.9 | 2880             | 67.9 | 3110         | 67.9 | 2910             | 67.9 | 9100         | 67.9 | 8790             | 67.9 |
| Magnesium                  |          | 9050         | 34.3 | 8640             | 34.3 | 8880         | 34.3 | 8850             | 34.3 | 7250         | 34.3 | 6730             | 34.3 |
| Manganese                  | 50       | 56.7         | 0.90 | 46.6             | 0.90 | 47.2         | 0.90 | 45.4             | 0.90 | 148          | 0.90 | 118              | 0.90 |
| Sodium                     | 50000    | 7070         | 19.1 | 7120             | 19.1 | 7020         | 19.1 | 7110             | 19.1 | 6170         | 19.1 | 6270             | 19.1 |
| Nickel                     | 100      | 40.1         | 4.2  | 35.4             | 4.2  | 32.0         | 4.2  | 33.2             | 4.2  | 5.8          | 4.2  | 6.4              | 4.2  |
| Lead                       | 10       | 2.8          | 1.6  | 1.6 U            | 1.6  | 1.2 U        | 1.2  | 1.2 U            | 1.2  | 2.7          | 1.6  | 1.6 U            | 1.6  |
| Antimony                   | 20       | 16.7         | 10.9 | 10.9 U           | 10.9 | 10.9 U       | 10.9 | 11.0             | 10.9 | 12           | 10.9 | 15.1             | 10.9 |
| Selenium                   | 50       | 1.5 U        | 1.5  | 1.5 U            | 1.5  | 1.8 U        | 1.8  | 1.8 U            | 1.8  | 1.5 U        | 1.5  | 1.5 U            | 1.5  |
| Thallium                   | 10       | 0.70 U       | 0.70 | 0.70 U           | 0.70 | 1.1 U        | 1.1  | 1.1 U            | 1.1  | 3.5 U        | 3.5  | 0.70 U           | 0.70 |
| Vanadium                   |          | 50.4         | 2.1  | 2.1 U            | 2.1  | 10.6         | 2.1  | 2.1 U            | 2.1  | 13.6         | 2.1  | 2.1 U            | 2.1  |
| Zinc                       | 5000     | 35.8         | 1.9  | 24.4             | 1.9  | 24.5         | 1.9  | 23.4             | 1.9  | 13.6         | 1.9  | 8.4              | 1.9  |
| Cyanide                    | 200      | 10 U         | 10   |                  |      | 10 U         | 10   |                  |      | 10 U         | 10   |                  |      |
| Dilution Factor            |          |              |      |                  |      |              |      |                  |      |              |      |                  |      |
| Method:TAL Metals, Cyanide |          |              |      |                  |      |              |      |                  |      |              |      |                  |      |

**MAIN POST  
GROUND WATER INORGANICS**

| Geographical Location       |          | B2           |      | B2               |      | B3           |      | B3               |      | B3            |        |
|-----------------------------|----------|--------------|------|------------------|------|--------------|------|------------------|------|---------------|--------|
| Sample                      |          | B2-MW02B-A02 |      | B2-MW02B-A02 SOL |      | B3-MW03B-A01 |      | B3-MW03B-A01 SOL |      | B3-MW03B-A02  |        |
| Sample Type                 |          | Total        |      | Soluble          |      | Total        |      | Soluble          |      | Total         |        |
| Batch#                      |          | 9503G616     |      | 9503G616         |      | 9502G169     |      | 9502G169         |      | 9503G740      |        |
| Prep#                       |          | 95GI475      |      | 95GI475          |      | 95GI422      |      | 95GI422          |      | 95GI519       |        |
| RFW#                        |          | 010          |      | 011              |      | 005          |      | 009              |      | 001           |        |
| Dilution Factor             |          | 1.00         |      | 1.00             |      | 1.00         |      | 1.00             |      | 1.00          |        |
| Matrix                      |          | water        |      | water, filtered  |      | water        |      | water, filtered  |      | water         |        |
| Units                       | ug/l     | ug/l         |      | ug/l             |      | ug/l         |      | ug/l             |      | ug/l          |        |
| Sampling Date               |          | 3/7/95       |      | 3/7/95           |      | 2/15/95      |      | 2/13/95          |      | 3/14/95       |        |
| Analysis Date               |          | 3/13/95      |      | 3/13/95          |      | 2/23/95      |      | 2/27/95          |      | 3/21/95       |        |
| Analysis                    | Standard | Analytical   | MDL  | Analytical       | MDL  | Analytical   | MDL  | Analytical       | MDL  | Analytical    | MDL    |
|                             |          | Result       |      | Result           |      | Result       |      | Result           |      | Result        |        |
| Silver                      | 20       | 2.5 U        | 2.5  | 2.5 U            | 2.5  | 2.5 U        | 2.5  | 2.5 U            | 2.5  | 3.0 U         | 3.0    |
| Aluminum                    | 200      | 454          | 16.8 | 16.8 U           | 16.8 | 5010         | 16.8 | 16.8 U           | 16.8 | 121000        | 24.0   |
| Arsenic                     | 8        | 3.9          | 1.9  | 1.9 U            | 1.9  | 7.1          | 1.9  | 1.9 U            | 1.9  | 89.3          | 9.5 *  |
| Barium                      | 2000     | 75.2         | 0.80 | 72.3             | 0.80 | 144          | 0.80 | 0.80 U           | 0.80 | 556           | 1.7    |
| Beryllium                   | 20       | 0.30 U       | 0.30 | 0.30 U           | 0.30 | 0.78         | 0.30 | 0.30 U           | 0.30 | 15.1          | 0.90   |
| Calcium                     |          | 41000        | 8.4  | 41100            | 8.4  | 27600        | 8.4  | 83.8             | 8.4  | 45400         | 10.4   |
| Cadmium                     | 4        | 2.9 U        | 2.9  | 2.9 U            | 2.9  | 2.9 U        | 2.9  | 2.9 U            | 2.9  | 9.5           | 2.8    |
| Cobalt                      |          | 2.3 U        | 2.3  | 2.3 U            | 2.3  | 9.4          | 2.3  | 2.3 U            | 2.3  | 50.0          | 3.0    |
| Chromium                    | 100      | 4.7 U        | 4.7  | 4.7 U            | 4.7  | 61.6         | 4.7  | 4.7 U            | 4.7  | 1600          | 2.9    |
| Copper                      | 1000     | 4.0 U        | 4.0  | 4.0 U            | 4.0  | 5.2          | 4.0  | 4.0 U            | 4.0  | 65.6          | 1.9    |
| Iron                        | 300      | 35000        | 2.5  | 28000            | 2.5  | 18800        | 2.5  | 9.4              | 2.5  | 431000        | 6.4    |
| Mercury                     | 2        | 0.20 U       | 0.20 | 0.20 U           | 0.20 | 0.20 U       | 0.20 | 0.20 U           | 0.20 | 0.20 U        | 0.20   |
| Potassium                   |          | 9180         | 67.9 | 9300             | 67.9 | 18400        | 67.9 | 67.9 U           | 67.9 | 137000        | 685    |
| Magnesium                   |          | 7300         | 34.3 | 7200             | 34.3 | 8230         | 34.3 | 34.3 U           | 34.3 | 62700         | 18.3   |
| Manganese                   | 50       | 129          | 0.90 | 119              | 0.90 | 106          | 0.90 | 0.90 U           | 0.90 | 331           | 1.8    |
| Sodium                      | 50000    | 6660         | 19.1 | 6820             | 19.1 | 21500        | 19.1 | 93.3             | 19.1 | 19600         | 30.5   |
| Nickel                      | 100      | 4.2 U        | 4.2  | 4.2 U            | 4.2  | 66.3         | 4.2  | 4.2 U            | 4.2  | 187           | 10.8   |
| Lead                        | 10       | 1.2 U        | 1.2  | 2.1              | 1.2  | 2.9          | 1.6  | 1.6 U            | 1.6  | 76.6          | 5.0 *  |
| Antimony                    | 20       | 10.9         | 10.9 | 10.9 U           | 10.9 | 14.1         | 10.9 | 16.8             | 10.9 | 20.7 U        | 20.7   |
| Selenium                    | 50       | 1.8 U        | 1.8  | 1.8 U            | 1.8  | 4.2          | 1.5  | 1.5 U            | 1.5  | 22            | 3.0 ** |
| Thallium                    | 10       | 1.1 U        | 1.1  | 1.1 U            | 1.1  | 0.70 U       | 0.70 | 0.70 U           | 0.70 | 5.5           | 5.5 *  |
| Vanadium                    |          | 4.7          | 2.1  | 2.1 U            | 2.1  | 23.1         | 2.1  | 2.1 U            | 2.1  | 452           | 2.3    |
| Zinc                        | 5000     | 9.7          | 1.9  | 5.8              | 1.9  | 63.0         | 1.9  | 4.0              | 1.9  | 801           | 3.8    |
| Cyanide                     | 200      | 10 U         | 10   |                  |      | 10 U         | 10   |                  |      | 10 U          | 10.0   |
| Dilution Factor             |          |              |      |                  |      |              |      |                  |      | * = 5, ** = 2 |        |
| Method: TAL Metals, Cyanide |          |              |      |                  |      |              |      |                  |      |               |        |

# MAIN POST GROUND WATER INORGANICS

| Geographical Location       |          | B3               |      | B3                    |      | B3                      |      | B3                    |      | B3                      |      | B4           |      |
|-----------------------------|----------|------------------|------|-----------------------|------|-------------------------|------|-----------------------|------|-------------------------|------|--------------|------|
| Sample                      |          | B3-MW03B-A02 SOL |      | B3-MW03B-E01          |      | B3-MW03B-E01 SOL        |      | B3-MW03B-E02          |      | B3-MW03B-E02 SOL        |      | B4-MW04B-A01 |      |
| Sample Type                 |          | Soluble          |      | Field Rinsate - Total |      | Field Rinsate - Soluble |      | Field Rinsate - Total |      | Field Rinsate - Soluble |      | Total        |      |
| Batch#                      |          | 9503G740         |      | 9502G169              |      | 9502G169                |      | 9503G616              |      | 9503G616                |      | 9502G169     |      |
| Prep#                       |          | 95GI519          |      | 95GI422               |      | 95GI422                 |      | 95GI475               |      | 95GI475                 |      | 95GI422      |      |
| RFW#                        |          | 002              |      | 008                   |      | 006                     |      | 006                   |      | 007                     |      | 010          |      |
| Dilution Factor             |          | 1.00             |      | 1.00                  |      | 1.00                    |      | 1.00                  |      | 1.00                    |      | 1.00         |      |
| Matrix                      |          | water, filtered  |      | water                 |      | water, filtered         |      | water                 |      | water, filtered         |      | water        |      |
| Units                       | ug/l     | ug/l             |      | ug/l                  |      | ug/l                    |      | ug/l                  |      | ug/l                    |      | ug/l         |      |
| Sampling Date               |          | 3/14/95          |      | 2/14/95               |      | 2/14/95                 |      | 3/7/95                |      | 3/7/95                  |      | 2/13/95      |      |
| Analysis Date               |          | 3/21/95          |      | 2/23/95               |      | 2/27/95                 |      | 3/13/95               |      | 3/13/95                 |      | 2/23/95      |      |
| Analysis                    | Standard | Analytical       | MDL  | Analytical            | MDL  | Analytical              | MDL  | Analytical            | MDL  | Analytical              | MDL  | Analytical   | MDL  |
|                             |          | Result           |      | Result                |      | Result                  |      | Result                |      | Result                  |      | Result       |      |
| Silver                      | 20       | 3.0 U            | 3.0  | 2.5 U                 | 2.5  | 2.5 U                   | 2.5  | 2.5 U                 | 2.5  | 2.5 U                   | 2.5  | 2.5 U        | 2.5  |
| Aluminum                    | 200      | 84.1             | 24.0 | 26.2                  | 16.8 | 173                     | 16.8 | 27.1                  | 16.8 | 17.2                    | 16.8 | 1890         | 16.8 |
| Arsenic                     | 8        | 2.1              | 1.9  | 1.9 U                 | 1.9  | 1.9 U                   | 1.9  | 1.9 U                 | 1.9  | 1.9 U                   | 1.9  | 1.9 U        | 1.9  |
| Barium                      | 2000     | 93.1             | 1.7  | 1.0                   | 0.80 | 113                     | 0.80 | 0.80 U                | 0.80 | 0.80 U                  | 0.80 | 56.8         | 0.80 |
| Beryllium                   | 20       | 0.90 U           | 0.90 | 0.30 U                | 0.30 | 0.30 U                  | 0.30 | 0.30 U                | 0.30 | 0.30 U                  | 0.30 | 0.36         | 0.30 |
| Calcium                     |          | 24900            | 10.4 | 123                   | 8.4  | 25400                   | 8.4  | 368                   | 8.4  | 163                     | 8.4  | 4460         | 8.4  |
| Cadmium                     | 4        | 2.8 U            | 2.8  | 2.9 U                 | 2.9  | 2.9 U                   | 2.9  | 2.9 U                 | 2.9  | 2.9 U                   | 2.9  | 2.9 U        | 2.9  |
| Cobalt                      |          | 4.4              | 3.0  | 2.3 U                 | 2.3  | 7.3                     | 2.3  | 2.3 U                 | 2.3  | 2.3 U                   | 2.3  | 2.7          | 2.3  |
| Chromium                    | 100      | 2.9 U            | 2.9  | 4.7 U                 | 4.7  | 4.7 U                   | 4.7  | 4.7 U                 | 4.7  | 4.7 U                   | 4.7  | 18.4         | 4.7  |
| Copper                      | 1000     | 2.9              | 1.9  | 4.0 U                 | 4.0  | 4.0 U                   | 4.0  | 4.0 U                 | 4.0  | 4.0 U                   | 4.0  | 4.0 U        | 4.0  |
| Iron                        | 300      | 10000            | 6.4  | 16.5                  | 2.5  | 109                     | 2.5  | 10.1                  | 2.5  | 9.3                     | 2.5  | 4510         | 2.5  |
| Mercury                     | 2        | 0.20 U           | 0.20 | 0.20 U                | 0.20 | 0.20 U                  | 0.20 | 0.20 U                | 0.20 | 0.20 U                  | 0.20 | 0.26         | 0.20 |
| Potassium                   |          | 8400             | 685  | 67.9 U                | 67.9 | 13200                   | 67.9 | 67.9 U                | 67.9 | 67.9 U                  | 67.9 | 4690         | 67.9 |
| Magnesium                   |          | 6390             | 18.3 | 34.3 U                | 34.3 | 5790                    | 34.3 | 46.0                  | 34.3 | 61.3                    | 34.3 | 7430         | 34.3 |
| Manganese                   | 50       | 104              | 1.8  | 0.90 U                | 0.90 | 90.1                    | 0.90 | 0.90 U                | 0.90 | 0.90 U                  | 0.90 | 11.8         | 0.90 |
| Sodium                      | 50000    | 20100            | 30.5 | 820                   | 19.1 | 20800                   | 19.1 | 296                   | 19.1 | 179                     | 19.1 | 12600        | 19.1 |
| Nickel                      | 100      | 33.3             | 10.8 | 4.2 U                 | 4.2  | 61.5                    | 4.2  | 4.2 U                 | 4.2  | 4.2 U                   | 4.2  | 8.5          | 4.2  |
| Lead                        | 10       | 1.0 U            | 1.0  | 1.6 U                 | 1.6  | 1.6 U                   | 1.6  | 1.2 U                 | 1.2  | 1.2 U                   | 1.2  | 1.6 U        | 1.6  |
| Antimony                    | 20       | 20.7 U           | 20.7 | 10.9 U                | 10.9 | 16.7                    | 10.9 | 10.9 U                | 10.9 | 10.9 U                  | 10.9 | 12.1         | 10.9 |
| Selenium                    | 50       | 1.5 U            | 1.5  | 1.5 U                 | 1.5  | 1.5 U                   | 1.5  | 1.8 U                 | 1.8  | 1.8 U                   | 1.8  | 1.5 U        | 1.5  |
| Thallium                    | 10       | 1.1 U            | 1.1  | 0.70 U                | 0.70 | 0.70 U                  | 0.70 | 1.1 U                 | 1.1  | 1.1 U                   | 1.1  | 0.70 U       | 0.70 |
| Vanadium                    |          | 2.3 U            | 2.3  | 2.1 U                 | 2.1  | 2.1 U                   | 2.1  | 2.1 U                 | 2.1  | 2.1 U                   | 2.1  | 6.6          | 2.1  |
| Zinc                        | 5000     | 39.4             | 3.8  | 2.0                   | 1.9  | 27.0                    | 1.9  | 1.9 U                 | 1.9  | 1.9 U                   | 1.9  | 51.4         | 1.9  |
| Cyanide                     | 200      |                  |      | 10 U                  | 10   |                         |      | 10 U                  | 10   |                         |      | 10 U         | 10   |
| Dilution Factor             |          |                  |      |                       |      |                         |      |                       |      |                         |      |              |      |
| Method: TAL Metals, Cyanide |          |                  |      |                       |      |                         |      |                       |      |                         |      |              |      |

**MAIN POST  
GROUND WATER INORGANICS**

| Geographical Location      |          | B4               |      | B4           |      | B4               |      | B5           |      | B5               |      | B5                |        |
|----------------------------|----------|------------------|------|--------------|------|------------------|------|--------------|------|------------------|------|-------------------|--------|
| Sample                     |          | B4-MW04B-A01 SOL |      | B4-MW04B-A02 |      | B4-MW04B-A02 SOL |      | B5-MW05B-A01 |      | B5-MW05B-A01 SOL |      | B5-MW05B-A02      |        |
| Sample Type                |          | Soluble          |      | Total        |      | Soluble          |      | Total        |      | Soluble          |      | Total             |        |
| Batch#                     |          | 9502G169         |      | 9503G616     |      | 9503G616         |      | 9502G169     |      | 9502G169         |      | 9503G616          |        |
| Prep#                      |          | 95GI422          |      | 95GI475      |      | 95GI475          |      | 95GI422      |      | 95GI422          |      | 95GI475           |        |
| RFW#                       |          | 011              |      | 012          |      | 013              |      | 012          |      | 013              |      | 001               |        |
| Dilution Factor            |          | 1.00             |      | 1.00         |      | 1.00             |      | 1.00         |      | 1.00             |      | 1.00              |        |
| Matrix                     |          | water, filtered  |      | water        |      | water, filtered  |      | water        |      | water, filtered  |      | water             |        |
| Units                      | ug/l     | ug/l             |      | ug/l         |      | ug/l             |      | ug/l         |      | ug/l             |      | ug/l              |        |
| Sampling Date              |          | 2/13/95          |      | 3/7/95       |      | 3/7/95           |      | 2/13/95      |      | 2/13/95          |      | 3/7/95            |        |
| Analysis Date              |          | 2/27/95          |      | 3/13/95      |      | 3/13/95          |      | 2/23/95      |      | 2/27/95          |      | 3/13/95           |        |
| Analysis                   | Standard | Analytical       | MDL  | Analytical   | MDL  | Analytical       | MDL  | Analytical   | MDL  | Analytical       | MDL  | Analytical        | MDL    |
|                            |          | Result           |      | Result       |      | Result           |      | Result       |      | Result           |      | Result            |        |
| Silver                     | 20       | 2.5 U            | 2.5  | 2.5 U        | 2.5  | 2.5 U            | 2.5  | 2.5 U        | 2.5  | 2.5 U            | 2.5  | 2.5 U             | 2.5    |
| Aluminum                   | 200      | 605              | 16.8 | 3700         | 16.8 | 673              | 16.8 | 5630         | 16.8 | 113              | 16.8 | 26000             | 16.8   |
| Arsenic                    | 8        | 1.9 U            | 1.9  | 2.1          | 1.9  | 1.9 U            | 1.9  | 15.8         | 1.9  | 1.9 U            | 1.9  | 56                | 9.5 *  |
| Barium                     | 2000     | 43.9             | 0.80 | 71.5         | 0.80 | 48.2             | 0.80 | 299          | 0.80 | 147              | 0.80 | 699               | 0.80   |
| Beryllium                  | 20       | 0.30 U           | 0.30 | 0.35         | 0.30 | 0.30 U           | 0.30 | 0.67         | 0.30 | 0.30 U           | 0.30 | 2.1               | 0.30   |
| Calcium                    |          | 4540             | 8.4  | 5160         | 8.4  | 5040             | 8.4  | 13800        | 8.4  | 13600            | 8.4  | 16400             | 8.4    |
| Cadmium                    | 4        | 2.9 U            | 2.9  | 2.9 U        | 2.9  | 2.9 U            | 2.9  | 3.8          | 2.9  | 2.9 U            | 2.9  | 4.6               | 2.9    |
| Cobalt                     |          | 2.3 U            | 2.3  | 3.5          | 2.3  | 2.3 U            | 2.3  | 15.6         | 2.3  | 13.3             | 2.3  | 18.3              | 2.3    |
| Chromium                   | 100      | 4.7 U            | 4.7  | 42.2         | 4.7  | 4.7 U            | 4.7  | 33.9         | 4.7  | 4.7 U            | 4.7  | 191               | 4.7    |
| Copper                     | 1000     | 4.0 U            | 4.0  | 4.0 U        | 4.0  | 4.0 U            | 4.0  | 10.0         | 4.0  | 4.0 U            | 4.0  | 43.0              | 4.0    |
| Iron                       | 300      | 18.5             | 2.5  | 10500        | 2.5  | 19.3             | 2.5  | 15500        | 2.5  | 277              | 2.5  | 72100             | 2.5    |
| Mercury                    | 2        | 0.20 U           | 0.20 | 0.20 U       | 0.20 | 0.20 U           | 0.20 | 0.20 U       | 0.20 | 0.20 U           | 0.20 | 0.20 U            | 0.20   |
| Potassium                  |          | 3580             | 67.9 | 6830         | 67.9 | 3810             | 67.9 | 8730         | 67.9 | 6910             | 67.9 | 16800             | 67.9   |
| Magnesium                  |          | 7030             | 34.3 | 9460         | 34.3 | 8120             | 34.3 | 7050         | 34.3 | 5900             | 34.3 | 12400             | 34.3   |
| Manganese                  | 50       | 10.8             | 0.90 | 14.5         | 0.90 | 11.0             | 0.90 | 166          | 0.90 | 145              | 0.90 | 233               | 0.90   |
| Sodium                     | 50000    | 12900            | 19.1 | 13900        | 19.1 | 14300            | 19.1 | 15900        | 19.1 | 16200            | 19.1 | 17900             | 19.1   |
| Nickel                     | 100      | 9.2              | 4.2  | 5.4          | 4.2  | 6.2              | 4.2  | 96.7         | 4.2  | 89.8             | 4.2  | 120               | 4.2    |
| Lead                       | 10       | 1.6 U            | 1.6  | 2.4          | 1.2  | 1.2 U            | 1.2  | 5.8          | 1.6  | 1.6 U            | 1.6  | 22.7              | 1.2    |
| Antimony                   | 20       | 12.9             | 10.9 | 10.9 U       | 10.9 | 12.3             | 10.9 | 14.5         | 10.9 | 15.8             | 10.9 | 12.1              | 10.9   |
| Selenium                   | 50       | 1.5 U            | 1.5  | 1.8 U        | 1.8  | 1.8 U            | 1.8  | 8.0          | 1.5  | 4.1              | 1.5  | 29.6              | 3.6 ** |
| Thallium                   | 10       | 0.70 U           | 0.70 | 1.1 U        | 1.1  | 1.1 U            | 1.1  | 0.70 U       | 0.70 | 0.70 U           | 0.70 | 5.5 U             | 5.5 *  |
| Vanadium                   |          | 2.1 U            | 2.1  | 14.8         | 2.1  | 2.1 U            | 2.1  | 22.8         | 2.1  | 2.1 U            | 2.1  | 108               | 2.1    |
| Zinc                       | 5000     | 44.8             | 1.9  | 63.7         | 1.9  | 55.5             | 1.9  | 115          | 1.9  | 74.3             | 1.9  | 233               | 1.9    |
| Cyanide                    | 200      |                  |      | 10 U         | 10   |                  |      | 10 U         | 10   |                  |      | 10 U              | 10     |
| Dilution Factor            |          |                  |      |              |      |                  |      |              |      |                  |      | * = 5.0, ** = 2.0 |        |
| Method:TAL Metals, Cyanide |          |                  |      |              |      |                  |      |              |      |                  |      |                   |        |

**MAIN POST  
GROUND WATER INORGANICS**

|                             |          |                  |      |
|-----------------------------|----------|------------------|------|
| Geographical Location       |          | B5               |      |
| Sample                      |          | B5-MW05B-A02 SOL |      |
| Sample Type                 |          | Soluble          |      |
| Batch#                      |          | 9503G616         |      |
| Prep#                       |          | 95GI475          |      |
| RFW#                        |          | 002              |      |
| Dilution Factor             |          | 1.00             |      |
| Matrix                      |          | water, filtered  |      |
| Units                       | ug/l     | ug/l             |      |
| Sampling Date               |          | 3/7/95           |      |
| Analysis Date               |          | 3/13/95          |      |
| Analysis                    | Standard | Analytical       | MDL  |
|                             |          | Result           |      |
| Silver                      | 20       | 2.5 U            | 2.5  |
| Aluminum                    | 200      | 108              | 16.8 |
| Arsenic                     | 8        | 1.9 U            | 1.9  |
| Barium                      | 2000     | 99.6             | 0.80 |
| Beryllium                   | 20       | 0.30 U           | 0.30 |
| Calcium                     |          | 14100            | 8.4  |
| Cadmium                     | 4        | 3.7              | 2.9  |
| Cobalt                      |          | 11.6             | 2.3  |
| Chromium                    | 100      | 4.7 U            | 4.7  |
| Copper                      | 1000     | 4.0 U            | 4.0  |
| Iron                        | 300      | 300              | 2.5  |
| Mercury                     | 2        | 0.20 U           | 0.20 |
| Potassium                   |          | 6280             | 67.9 |
| Magnesium                   |          | 6420             | 34.3 |
| Manganese                   | 50       | 146              | 0.90 |
| Sodium                      | 50000    | 17200            | 19.1 |
| Nickel                      | 100      | 76.9             | 4.2  |
| Lead                        | 10       | 1.2 U            | 1.2  |
| Antimony                    | 20       | 10.9 U           | 10.9 |
| Selenium                    | 50       | 4.4              | 1.8  |
| Thallium                    | 10       | 1.1 U            | 1.1  |
| Vanadium                    |          | 2.1 U            | 2.1  |
| Zinc                        | 5000     | 82.4             | 1.9  |
| Cyanide                     | 200      |                  |      |
| Dilution Factor             |          |                  |      |
| Method: TAL Metals, Cyanide |          |                  |      |

**MAIN POST**  
**GROUNDWATER PESTICIDES/PCBS**

| Geographical Location       |          | M2            |       | M2            |       | M2            |       | M2            |       | M2            |       | M2            |       |
|-----------------------------|----------|---------------|-------|---------------|-------|---------------|-------|---------------|-------|---------------|-------|---------------|-------|
| Sample                      |          | MP02-MW01-A01 |       | MP02-MW01-A02 |       | MP02-MW02-A01 |       | MP02-MW02-A02 |       | MP02-MW03-A01 |       | MP02-MW03-A02 |       |
| Sample Type                 |          |               |       |               |       |               |       |               |       |               |       |               |       |
| Batch#                      |          | 9502G197      |       | 9503G642      |       | 9502G197      |       | 9503G642      |       | 9502G197      |       | 9503G642      |       |
| Prep#                       |          | 95GP0119      |       | 95GP0229      |       | 95GP0119      |       | 95GP0229      |       | 95GP0119      |       | 95GP0229      |       |
| RFW#                        |          | 001           |       | 001           |       | 002           |       | 003           |       | 003           |       | 005           |       |
| Dilution Factor             |          | 1.00          |       | 1.00          |       | 1.00          |       | 1.00          |       | 1.00          |       | 1.00          |       |
| Matrix                      |          | water         |       | water         |       | water         |       | water         |       | water         |       | water         |       |
| Units                       | ug/l     | ug/l          |       | ug/l          |       | ug/l          |       | ug/l          |       | ug/l          |       | ug/l          |       |
| Sampling Date               |          | 2/15/95       |       | 3/8/95        |       | 2/15/95       |       | 3/8/95        |       | 2/15/95       |       | 3/8/95        |       |
| Analysis Date               |          | 3/4/95        |       | 3/19/95       |       | 3/4/95        |       | 3/19/95       |       | 3/4/95        |       | 3/19/95       |       |
| Analysis                    | Standard | Analytical    | CRDL  | Analytical    | CRDL  | Analytical    | CRDL  | Analytical    | CRDL  | Analytical    | CRDL  | Analytical    | CRDL  |
|                             |          | Result        |       | Result        |       | Result        |       | Result        |       | Result        |       | Result        |       |
| alpha-BHC                   | 0.02     | 0.050 U       | 0.050 | 0.048 U       | 0.048 | 0.047 U       | 0.047 | 0.048 U       | 0.048 | 0.052 U       | 0.052 | 0.056 U       | 0.056 |
| beta-BHC                    | 0.2      | 0.050 U       | 0.050 | 0.048 U       | 0.048 | 0.047 U       | 0.047 | 0.048 U       | 0.048 | 0.052 U       | 0.052 | 0.056 U       | 0.056 |
| delta-BHC                   |          | 0.050 U       | 0.050 | 0.048 U       | 0.048 | 0.047 U       | 0.047 | 0.048 U       | 0.048 | 0.052 U       | 0.052 | 0.056 U       | 0.056 |
| gamma-BHC (Lindane)         | 0.2      | 0.050 U       | 0.050 | 0.048 U       | 0.048 | 0.047 U       | 0.047 | 0.048 U       | 0.048 | 0.052 U       | 0.052 | 0.056 U       | 0.056 |
| Heptachlor                  | 0.4      | 0.050 U       | 0.050 | 0.048 U       | 0.048 | 0.047 U       | 0.047 | 0.048 U       | 0.048 | 0.052 U       | 0.052 | 0.056 U       | 0.056 |
| Aldrin                      | 0.04     | 0.050 U       | 0.050 | 0.048 U       | 0.048 | 0.047 U       | 0.047 | 0.048 U       | 0.048 | 0.052 U       | 0.052 | 0.056 U       | 0.056 |
| Heptachlor epoxide          | 0.2      | 0.050 U       | 0.050 | 0.048 U       | 0.048 | 0.047 U       | 0.047 | 0.048 U       | 0.048 | 0.052 U       | 0.052 | 0.056 U       | 0.056 |
| Endosulfan I                | 0.4      | 0.050 U       | 0.050 | 0.048 U       | 0.048 | 0.047 U       | 0.047 | 0.048 U       | 0.048 | 0.052 U       | 0.052 | 0.056 U       | 0.056 |
| Dieldrin                    | 0.03     | 0.10 U        | 0.10  | 0.095 U       | 0.095 | 0.094 U       | 0.094 | 0.095 U       | 0.095 | 0.10 U        | 0.10  | 0.11 U        | 0.11  |
| 4,4'-DDE                    | 0.1      | 0.10 U        | 0.10  | 0.095 U       | 0.095 | 0.094 U       | 0.094 | 0.095 U       | 0.095 | 0.10 U        | 0.10  | 0.11 U        | 0.11  |
| Endrin                      | 2        | 0.10 U        | 0.10  | 0.095 U       | 0.095 | 0.094 U       | 0.094 | 0.095 U       | 0.095 | 0.10 U        | 0.10  | 0.11 U        | 0.11  |
| Endosulfan II               | 0.4      | 0.10 U        | 0.10  | 0.095 U       | 0.095 | 0.094 U       | 0.094 | 0.095 U       | 0.095 | 0.10 U        | 0.10  | 0.11 U        | 0.11  |
| 4,4'-DDD                    | 0.1      | 0.10 U        | 0.10  | 0.095 U       | 0.095 | 0.094 U       | 0.094 | 0.095 U       | 0.095 | 0.10 U        | 0.10  | 0.11 U        | 0.11  |
| Endosulfan sulfate          | 0.4      | 0.10 U        | 0.10  | 0.095 U       | 0.095 | 0.094 U       | 0.094 | 0.095 U       | 0.095 | 0.10 U        | 0.10  | 0.11 U        | 0.11  |
| 4,4'-DDT                    | 0.1      | 0.10 U        | 0.10  | 0.095 U       | 0.095 | 0.094 U       | 0.094 | 0.095 U       | 0.095 | 0.10 U        | 0.10  | 0.11 U        | 0.11  |
| Methoxychlor                | 40       | 0.50 U        | 0.50  | 0.48 U        | 0.48  | 0.47 U        | 0.47  | 0.48 U        | 0.48  | 0.52 U        | 0.52  | 0.56 U        | 0.56  |
| Endrin ketone               |          | 0.10 U        | 0.10  | 0.095 U       | 0.095 | 0.094 U       | 0.094 | 0.095 U       | 0.095 | 0.10 U        | 0.10  | 0.11 U        | 0.11  |
| Endrin aldehyde             |          | 0.10 U        | 0.10  | 0.095 U       | 0.095 | 0.094 U       | 0.094 | 0.095 U       | 0.095 | 0.10 U        | 0.10  | 0.11 U        | 0.11  |
| alpha-Chlordane             |          | 0.050 U       | 0.050 | 0.048 U       | 0.048 | 0.047 U       | 0.047 | 0.048 U       | 0.048 | 0.052 U       | 0.052 | 0.056 U       | 0.056 |
| gamma-Chlordane             | 0.5      | 0.050 U       | 0.050 | 0.048 U       | 0.048 | 0.047 U       | 0.047 | 0.048 U       | 0.048 | 0.052 U       | 0.052 | 0.056 U       | 0.056 |
| Toxaphene                   | 3        | 5.0 U         | 5.0   | 4.8 U         | 4.8   | 4.7 U         | 4.7   | 4.8 U         | 4.8   | 5.2 U         | 5.2   | 5.6 U         | 5.6   |
| Aroclor-1016                | 2        | 1.0 U         | 1.0   | 0.95 U        | 0.95  | 0.94 U        | 0.94  | 0.95 U        | 0.95  | 1.0 U         | 1.0   | 1.1 U         | 1.1   |
| Aroclor-1221                | 2        | 2.0 U         | 2.0   | 1.9 U         | 1.9   | 1.9 U         | 1.9   | 1.9 U         | 1.9   | 2.1 U         | 2.1   | 2.2 U         | 2.2   |
| Aroclor-1232                | 2        | 1.0 U         | 1.0   | 0.95 U        | 0.95  | 0.94 U        | 0.94  | 0.95 U        | 0.95  | 1.0 U         | 1.0   | 1.1 U         | 1.1   |
| Aroclor-1242                | 2        | 1.0 U         | 1.0   | 0.95 U        | 0.95  | 0.94 U        | 0.94  | 0.95 U        | 0.95  | 1.8 P         | 1.0   | 1.1 U         | 1.1   |
| Aroclor-1248                | 2        | 1.0 U         | 1.0   | 0.95 U        | 0.95  | 0.94 U        | 0.94  | 0.95 U        | 0.95  | 1.0 U         | 1.0   | 1.1 U         | 1.1   |
| Aroclor-1254                | 2        | 1.0 U         | 1.0   | 0.95 U        | 0.95  | 0.94 U        | 0.94  | 0.95 U        | 0.95  | 1.0 U         | 1.0   | 1.1 U         | 1.1   |
| Aroclor-1260                | 2        | 1.0 U         | 1.0   | 0.95 U        | 0.95  | 0.94 U        | 0.94  | 0.95 U        | 0.95  | 1.0 U         | 1.0   | 1.1 U         | 1.1   |
| Method: TCL Pesticides/PCBs |          |               |       |               |       |               |       |               |       |               |       |               |       |

**MAIN POST  
GROUNDWATER PESTICIDES/PCBS**

| Geographical Location      |          | M3            |       | M3            |       | M3            |       | M3            |       | M3            |       | M3            |       |
|----------------------------|----------|---------------|-------|---------------|-------|---------------|-------|---------------|-------|---------------|-------|---------------|-------|
| Sample                     |          | MP03-MW04-A01 |       | MP03-MW04-A02 |       | MP03-MW05-A01 |       | MP03-MW05-A02 |       | MP03-MW06-A01 |       | MP03-MW06-A02 |       |
| Sample Type                |          |               |       |               |       |               |       |               |       |               |       |               |       |
| Batch#                     |          | 9502G219      |       | 9503G642      |       | 9502G219      |       | 9503G660      |       | 9502G219      |       | 9503G660      |       |
| Prep#                      |          | 95GP0127      |       | 95GP0229      |       | 95GP0127      |       | 95GP0233      |       | 95GP0127      |       | 95GP0233      |       |
| RFW#                       |          | 001           |       | 009           |       | 003           |       | 003           |       | 005           |       | 001           |       |
| Dilution Factor            |          | 1.00          |       | 1.00          |       | 1.00          |       | 1.00          |       | 1.00          |       | 1.00          |       |
| Matrix                     |          | water         |       | water         |       | water         |       | water         |       | water         |       | water         |       |
| Units                      | ug/l     | ug/l          |       | ug/l          |       | ug/l          |       | ug/l          |       | ug/l          |       | ug/l          |       |
| Sampling Date              |          | 2/16/95       |       | 3/8/95        |       | 2/16/95       |       | 3/9/95        |       | 2/16/95       |       | 3/9/95        |       |
| Analysis Date              |          | 3/14/95       |       | 3/20/95       |       | 3/14/95       |       | 3/20/95       |       | 3/14/95       |       | 3/20/95       |       |
| Analysis                   | Standard | Analytical    | CRDL  | Analytical    | CRDL  | Analytical    | CRDL  | Analytical    | CRDL  | Analytical    | CRDL  | Analytical    | CRDL  |
|                            |          | Result        |       | Result        |       | Result        |       | Result        |       | Result        |       | Result        |       |
| alpha-BHC                  | 0.02     | 0.054 U       | 0.054 | 0.052 U       | 0.052 | 0.047 U       | 0.047 | 0.056 U       | 0.056 | 0.049 U       | 0.049 | 0.048 U       | 0.048 |
| beta-BHC                   | 0.2      | 0.054 U       | 0.054 | 0.052 U       | 0.052 | 0.047 U       | 0.047 | 0.056 U       | 0.056 | 0.049 U       | 0.049 | 0.048 U       | 0.048 |
| delta-BHC                  |          | 0.054 U       | 0.054 | 0.052 U       | 0.052 | 0.047 U       | 0.047 | 0.056 U       | 0.056 | 0.049 U       | 0.049 | 0.048 U       | 0.048 |
| gamma-BHC (Lindane)        | 0.2      | 0.054 U       | 0.054 | 0.052 U       | 0.052 | 0.047 U       | 0.047 | 0.056 U       | 0.056 | 0.049 U       | 0.049 | 0.048 U       | 0.048 |
| Heptachlor                 | 0.4      | 0.054 U       | 0.054 | 0.052 U       | 0.052 | 0.047 U       | 0.047 | 0.056 U       | 0.056 | 0.049 U       | 0.049 | 0.048 U       | 0.048 |
| Aldrin                     | 0.04     | 0.054 U       | 0.054 | 0.052 U       | 0.052 | 0.047 U       | 0.047 | 0.056 U       | 0.056 | 0.049 U       | 0.049 | 0.048 U       | 0.048 |
| Heptachlor epoxide         | 0.2      | 0.054 U       | 0.054 | 0.052 U       | 0.052 | 0.047 U       | 0.047 | 0.056 U       | 0.056 | 0.049 U       | 0.049 | 0.048 U       | 0.048 |
| Endosulfan I               | 0.4      | 0.054 U       | 0.054 | 0.052 U       | 0.052 | 0.047 U       | 0.047 | 0.056 U       | 0.056 | 0.049 U       | 0.049 | 0.048 U       | 0.048 |
| Dieldrin                   | 0.03     | 0.11 U        | 0.11  | 0.10 U        | 0.10  | 0.094 U       | 0.094 | 0.11 U        | 0.11  | 0.098 U       | 0.098 | 0.096 U       | 0.096 |
| 4,4'-DDE                   | 0.1      | 0.11 U        | 0.11  | 0.10 U        | 0.10  | 0.094 U       | 0.094 | 0.11 U        | 0.11  | 0.098 U       | 0.098 | 0.096 U       | 0.096 |
| Endrin                     | 2        | 0.11 U        | 0.11  | 0.10 U        | 0.10  | 0.094 U       | 0.094 | 0.11 U        | 0.11  | 0.098 U       | 0.098 | 0.096 U       | 0.096 |
| Endosulfan II              | 0.4      | 0.11 U        | 0.11  | 0.10 U        | 0.10  | 0.094 U       | 0.094 | 0.11 U        | 0.11  | 0.098 U       | 0.098 | 0.096 U       | 0.096 |
| 4,4'-DDD                   | 0.1      | 0.11 U        | 0.11  | 0.10 U        | 0.10  | 0.094 U       | 0.094 | 0.11 U        | 0.11  | 0.098 U       | 0.098 | 0.096 U       | 0.096 |
| Endosulfan sulfate         | 0.4      | 0.11 U        | 0.11  | 0.10 U        | 0.10  | 0.094 U       | 0.094 | 0.11 U        | 0.11  | 0.098 U       | 0.098 | 0.096 U       | 0.096 |
| 4,4'-DDT                   | 0.1      | 0.11 U        | 0.11  | 0.10 U        | 0.10  | 0.094 U       | 0.094 | 0.11 U        | 0.11  | 0.098 U       | 0.098 | 0.096 U       | 0.096 |
| Methoxychlor               | 40       | 0.54 U        | 0.54  | 0.52 U        | 0.52  | 0.47 U        | 0.47  | 0.56 U        | 0.56  | 0.49 U        | 0.49  | 0.48 U        | 0.48  |
| Endrin ketone              |          | 0.11 U        | 0.11  | 0.10 U        | 0.10  | 0.094 U       | 0.094 | 0.11 U        | 0.11  | 0.098 U       | 0.098 | 0.096 U       | 0.096 |
| Endrin aldehyde            |          | 0.11 U        | 0.11  | 0.10 U        | 0.10  | 0.094 U       | 0.094 | 0.11 U        | 0.11  | 0.098 U       | 0.098 | 0.096 U       | 0.096 |
| alpha-Chlordane            |          | 0.054 U       | 0.054 | 0.052 U       | 0.052 | 0.047 U       | 0.047 | 0.056 U       | 0.056 | 0.049 U       | 0.049 | 0.048 U       | 0.048 |
| gamma-Chlordane            | 0.5      | 0.054 U       | 0.054 | 0.052 U       | 0.052 | 0.047 U       | 0.047 | 0.056 U       | 0.056 | 0.049 U       | 0.049 | 0.048 U       | 0.048 |
| Toxaphene                  | 3        | 5.4 U         | 5.4   | 5.2 U         | 5.2   | 4.7 U         | 4.7   | 5.6 U         | 5.6   | 4.9 U         | 4.9   | 4.8 U         | 4.8   |
| Aroclor-1016               | 2        | 1.1 U         | 1.1   | 1.0 U         | 1.0   | 0.94 U        | 0.94  | 1.1 U         | 1.1   | 0.98 U        | 0.98  | 0.96 U        | 0.96  |
| Aroclor-1221               | 2        | 2.2 U         | 2.2   | 2.1 U         | 2.1   | 1.9 U         | 1.9   | 2.2 U         | 2.2   | 2.0 U         | 2.0 U | 1.9 U         | 1.9   |
| Aroclor-1232               | 2        | 1.1 U         | 1.1   | 1.0 U         | 1.0   | 0.94 U        | 0.94  | 1.1 U         | 1.1   | 0.98 U        | 0.98  | 0.96 U        | 0.96  |
| Aroclor-1242               | 2        | 1.1 U         | 1.1   | 1.0 U         | 1.0   | 0.94 U        | 0.94  | 1.1 U         | 1.1   | 0.98 U        | 0.98  | 0.96 U        | 0.96  |
| Aroclor-1248               | 2        | 1.1 U         | 1.1   | 1.0 U         | 1.0   | 0.94 U        | 0.94  | 1.1 U         | 1.1   | 0.98 U        | 0.98  | 0.96 U        | 0.96  |
| Aroclor-1254               | 2        | 1.1 U         | 1.1   | 1.0 U         | 1.0   | 0.94 U        | 0.94  | 1.1 U         | 1.1   | 0.98 U        | 0.98  | 0.96 U        | 0.96  |
| Aroclor-1260               | 2        | 1.1 U         | 1.1   | 1.0 U         | 1.0   | 0.94 U        | 0.94  | 1.1 U         | 1.1   | 0.98 U        | 0.98  | 0.96 U        | 0.96  |
| Method:TCL Pesticides/PCBs |          |               |       |               |       |               |       |               |       |               |       |               |       |



**MAIN POST  
GROUNDWATER PESTICIDES/PCBS**

| Geographical Location      |          | M4                   |       | M4                   |       | M4                   |       | M4                   |       | M4                   |       | M4                   |       |
|----------------------------|----------|----------------------|-------|----------------------|-------|----------------------|-------|----------------------|-------|----------------------|-------|----------------------|-------|
| Sample                     |          | MP04-MW07-A01        |       | MP04-MW07-A02        |       | MP04-MW07-C01        |       | MP04-MW07-C02        |       | MP04-MW07-E01        |       | MP04-MW08-A01        |       |
| Sample Type                |          |                      |       |                      |       | Duplicate            |       | Duplicate            |       | Field Rinsate Blank  |       |                      |       |
| Batch#                     |          | 9502G219             |       | 9503G660             |       | 9502G219             |       | 9503G660             |       | 9502G219             |       | 9502G219             |       |
| Prep#                      |          | 95GP0127             |       | 95GP0233             |       | 95GP0127             |       | 95GP0233             |       | 95GP0127             |       | 95GP0127             |       |
| RFW#                       |          | 007                  |       | 005                  |       | 009                  |       | 007                  |       | 012                  |       | 014                  |       |
| Dilution Factor            |          | 1.00                 |       | 1.00                 |       | 1.00                 |       | 1.00                 |       | 1.00                 |       | 1.00                 |       |
| Matrix                     |          | water                |       | water                |       | water                |       | water                |       | water                |       | water                |       |
| Units                      | ug/l     | ug/l                 |       | ug/l                 |       | ug/l                 |       | ug/l                 |       | ug/l                 |       | ug/l                 |       |
| Sampling Date              |          | 2/16/95              |       | 3/9/95               |       | 2/16/95              |       | 3/9/95               |       | 2/16/95              |       | 2/16/95              |       |
| Analysis Date              |          | 3/14/95              |       | 3/20/95              |       | 3/14/95              |       | 3/20/95              |       | 3/14/95              |       | 3/14/95              |       |
| Analysis                   | Standard | Analytical<br>Result | CRDL  | Analytical<br>Result | CRDL  | Analytical<br>Result | CRDL  | Analytical<br>Result | CRDL  | Analytical<br>Result | CRDL  | Analytical<br>Result | CRDL  |
| alpha-BHC                  | 0.02     | 0.052 U              | 0.052 | 0.053 U              | 0.053 | 0.052 U              | 0.052 | 0.053 U              | 0.053 | 0.052 U              | 0.052 | 0.062 U              | 0.062 |
| beta-BHC                   | 0.2      | 0.052 U              | 0.052 | 0.053 U              | 0.053 | 0.052 U              | 0.052 | 0.053 U              | 0.053 | 0.052 U              | 0.052 | 0.062 U              | 0.062 |
| delta-BHC                  |          | 0.052 U              | 0.052 | 0.053 U              | 0.053 | 0.052 U              | 0.052 | 0.053 U              | 0.053 | 0.052 U              | 0.052 | 0.062 U              | 0.062 |
| gamma-BHC (Lindane)        | 0.2      | 0.052 U              | 0.052 | 0.053 U              | 0.053 | 0.052 U              | 0.052 | 0.053 U              | 0.053 | 0.052 U              | 0.052 | 0.062 U              | 0.062 |
| Heptachlor                 | 0.4      | 0.052 U              | 0.052 | 0.053 U              | 0.053 | 0.052 U              | 0.052 | 0.053 U              | 0.053 | 0.052 U              | 0.052 | 0.062 U              | 0.062 |
| Aldrin                     | 0.04     | 0.052 U              | 0.052 | 0.053 U              | 0.053 | 0.052 U              | 0.052 | 0.053 U              | 0.053 | 0.052 U              | 0.052 | 0.062 U              | 0.062 |
| Heptachlor epoxide         | 0.2      | 0.052 U              | 0.052 | 0.053 U              | 0.053 | 0.052 U              | 0.052 | 0.053 U              | 0.053 | 0.052 U              | 0.052 | 0.062 U              | 0.062 |
| Endosulfan I               | 0.4      | 0.052 U              | 0.052 | 0.053 U              | 0.053 | 0.052 U              | 0.052 | 0.053 U              | 0.053 | 0.052 U              | 0.052 | 0.062 U              | 0.062 |
| Dieldrin                   | 0.03     | 0.10 U               | 0.10  | 0.11 U               | 0.11  | 0.10 U               | 0.10  | 0.11 U               | 0.11  | 0.10 U               | 0.10  | 0.12 U               | 0.12  |
| 4,4'-DDE                   | 0.1      | 0.10 U               | 0.10  | 0.11 U               | 0.11  | 0.10 U               | 0.10  | 0.11 U               | 0.11  | 0.10 U               | 0.10  | 0.12 U               | 0.12  |
| Endrin                     | 2        | 0.10 U               | 0.10  | 0.11 U               | 0.11  | 0.10 U               | 0.10  | 0.11 U               | 0.11  | 0.10 U               | 0.10  | 0.12 U               | 0.12  |
| Endosulfan II              | 0.4      | 0.10 U               | 0.10  | 0.11 U               | 0.11  | 0.10 U               | 0.10  | 0.11 U               | 0.11  | 0.10 U               | 0.10  | 0.12 U               | 0.12  |
| 4,4'-DDD                   | 0.1      | 0.10 U               | 0.10  | 0.11 U               | 0.11  | 0.10 U               | 0.10  | 0.11 U               | 0.11  | 0.10 U               | 0.10  | 0.12 U               | 0.12  |
| Endosulfan sulfate         | 0.4      | 0.10 U               | 0.10  | 0.11 U               | 0.11  | 0.10 U               | 0.10  | 0.11 U               | 0.11  | 0.10 U               | 0.10  | 0.12 U               | 0.12  |
| 4,4'-DDT                   | 0.1      | 0.19                 | 0.10  | 0.11 U               | 0.11  | 0.32                 | 0.10  | 0.11 U               | 0.11  | 0.10 U               | 0.10  | 0.12 U               | 0.12  |
| Methoxychlor               | 40       | 0.52 U               | 0.52  | 0.53 U               | 0.53  | 0.52 U               | 0.52  | 0.53 U               | 0.53  | 0.52 U               | 0.52  | 0.62 U               | 0.62  |
| Endrin ketone              |          | 0.10 U               | 0.10  | 0.11 U               | 0.11  | 0.10 U               | 0.10  | 0.11 U               | 0.11  | 0.10 U               | 0.10  | 0.12 U               | 0.12  |
| Endrin aldehyde            |          | 0.10 U               | 0.10  | 0.11 U               | 0.11  | 0.10 U               | 0.10  | 0.11 U               | 0.11  | 0.10 U               | 0.10  | 0.12 U               | 0.12  |
| alpha-Chlordane            |          | 0.052 U              | 0.052 | 0.053 U              | 0.053 | 0.052 U              | 0.052 | 0.053 U              | 0.053 | 0.052 U              | 0.052 | 0.062 U              | 0.062 |
| gamma-Chlordane            | 0.5      | 0.052 U              | 0.052 | 0.053 U              | 0.053 | 0.052 U              | 0.052 | 0.053 U              | 0.053 | 0.052 U              | 0.052 | 0.062 U              | 0.062 |
| Toxaphene                  | 3        | 5.2 U                | 5.2   | 5.3 U                | 5.3   | 5.2 U                | 5.2   | 5.3 U                | 5.3   | 5.2 U                | 5.2   | 6.2 U                | 6.2   |
| Aroclor-1016               | 2        | 1.0 U                | 1.0   | 1.1 U                | 1.1   | 1.0 U                | 1.0   | 1.1 U                | 1.1   | 1.0 U                | 1.0   | 1.2 U                | 1.2   |
| Aroclor-1221               | 2        | 2.1 U                | 2.1   | 2.1 U                | 2.1   | 2.1 U                | 2.1   | 2.1 U                | 2.1   | 2.1 U                | 2.1   | 2.5 U                | 2.5   |
| Aroclor-1232               | 2        | 1.0 U                | 1.0   | 1.1 U                | 1.1   | 1.0 U                | 1.0   | 1.1 U                | 1.1   | 1.0 U                | 1.0   | 1.2 U                | 1.2   |
| Aroclor-1242               | 2        | 1.0 U                | 1.0   | 1.1 U                | 1.1   | 1.0 U                | 1.0   | 1.1 U                | 1.1   | 1.0 U                | 1.0   | 1.2 U                | 1.2   |
| Aroclor-1248               | 2        | 1.0 U                | 1.0   | 1.1 U                | 1.1   | 1.0 U                | 1.0   | 1.1 U                | 1.1   | 1.0 U                | 1.0   | 1.2 U                | 1.2   |
| Aroclor-1254               | 2        | 1.0 U                | 1.0   | 1.1 U                | 1.1   | 1.0 U                | 1.0   | 1.1 U                | 1.1   | 1.0 U                | 1.0   | 1.2 U                | 1.2   |
| Aroclor-1260               | 2        | 1.0 U                | 1.0   | 1.1 U                | 1.1   | 1.0 U                | 1.0   | 1.1 U                | 1.1   | 1.0 U                | 1.0   | 1.2 U                | 1.2   |
| Method:TCL Pesticides/PCBs |          |                      |       |                      |       |                      |       |                      |       |                      |       |                      |       |

**MAIN POST  
GROUNDWATER PESTICIDES/PCBS**

| Geographical Location      |          | M4            |       | M4            |       | M4            |       | M5            |       | M5            |       | M5            |       |
|----------------------------|----------|---------------|-------|---------------|-------|---------------|-------|---------------|-------|---------------|-------|---------------|-------|
| Sample                     |          | MP04-MW08-A02 |       | MP04-MW09-A01 |       | MP04-MW09-A02 |       | MP05-MW10-A01 |       | MP05-MW10-A02 |       | MP05-MW11-A01 |       |
| Sample Type                |          |               |       |               |       |               |       |               |       |               |       |               |       |
| Batch#                     |          | 9503G642      |       | 9502G219      |       | 9503G660      |       | 9502G238      |       | 9503G660      |       | 9502G238      |       |
| Prep#                      |          | 95GP0229      |       | 95GP0127      |       | 95GP0233      |       | 95GP0135      |       | 95GP0233      |       | 95GP0135      |       |
| RFW#                       |          | 007           |       | 016           |       | 009           |       | 010           |       | 011           |       | 012           |       |
| Dilution Factor            |          | 1.00          |       | 1.00          |       | 1.00          |       | 1.00          |       | 1.00          |       | 1.00          |       |
| Matrix                     |          | water         |       | water         |       | water         |       | water         |       | water         |       | water         |       |
| Units                      | ug/l     | ug/l          |       | ug/l          |       | ug/l          |       | ug/l          |       | ug/l          |       | ug/l          |       |
| Sampling Date              |          | 3/8/95        |       | 2/16/95       |       | 3/9/95        |       | 2/17/95       |       | 3/9/95        |       | 2/17/95       |       |
| Analysis Date              |          | 3/20/95       |       | 3/14/95       |       | 3/26/95       |       | 3/11/95       |       | 3/26/95       |       | 3/11/95       |       |
| Analysis                   | Standard | Analytical    | CRDL  | Analytical    | CRDL  | Analytical    | CRDL  | Analytical    | CRDL  | Analytical    | CRDL  | Analytical    | CRDL  |
|                            |          | Result        |       | Result        |       | Result        |       | Result        |       | Result        |       | Result        |       |
| alpha-BHC                  | 0.02     | 0.053 U       | 0.053 | 0.062 U       | 0.062 | 0.052 U       | 0.052 | 0.051 U       | 0.051 | 0.052 U       | 0.052 | 0.052 U       | 0.052 |
| beta-BHC                   | 0.2      | 0.053 U       | 0.053 | 0.062 U       | 0.062 | 0.052 U       | 0.052 | 0.051 U       | 0.051 | 0.052 U       | 0.052 | 0.052 U       | 0.052 |
| delta-BHC                  |          | 0.053 U       | 0.053 | 0.062 U       | 0.062 | 0.052 U       | 0.052 | 0.051 U       | 0.051 | 0.052 U       | 0.052 | 0.052 U       | 0.052 |
| gamma-BHC (Lindane)        | 0.2      | 0.053 U       | 0.053 | 0.062 U       | 0.062 | 0.052 U       | 0.052 | 0.051 U       | 0.051 | 0.052 U       | 0.052 | 0.052 U       | 0.052 |
| Heptachlor                 | 0.4      | 0.053 U       | 0.053 | 0.062 U       | 0.062 | 0.052 U       | 0.052 | 0.051 U       | 0.051 | 0.052 U       | 0.052 | 0.052 U       | 0.052 |
| Aldrin                     | 0.04     | 0.053 U       | 0.053 | 0.062 U       | 0.062 | 0.052 U       | 0.052 | 0.051 U       | 0.051 | 0.052 U       | 0.052 | 0.052 U       | 0.052 |
| Heptachlor epoxide         | 0.2      | 0.053 U       | 0.053 | 0.062 U       | 0.062 | 0.052 U       | 0.052 | 0.051 U       | 0.051 | 0.052 U       | 0.052 | 0.052 U       | 0.052 |
| Endosulfan I               | 0.4      | 0.053 U       | 0.053 | 0.062 U       | 0.062 | 0.052 U       | 0.052 | 0.051 U       | 0.051 | 0.052 U       | 0.052 | 0.052 U       | 0.052 |
| Dieldrin                   | 0.03     | 0.11 U        | 0.11  | 0.12 U        | 0.12  | 0.10 U        | 0.10  | 0.10 U        | 0.10  | 0.10 U        | 0.10  | 0.10 U        | 0.10  |
| 4,4'-DDE                   | 0.1      | 0.11 U        | 0.11  | 0.12 U        | 0.12  | 0.10 U        | 0.10  | 0.10 U        | 0.10  | 0.10 U        | 0.10  | 0.10 U        | 0.10  |
| Endrin                     | 2        | 0.11 U        | 0.11  | 0.12 U        | 0.12  | 0.10 U        | 0.10  | 0.10 U        | 0.10  | 0.10 U        | 0.10  | 0.10 U        | 0.10  |
| Endosulfan II              | 0.4      | 0.11 U        | 0.11  | 0.12 U        | 0.12  | 0.10 U        | 0.10  | 0.10 U        | 0.10  | 0.10 U        | 0.10  | 0.10 U        | 0.10  |
| 4,4'-DDD                   | 0.1      | 0.11 U        | 0.11  | 0.12 U        | 0.12  | 0.10 U        | 0.10  | 0.10 U        | 0.10  | 0.10 U        | 0.10  | 0.10 U        | 0.10  |
| Endosulfan sulfate         | 0.4      | 0.11 U        | 0.11  | 0.12 U        | 0.12  | 0.10 U        | 0.10  | 0.10 U        | 0.10  | 0.10 U        | 0.10  | 0.10 U        | 0.10  |
| 4,4'-DDT                   | 0.1      | 0.11 U        | 0.11  | 0.12 U        | 0.12  | 0.10 U        | 0.10  | 0.10 U        | 0.10  | 0.10 U        | 0.10  | 0.10 U        | 0.10  |
| Methoxychlor               | 40       | 0.53 U        | 0.53  | 0.62 U        | 0.62  | 0.52 U        | 0.52  | 0.51 U        | 0.51  | 0.52 U        | 0.52  | 0.52 U        | 0.52  |
| Endrin ketone              |          | 0.11 U        | 0.11  | 0.12 U        | 0.12  | 0.10 U        | 0.10  | 0.10 U        | 0.10  | 0.10 U        | 0.10  | 0.10 U        | 0.10  |
| Endrin aldehyde            |          | 0.11 U        | 0.11  | 0.12 U        | 0.12  | 0.10 U        | 0.10  | 0.10 U        | 0.10  | 0.10 U        | 0.10  | 0.10 U        | 0.10  |
| alpha-Chlordane            |          | 0.053 U       | 0.053 | 0.062 U       | 0.062 | 0.052 U       | 0.052 | 0.051 U       | 0.051 | 0.052 U       | 0.052 | 0.052 U       | 0.052 |
| gamma-Chlordane            | 0.5      | 0.053 U       | 0.053 | 0.062 U       | 0.062 | 0.052 U       | 0.052 | 0.051 U       | 0.051 | 0.052 U       | 0.052 | 0.052 U       | 0.052 |
| Toxaphene                  | 3        | 5.3 U         | 5.3   | 6.2 U         | 6.2   | 5.2 U         | 5.2   | 5.1 U         | 5.1   | 5.2 U         | 5.2   | 5.2 U         | 5.2   |
| Aroclor-1016               | 2        | 1.1 U         | 1.1   | 1.2 U         | 1.2   | 1.0 U         | 1.0   | 1.0 U         | 1.0   | 1.0 U         | 1.0   | 1.0 U         | 1.0   |
| Aroclor-1221               | 2        | 2.1 U         | 2.1   | 2.5 U         | 2.5   | 2.1 U         | 2.1   | 2.0 U         | 2.0   | 2.1 U         | 2.1   | 2.1 U         | 2.1   |
| Aroclor-1232               | 2        | 1.1 U         | 1.1   | 1.2 U         | 1.2   | 1.0 U         | 1.0   | 1.0 U         | 1.0   | 1.0 U         | 1.0   | 1.0 U         | 1.0   |
| Aroclor-1242               | 2        | 1.1 U         | 1.1   | 1.2 U         | 1.2   | 1.0 U         | 1.0   | 1.0 U         | 1.0   | 1.0 U         | 1.0   | 1.0 U         | 1.0   |
| Aroclor-1248               | 2        | 1.1 U         | 1.1   | 1.2 U         | 1.2   | 1.0 U         | 1.0   | 1.0 U         | 1.0   | 1.0 U         | 1.0   | 1.0 U         | 1.0   |
| Aroclor-1254               | 2        | 1.1 U         | 1.1   | 1.2 U         | 1.2   | 1.0 U         | 1.0   | 1.0 U         | 1.0   | 1.0 U         | 1.0   | 1.0 U         | 1.0   |
| Aroclor-1260               | 2        | 1.1 U         | 1.1   | 1.2 U         | 1.2   | 1.0 U         | 1.0   | 1.0 U         | 1.0   | 1.0 U         | 1.0   | 1.0 U         | 1.0   |
| Method:TCL Pesticides/PCBs |          |               |       |               |       |               |       |               |       |               |       |               |       |

**MAIN POST  
GROUNDWATER PESTICIDES/PCBS**

| Geographical Location      |          | M5                   |       | M5                   |       | M8                   |       | M8                   |       | M8                   |       | M8                   |       |
|----------------------------|----------|----------------------|-------|----------------------|-------|----------------------|-------|----------------------|-------|----------------------|-------|----------------------|-------|
| Sample                     |          | MP05-MW11-A02        |       | MP05-MW11-E02        |       | MP08-MW12-A01        |       | MP08-MW12-A02        |       | MP08-MW12-C02        |       | MP08-MW12-E02        |       |
| Sample Type                |          |                      |       | Field Rinsate Blank  |       |                      |       |                      |       | Duplicate            |       | Field Rinsate Blank  |       |
| Batch#                     |          | 9503G660             |       | 9503G660             |       | 9502G238             |       | 9503G767             |       | 9503G767             |       | 9503G767             |       |
| Prep#                      |          | 95GP0233             |       | 95GP0233             |       | 95GP0135             |       | 94GP0262             |       | 94GP0262             |       | 94GP0262             |       |
| RFW#                       |          | 013                  |       | 016                  |       | 014                  |       | 001                  |       | 003                  |       | 006                  |       |
| Dilution Factor            |          | 1.00                 |       | 1.00                 |       | 1.00                 |       | 1.00                 |       | 1.00                 |       | 1.00                 |       |
| Matrix                     |          | water                |       | water                |       | water                |       | water                |       | water                |       | water                |       |
| Units                      | ug/l     | ug/l                 |       | ug/l                 |       | ug/l                 |       | ug/l                 |       | ug/l                 |       | ug/l                 |       |
| Sampling Date              |          | 3/9/95               |       | 3/9/95               |       | 2/17/95              |       | 3/15/95              |       | 3/15/95              |       | 3/15/95              |       |
| Analysis Date              |          | 3/26/95              |       | 3/28/95              |       | 3/11/95              |       | 4/15/95              |       | 4/15/95              |       | 4/15/95              |       |
| Analysis                   | Standard | Analytical<br>Result | CRDL  | Analytical<br>Result | CRDL  | Analytical<br>Result | CRDL  | Analytical<br>Result | CRDL  | Analytical<br>Result | CRDL  | Analytical<br>Result | CRDL  |
| alpha-BHC                  | 0.02     | 0.052 U              | 0.052 | 0.051 U              | 0.051 | 0.052 U              | 0.052 | 0.052 U              | 0.052 | 0.052 U              | 0.052 | 0.052 U              | 0.052 |
| beta-BHC                   | 0.2      | 0.052 U              | 0.052 | 0.051 U              | 0.051 | 0.052 U              | 0.052 | 0.052 U              | 0.052 | 0.052 U              | 0.052 | 0.052 U              | 0.052 |
| delta-BHC                  |          | 0.052 U              | 0.052 | 0.051 U              | 0.051 | 0.052 U              | 0.052 | 0.052 U              | 0.052 | 0.052 U              | 0.052 | 0.052 U              | 0.052 |
| gamma-BHC (Lindane)        | 0.2      | 0.052 U              | 0.052 | 0.051 U              | 0.051 | 0.052 U              | 0.052 | 0.052 U              | 0.052 | 0.052 U              | 0.052 | 0.052 U              | 0.052 |
| Heptachlor                 | 0.4      | 0.052 U              | 0.052 | 0.051 U              | 0.051 | 0.052 U              | 0.052 | 0.052 U              | 0.052 | 0.052 U              | 0.052 | 0.052 U              | 0.052 |
| Aldrin                     | 0.04     | 0.052 U              | 0.052 | 0.051 U              | 0.051 | 0.052 U              | 0.052 | 0.052 U              | 0.052 | 0.052 U              | 0.052 | 0.052 U              | 0.052 |
| Heptachlor epoxide         | 0.2      | 0.052 U              | 0.052 | 0.051 U              | 0.051 | 0.052 U              | 0.052 | 0.052 U              | 0.052 | 0.052 U              | 0.052 | 0.052 U              | 0.052 |
| Endosulfan I               | 0.4      | 0.052 U              | 0.052 | 0.051 U              | 0.051 | 0.052 U              | 0.052 | 0.052 U              | 0.052 | 0.052 U              | 0.052 | 0.052 U              | 0.052 |
| Dieldrin                   | 0.03     | 0.10 U               | 0.10  | 0.10 U               | 0.10  | 0.10 U               | 0.10  | 0.10 U               | 0.10  | 0.10 U               | 0.10  | 0.10 U               | 0.10  |
| 4,4'-DDE                   | 0.1      | 0.10 U               | 0.10  | 0.10 U               | 0.10  | 0.10 U               | 0.10  | 0.10 U               | 0.10  | 0.10 U               | 0.10  | 0.10 U               | 0.10  |
| Endrin                     | 2        | 0.10 U               | 0.10  | 0.10 U               | 0.10  | 0.10 U               | 0.10  | 0.10 U               | 0.10  | 0.10 U               | 0.10  | 0.10 U               | 0.10  |
| Endosulfan II              | 0.4      | 0.10 U               | 0.10  | 0.10 U               | 0.10  | 0.10 U               | 0.10  | 0.10 U               | 0.10  | 0.10 U               | 0.10  | 0.10 U               | 0.10  |
| 4,4'-DDD                   | 0.1      | 0.10 U               | 0.10  | 0.10 U               | 0.10  | 0.10 U               | 0.10  | 0.10 U               | 0.10  | 0.10 U               | 0.10  | 0.10 U               | 0.10  |
| Endosulfan sulfate         | 0.4      | 0.10 U               | 0.10  | 0.10 U               | 0.10  | 0.10 U               | 0.10  | 0.10 U               | 0.10  | 0.10 U               | 0.10  | 0.10 U               | 0.10  |
| 4,4'-DDT                   | 0.1      | 0.10 U               | 0.10  | 0.10 U               | 0.10  | 0.10 U               | 0.10  | 0.10 U               | 0.10  | 0.10 U               | 0.10  | 0.10 U               | 0.10  |
| Methoxychlor               | 40       | 0.52 U               | 0.52  | 0.51 U               | 0.51  | 0.52 U               | 0.52  | 0.52 U               | 0.52  | 0.52 U               | 0.52  | 0.52 U               | 0.52  |
| Endrin ketone              |          | 0.10 U               | 0.10  | 0.10 U               | 0.10  | 0.10 U               | 0.10  | 0.10 U               | 0.10  | 0.10 U               | 0.10  | 0.10 U               | 0.10  |
| Endrin aldehyde            |          | 0.10 U               | 0.10  | 0.10 U               | 0.10  | 0.10 U               | 0.10  | 0.10 U               | 0.10  | 0.10 U               | 0.10  | 0.10 U               | 0.10  |
| alpha-Chlordane            |          | 0.052 U              | 0.052 | 0.051 U              | 0.051 | 0.052 U              | 0.052 | 0.052 U              | 0.052 | 0.052 U              | 0.052 | 0.052 U              | 0.052 |
| gamma-Chlordane            | 0.5      | 0.052 U              | 0.052 | 0.051 U              | 0.051 | 0.052 U              | 0.052 | 0.052 U              | 0.052 | 0.052 U              | 0.052 | 0.052 U              | 0.052 |
| Toxaphene                  | 3        | 5.2 U                | 5.2   | 5.1 U                | 5.1   | 5.2 U                | 5.2   | 5.2 U                | 5.2   | 5.2 U                | 5.2   | 5.2 U                | 5.2   |
| Aroclor-1016               | 2        | 1.0 U                | 1.0   | 1.0 U                | 1.0   | 1.0 U                | 1.0   | 1.0 U                | 1.0   | 1.0 U                | 1.0   | 1.0 U                | 1.0   |
| Aroclor-1221               | 2        | 2.1 U                | 2.1   | 2.0 U                | 2.0   | 2.1 U                | 2.1   | 2.1 U                | 2.1   | 2.1 U                | 2.1   | 2.1 U                | 2.1   |
| Aroclor-1232               | 2        | 1.0 U                | 1.0   | 1.0 U                | 1.0   | 1.0 U                | 1.0   | 1.0 U                | 1.0   | 1.0 U                | 1.0   | 1.0 U                | 1.0   |
| Aroclor-1242               | 2        | 1.0 U                | 1.0   | 1.0 U                | 1.0   | 1.0 U                | 1.0   | 1.0 U                | 1.0   | 1.0 U                | 1.0   | 1.0 U                | 1.0   |
| Aroclor-1248               | 2        | 1.0 U                | 1.0   | 1.0 U                | 1.0   | 1.0 U                | 1.0   | 1.0 U                | 1.0   | 1.0 U                | 1.0   | 1.0 U                | 1.0   |
| Aroclor-1254               | 2        | 1.0 U                | 1.0   | 1.0 U                | 1.0   | 1.0 U                | 1.0   | 1.0 U                | 1.0   | 1.0 U                | 1.0   | 1.0 U                | 1.0   |
| Aroclor-1260               | 2        | 1.0 U                | 1.0   | 1.0 U                | 1.0   | 1.0 U                | 1.0   | 1.0 U                | 1.0   | 1.0 U                | 1.0   | 1.0 U                | 1.0   |
| Method:TCL Pesticides/PCBs |          |                      |       |                      |       |                      |       |                      |       |                      |       |                      |       |

**MAIN POST  
GROUNDWATER PESTICIDES/PCBS**

| Geographical Location       |          | M8            |       | M8            |       | M8            |       | M8            |       | M8            |       | M8            |       |
|-----------------------------|----------|---------------|-------|---------------|-------|---------------|-------|---------------|-------|---------------|-------|---------------|-------|
| Sample                      |          | MP08-MW13-A01 |       | MP08-MW13-A02 |       | MP08-MW14-A01 |       | MP08-MW14-A02 |       | MP08-MW15-A01 |       | MP08-MW15-A02 |       |
| Sample Type                 |          |               |       |               |       |               |       |               |       |               |       |               |       |
| Batch#                      |          | 9502G403      |       | 9503G767      |       | 9502G219      |       | 9503G767      |       | 9502G403      |       | 9503G767      |       |
| Prep#                       |          | 95GP0164      |       | 94GP0262      |       | 95GP0127      |       | 94GP0262      |       | 95GP0164      |       | 94GP0262      |       |
| RFW#                        |          | 001           |       | 008           |       | 018           |       | 010           |       | 003           |       | 012           |       |
| Dilution Factor             |          | 1.00          |       | 1.00          |       | 1.00          |       | 1.00          |       | 1.00          |       | 1.00          |       |
| Matrix                      |          | water         |       | water         |       | water         |       | water         |       | water         |       | water         |       |
| Units                       | ug/l     | ug/l          |       | ug/l          |       | ug/l          |       | ug/l          |       | ug/l          |       | ug/l          |       |
| Sampling Date               |          | 2/22/95       |       | 3/15/95       |       | 2/16/95       |       | 3/15/95       |       | 2/22/95       |       | 3/15/95       |       |
| Analysis Date               |          | 3/14/95       |       | 4/15/95       |       | 3/14/95       |       | 4/15/95       |       | 3/14/95       |       | 4/15/95       |       |
| Analysis                    | Standard | Analytical    | CRDL  | Analytical    | CRDL  | Analytical    | CRDL  | Analytical    | CRDL  | Analytical    | CRDL  | Analytical    | CRDL  |
|                             |          | Result        |       | Result        |       | Result        |       | Result        |       | Result        |       | Result        |       |
| alpha-BHC                   | 0.02     | 0.052 U       | 0.052 | 0.052 U       | 0.052 | 0.048 U       | 0.048 | 0.046 U       | 0.046 | 0.052 U       | 0.052 | 0.053 U       | 0.053 |
| beta-BHC                    | 0.2      | 0.052 U       | 0.052 | 0.052 U       | 0.052 | 0.048 U       | 0.048 | 0.046 U       | 0.046 | 0.052 U       | 0.052 | 0.053 U       | 0.053 |
| delta-BHC                   |          | 0.052 U       | 0.052 | 0.052 U       | 0.052 | 0.048 U       | 0.048 | 0.046 U       | 0.046 | 0.052 U       | 0.052 | 0.053 U       | 0.053 |
| gamma-BHC (Lindane)         | 0.2      | 0.052 U       | 0.052 | 0.052 U       | 0.052 | 0.048 U       | 0.048 | 0.046 U       | 0.046 | 0.052 U       | 0.052 | 0.053 U       | 0.053 |
| Heptachlor                  | 0.4      | 0.052 U       | 0.052 | 0.052 U       | 0.052 | 0.048 U       | 0.048 | 0.046 U       | 0.046 | 0.052 U       | 0.052 | 0.053 U       | 0.053 |
| Aldrin                      | 0.04     | 0.052 U       | 0.052 | 0.052 U       | 0.052 | 0.048 U       | 0.048 | 0.046 U       | 0.046 | 0.052 U       | 0.052 | 0.053 U       | 0.053 |
| Heptachlor epoxide          | 0.2      | 0.052 U       | 0.052 | 0.052 U       | 0.052 | 0.048 U       | 0.048 | 0.046 U       | 0.046 | 0.052 U       | 0.052 | 0.053 U       | 0.053 |
| Endosulfan I                | 0.4      | 0.052 U       | 0.052 | 0.052 U       | 0.052 | 0.048 U       | 0.048 | 0.046 U       | 0.046 | 0.052 U       | 0.052 | 0.053 U       | 0.053 |
| Dieldrin                    | 0.03     | 0.10 U        | 0.10  | 0.10 U        | 0.10  | 0.097 U       | 0.097 | 0.092 U       | 0.092 | 0.10 U        | 0.10  | 0.11 U        | 0.11  |
| 4,4'-DDE                    | 0.1      | 0.10 U        | 0.10  | 0.10 U        | 0.10  | 0.097 U       | 0.097 | 0.092 U       | 0.092 | 0.10 U        | 0.10  | 0.11 U        | 0.11  |
| Endrin                      | 2        | 0.10 U        | 0.10  | 0.10 U        | 0.10  | 0.097 U       | 0.097 | 0.092 U       | 0.092 | 0.10 U        | 0.10  | 0.11 U        | 0.11  |
| Endosulfan II               | 0.4      | 0.10 U        | 0.10  | 0.10 U        | 0.10  | 0.097 U       | 0.097 | 0.092 U       | 0.092 | 0.10 U        | 0.10  | 0.11 U        | 0.11  |
| 4,4'-DDD                    | 0.1      | 0.10 U        | 0.10  | 0.10 U        | 0.10  | 0.097 U       | 0.097 | 0.092 U       | 0.092 | 0.10 U        | 0.10  | 0.11 U        | 0.11  |
| Endosulfan sulfate          | 0.4      | 0.10 U        | 0.10  | 0.10 U        | 0.10  | 0.097 U       | 0.097 | 0.092 U       | 0.092 | 0.10 U        | 0.10  | 0.11 U        | 0.11  |
| 4,4'-DDT                    | 0.1      | 0.10 U        | 0.10  | 0.10 U        | 0.10  | 0.097 U       | 0.097 | 0.092 U       | 0.092 | 0.10 U        | 0.10  | 0.11 U        | 0.11  |
| Methoxychlor                | 40       | 0.52 U        | 0.52  | 0.52 U        | 0.52  | 0.48 U        | 0.48  | 0.46 U        | 0.46  | 0.52 U        | 0.52  | 0.53 U        | 0.53  |
| Endrin ketone               |          | 0.10 U        | 0.10  | 0.10 U        | 0.10  | 0.097 U       | 0.097 | 0.092 U       | 0.092 | 0.10 U        | 0.10  | 0.11 U        | 0.11  |
| Endrin aldehyde             |          | 0.10 U        | 0.10  | 0.10 U        | 0.10  | 0.097 U       | 0.097 | 0.092 U       | 0.092 | 0.10 U        | 0.10  | 0.11 U        | 0.11  |
| alpha-Chlordane             |          | 0.052 U       | 0.052 | 0.052 U       | 0.052 | 0.048 U       | 0.048 | 0.046 U       | 0.046 | 0.052 U       | 0.052 | 0.053 U       | 0.053 |
| gamma-Chlordane             | 0.5      | 0.052 U       | 0.052 | 0.052 U       | 0.052 | 0.048 U       | 0.048 | 0.046 U       | 0.046 | 0.052 U       | 0.052 | 0.053 U       | 0.053 |
| Toxaphene                   | 3        | 5.2 U         | 5.2   | 5.2 U         | 5.2   | 4.8 U         | 4.8   | 4.6 U         | 4.6   | 5.2 U         | 5.2   | 5.3 U         | 5.3   |
| Aroclor-1016                | 2        | 1.0 U         | 1.0   | 1.0 U         | 1.0   | 0.97 U        | 0.97  | 0.92 U        | 0.92  | 1.0 U         | 1.0   | 1.1 U         | 1.1   |
| Aroclor-1221                | 2        | 2.1 U         | 2.1   | 2.1 U         | 2.1   | 1.9 U         | 1.9   | 1.8 U         | 1.8   | 2.1 U         | 2.1   | 2.1 U         | 2.1   |
| Aroclor-1232                | 2        | 1.0 U         | 1.0   | 1.0 U         | 1.0   | 0.97 U        | 0.97  | 0.92 U        | 0.92  | 1.0 U         | 1.0   | 1.1 U         | 1.1   |
| Aroclor-1242                | 2        | 1.0 U         | 1.0   | 1.0 U         | 1.0   | 0.97 U        | 0.97  | 0.92 U        | 0.92  | 1.0 U         | 1.0   | 1.1 U         | 1.1   |
| Aroclor-1248                | 2        | 1.0 U         | 1.0   | 1.0 U         | 1.0   | 0.97 U        | 0.97  | 0.92 U        | 0.92  | 1.0 U         | 1.0   | 1.1 U         | 1.1   |
| Aroclor-1254                | 2        | 1.0 U         | 1.0   | 1.0 U         | 1.0   | 0.97 U        | 0.97  | 0.92 U        | 0.92  | 1.0 U         | 1.0   | 1.1 U         | 1.1   |
| Aroclor-1260                | 2        | 1.0 U         | 1.0   | 1.0 U         | 1.0   | 0.97 U        | 0.97  | 0.92 U        | 0.92  | 1.0 U         | 1.0   | 1.1 U         | 1.1   |
| Method: TCL Pesticides/PCBs |          |               |       |               |       |               |       |               |       |               |       |               |       |

**MAIN POST  
GROUNDWATER PESTICIDES/PCBS**

| Geographical Location      |          | M8            |       | M8                  |       | M12           |       | M12           |       | M12           |       | M12           |       |
|----------------------------|----------|---------------|-------|---------------------|-------|---------------|-------|---------------|-------|---------------|-------|---------------|-------|
| Sample                     |          | MP08-MW15-C01 |       | MP08-MW15-E01       |       | MP12-MW16-A01 |       | MP12-MW16-A02 |       | MP12-MW17-A01 |       | MP12-MW17-A02 |       |
| Sample Type                |          | Duplicate     |       | Field Rinsate Blank |       |               |       |               |       |               |       |               |       |
| Batch#                     |          | 9502G403      |       | 9502G403            |       | 9503G299      |       | 9503G681      |       | 9503G299      |       | 9503G681      |       |
| Prep#                      |          | 95GP0164      |       | 95GP0164            |       | 95GP0154      |       | 95GP0247      |       | 95GP0154      |       | 95GP0247      |       |
| RFW#                       |          | 005           |       | 008                 |       | 001           |       | 001           |       | 003           |       | 003           |       |
| Dilution Factor            |          | 1.00          |       | 1.00                |       | 1.00          |       | 1.00          |       | 1.00          |       | 1.00          |       |
| Matrix                     |          | water         |       | water               |       | water         |       | water         |       | water         |       | water         |       |
| Units                      | ug/l     | ug/l          |       | ug/l                |       | ug/l          |       | ug/l          |       | ug/l          |       | ug/l          |       |
| Sampling Date              |          | 2/22/95       |       | 2/22/95             |       | 2/20/95       |       | 3/10/95       |       | 2/20/95       |       | 3/10/95       |       |
| Analysis Date              |          | 3/14/95       |       | 3/15/95             |       | 3/15/95       |       | 3/29/95       |       | 3/15/95       |       | 3/29/95       |       |
| Analysis                   | Standard | Analytical    | CRDL  | Analytical          | CRDL  | Analytical    | CRDL  | Analytical    | CRDL  | Analytical    | CRDL  | Analytical    | CRDL  |
|                            |          | Result        |       | Result              |       | Result        |       | Result        |       | Result        |       | Result        |       |
| alpha-BHC                  | 0.02     | 0.052 U       | 0.052 | 0.054 U             | 0.054 | 0.053 U       | 0.053 | 0.053 U       | 0.053 | 0.052 U       | 0.052 | 0.052 U       | 0.052 |
| beta-BHC                   | 0.2      | 0.052 U       | 0.052 | 0.054 U             | 0.054 | 0.053 U       | 0.053 | 0.053 U       | 0.053 | 0.052 U       | 0.052 | 0.052 U       | 0.052 |
| delta-BHC                  |          | 0.052 U       | 0.052 | 0.054 U             | 0.054 | 0.053 U       | 0.053 | 0.053 U       | 0.053 | 0.052 U       | 0.052 | 0.052 U       | 0.052 |
| gamma-BHC (Lindane)        | 0.2      | 0.052 U       | 0.052 | 0.054 U             | 0.054 | 0.053 U       | 0.053 | 0.053 U       | 0.053 | 0.052 U       | 0.052 | 0.052 U       | 0.052 |
| Heptachlor                 | 0.4      | 0.052 U       | 0.052 | 0.054 U             | 0.054 | 0.053 U       | 0.053 | 0.053 U       | 0.053 | 0.052 U       | 0.052 | 0.052 U       | 0.052 |
| Aldrin                     | 0.04     | 0.052 U       | 0.052 | 0.054 U             | 0.054 | 0.053 U       | 0.053 | 0.053 U       | 0.053 | 0.052 U       | 0.052 | 0.052 U       | 0.052 |
| Heptachlor epoxide         | 0.2      | 0.052 U       | 0.052 | 0.054 U             | 0.054 | 0.053 U       | 0.053 | 0.053 U       | 0.053 | 0.052 U       | 0.052 | 0.052 U       | 0.052 |
| Endosulfan I               | 0.4      | 0.052 U       | 0.052 | 0.054 U             | 0.054 | 0.053 U       | 0.053 | 0.053 U       | 0.053 | 0.052 U       | 0.052 | 0.052 U       | 0.052 |
| Dieldrin                   | 0.03     | 0.10 U        | 0.10  | 0.11 U              | 0.11  | 0.11 U        | 0.11  | 0.11 U        | 0.11  | 0.10 U        | 0.10  | 0.10 U        | 0.10  |
| 4,4'-DDE                   | 0.1      | 0.10 U        | 0.10  | 0.11 U              | 0.11  | 0.11 U        | 0.11  | 0.11 U        | 0.11  | 0.10 U        | 0.10  | 0.10 U        | 0.10  |
| Endrin                     | 2        | 0.10 U        | 0.10  | 0.11 U              | 0.11  | 0.11 U        | 0.11  | 0.11 U        | 0.11  | 0.10 U        | 0.10  | 0.10 U        | 0.10  |
| Endosulfan II              | 0.4      | 0.10 U        | 0.10  | 0.11 U              | 0.11  | 0.11 U        | 0.11  | 0.11 U        | 0.11  | 0.10 U        | 0.10  | 0.10 U        | 0.10  |
| 4,4'-DDD                   | 0.1      | 0.10 U        | 0.10  | 0.11 U              | 0.11  | 0.11 U        | 0.11  | 0.11 U        | 0.11  | 0.10 U        | 0.10  | 0.10 U        | 0.10  |
| Endosulfan sulfate         | 0.4      | 0.10 U        | 0.10  | 0.11 U              | 0.11  | 0.11 U        | 0.11  | 0.11 U        | 0.11  | 0.10 U        | 0.10  | 0.10 U        | 0.10  |
| 4,4'-DDT                   | 0.1      | 0.10 U        | 0.10  | 0.11 U              | 0.11  | 0.11 U        | 0.11  | 0.11 U        | 0.11  | 0.10 U        | 0.10  | 0.10 U        | 0.10  |
| Methoxychlor               | 40       | 0.52 U        | 0.52  | 0.54 U              | 0.54  | 0.53 U        | 0.53  | 0.53 U        | 0.53  | 0.52 U        | 0.52  | 0.52 U        | 0.52  |
| Endrin ketone              |          | 0.10 U        | 0.10  | 0.11 U              | 0.11  | 0.11 U        | 0.11  | 0.11 U        | 0.11  | 0.10 U        | 0.10  | 0.10 U        | 0.10  |
| Endrin aldehyde            |          | 0.10 U        | 0.10  | 0.11 U              | 0.11  | 0.11 U        | 0.11  | 0.11 U        | 0.11  | 0.10 U        | 0.10  | 0.10 U        | 0.10  |
| alpha-Chlordane            |          | 0.052 U       | 0.052 | 0.054 U             | 0.054 | 0.053 U       | 0.053 | 0.053 U       | 0.053 | 0.052 U       | 0.052 | 0.052 U       | 0.052 |
| gamma-Chlordane            | 0.5      | 0.052 U       | 0.052 | 0.054 U             | 0.054 | 0.053 U       | 0.053 | 0.053 U       | 0.053 | 0.052 U       | 0.052 | 0.052 U       | 0.052 |
| Toxaphene                  | 3        | 5.2 U         | 5.2   | 5.4 U               | 5.4   | 5.3 U         | 5.3   | 5.3 U         | 5.3   | 5.2 U         | 5.2   | 5.2 U         | 5.2   |
| Aroclor-1016               | 2        | 1.0 U         | 1.0   | 1.1 U               | 1.1   | 1.1 U         | 1.1   | 1.1 U         | 1.1   | 1.0 U         | 1.0   | 1.0 U         | 1.0   |
| Aroclor-1221               | 2        | 2.1 U         | 2.1   | 2.2 U               | 2.2   | 2.1 U         | 2.1   | 2.1 U         | 2.1   | 2.1 U         | 2.1   | 2.1 U         | 2.1   |
| Aroclor-1232               | 2        | 1.0 U         | 1.0   | 1.1 U               | 1.1   | 1.1 U         | 1.1   | 1.1 U         | 1.1   | 1.0 U         | 1.0   | 1.0 U         | 1.0   |
| Aroclor-1242               | 2        | 1.0 U         | 1.0   | 1.1 U               | 1.1   | 1.1 U         | 1.1   | 1.1 U         | 1.1   | 1.0 U         | 1.0   | 1.0 U         | 1.0   |
| Aroclor-1248               | 2        | 1.0 U         | 1.0   | 1.1 U               | 1.1   | 1.1 U         | 1.1   | 1.1 U         | 1.1   | 1.0 U         | 1.0   | 1.0 U         | 1.0   |
| Aroclor-1254               | 2        | 1.0 U         | 1.0   | 1.1 U               | 1.1   | 1.1 U         | 1.1   | 1.1 U         | 1.1   | 1.0 U         | 1.0   | 1.0 U         | 1.0   |
| Aroclor-1260               | 2        | 1.0 U         | 1.0   | 1.1 U               | 1.1   | 1.1 U         | 1.1   | 1.1 U         | 1.1   | 1.0 U         | 1.0   | 1.0 U         | 1.0   |
| Method:TCL Pesticides/PCBs |          |               |       |                     |       |               |       |               |       |               |       |               |       |

**MAIN POST  
GROUNDWATER PESTICIDES/PCBS**

| Geographical Location      |          | M12           |       | M12           |       | M14           |       | M14           |       | M14           |       | M14           |       |
|----------------------------|----------|---------------|-------|---------------|-------|---------------|-------|---------------|-------|---------------|-------|---------------|-------|
| Sample                     |          | MP12-MW18-A01 |       | MP12-MW18-A02 |       | MP14-MW19-A01 |       | MP14-MW19-A02 |       | MP14-MW20-A01 |       | MP14-MW20-A02 |       |
| Sample Type                |          |               |       |               |       |               |       |               |       |               |       |               |       |
| Batch#                     |          | 9503G299      |       | 9503G681      |       | 9503G299      |       | 9503G681      |       | 9502G403      |       | 9503G722      |       |
| Prep#                      |          | 95GP0154      |       | 95GP0247      |       | 95GP0154      |       | 95GP0247      |       | 95GP0164      |       | 95GP0247      |       |
| RFW#                       |          | 005           |       | 005           |       | 007           |       | 007           |       | 010           |       | 001           |       |
| Dilution Factor            |          | 1.00          |       | 1.00          |       | 1.00          |       | 1.00          |       | 1.00          |       | 1.00          |       |
| Matrix                     |          | water         |       | water         |       | water         |       | water         |       | water         |       | water         |       |
| Units                      | ug/l     | ug/l          |       | ug/l          |       | ug/l          |       | ug/l          |       | ug/l          |       | ug/l          |       |
| Sampling Date              |          | 2/20/95       |       | 3/10/95       |       | 2/20/95       |       | 3/10/95       |       | 2/22/95       |       | 3/13/95       |       |
| Analysis Date              |          | 3/15/95       |       | 3/29/95       |       | 3/15/95       |       | 3/29/95       |       | 3/15/95       |       | 3/29/95       |       |
| Analysis                   | Standard | Analytical    | CRDL  | Analytical    | CRDL  | Analytical    | CRDL  | Analytical    | CRDL  | Analytical    | CRDL  | Analytical    | CRDL  |
|                            |          | Result        |       | Result        |       | Result        |       | Result        |       | Result        |       | Result        |       |
| alpha-BHC                  | 0.02     | 0.056 U       | 0.056 | 0.052 U       | 0.052 | 0.052 U       | 0.052 | 0.052 U       | 0.052 | 0.046 U       | 0.046 | 0.060 U       | 0.060 |
| beta-BHC                   | 0.2      | 0.056 U       | 0.056 | 0.052 U       | 0.052 | 0.052 U       | 0.052 | 0.052 U       | 0.052 | 0.046 U       | 0.046 | 0.060 U       | 0.060 |
| delta-BHC                  |          | 0.056 U       | 0.056 | 0.052 U       | 0.052 | 0.052 U       | 0.052 | 0.052 U       | 0.052 | 0.046 U       | 0.046 | 0.060 U       | 0.060 |
| gamma-BHC (Lindane)        | 0.2      | 0.056 U       | 0.056 | 0.052 U       | 0.052 | 0.052 U       | 0.052 | 0.052 U       | 0.052 | 0.046 U       | 0.046 | 0.060 U       | 0.060 |
| Heptachlor                 | 0.4      | 0.056 U       | 0.056 | 0.052 U       | 0.052 | 0.052 U       | 0.052 | 0.052 U       | 0.052 | 0.046 U       | 0.046 | 0.060 U       | 0.060 |
| Aldrin                     | 0.04     | 0.056 U       | 0.056 | 0.052 U       | 0.052 | 0.052 U       | 0.052 | 0.052 U       | 0.052 | 0.046 U       | 0.046 | 0.060 U       | 0.060 |
| Heptachlor epoxide         | 0.2      | 0.056 U       | 0.056 | 0.052 U       | 0.052 | 0.052 U       | 0.052 | 0.052 U       | 0.052 | 0.046 U       | 0.046 | 0.060 U       | 0.060 |
| Endosulfan I               | 0.4      | 0.056 U       | 0.056 | 0.052 U       | 0.052 | 0.052 U       | 0.052 | 0.052 U       | 0.052 | 0.046 U       | 0.046 | 0.060 U       | 0.060 |
| Dieldrin                   | 0.03     | 0.11 U        | 0.11  | 0.10 U        | 0.10  | 0.10 U        | 0.10  | 0.10 U        | 0.10  | 0.093 U       | 0.093 | 0.12 U        | 0.12  |
| 4,4'-DDE                   | 0.1      | 0.11 U        | 0.11  | 0.10 U        | 0.10  | 0.10 U        | 0.10  | 0.10 U        | 0.10  | 0.093 U       | 0.093 | 0.12 U        | 0.12  |
| Endrin                     | 2        | 0.11 U        | 0.11  | 0.10 U        | 0.10  | 0.10 U        | 0.10  | 0.10 U        | 0.10  | 0.093 U       | 0.093 | 0.12 U        | 0.12  |
| Endosulfan II              | 0.4      | 0.11 U        | 0.11  | 0.10 U        | 0.10  | 0.10 U        | 0.10  | 0.10 U        | 0.10  | 0.093 U       | 0.093 | 0.12 U        | 0.12  |
| 4,4'-DDD                   | 0.1      | 0.11 U        | 0.11  | 0.10 U        | 0.10  | 0.10 U        | 0.10  | 0.10 U        | 0.10  | 0.093 U       | 0.093 | 0.12 U        | 0.12  |
| Endosulfan sulfate         | 0.4      | 0.11 U        | 0.11  | 0.10 U        | 0.10  | 0.10 U        | 0.10  | 0.10 U        | 0.10  | 0.093 U       | 0.093 | 0.12 U        | 0.12  |
| 4,4'-DDT                   | 0.1      | 0.11 U        | 0.11  | 0.10 U        | 0.10  | 0.10 U        | 0.10  | 0.10 U        | 0.10  | 0.093 U       | 0.093 | 0.12 U        | 0.12  |
| Methoxychlor               | 40       | 0.56 U        | 0.56  | 0.52 U        | 0.52  | 0.52 U        | 0.52  | 0.52 U        | 0.52  | 0.46 U        | 0.46  | 0.60 U        | 0.60  |
| Endrin ketone              |          | 0.11 U        | 0.11  | 0.10 U        | 0.10  | 0.10 U        | 0.10  | 0.10 U        | 0.10  | 0.093 U       | 0.093 | 0.12 U        | 0.12  |
| Endrin aldehyde            |          | 0.11 U        | 0.11  | 0.10 U        | 0.10  | 0.10 U        | 0.10  | 0.10 U        | 0.10  | 0.093 U       | 0.093 | 0.12 U        | 0.12  |
| alpha-Chlordane            |          | 0.056 U       | 0.056 | 0.052 U       | 0.052 | 0.052 U       | 0.052 | 0.052 U       | 0.052 | 0.046 U       | 0.046 | 0.060 U       | 0.060 |
| gamma-Chlordane            | 0.5      | 0.056 U       | 0.056 | 0.052 U       | 0.052 | 0.052 U       | 0.052 | 0.052 U       | 0.052 | 0.046 U       | 0.046 | 0.060 U       | 0.060 |
| Toxaphene                  | 3        | 5.6 U         | 5.6   | 5.2 U         | 5.2   | 5.2 U         | 5.2   | 5.2 U         | 5.2   | 4.6 U         | 4.6   | 6.0 U         | 6.0   |
| Aroclor-1016               | 2        | 1.1 U         | 1.1   | 1.0 U         | 1.0   | 1.0 U         | 1.0   | 1.0 U         | 1.0   | 0.93 U        | 0.93  | 1.2 U         | 1.2   |
| Aroclor-1221               | 2        | 2.2 U         | 2.2   | 2.1 U         | 2.1   | 2.1 U         | 2.1   | 2.1 U         | 2.1   | 1.9 U         | 1.9   | 2.4 U         | 2.4   |
| Aroclor-1232               | 2        | 1.1 U         | 1.1   | 1.0 U         | 1.0   | 1.0 U         | 1.0   | 1.0 U         | 1.0   | 0.93 U        | 0.93  | 1.2 U         | 1.2   |
| Aroclor-1242               | 2        | 1.1 U         | 1.1   | 1.0 U         | 1.0   | 1.0 U         | 1.0   | 1.0 U         | 1.0   | 0.93 U        | 0.93  | 1.2 U         | 1.2   |
| Aroclor-1248               | 2        | 1.1 U         | 1.1   | 1.0 U         | 1.0   | 1.0 U         | 1.0   | 1.0 U         | 1.0   | 0.93 U        | 0.93  | 1.2 U         | 1.2   |
| Aroclor-1254               | 2        | 1.1 U         | 1.1   | 1.0 U         | 1.0   | 1.0 U         | 1.0   | 1.0 U         | 1.0   | 0.93 U        | 0.93  | 1.2 U         | 1.2   |
| Aroclor-1260               | 2        | 1.1 U         | 1.1   | 1.0 U         | 1.0   | 1.0 U         | 1.0   | 1.0 U         | 1.0   | 0.93 U        | 0.93  | 1.2 U         | 1.2   |
| Method:TCL Pesticides/PCBs |          |               |       |               |       |               |       |               |       |               |       |               |       |

**MAIN POST**  
**GROUNDWATER PESTICIDES/PCBS**

| Geographical Location      |          | M14                 |       | M14           |       | M14           |       | M16           |       | M16           |       | M18           |        |
|----------------------------|----------|---------------------|-------|---------------|-------|---------------|-------|---------------|-------|---------------|-------|---------------|--------|
| Sample                     |          | MP14-MW20-E02       |       | MP14-MW21-A01 |       | MP14-MW21-A02 |       | MP16-MW22-A01 |       | MP16-MW22-A02 |       | MP18-MW03-A01 |        |
| Sample Type                |          | Field Rinsate Blank |       |               |       |               |       |               |       |               |       |               |        |
| Batch#                     |          | 9503G722            |       | 9502G403      |       | 9503G660      |       | 9502G238      |       | 9503G660      |       | 9505G825      |        |
| Prep#                      |          | 95GP0247            |       | 95GP0164      |       | 95GP0233      |       | 95GP0135      |       | 95GP0233      |       | 95GP0510      |        |
| RFW#                       |          | 003                 |       | 012           |       | 019           |       | 016           |       | 018           |       | 001           |        |
| Dilution Factor            |          | 1.00                |       | 1.00          |       | 1.00          |       | 1.00          |       | 1.00          |       | 1.00          |        |
| Matrix                     |          | water               |       | water         |       | water         |       | water         |       | water         |       | water         |        |
| Units                      | ug/l     | ug/l                |       | ug/l          |       | ug/l          |       | ug/l          |       | ug/l          |       | ug/l          |        |
| Sampling Date              |          | 3/13/95             |       | 2/22/95       |       | 3/9/95        |       | 2/17/95       |       | 3/9/95        |       | 5/10/95       |        |
| Analysis Date              |          | 3/29/95             |       | 3/15/95       |       | 3/28/95       |       | 3/11/95       |       | 3/28/95       |       | 5/19/95       |        |
| Analysis                   | Standard | Analytical          | CRDL  | Analytical    | CRDL  | Analytical    | CRDL  | Analytical    | CRDL  | Analytical    | CRDL  | Analytical    | CRDL   |
|                            |          | Result              |       | Result        |       | Result        |       | Result        |       | Result        |       | Result        |        |
| alpha-BHC                  | 0.02     | 0.052 U             | 0.052 | 0.047 U       | 0.047 | 0.054 U       | 0.054 | 0.048 U       | 0.048 | 0.052 U       | 0.052 | 0.054 U       | 0.054  |
| beta-BHC                   | 0.2      | 0.052 U             | 0.052 | 0.047 U       | 0.047 | 0.054 U       | 0.054 | 0.048 U       | 0.048 | 0.052 U       | 0.052 | 0.054 U       | 0.054  |
| delta-BHC                  |          | 0.052 U             | 0.052 | 0.047 U       | 0.047 | 0.054 U       | 0.054 | 0.048 U       | 0.048 | 0.052 U       | 0.052 | 0.054 U       | 0.054  |
| gamma-BHC (Lindane)        | 0.2      | 0.052 U             | 0.052 | 0.047 U       | 0.047 | 0.054 U       | 0.054 | 0.048 U       | 0.048 | 0.052 U       | 0.052 | 0.054 U       | 0.054  |
| Heptachlor                 | 0.4      | 0.052 U             | 0.052 | 0.047 U       | 0.047 | 0.054 U       | 0.054 | 0.048 U       | 0.048 | 0.052 U       | 0.052 | 0.054 U       | 0.054  |
| Aldrin                     | 0.04     | 0.052 U             | 0.052 | 0.047 U       | 0.047 | 0.054 U       | 0.054 | 0.048 U       | 0.048 | 0.052 U       | 0.052 | 0.054 U       | 0.054  |
| Heptachlor epoxide         | 0.2      | 0.052 U             | 0.052 | 0.047 U       | 0.047 | 0.054 U       | 0.054 | 0.048 U       | 0.048 | 0.052 U       | 0.052 | 0.054 U       | 0.054  |
| Endosulfan I               | 0.4      | 0.052 U             | 0.052 | 0.047 U       | 0.047 | 0.054 U       | 0.054 | 0.048 U       | 0.048 | 0.052 U       | 0.052 | 0.054 U       | 0.054  |
| Dieldrin                   | 0.03     | 0.10 U              | 0.10  | 0.094 U       | 0.094 | 0.11 U        | 0.11  | 0.095 U       | 0.095 | 0.10 U        | 0.10  | 0.11 U        | 0.11 U |
| 4,4'-DDE                   | 0.1      | 0.10 U              | 0.10  | 0.094 U       | 0.094 | 0.11 U        | 0.11  | 0.095 U       | 0.095 | 0.10 U        | 0.10  | 0.11 U        | 0.11 U |
| Endrin                     | 2        | 0.10 U              | 0.10  | 0.094 U       | 0.094 | 0.11 U        | 0.11  | 0.095 U       | 0.095 | 0.10 U        | 0.10  | 0.11 U        | 0.11 U |
| Endosulfan II              | 0.4      | 0.10 U              | 0.10  | 0.094 U       | 0.094 | 0.11 U        | 0.11  | 0.095 U       | 0.095 | 0.10 U        | 0.10  | 0.11 U        | 0.11 U |
| 4,4'-DDD                   | 0.1      | 0.10 U              | 0.10  | 0.094 U       | 0.094 | 0.11 U        | 0.11  | 0.095 U       | 0.095 | 0.10 U        | 0.10  | 0.11 U        | 0.11 U |
| Endosulfan sulfate         | 0.4      | 0.10 U              | 0.10  | 0.094 U       | 0.094 | 0.11 U        | 0.11  | 0.095 U       | 0.095 | 0.10 U        | 0.10  | 0.11 U        | 0.11 U |
| 4,4'-DDT                   | 0.1      | 0.10 U              | 0.10  | 0.094 U       | 0.094 | 0.11 U        | 0.11  | 0.095 U       | 0.095 | 0.10 U        | 0.10  | 0.11 U        | 0.11 U |
| Methoxychlor               | 40       | 0.52 U              | 0.52  | 0.47 U        | 0.47  | 0.54 U        | 0.54  | 0.48 U        | 0.48  | 0.52 U        | 0.52  | 0.54 U        | 0.54   |
| Endrin ketone              |          | 0.10 U              | 0.10  | 0.094 U       | 0.094 | 0.11 U        | 0.11  | 0.095 U       | 0.095 | 0.10 U        | 0.10  | 0.11 U        | 0.11 U |
| Endrin aldehyde            |          | 0.10 U              | 0.10  | 0.094 U       | 0.094 | 0.11 U        | 0.11  | 0.095 U       | 0.095 | 0.10 U        | 0.10  | 0.11 U        | 0.11 U |
| alpha-Chlordane            |          | 0.052 U             | 0.052 | 0.047 U       | 0.047 | 0.054 U       | 0.054 | 0.048 U       | 0.048 | 0.052 U       | 0.052 | 0.054 U       | 0.054  |
| gamma-Chlordane            | 0.5      | 0.052 U             | 0.052 | 0.047 U       | 0.047 | 0.054 U       | 0.054 | 0.048 U       | 0.048 | 0.052 U       | 0.052 | 0.054 U       | 0.054  |
| Toxaphene                  | 3        | 5.2 U               | 5.2   | 4.7 U         | 4.7   | 5.4 U         | 5.4   | 4.8 U         | 4.8   | 5.2 U         | 5.2   | 5.4 U         | 5.4    |
| Aroclor-1016               | 2        | 1.0 U               | 1.0   | 0.94 U        | 0.94  | 1.1 U         | 1.1   | 0.95 U        | 0.95  | 1.0 U         | 1.0   | 1.1 U         | 1.1 U  |
| Aroclor-1221               | 2        | 2.1 U               | 2.1   | 1.9 U         | 1.9   | 2.2 U         | 2.2   | 1.9 U         | 1.9   | 2.1 U         | 2.1   | 2.2 U         | 2.2    |
| Aroclor-1232               | 2        | 1.0 U               | 1.0   | 0.94 U        | 0.94  | 1.1 U         | 1.1   | 0.95 U        | 0.95  | 1.0 U         | 1.0   | 1.1 U         | 1.1 U  |
| Aroclor-1242               | 2        | 1.0 U               | 1.0   | 0.94 U        | 0.94  | 1.1 U         | 1.1   | 0.95 U        | 0.95  | 1.0 U         | 1.0   | 1.1 U         | 1.1 U  |
| Aroclor-1248               | 2        | 1.0 U               | 1.0   | 0.94 U        | 0.94  | 1.1 U         | 1.1   | 0.95 U        | 0.95  | 1.0 U         | 1.0   | 1.1 U         | 1.1 U  |
| Aroclor-1254               | 2        | 1.0 U               | 1.0   | 0.94 U        | 0.94  | 1.1 U         | 1.1   | 0.95 U        | 0.95  | 1.0 U         | 1.0   | 1.1 U         | 1.1 U  |
| Aroclor-1260               | 2        | 1.0 U               | 1.0   | 0.94 U        | 0.94  | 1.1 U         | 1.1   | 0.95 U        | 0.95  | 1.0 U         | 1.0   | 1.1 U         | 1.1 U  |
| Method:TCL Pesticides/PCBs |          |                     |       |               |       |               |       |               |       |               |       |               |        |

**MAIN POST  
GROUNDWATER PESTICIDES/PCBS**

| Geographical Location      |          | M18                 |        | M18           |       | M18           |       | M18           |       | M18           |       | M18                 |       |
|----------------------------|----------|---------------------|--------|---------------|-------|---------------|-------|---------------|-------|---------------|-------|---------------------|-------|
| Sample                     |          | MP18-MW03-E01       |        | MP18-MW03-A02 |       | MP18-MW24-A01 |       | MP18-MW24-A02 |       | MP18-MW24-C02 |       | MP18-MW24-E01       |       |
| Sample Type                |          | Field Rinsate Blank |        |               |       |               |       | Duplicate     |       |               |       | Field Rinsate Blank |       |
| Batch#                     |          | 9505G825            |        | 9505G139      |       | 9502G238      |       | 9503G681      |       | 9503G681      |       | 9502G238            |       |
| Prep#                      |          | 95GP0510            |        | 95GP0580      |       | 95GP0135      |       | 95GP0247      |       | 95GP0248      |       | 95GP0135            |       |
| RFW#                       |          | 001                 |        | 001           |       | 001           |       | 009           |       | 011           |       | 004                 |       |
| Dilution Factor            |          | 1.00                |        | 1.00          |       | 1.00          |       | 1.00          |       | 1.00          |       | 1.00                |       |
| Matrix                     |          | water               |        | water         |       | water         |       | water         |       | water         |       | water               |       |
| Units                      | ug/l     | ug/l                |        | ug/l          |       | ug/l          |       | ug/l          |       | ug/l          |       | ug/l                |       |
| Sampling Date              |          | 5/10/95             |        | 5/25/95       |       | 2/17/95       |       | 3/10/95       |       | 3/10/95       |       | 2/17/95             |       |
| Analysis Date              |          | 5/19/95             |        | 6/1/95        |       | 3/10/95       |       | 3/29/95       |       | 3/29/95       |       | 3/10/95             |       |
| Analysis                   | Standard | Analytical          | CRDL   | Analytical    | CRDL  | Analytical    | CRDL  | Analytical    | CRDL  | Analytical    | CRDL  | Analytical          | CRDL  |
|                            |          | Result              |        | Result        |       | Result        |       | Result        |       | Result        |       | Result              |       |
| alpha-BHC                  | 0.02     | 0.054 U             | 0.054  | 0.048 U       | 0.048 | 0.046 U       | 0.046 | 0.052 U       | 0.052 | 0.052 U       | 0.052 | 0.047 U             | 0.047 |
| beta-BHC                   | 0.2      | 0.054 U             | 0.054  | 0.048 U       | 0.048 | 0.046 U       | 0.046 | 0.052 U       | 0.052 | 0.052 U       | 0.052 | 0.047 U             | 0.047 |
| delta-BHC                  |          | 0.054 U             | 0.054  | 0.048 U       | 0.048 | 0.046 U       | 0.046 | 0.052 U       | 0.052 | 0.052 U       | 0.052 | 0.047 U             | 0.047 |
| gamma-BHC (Lindane)        | 0.2      | 0.054 U             | 0.054  | 0.048 U       | 0.048 | 0.046 U       | 0.046 | 0.052 U       | 0.052 | 0.052 U       | 0.052 | 0.047 U             | 0.047 |
| Heptachlor                 | 0.4      | 0.054 U             | 0.054  | 0.048 U       | 0.048 | 0.046 U       | 0.046 | 0.052 U       | 0.052 | 0.052 U       | 0.052 | 0.047 U             | 0.047 |
| Aldrin                     | 0.04     | 0.054 U             | 0.054  | 0.048 U       | 0.048 | 0.046 U       | 0.046 | 0.052 U       | 0.052 | 0.052 U       | 0.052 | 0.047 U             | 0.047 |
| Heptachlor epoxide         | 0.2      | 0.054 U             | 0.054  | 0.048 U       | 0.048 | 0.046 U       | 0.046 | 0.052 U       | 0.052 | 0.052 U       | 0.052 | 0.047 U             | 0.047 |
| Endosulfan I               | 0.4      | 0.054 U             | 0.054  | 0.048 U       | 0.048 | 0.046 U       | 0.046 | 0.052 U       | 0.052 | 0.052 U       | 0.052 | 0.047 U             | 0.047 |
| Dieldrin                   | 0.03     | 0.11 U              | 0.11 U | 0.095 U       | 0.095 | 0.093 U       | 0.093 | 0.10 U        | 0.10  | 0.10 U        | 0.10  | 0.094 U             | 0.094 |
| 4,4'-DDE                   | 0.1      | 0.11 U              | 0.11 U | 0.095 U       | 0.095 | 0.093 U       | 0.093 | 0.10 U        | 0.10  | 0.10 U        | 0.10  | 0.094 U             | 0.094 |
| Endrin                     | 2        | 0.11 U              | 0.11 U | 0.095 U       | 0.095 | 0.093 U       | 0.093 | 0.10 U        | 0.10  | 0.10 U        | 0.10  | 0.094 U             | 0.094 |
| Endosulfan II              | 0.4      | 0.11 U              | 0.11 U | 0.095 U       | 0.095 | 0.093 U       | 0.093 | 0.10 U        | 0.10  | 0.10 U        | 0.10  | 0.094 U             | 0.094 |
| 4,4'-DDD                   | 0.1      | 0.11 U              | 0.11 U | 0.095 U       | 0.095 | 0.18          | 0.093 | 0.10 U        | 0.10  | 0.11 P        | 0.10  | 0.094 U             | 0.094 |
| Endosulfan sulfate         | 0.4      | 0.11 U              | 0.11 U | 0.095 U       | 0.095 | 0.093 U       | 0.093 | 0.10 U        | 0.10  | 0.10 U        | 0.10  | 0.094 U             | 0.094 |
| 4,4'-DDT                   | 0.1      | 0.11 U              | 0.11 U | 0.095 U       | 0.095 | 0.093 U       | 0.093 | 0.10 U        | 0.10  | 0.10 U        | 0.10  | 0.094 U             | 0.094 |
| Methoxychlor               | 40       | 0.54 U              | 0.54   | 0.48 U        | 0.48  | 0.46 U        | 0.46  | 0.52 U        | 0.52  | 0.52 U        | 0.52  | 0.47 U              | 0.47  |
| Endrin ketone              |          | 0.11 U              | 0.11 U | 0.095 U       | 0.095 | 0.093 U       | 0.093 | 0.10 U        | 0.10  | 0.10 U        | 0.10  | 0.094 U             | 0.094 |
| Endrin aldehyde            |          | 0.11 U              | 0.11 U | 0.095 U       | 0.095 | 0.093 U       | 0.093 | 0.10 U        | 0.10  | 0.10 U        | 0.10  | 0.094 U             | 0.094 |
| alpha-Chlordane            |          | 0.054 U             | 0.054  | 0.048 U       | 0.048 | 0.046 U       | 0.046 | 0.052 U       | 0.052 | 0.052 U       | 0.052 | 0.047 U             | 0.047 |
| gamma-Chlordane            | 0.5      | 0.054 U             | 0.054  | 0.048 U       | 0.048 | 0.046 U       | 0.046 | 0.052 U       | 0.052 | 0.052 U       | 0.052 | 0.047 U             | 0.047 |
| Toxaphene                  | 3        | 5.4 U               | 5.4    | 4.8 U         | 4.8   | 4.6 U         | 4.6   | 5.2 U         | 5.2   | 5.2 U         | 5.2   | 4.7 U               | 4.7   |
| Aroclor-1016               | 2        | 1.1 U               | 1.1 U  | 0.95 U        | 0.95  | 0.93 U        | 0.93  | 1.0 U         | 1.0   | 1.0 U         | 1.0   | 0.94 U              | 0.94  |
| Aroclor-1221               | 2        | 2.2 U               | 2.2    | 1.9 U         | 1.9   | 1.9 U         | 1.9   | 2.1 U         | 2.1   | 2.1 U         | 2.1   | 1.9 U               | 1.9   |
| Aroclor-1232               | 2        | 1.1 U               | 1.1 U  | 0.95 U        | 0.95  | 0.93 U        | 0.93  | 1.0 U         | 1.0   | 1.0 U         | 1.0   | 0.94 U              | 0.94  |
| Aroclor-1242               | 2        | 1.1 U               | 1.1 U  | 0.95 U        | 0.95  | 0.93 U        | 0.93  | 1.0 U         | 1.0   | 1.0 U         | 1.0   | 0.94 U              | 0.94  |
| Aroclor-1248               | 2        | 1.1 U               | 1.1 U  | 0.95 U        | 0.95  | 0.93 U        | 0.93  | 1.0 U         | 1.0   | 1.0 U         | 1.0   | 0.94 U              | 0.94  |
| Aroclor-1254               | 2        | 1.1 U               | 1.1 U  | 0.95 U        | 0.95  | 0.93 U        | 0.93  | 1.0 U         | 1.0   | 1.0 U         | 1.0   | 0.94 U              | 0.94  |
| Aroclor-1260               | 2        | 1.1 U               | 1.1 U  | 0.95 U        | 0.95  | 0.93 U        | 0.93  | 1.0 U         | 1.0   | 1.0 U         | 1.0   | 0.94 U              | 0.94  |
| Method:TCL Pesticides/PCBs |          |                     |        |               |       |               |       |               |       |               |       |                     |       |



**MAIN POST  
GROUNDWATER PESTICIDES/PCBS**

| Geographical Location       |          | M18                 |       | M18           |       | M18           |       | M18           |       | B1           |       |
|-----------------------------|----------|---------------------|-------|---------------|-------|---------------|-------|---------------|-------|--------------|-------|
| Sample                      |          | MP18-MW24-E02       |       | MP18-MW25-A01 |       | MP18-MW25-A02 |       | MP18-MW25-C01 |       | B1-MW01B-A01 |       |
| Sample Type                 |          | Field Rinsate Blank |       |               |       |               |       | Duplicate     |       |              |       |
| Batch#                      |          | 9503G681            |       | 9502G238      |       | 9503G681      |       | 9502G238      |       | 9502G169     |       |
| Prep#                       |          | 95GP0247            |       | 95GP0135      |       | 95GP0247      |       | 95GP0135      |       | 95GP0119     |       |
| RFW#                        |          | 014                 |       | 006           |       | 016           |       | 008           |       | 001          |       |
| Dilution Factor             |          | 1.00                |       | 1.00          |       | 1.00          |       | 1.00          |       | 1.00         |       |
| Matrix                      |          | water               |       | water         |       | water         |       | water         |       | water        |       |
| Units                       | ug/l     | ug/l                |       | ug/l          |       | ug/l          |       | ug/l          |       | ug/l         |       |
| Sampling Date               |          | 3/10/95             |       | 2/17/95       |       | 3/10/95       |       | 2/17/95       |       | 2/14/95      |       |
| Analysis Date               |          | 3/29/95             |       | 3/10/95       |       | 3/29/95       |       | 3/11/95       |       | 3/4/95       |       |
| Analysis                    | Standard | Analytical          | CRDL  | Analytical    | CRDL  | Analytical    | CRDL  | Analytical    | CRDL  | Analytical   | CRDL  |
|                             |          | Result              |       | Result        |       | Result        |       | Result        |       | Result       |       |
| alpha-BHC                   | 0.02     | 0.056 U             | 0.056 | 0.047 U       | 0.047 | 0.053 U       | 0.053 | 0.051 U       | 0.051 | 0.052 U      | 0.052 |
| beta-BHC                    | 0.2      | 0.056 U             | 0.056 | 0.047 U       | 0.047 | 0.053 U       | 0.053 | 0.051 U       | 0.051 | 0.052 U      | 0.052 |
| delta-BHC                   |          | 0.056 U             | 0.056 | 0.047 U       | 0.047 | 0.053 U       | 0.053 | 0.051 U       | 0.051 | 0.052 U      | 0.052 |
| gamma-BHC (Lindane)         | 0.2      | 0.056 U             | 0.056 | 0.047 U       | 0.047 | 0.053 U       | 0.053 | 0.051 U       | 0.051 | 0.052 U      | 0.052 |
| Heptachlor                  | 0.4      | 0.056 U             | 0.056 | 0.047 U       | 0.047 | 0.053 U       | 0.053 | 0.051 U       | 0.051 | 0.052 U      | 0.052 |
| Aldrin                      | 0.04     | 0.056 U             | 0.056 | 0.047 U       | 0.047 | 0.053 U       | 0.053 | 0.051 U       | 0.051 | 0.052 U      | 0.052 |
| Heptachlor epoxide          | 0.2      | 0.056 U             | 0.056 | 0.047 U       | 0.047 | 0.053 U       | 0.053 | 0.051 U       | 0.051 | 0.041 J      | 0.052 |
| Endosulfan I                | 0.4      | 0.056 U             | 0.056 | 0.047 U       | 0.047 | 0.053 U       | 0.053 | 0.051 U       | 0.051 | 0.052 U      | 0.052 |
| Dieldrin                    | 0.03     | 0.11 U              | 0.11  | 0.094 U       | 0.094 | 0.11 U        | 0.11  | 0.10 U        | 0.10  | 0.10 U       | 0.10  |
| 4,4'-DDE                    | 0.1      | 0.11 U              | 0.11  | 0.094 U       | 0.094 | 0.11 U        | 0.11  | 0.10 U        | 0.10  | 0.10 U       | 0.10  |
| Endrin                      | 2        | 0.11 U              | 0.11  | 0.094 U       | 0.094 | 0.11 U        | 0.11  | 0.10 U        | 0.10  | 0.10 U       | 0.10  |
| Endosulfan II               | 0.4      | 0.11 U              | 0.11  | 0.094 U       | 0.094 | 0.11 U        | 0.11  | 0.10 U        | 0.10  | 0.10 U       | 0.10  |
| 4,4'-DDD                    | 0.1      | 0.11 U              | 0.11  | 0.094 U       | 0.094 | 0.11 U        | 0.11  | 0.10 U        | 0.10  | 0.10 U       | 0.10  |
| Endosulfan sulfate          | 0.4      | 0.11 U              | 0.11  | 0.094 U       | 0.094 | 0.11 U        | 0.11  | 0.10 U        | 0.10  | 0.10 U       | 0.10  |
| 4,4'-DDT                    | 0.1      | 0.11 U              | 0.11  | 0.094 U       | 0.094 | 0.11 U        | 0.11  | 0.10 U        | 0.10  | 0.10 U       | 0.10  |
| Methoxychlor                | 40       | 0.56 U              | 0.56  | 0.47 U        | 0.47  | 0.53 U        | 0.53  | 0.51 U        | 0.51  | 0.52 U       | 0.52  |
| Endrin ketone               |          | 0.11 U              | 0.11  | 0.094 U       | 0.094 | 0.11 U        | 0.11  | 0.10 U        | 0.10  | 0.10 U       | 0.10  |
| Endrin aldehyde             |          | 0.11 U              | 0.11  | 0.094 U       | 0.094 | 0.11 U        | 0.11  | 0.10 U        | 0.10  | 0.10 U       | 0.10  |
| alpha-Chlordane             |          | 0.056 U             | 0.056 | 0.047 U       | 0.047 | 0.053 U       | 0.053 | 0.051 U       | 0.051 | 0.052 U      | 0.052 |
| gamma-Chlordane             | 0.5      | 0.056 U             | 0.056 | 0.047 U       | 0.047 | 0.053 U       | 0.053 | 0.051 U       | 0.051 | 0.052 U      | 0.052 |
| Toxaphene                   | 3        | 5.6 U               | 5.6   | 4.7 U         | 4.7   | 5.3 U         | 5.3   | 5.1 U         | 5.1   | 5.2 U        | 5.2   |
| Aroclor-1016                | 2        | 1.1 U               | 1.1   | 0.94 U        | 0.94  | 1.1 U         | 1.1   | 1.0 U         | 1.0   | 1.0 U        | 1.0   |
| Aroclor-1221                | 2        | 2.2 U               | 2.2   | 1.9 U         | 1.9   | 2.1 U         | 2.1   | 2.0 U         | 2.0   | 2.1 U        | 2.1   |
| Aroclor-1232                | 2        | 1.1 U               | 1.1   | 0.94 U        | 0.94  | 1.1 U         | 1.1   | 1.0 U         | 1.0   | 1.0 U        | 1.0   |
| Aroclor-1242                | 2        | 1.1 U               | 1.1   | 0.94 U        | 0.94  | 1.1 U         | 1.1   | 1.0 U         | 1.0   | 1.0 U        | 1.0   |
| Aroclor-1248                | 2        | 1.1 U               | 1.1   | 0.94 U        | 0.94  | 1.1 U         | 1.1   | 1.0 U         | 1.0   | 1.0 U        | 1.0   |
| Aroclor-1254                | 2        | 1.1 U               | 1.1   | 0.94 U        | 0.94  | 1.1 U         | 1.1   | 1.0 U         | 1.0   | 1.0 U        | 1.0   |
| Aroclor-1260                | 2        | 1.1 U               | 1.1   | 0.94 U        | 0.94  | 1.1 U         | 1.1   | 1.0 U         | 1.0   | 1.0 U        | 1.0   |
| Method: TCL Pesticides/PCBs |          |                     |       |               |       |               |       |               |       |              |       |

**MAIN POST  
GROUNDWATER PESTICIDES/PCBS**

| Geographical Location       |          | B1           |       | B2           |       | B2           |       | B3           |       | B3           |      |
|-----------------------------|----------|--------------|-------|--------------|-------|--------------|-------|--------------|-------|--------------|------|
| Sample                      |          | B1-MW01B-A02 |       | B2-MW02B-A01 |       | B2-MW02B-A02 |       | B3-MW03B-A01 |       | B3-MW03B-A02 |      |
| Sample Type                 |          |              |       |              |       |              |       |              |       |              |      |
| Batch#                      |          | 9503G616     |       | 9502G169     |       | 9503G616     |       | 9502G169     |       | 9503G740     |      |
| Prep#                       |          | 95GP0219     |       | 95GP0119     |       | 95GP0219     |       | 95GP0119     |       | 95GP0251     |      |
| RFW#                        |          | 008          |       | 003          |       | 010          |       | 005          |       | 001          |      |
| Dilution Factor             |          | 1.00         |       | 1.00         |       | 1.00         |       | 1.00         |       | 1.00         |      |
| Matrix                      |          | water        |       | water        |       | water        |       | water        |       | water        |      |
| Units                       | ug/l     | ug/l         |       | ug/l         |       | ug/l         |       | ug/l         |       | ug/l         |      |
| Sampling Date               |          | 3/7/95       |       | 2/14/95      |       | 3/7/95       |       | 2/14/95      |       | 3/14/95      |      |
| Analysis Date               |          | 3/17/95      |       | 3/4/95       |       | 3/17/95      |       | 3/4/95       |       | 4/12/95      |      |
| Analysis                    | Standard | Analytical   | CRDL  | Analytical   | CRDL  | Analytical   | CRDL  | Analytical   | CRDL  | Analytical   | CRDL |
|                             |          | Result       |       | Result       |       | Result       |       | Result       |       | Result       |      |
| alpha-BHC                   | 0.02     | 0.051 U      | 0.051 | 0.056 U      | 0.056 | 0.052 U      | 0.052 | 0.047 U      | 0.047 | 0.050 U      | 0.05 |
| beta-BHC                    | 0.2      | 0.051 U      | 0.051 | 0.056 U      | 0.056 | 0.052 U      | 0.052 | 0.047 U      | 0.047 | 0.050 U      | 0.05 |
| delta-BHC                   |          | 0.051 U      | 0.051 | 0.056 U      | 0.056 | 0.052 U      | 0.052 | 0.047 U      | 0.047 | 0.050 U      | 0.05 |
| gamma-BHC (Lindane)         | 0.2      | 0.051 U      | 0.051 | 0.056 U      | 0.056 | 0.052 U      | 0.052 | 0.047 U      | 0.047 | 0.050 U      | 0.05 |
| Heptachlor                  | 0.4      | 0.051 U      | 0.051 | 0.056 U      | 0.056 | 0.052 U      | 0.052 | 0.047 U      | 0.047 | 0.050 U      | 0.05 |
| Aldrin                      | 0.04     | 0.051 U      | 0.051 | 0.056 U      | 0.056 | 0.052 U      | 0.052 | 0.047 U      | 0.047 | 0.050 U      | 0.05 |
| Heptachlor epoxide          | 0.2      | 0.041 J      | 0.051 | 0.056 U      | 0.056 | 0.052 U      | 0.052 | 0.047 U      | 0.047 | 0.050 U      | 0.05 |
| Endosulfan I                | 0.4      | 0.051 U      | 0.051 | 0.056 U      | 0.056 | 0.052 U      | 0.052 | 0.047 U      | 0.047 | 0.050 U      | 0.05 |
| Dieldrin                    | 0.03     | 0.10 U       | 0.10  | 0.11 U       | 0.11  | 0.10 U       | 0.10  | 0.094 U      | 0.094 | 0.10 U       | 0.10 |
| 4,4'-DDE                    | 0.1      | 0.10 U       | 0.10  | 0.11 U       | 0.11  | 0.10 U       | 0.10  | 0.094 U      | 0.094 | 0.050 JP     | 0.10 |
| Endrin                      | 2        | 0.10 U       | 0.10  | 0.11 U       | 0.11  | 0.10 U       | 0.10  | 0.094 U      | 0.094 | 0.10 U       | 0.10 |
| Endosulfan II               | 0.4      | 0.10 U       | 0.10  | 0.11 U       | 0.11  | 0.10 U       | 0.10  | 0.094 U      | 0.094 | 0.10 U       | 0.10 |
| 4,4'-DDD                    | 0.1      | 0.10 U       | 0.10  | 0.11 U       | 0.11  | 0.10 U       | 0.10  | 0.094 U      | 0.094 | 0.10 U       | 0.10 |
| Endosulfan sulfate          | 0.4      | 0.10 U       | 0.10  | 0.11 U       | 0.11  | 0.10 U       | 0.10  | 0.094 U      | 0.094 | 0.10 U       | 0.10 |
| 4,4'-DDT                    | 0.1      | 0.10 U       | 0.10  | 0.11 U       | 0.11  | 0.10 U       | 0.10  | 0.094 U      | 0.094 | 0.10 U       | 0.10 |
| Methoxychlor                | 40       | 0.51 U       | 0.51  | 0.56 U       | 0.56  | 0.52 U       | 0.52  | 0.47 U       | 0.47  | 0.50 U       | 0.5  |
| Endrin ketone               |          | 0.10 U       | 0.10  | 0.11 U       | 0.11  | 0.10 U       | 0.10  | 0.094 U      | 0.094 | 0.10 U       | 0.10 |
| Endrin aldehyde             |          | 0.10 U       | 0.10  | 0.11 U       | 0.11  | 0.10 U       | 0.10  | 0.094 U      | 0.094 | 0.10 U       | 0.10 |
| alpha-Chlordane             |          | 0.051 U      | 0.051 | 0.056 U      | 0.056 | 0.052 U      | 0.052 | 0.047 U      | 0.047 | 0.050 U      | 0.05 |
| gamma-Chlordane             | 0.5      | 0.051 U      | 0.051 | 0.056 U      | 0.056 | 0.052 U      | 0.052 | 0.047 U      | 0.047 | 0.050 U      | 0.05 |
| Toxaphene                   | 3        | 5.1 U        | 5.1   | 5.6 U        | 5.6   | 5.2 U        | 5.2   | 4.7 U        | 4.7   | 5.0 U        | 5.0  |
| Aroclor-1016                | 2        | 1.0 U        | 1.0   | 1.1 U        | 1.1   | 1.0 U        | 1.0   | 0.94 U       | 0.94  | 1.0 U        | 1.0  |
| Aroclor-1221                | 2        | 2.0 U        | 2.0   | 2.2 U        | 2.2   | 2.1 U        | 2.1   | 1.9 U        | 1.9   | 2.0 U        | 2.0  |
| Aroclor-1232                | 2        | 1.0 U        | 1.0   | 1.1 U        | 1.1   | 1.0 U        | 1.0   | 0.94 U       | 0.94  | 1.0 U        | 1.0  |
| Aroclor-1242                | 2        | 1.0 U        | 1.0   | 1.1 U        | 1.1   | 1.0 U        | 1.0   | 0.94 U       | 0.94  | 1.0 U        | 1.0  |
| Aroclor-1248                | 2        | 1.0 U        | 1.0   | 1.1 U        | 1.1   | 1.0 U        | 1.0   | 0.94 U       | 0.94  | 1.0 U        | 1.0  |
| Aroclor-1254                | 2        | 1.0 U        | 1.0   | 1.1 U        | 1.1   | 1.0 U        | 1.0   | 0.94 U       | 0.94  | 1.0 U        | 1.0  |
| Aroclor-1260                | 2        | 1.0 U        | 1.0   | 1.1 U        | 1.1   | 1.0 U        | 1.0   | 0.94 U       | 0.94  | 1.0 U        | 1.0  |
| Method: TCL Pesticides/PCBs |          |              |       |              |       |              |       |              |       |              |      |

**MAIN POST**  
**GROUNDWATER PESTICIDES/PCBS**

| Geographical Location      |          | B3                  |       | B3                  |       | B4           |       | B4           |       | B5           |       | B5           |       |
|----------------------------|----------|---------------------|-------|---------------------|-------|--------------|-------|--------------|-------|--------------|-------|--------------|-------|
| Sample                     |          | B3-MW03B-E01        |       | B3-MW03B-E02        |       | B4-MW04B-A01 |       | B4-MW04B-A02 |       | B5-MW05B-A01 |       | B5-MW05B-A02 |       |
| Sample Type                |          | Field Rinsate Blank |       | Field Rinsate Blank |       |              |       |              |       |              |       |              |       |
| Batch#                     |          | 9502G169            |       | 9503G616            |       | 9502G169     |       | 9503G616     |       | 9502G169     |       | 9503G616     |       |
| Prep#                      |          | 95GP0119            |       | 95GP0219            |       | 95GP0119     |       | 95GP0219     |       | 95GP0119     |       | 95GP0219     |       |
| RFW#                       |          | 008                 |       | 006                 |       | 010          |       | 012          |       | 012          |       | 001          |       |
| Dilution Factor            |          | 1.00                |       | 1.00                |       | 1.00         |       | 1.00         |       | 1.00         |       | 1.00         |       |
| Matrix                     |          | water               |       | water               |       | water        |       | water        |       | water        |       | water        |       |
| Units                      | ug/l     | ug/l                |       | ug/l                |       | ug/l         |       | ug/l         |       | ug/l         |       | ug/l         |       |
| Sampling Date              |          | 2/13/95             |       | 3/7/95              |       | 2/13/95      |       | 3/7/95       |       | 2/13/95      |       | 3/7/95       |       |
| Analysis Date              |          | 3/4/95              |       | 3/17/95             |       | 3/4/95       |       | 3/17/95      |       | 3/4/95       |       | 3/17/95      |       |
| Analysis                   | Standard | Analytical          | CRDL  | Analytical          | CRDL  | Analytical   | CRDL  | Analytical   | CRDL  | Analytical   | CRDL  | Analytical   | CRDL  |
|                            |          | Result              |       | Result              |       | Result       |       | Result       |       | Result       |       | Result       |       |
| alpha-BHC                  | 0.02     | 0.048 U             | 0.048 | 0.048 U             | 0.048 | 0.062 U      | 0.062 | 0.052 U      | 0.052 | 0.052 U      | 0.052 | 0.058 U      | 0.058 |
| beta-BHC                   | 0.2      | 0.048 U             | 0.048 | 0.048 U             | 0.048 | 0.062 U      | 0.062 | 0.052 U      | 0.052 | 0.052 U      | 0.052 | 0.058 U      | 0.058 |
| delta-BHC                  |          | 0.048 U             | 0.048 | 0.048 U             | 0.048 | 0.062 U      | 0.062 | 0.052 U      | 0.052 | 0.052 U      | 0.052 | 0.058 U      | 0.058 |
| gamma-BHC (Lindane)        | 0.2      | 0.048 U             | 0.048 | 0.048 U             | 0.048 | 0.062 U      | 0.062 | 0.052 U      | 0.052 | 0.052 U      | 0.052 | 0.058 U      | 0.058 |
| Heptachlor                 | 0.4      | 0.048 U             | 0.048 | 0.048 U             | 0.048 | 0.062 U      | 0.062 | 0.052 U      | 0.052 | 0.052 U      | 0.052 | 0.058 U      | 0.058 |
| Aldrin                     | 0.04     | 0.048 U             | 0.048 | 0.048 U             | 0.048 | 0.062 U      | 0.062 | 0.052 U      | 0.052 | 0.052 U      | 0.052 | 0.058 U      | 0.058 |
| Heptachlor epoxide         | 0.2      | 0.048 U             | 0.048 | 0.048 U             | 0.048 | 0.062 U      | 0.062 | 0.052 U      | 0.052 | 0.052 U      | 0.052 | 0.058 U      | 0.058 |
| Endosulfan I               | 0.4      | 0.048 U             | 0.048 | 0.048 U             | 0.048 | 0.062 U      | 0.062 | 0.052 U      | 0.052 | 0.052 U      | 0.052 | 0.058 U      | 0.058 |
| Dieldrin                   | 0.03     | 0.095 U             | 0.095 | 0.096 U             | 0.096 | 0.12 U       | 0.12  | 0.10 U       | 0.10  | 0.10 U       | 0.10  | 0.12 U       | 0.12  |
| 4,4'-DDE                   | 0.1      | 0.095 U             | 0.095 | 0.096 U             | 0.096 | 0.12 U       | 0.12  | 0.10 U       | 0.10  | 0.10 U       | 0.10  | 0.12 U       | 0.12  |
| Endrin                     | 2        | 0.095 U             | 0.095 | 0.096 U             | 0.096 | 0.12 U       | 0.12  | 0.10 U       | 0.10  | 0.10 U       | 0.10  | 0.12 U       | 0.12  |
| Endosulfan II              | 0.4      | 0.095 U             | 0.095 | 0.096 U             | 0.096 | 0.12 U       | 0.12  | 0.10 U       | 0.10  | 0.10 U       | 0.10  | 0.12 U       | 0.12  |
| 4,4'-DDD                   | 0.1      | 0.095 U             | 0.095 | 0.096 U             | 0.096 | 0.12 U       | 0.12  | 0.10 U       | 0.10  | 0.10 U       | 0.10  | 0.12 U       | 0.12  |
| Endosulfan sulfate         | 0.4      | 0.095 U             | 0.095 | 0.096 U             | 0.096 | 0.12 U       | 0.12  | 0.10 U       | 0.10  | 0.10 U       | 0.10  | 0.12 U       | 0.12  |
| 4,4'-DDT                   | 0.1      | 0.095 U             | 0.095 | 0.096 U             | 0.096 | 0.12 U       | 0.12  | 0.10 U       | 0.10  | 0.10 U       | 0.10  | 0.12 U       | 0.12  |
| Methoxychlor               | 40       | 0.48 U              | 0.48  | 0.48 U              | 0.48  | 0.62 U       | 0.62  | 0.52 U       | 0.52  | 0.52 U       | 0.52  | 0.58 U       | 0.58  |
| Endrin ketone              |          | 0.095 U             | 0.095 | 0.096 U             | 0.096 | 0.12 U       | 0.12  | 0.10 U       | 0.10  | 0.10 U       | 0.10  | 0.12 U       | 0.12  |
| Endrin aldehyde            |          | 0.095 U             | 0.095 | 0.096 U             | 0.096 | 0.12 U       | 0.12  | 0.10 U       | 0.10  | 0.10 U       | 0.10  | 0.12 U       | 0.12  |
| alpha-Chlordane            |          | 0.048 U             | 0.048 | 0.048 U             | 0.048 | 0.062 U      | 0.062 | 0.052 U      | 0.052 | 0.052 U      | 0.052 | 0.058 U      | 0.058 |
| gamma-Chlordane            | 0.5      | 0.048 U             | 0.048 | 0.048 U             | 0.048 | 0.062 U      | 0.062 | 0.052 U      | 0.052 | 0.052 U      | 0.052 | 0.058 U      | 0.058 |
| Toxaphene                  | 3        | 4.8 U               | 4.8   | 4.8 U               | 4.8   | 6.2 U        | 6.2   | 5.2 U        | 5.2   | 5.2 U        | 5.2   | 5.8 U        | 5.8   |
| Aroclor-1016               | 2        | 0.95 U              | 0.95  | 0.96 U              | 0.96  | 1.2 U        | 1.2   | 1.0 U        | 1.0   | 1.0 U        | 1.0   | 1.2 U        | 1.2   |
| Aroclor-1221               | 2        | 1.9 U               | 1.9   | 1.9 U               | 1.9   | 2.5 U        | 2.5   | 2.1 U        | 2.1   | 2.1 U        | 2.1   | 2.3 U        | 2.3   |
| Aroclor-1232               | 2        | 0.95 U              | 0.95  | 0.96 U              | 0.96  | 1.2 U        | 1.2   | 1.0 U        | 1.0   | 1.0 U        | 1.0   | 1.2 U        | 1.2   |
| Aroclor-1242               | 2        | 0.95 U              | 0.95  | 0.96 U              | 0.96  | 1.2 U        | 1.2   | 1.0 U        | 1.0   | 1.0 U        | 1.0   | 1.2 U        | 1.2   |
| Aroclor-1248               | 2        | 0.95 U              | 0.95  | 0.96 U              | 0.96  | 1.2 U        | 1.2   | 1.0 U        | 1.0   | 1.0 U        | 1.0   | 1.2 U        | 1.2   |
| Aroclor-1254               | 2        | 0.95 U              | 0.95  | 0.96 U              | 0.96  | 1.2 U        | 1.2   | 1.0 U        | 1.0   | 1.0 U        | 1.0   | 1.2 U        | 1.2   |
| Aroclor-1260               | 2        | 0.95 U              | 0.95  | 0.96 U              | 0.96  | 1.2 U        | 1.2   | 1.0 U        | 1.0   | 1.0 U        | 1.0   | 1.2 U        | 1.2   |
| Method:TCL Pesticides/PCBs |          |                     |       |                     |       |              |       |              |       |              |       |              |       |

**MAIN POST  
TRANSFORMERS AND CONCRETE - PCBs**

| Geographical Location |          | Building 292  |           | Building 686  |           | Building 718  |           | Building 1002 |           | Building 1002 |           | Building 1004 |           |
|-----------------------|----------|---------------|-----------|---------------|-----------|---------------|-----------|---------------|-----------|---------------|-----------|---------------|-----------|
| Sample                |          | MPT5-TR01-A01 |           | MPT6-TR01-A01 |           | MPT4-TR01-A01 |           | MPT7-CC01-A01 |           | MPT7-CC01-C01 |           | MPT8-TR01-A01 |           |
| Sample Type           |          | Transformer   |           | Transformer   |           | Transformer   |           | Concrete      |           | Duplicate     |           | Transformer   |           |
| Batch#                |          | 9411G832      |           | 9411G832      |           | 9411G832      |           | 9412G922      |           | 9412G922      |           | 9411G832      |           |
| Prep#                 |          | 94GP1024      |           | 94GP1024      |           | 94GP1024      |           |               |           |               |           | 94GP1024      |           |
| RFW#                  |          | 007           |           | 008           |           | 006           |           | 010           |           | 011           |           | 009           |           |
| Sample Depth          |          |               |           |               |           |               |           |               |           |               |           |               |           |
| Dilution Factor       |          | 2.5           |           | 0.5           |           | 0.5           |           | 25000         |           | 25000         |           | 5.0           |           |
| Matrix                |          | soil          |           | soil          |           | soil          |           | Concrete      |           | Concrete      |           | soil          |           |
| Units                 | mg/kg    | mg/kg         |           | mg/kg         |           | mg/kg         |           | mg/kg         |           | mg/kg         |           | mg/kg         |           |
| Sampling Date         |          | 11/29/94      |           | 11/29/94      |           | 11/29/94      |           |               |           |               |           | 11/29/94      |           |
| Analysis Date         |          | 12/21/94      |           | 12/21/94      |           | 12/22/94      |           | 12/31/94      |           | 12/31/94      |           | 12/21/94      |           |
| Analysis              | Standard | Analytical    | Reporting | Analytical    | Reporting | Analytical    | Reporting | Analytical    | Reporting | Analytical    | Reporting | Analytical    | Reporting |
|                       |          | Result        | Limit     | Result        | Limit     | Result        | Limit     | Result        | Limit     | Result        | Limit     | Result        | Limit     |
| % Solids              |          | 81.3          | 0.10      | 89.4          | 0.10      | 77.7          | 0.10      |               |           |               |           | 88.2          | 0.10      |
| Aroclor-1016          | 0.055    | 0.24 U        | 0.24      | 0.045 U       | 0.045     | 0.051 U       | 0.051     | 2000 U        | 2000      | 1900 U        | 1900      | 0.45 U        | 0.45      |
| Aroclor-1221          | 0.055    | 0.24 U        | 0.24      | 0.045 U       | 0.045     | 0.051 U       | 0.051     | 2000 U        | 2000      | 1900 U        | 1900      | 0.45 U        | 0.45      |
| Aroclor-1232          | 0.055    | 0.24 U        | 0.24      | 0.045 U       | 0.045     | 0.051 U       | 0.051     | 2000 U        | 2000      | 1900 U        | 1900      | 0.45 U        | 0.45      |
| Aroclor-1242          | 0.055    | 0.24 U        | 0.24      | 0.045 U       | 0.045     | 0.051 U       | 0.051     | 2000 U        | 2000      | 1900 U        | 1900      | 0.45 U        | 0.45      |
| Aroclor-1248          | 0.055    | 0.24 U        | 0.24      | 0.045 U       | 0.045     | 0.051 U       | 0.051     | 8400          | 2000      | 6300          | 1900      | 0.45 U        | 0.45      |
| Aroclor-1254          | 0.055    | 0.48 U        | 0.48      | 0.089 U       | 0.089     | 0.1 U         | 0.1       | 3900 U        | 3900      | 3900 U        | 3900      | 0.89 U        | 0.89      |
| Aroclor-1260          | 0.055    | 0.68          |           | 0.18          |           | 0.059 J       | 0.1       | 3900 U        | 3900      | 3900 U        | 3900      | 0.89 U        | 0.89      |
| Method: TCL PCBs      |          |               |           |               |           |               |           |               |           |               |           |               |           |

**MAIN POST**  
**TRANSFORMERS AND CONCRETE - PCBs**

|                       |          |               |           |                 |           |               |           |               |           |               |           |               |           |
|-----------------------|----------|---------------|-----------|-----------------|-----------|---------------|-----------|---------------|-----------|---------------|-----------|---------------|-----------|
| Geographical Location |          | Building 1208 |           | Building 1208   |           | Building 1209 |           | Building 1220 |           | Building 1220 |           | Building 1220 |           |
| Sample                |          | MPT2-CC01-A01 |           | MPT2-CC01-A01DL |           | MPT1-CC01-A01 |           | MPT3-TR01-A01 |           | MPT3-TR02-A01 |           | MPT3-TR03-A01 |           |
| Sample Type           |          | Concrete      |           | Concrete        |           | Concrete      |           | Transformer   |           | Transformer   |           | Transformer   |           |
| Batch#                |          | 9412G922      |           | 9412G922        |           | 9412G922      |           | 9411G832      |           | 9411G832      |           | 9411G832      |           |
| Prep#                 |          |               |           |                 |           |               |           | 94GP1024      |           | 94GP1024      |           | 94GP1024      |           |
| RFW#                  |          | 009DL         |           | 009             |           | 008           |           | 001           |           | 002           |           | 003           |           |
| Sample Depth          |          |               |           |                 |           |               |           |               |           |               |           |               |           |
| Dilution Factor       |          | 25000         |           | 50000           |           | 5000          |           | 0.5           |           | 0.5           |           | 0.5           |           |
| Matrix                |          | Concrete      |           | Concrete        |           | Concrete      |           | soil          |           | soil          |           | soil          |           |
| Units                 | mg/kg    | mg/kg         |           | mg/kg           |           | mg/kg         |           | mg/kg         |           | mg/kg         |           | mg/kg         |           |
| Sampling Date         |          |               |           |                 |           | NA            |           | 11/29/94      |           | 11/29/94      |           | 11/29/94      |           |
| Analysis Date         |          | 12/31/94      |           | 12/31/94        |           | 12/31/94      |           | 12/21/94      |           | 12/21/94      |           | 12/21/94      |           |
| Analysis              | Standard | Analytical    | Reporting | Analytical      | Reporting | Analytical    | Reporting | Analytical    | Reporting | Analytical    | Reporting | Analytical    | Reporting |
|                       |          | Result        | Limit     | Result          | Limit     | Result        | Limit     | Result        | Limit     | Result        | Limit     | Result        | Limit     |
| % Solids              |          |               |           |                 |           |               |           | 88.3          | 0.10      | 96.4          | 0.10      | 84.9          | 0.10      |
| Aroclor-1016          | 0.055    | 2000 U        | 2000      | NA              | NA        | 400 U         | 400       | 0.045 U       | 0.045     | 0.041 U       | 0.041     | 0.047 U       | 0.047     |
| Aroclor-1221          | 0.055    | 2000 U        | 2000      | NA              | NA        | 400 U         | 400       | 0.045 U       | 0.045     | 0.041 U       | 0.041     | 0.047 U       | 0.047     |
| Aroclor-1232          | 0.055    | 2000 U        | 2000      | NA              | NA        | 400 U         | 400       | 0.045 U       | 0.045     | 0.041 U       | 0.041     | 0.047 U       | 0.047     |
| Aroclor-1242          | 0.055    | 2000 U        | 2000      | NA              | NA        | 400 U         | 400       | 0.045 U       | 0.045     | 0.041 U       | 0.041     | 0.047 U       | 0.047     |
| Aroclor-1248          | 0.055    | 2000 U        | 2000      | NA              | NA        | 400 U         | 400       | 0.045 U       | 0.045     | 0.041 U       | 0.041     | 0.047 U       | 0.047     |
| Aroclor-1254          | 0.055    | 4000 U        | 4000      | NA              | NA        | 790 U         | 790       | 0.089 U       | 0.089     | 0.082 U       | 0.082     | 0.094 U       | 0.094     |
| Aroclor-1260          | 0.055    | E             |           | 19000           | 8000      | 1500          | 790       | 0.015 J       | 0.089     | 0.082 U       | 0.082     | 0.063 J       | 0.094     |
| Method:TCL PCBs       |          |               |           |                 |           |               |           |               |           |               |           |               |           |

**MAIN POST  
TRANSFORMERS AND CONCRETE - PCBs**

|                       |          |               |           |               |           |               |           |
|-----------------------|----------|---------------|-----------|---------------|-----------|---------------|-----------|
| Geographical Location |          | Building 1220 |           | Building 1220 |           | Building 1220 |           |
| Sample                |          | MPT3-TR04-A01 |           | MPT3-TR04-C01 |           | MPT3-CC01-A01 |           |
| Sample Type           |          | Transformer   |           | Duplicate     |           | Concrete      |           |
| Batch#                |          | 9411G832      |           | 9411G832      |           | 9412G822      |           |
| Prep#                 |          | 94GP1024      |           | 94GP1024      |           |               |           |
| RFW#                  |          | 004           |           | 005           |           | 007           |           |
| Sample Depth          |          |               |           |               |           |               |           |
| Dilution Factor       |          | 0.5           |           | 0.5           |           | 0.50          |           |
| Matrix                |          | soil          |           | soil          |           | Concrete      |           |
| Units                 | mg/kg    | mg/kg         |           | mg/kg         |           | mg/kg         |           |
| Sampling Date         |          | 11/29/94      |           | 11/29/94      |           | NA            |           |
| Analysis Date         |          | 12/21/94      |           | 12/22/94      |           | 12/31/94      |           |
| Analysis              | Standard | Analytical    | Reporting | Analytical    | Reporting | Analytical    | Reporting |
|                       |          | Result        | Limit     | Result        | Limit     | Result        | Limit     |
| % Solids              |          | 87.9          | 0.10      | 88.0          | 0.10      |               |           |
| Aroclor-1016          | 0.055    | 0.045 U       | 0.045     | 0.045 U       | 0.045     | 0.04 U        | 0.04      |
| Aroclor-1221          | 0.055    | 0.045 U       | 0.045     | 0.045 U       | 0.045     | 0.04 U        | 0.04      |
| Aroclor-1232          | 0.055    | 0.045 U       | 0.045     | 0.045 U       | 0.045     | 0.04 U        | 0.04      |
| Aroclor-1242          | 0.055    | 0.045 U       | 0.045     | 0.045 U       | 0.045     | 0.04 U        | 0.04      |
| Aroclor-1248          | 0.055    | 0.045 U       | 0.045     | 0.045 U       | 0.045     | 0.04 U        | 0.04      |
| Aroclor-1254          | 0.055    | 0.090 U       | 0.09      | 0.089 U       | 0.089     | 0.08 U        | 0.079     |
| Aroclor-1260          | 0.055    | 0.087 J       | 0.09      | 0.07 J        | 0.089     | 0.026         | 0.079     |
| Method: TCL PCBs      |          |               |           |               |           |               |           |

**CHARLES WOOD**

**CHARLES WOOD  
SEDIMENT VOLATILES**

| Geographical Location      |          |        | Background    |       | Background    |       | CW5           |       |
|----------------------------|----------|--------|---------------|-------|---------------|-------|---------------|-------|
| Sample                     |          |        | CW02-SD01-A01 |       | CW05-SD01-A01 |       | CW06-SD01-A01 |       |
| Batch#                     |          |        | 9412G923      |       | 9412G923      |       | 9412G923      |       |
| Prep#                      |          |        | 94GVT028      |       | 94GVT028      |       | 94GVT028      |       |
| RFW#                       |          |        | 005           |       | 006           |       | 006           |       |
| Sample Depth               |          |        | 0-6"          |       | 0-6"          |       | 0-6"          |       |
| Dilution Factor            |          |        | 1.00          |       | 1.00          |       | 1.00          |       |
| Matrix                     |          |        | soil          |       | soil          |       | soil          |       |
| Units                      | mg/kg    | mg/kg  | mg/kg         |       | mg/kg         |       | mg/kg         |       |
| Sampling Date              |          |        | 12/1/94       |       | 12/1/94       |       | 12/1/94       |       |
| Analysis Date              |          |        | 12/9/94       |       | 12/9/94       |       | 12/9/94       |       |
| Analysis                   | Standard | MDL    | Analytical    | CRQL  | Analytical    | CRQL  | Analytical    | CRQL  |
|                            |          |        | Result        |       | Result        |       | Result        |       |
|                            |          |        |               |       |               |       |               |       |
| Chloromethane              |          | 0.0073 | 0.014 U       | 0.014 | 0.018 U       | 0.018 | 0.013 U       | 0.013 |
| Bromomethane               |          | 0.0067 | 0.014 U       | 0.014 | 0.018 U       | 0.018 | 0.013 U       | 0.013 |
| Vinyl Chloride             |          | 0.0079 | 0.014 U       | 0.014 | 0.018 U       | 0.018 | 0.013 U       | 0.013 |
| Chloroethane               |          | 0.0091 | 0.014 U       | 0.014 | 0.018 U       | 0.018 | 0.013 U       | 0.013 |
| Methylene Chloride         |          | 0.0027 | 0.014 U       | 0.014 | 0.018 U       | 0.018 | 0.013 U       | 0.013 |
| Acetone                    |          | 0.0069 | 0.014 U       | 0.014 | 0.018 U       | 0.018 | 0.013 U       | 0.013 |
| Carbon Disulfide           |          | 0.0044 | 0.014 U       | 0.014 | 0.018 U       | 0.018 | 0.013 U       | 0.013 |
| 1,1-Dichloroethene         |          | 0.0049 | 0.014 U       | 0.014 | 0.018 U       | 0.018 | 0.013 U       | 0.013 |
| 1,1-Dichloroethane         |          | 0.003  | 0.014 U       | 0.014 | 0.018 U       | 0.018 | 0.013 U       | 0.013 |
| 1,2-Dichloroethene (total) |          | 0.0044 | 0.014 U       | 0.014 | 0.018 U       | 0.018 | 0.013 U       | 0.013 |
| Chloroform                 |          | 0.0029 | 0.014 U       | 0.014 | 0.018 U       | 0.018 | 0.013 U       | 0.013 |
| 1,2-Dichloroethane         |          | 0.0024 | 0.014 U       | 0.014 | 0.018 U       | 0.018 | 0.013 U       | 0.013 |
| 2-Butanone                 |          | 0.0041 | 0.014 U       | 0.014 | 0.018 U       | 0.018 | 0.013 U       | 0.013 |
| 1,1,1-Trichloroethane      |          | 0.0017 | 0.014 U       | 0.014 | 0.018 U       | 0.018 | 0.013 U       | 0.013 |
| Carbon Tetrachloride       |          | 0.0015 | 0.014 U       | 0.014 | 0.018 U       | 0.018 | 0.013 U       | 0.013 |
| Bromodichloromethane       |          | 0.002  | 0.014 U       | 0.014 | 0.018 U       | 0.018 | 0.013 U       | 0.013 |
| 1,2-Dichloropropane        |          | 0.0017 | 0.014 U       | 0.014 | 0.018 U       | 0.018 | 0.013 U       | 0.013 |
| cis-1,3-Dichloropropene    |          | 0.003  | 0.014 U       | 0.014 | 0.018 U       | 0.018 | 0.013 U       | 0.013 |
| Trichloroethene            |          | 0.002  | 0.014 U       | 0.014 | 0.018 U       | 0.018 | 0.013 U       | 0.013 |
| Dibromochloromethane       |          | 0.0024 | 0.014 U       | 0.014 | 0.018 U       | 0.018 | 0.013 U       | 0.013 |
| 1,1,2-Trichloroethane      |          | 0.0043 | 0.014 U       | 0.014 | 0.018 U       | 0.018 | 0.013 U       | 0.013 |
| Benzene                    |          | 0.0033 | 0.014 U       | 0.014 | 0.018 U       | 0.018 | 0.013 U       | 0.013 |
| trans-1,3-Dichloropropene  |          | 0.0024 | 0.014 U       | 0.014 | 0.018 U       | 0.018 | 0.013 U       | 0.013 |
| Bromoform                  |          | 0.0031 | 0.014 U       | 0.014 | 0.018 U       | 0.018 | 0.013 U       | 0.013 |
| 4-Methyl-2-pentanone       |          | 0.0055 | 0.014 U       | 0.014 | 0.018 U       | 0.018 | 0.013 U       | 0.013 |
| 2-Hexanone                 |          | 0.0039 | 0.014 U       | 0.014 | 0.018 U       | 0.018 | 0.013 U       | 0.013 |
| Tetrachloroethene          |          | 0.004  | 0.014 U       | 0.014 | 0.018 U       | 0.018 | 0.013 U       | 0.013 |
| 1,1,2,2-Tetrachloroethane  |          | 0.0042 | 0.014 U       | 0.014 | 0.018 U       | 0.018 | 0.013 U       | 0.013 |
| Toluene                    |          | 0.0027 | 0.014 U       | 0.014 | 0.018 U       | 0.018 | 0.013 U       | 0.013 |
| Chlorobenzene              |          | 0.0027 | 0.014 U       | 0.014 | 0.018 U       | 0.018 | 0.013 U       | 0.013 |
| Ethylbenzene               |          | 0.0031 | 0.014 U       | 0.014 | 0.018 U       | 0.018 | 0.013 U       | 0.013 |
| Styrene                    |          | 0.0038 | 0.014 U       | 0.014 | 0.018 U       | 0.018 | 0.013 U       | 0.013 |
| Xylene (total)             |          | 0.0038 | 0.014 U       | 0.014 | 0.018 U       | 0.018 | 0.013 U       | 0.013 |
| Total Est. Conc. of TIC.   |          |        |               |       | 0.02          |       |               |       |
| Method:TCL Volatiles       |          |        |               |       |               |       |               |       |



**CHARLES WOOD  
SEDIMENT SEMIVOLATILES**

| Geographical Location        |          |       | Background    |      | Background    |      | Background     |      | CW5           |      |
|------------------------------|----------|-------|---------------|------|---------------|------|----------------|------|---------------|------|
| Sample                       |          |       | CW02-SD01-A01 |      | CW05-SD01-A01 |      | CW05-SD01-A01R |      | CW06-SD01-A01 |      |
| Batch#                       |          |       | 9412G923      |      | 9412G923      |      | 9412G923       |      | 9412G923      |      |
| Prep#                        |          |       | 94GBO800      |      | 94GBO800      |      | 94GBO800       |      | 94GBO800      |      |
| RFW#                         |          |       | 005           |      | 006           |      | 006            |      | 007           |      |
| Sample Depth                 |          |       | 0-6"          |      | 0-6"          |      | 0-6"           |      | 0-6"          |      |
| Dilution Factor              |          |       | 1.00          |      | 1.00          |      | 1.00           |      | 1.00          |      |
| Matrix                       |          |       | soil          |      | soil          |      | soil           |      | soil          |      |
| Units                        | mg/kg    | mg/kg | mg/kg         |      | mg/kg         |      | mg/kg          |      | mg/kg         |      |
| Sampling Date                |          |       | 12/1/94       |      | 12/1/94       |      | 12/1/94        |      | 12/1/94       |      |
| Analysis Date                |          |       | 12/22/94      |      | 12/22/94      |      | 12/22/94       |      | 12/22/94      |      |
| Analysis                     | Standard | MDL   | Analytical    | CRQL | Analytical    | CRQL | Analytical     | CRQL | Analytical    | CRQL |
|                              |          |       | Result        |      | Result        |      | Result         |      | Result        |      |
| Phenol                       |          | 0.234 | 0.47 U        | 0.47 | 0.61 U        | 0.61 | 0.61 U         | 0.61 | 0.42 U        | 0.42 |
| bis(2-Chloroethyl) ether     |          | 0.32  | 0.47 U        | 0.47 | 0.61 U        | 0.61 | 0.61 U         | 0.61 | 0.42 U        | 0.42 |
| 2-Chlorophenol               |          | 0.241 | 0.47 U        | 0.47 | 0.61 U        | 0.61 | 0.61 U         | 0.61 | 0.42 U        | 0.42 |
| 1,3-Dichlorobenzene          |          | 0.175 | 0.47 U        | 0.47 | 0.61 U        | 0.61 | 0.61 U         | 0.61 | 0.42 U        | 0.42 |
| 1,4-Dichlorobenzene          |          | 0.158 | 0.47 U        | 0.47 | 0.61 U        | 0.61 | 0.61 U         | 0.61 | 0.42 U        | 0.42 |
| 1,2-Dichlorobenzene          |          | 0.188 | 0.47 U        | 0.47 | 0.61 U        | 0.61 | 0.61 U         | 0.61 | 0.42 U        | 0.42 |
| 2-Methylphenol               |          | 0.221 | 0.47 U        | 0.47 | 0.61 U        | 0.61 | 0.61 U         | 0.61 | 0.42 U        | 0.42 |
| 2,2'-oxybis(1-Chloropropane) |          | 0.231 | 0.47 U        | 0.47 | 0.61 U        | 0.61 | 0.61 U         | 0.61 | 0.42 U        | 0.42 |
| 4-Methylphenol               |          | 0.426 | 0.47 U        | 0.47 | 0.61 U        | 0.61 | 0.61 U         | 0.61 | 0.42 U        | 0.42 |
| N-Nitroso-di-n-propylamine   |          | 0.264 | 0.47 U        | 0.47 | 0.61 U        | 0.61 | 0.61 U         | 0.61 | 0.42 U        | 0.42 |
| Hexachloroethane             |          | 0.175 | 0.47 U        | 0.47 | 0.61 U        | 0.61 | 0.61 U         | 0.61 | 0.42 U        | 0.42 |
| Nitrobenzene                 |          | 0.244 | 0.47 U        | 0.47 | 0.61 U        | 0.61 | 0.61 U         | 0.61 | 0.42 U        | 0.42 |
| Isophorone                   |          | 0.129 | 0.47 U        | 0.47 | 0.61 U        | 0.61 | 0.61 U         | 0.61 | 0.42 U        | 0.42 |
| 2-Nitrophenol                |          | 0.231 | 0.47 U        | 0.47 | 0.61 U        | 0.61 | 0.61 U         | 0.61 | 0.42 U        | 0.42 |
| 2,4-Dimethylphenol           |          | 0.158 | 0.47 U        | 0.47 | 0.61 U        | 0.61 | 0.61 U         | 0.61 | 0.42 U        | 0.42 |
| bis(2-Chloroethoxy) methane  |          | 0.201 | 0.47 U        | 0.47 | 0.61 U        | 0.61 | 0.61 U         | 0.61 | 0.42 U        | 0.42 |
| 2,4-Dichlorophenol           |          | 0.145 | 0.47 U        | 0.47 | 0.61 U        | 0.61 | 0.61 U         | 0.61 | 0.42 U        | 0.42 |
| 1,2,4-Trichlorobenzene       |          | 0.317 | 0.47 U        | 0.47 | 0.61 U        | 0.61 | 0.61 U         | 0.61 | 0.42 U        | 0.42 |
| Naphthalene                  |          | 0.277 | 0.47 U        | 0.47 | 0.61 U        | 0.61 | 0.61 U         | 0.61 | 0.42 U        | 0.42 |
| 4-Chloroaniline              |          | 0.096 | 0.47 U        | 0.47 | 0.61 U        | 0.61 | 0.61 U         | 0.61 | 0.42 U        | 0.42 |
| Hexachlorobutadiene          |          | 0.152 | 0.47 U        | 0.47 | 0.61 U        | 0.61 | 0.61 U         | 0.61 | 0.42 U        | 0.42 |
| 4-Chloro-3-methylphenol      |          | 0.102 | 0.47 U        | 0.47 | 0.61 U        | 0.61 | 0.61 U         | 0.61 | 0.42 U        | 0.42 |
| 2-Methylnaphthalene          |          | 0.287 | 0.47 U        | 0.47 | 0.61 U        | 0.61 | 0.61 U         | 0.61 | 0.42 U        | 0.42 |
| Hexachlorocyclopentadiene    |          | 0.119 | 0.47 U        | 0.47 | 0.61 U        | 0.61 | 0.61 U         | 0.61 | 0.42 U        | 0.42 |
| 2,4,6-Trichlorophenol        |          | 0.185 | 0.47 U        | 0.47 | 0.61 U        | 0.61 | 0.61 U         | 0.61 | 0.42 U        | 0.42 |
| 2,4,5-Trichlorophenol        |          | 0.155 | 1.2 U         | 1.2  | 1.5 U         | 1.5  | 1.5 U          | 1.5  | 1 U           | 1    |
| 2-Chloronaphthalene          |          | 0.271 | 0.47 U        | 0.47 | 0.61 U        | 0.61 | 0.61 U         | 0.61 | 0.42 U        | 0.42 |
| 2-Nitroaniline               |          | 0.201 | 1.2 U         | 1.2  | 1.5 U         | 1.5  | 1.5 U          | 1.5  | 1 U           | 1    |
| Dimethylphthalate            |          | 0.145 | 0.47 U        | 0.47 | 0.61 U        | 0.61 | 0.61 U         | 0.61 | 0.4 J         | 0.42 |
| Acenaphthylene               |          | 0.198 | 0.47 U        | 0.47 | 0.61 U        | 0.61 | 0.61 U         | 0.61 | 0.42 U        | 0.42 |
| 2,6-Dinitrotoluene           |          | 0.172 | 0.47 U        | 0.47 | 0.61 U        | 0.61 | 0.61 U         | 0.61 | 0.42 U        | 0.42 |
| 3-Nitroaniline               |          | 0.172 | 1.2 U         | 1.2  | 1.5 U         | 1.5  | 1.5 U          | 1.5  | 1 U           | 1    |
| Acenaphthene                 |          | 0.221 | 0.47 U        | 0.47 | 0.61 U        | 0.61 | 0.61 U         | 0.61 | 0.42 U        | 0.42 |
| 2,4-Dinitrophenol            |          | 0.152 | 1.2 U         | 1.2  | 1.5 U         | 1.5  | 1.5 U          | 1.5  | 1 U           | 1    |

**CHARLES WOOD  
SEDIMENT SEMIVOLATILES**

| Geographical Location      |          |       | Background    | Background    | Background     | CW5           |
|----------------------------|----------|-------|---------------|---------------|----------------|---------------|
| Sample                     |          |       | CW02-SD01-A01 | CW05-SD01-A01 | CW05-SD01-A01R | CW06-SD01-A01 |
| Batch#                     |          |       | 9412G923      | 9412G923      | 9412G923       | 9412G923      |
| Prep#                      |          |       | 94GBO800      | 94GBO800      | 94GBO800       | 94GBO800      |
| RFW#                       |          |       | 005           | 006           | 006            | 007           |
| Sample Depth               |          |       | 0-6"          | 0-6"          | 0-6"           | 0-6"          |
| Dilution Factor            |          |       | 1.00          | 1.00          | 1.00           | 1.00          |
| Matrix                     |          |       | soil          | soil          | soil           | soil          |
| Units                      | mg/kg    | mg/kg | mg/kg         | mg/kg         | mg/kg          | mg/kg         |
| Sampling Date              |          |       | 12/1/94       | 12/1/94       | 12/1/94        | 12/1/94       |
| Analysis Date              |          |       | 12/22/94      | 12/22/94      | 12/22/94       | 12/22/94      |
| Analysis                   | Standard | MDL   | Analytical    | CRQL          | Analytical     | CRQL          |
|                            |          |       | Result        |               | Result         |               |
|                            |          |       |               |               |                |               |
| 4-Nitrophenol              |          | 0.248 | 1.2 U         | 1.2           | 1.5 U          | 1.5           |
| Dibenzofuran               |          | 0.215 | 0.47 U        | 0.47          | 0.61 U         | 0.61          |
| 2,4-Dinitrotoluene         |          | 0.191 | 0.47 U        | 0.47          | 0.61 U         | 0.61          |
| Diethylphthalate           |          | 0.178 | 0.47 U        | 0.47          | 0.61 U         | 0.61          |
| 4-Chlorophenyl-phenylether |          | 0.231 | 0.47 U        | 0.47          | 0.61 U         | 0.61          |
| Fluorene                   |          | 0.208 | 0.47 U        | 0.47          | 0.61 U         | 0.61          |
| 4-Nitroaniline             |          | 0.211 | 1.2 U         | 1.2           | 1.5 U          | 1.5           |
| 4,6-Dinitro-2-methylphenol |          | 0.175 | 1.2 U         | 1.2           | 1.5 U          | 1.5           |
| N-Nitrosodiphenylamine (1) |          | 0.139 | 0.47 U        | 0.47          | 0.61 U         | 0.61          |
| 4-Bromophenyl-phenylether  |          | 0.175 | 0.47 U        | 0.47          | 0.61 U         | 0.61          |
| Hexachlorobenzene          |          | 0.182 | 0.47 U        | 0.47          | 0.61 U         | 0.61          |
| Pentachlorophenol          |          | 0.132 | 1.2 U         | 1.2           | 1.5 U          | 1.5           |
| Phenanthrene               | 0.225    | 0.165 | 0.47 U        | 0.47          | 0.079 J        | 0.61          |
| Anthracene                 |          | 0.152 | 0.47 U        | 0.47          | 0.61 U         | 0.61          |
| Carbazole                  |          | 0.145 | 0.47 U        | 0.47          | 0.61 U         | 0.61          |
| Di-n-butylphthalate        |          | 0.215 | 0.47 U        | 0.47          | 0.12 J         | 0.61          |
| Fluoranthene               | 0.6      | 0.198 | 0.47 U        | 0.47          | 0.12 J         | 0.61          |
| Pyrene                     | 0.35     | 0.178 | 0.47 U        | 0.47          | 0.24 J         | 0.61          |
| Butylbenzylphthalate       |          | 0.175 | 0.47 U        | 0.47          | 0.61 U         | 0.61          |
| 3,3'-Dichlorobenzidine     |          | 0.092 | 0.47 U        | 0.47          | 0.61 U         | 0.61          |
| Benzo(a)anthracene         | 0.23     | 0.162 | 0.47 U        | 0.47          | 0.09 J         | 0.61          |
| Chrysene                   | 0.4      | 0.145 | 0.47 U        | 0.47          | 0.11 J         | 0.61          |
| bis(2-Ethylhexy)phthalate  |          | 0.32  | 0.47 U        | 0.47          | 0.21 J         | 0.61          |
| Di-n-octyl phthalate       |          | 0.185 | 0.47 U        | 0.47          | 0.61 U         | 0.61          |
| Benzo(b)fluoranthene       |          | 0.188 | 0.47 U        | 0.47          | 0.16 J         | 0.61          |
| Benzo(k)fluoranthene       |          | 0.205 | 0.47 U        | 0.47          | 0.61 U         | 0.61          |
| Benzo(a)pyrene             | 0.4      | 0.162 | 0.47 U        | 0.47          | 0.61 U         | 0.61          |
| Indeno(1,2,3-cd)pyrene     |          | 0.234 | 0.47 U        | 0.47          | 0.17 J         | 0.61          |
| Dibenzo(a,h)anthracene     |          | 0.198 | 0.47 U        | 0.47          | 0.61 U         | 0.61          |
| Benzo(g,h,i)perylene       |          | 0.224 | 0.47 U        | 0.47          | 0.15 J         | 0.61          |
| Organic Carbon %           |          |       |               |               | 1.3            | 0.06          |
| % solids                   |          |       |               |               | 76.3           | 0.10          |
| Total Est. Conc. of TIC    |          |       | 10.1 J        |               | 28.2 J         |               |
| Method: TCL Semivolatiles  |          |       |               |               |                |               |

**CHARLES WOOD  
SEDIMENT INORGANICS**

| Geographical Location       |          | Background    |       | Background    |      | Background    |        | CW5           |       |
|-----------------------------|----------|---------------|-------|---------------|------|---------------|--------|---------------|-------|
| Sample                      |          | CW02-SD01-A01 |       | CW05-SD01-A01 |      | CW05-SD01-A01 |        | CW06-SD01-A01 |       |
| Batch#                      |          | 9412G923      |       | 9505G138      |      | 9412G923      |        | 9412G923      |       |
| Prep#                       |          | 94GTS473      |       | 95GTS327      |      | 94GTS473      |        | 94GTS473      |       |
| RFW#                        |          | 005           |       | 001           |      | 006           |        | 007           |       |
| Sample Depth                |          | 0-6"          |       | 0-6"          |      | 0-6"          |        | 0-6"          |       |
| Dilution Factor             |          | 1.00          |       | 1.00          |      | 1.00          |        | 1.00          |       |
| Matrix                      |          | soil          |       | soil          |      | soil          |        | soil          |       |
| Units                       | mg/kg    | mg/kg         |       | mg/kg         |      | mg/kg         |        | mg/kg         |       |
| Sampling Date               |          | 12/1/94       |       | 5/25/95       |      | 12/1/94       |        | 12/1/94       |       |
| Analysis Date               |          | 12/9/94       |       | 6/1/95        |      | 12/9/94       |        | 12/9/94       |       |
| Analysis                    | Standard | Analytical    | MDL   | Analytical    | MDL  | Analytical    | MDL    | Analytical    | MDL   |
|                             |          | Result        |       | Result        |      | Result        |        | Result        |       |
| % Solids                    |          | 71.3          | 0.10  | 76.3          | 0.10 | 54.5          | 0.10   | 79.3          | 0.10  |
| Silver                      | 1        | 0.63 U        | 0.63  |               |      | 1.1 U         | 1.1    | 0.70 U        | 0.7   |
| Aluminum                    |          | 1910          | 5.5   |               |      | 6660          | 9.1    | 866           | 6.1   |
| Arsenic                     | 33       | 1.1           | 0.38  |               |      | 5.8           | 0.54   | 0.74          | 0.35  |
| Barium                      |          | 8.4           | 0.43  |               |      | 45.7          | 0.71   | 9.6           | 0.48  |
| Beryllium                   |          | 0.31 U        | 0.31  |               |      | 0.51 U        | 0.51   | 0.34 U        | 0.34  |
| Calcium                     |          | 343           | 2.5   |               |      | 2960          | 4.1    | 509           | 2.7   |
| Cadmium                     | 5        | 0.70 U        | 0.70  |               |      | 1.2 U         | 1.2    | 0.77 U        | 0.77  |
| Cobalt                      |          | 0.88          | 0.57  |               |      | 4.2           | 0.95   | 1.3           | 0.64  |
| Chromium                    | 80       | 24.4          | 1.3   |               |      | 36.9          | 2.2    | 7.8           | 1.5   |
| Copper                      | 70       | 2.2           | 0.49  |               |      | 24.5          | 0.82   | 7.4           | 0.55  |
| Iron                        |          | 5860          | 0.96  |               |      | 19600         | 1.6    | 6910          | 1.1   |
| Mercury                     | 0.15     | 0.10 U        | 0.10  |               |      | 0.15 U        | 0.15   | 0.084 U       | 0.084 |
| Potassium                   |          | 1700          | 168   |               |      | 1410          | 279    | 256           | 186   |
| Magnesium                   |          | 640           | 7.8   |               |      | 2560          | 13.0   | 320           | 8.7   |
| Manganese                   |          | 5.4           | 0.41  |               |      | 65.1          | 0.68   | 25.8          | 0.45  |
| Sodium                      |          | 37.4          | 3.2   |               |      | 271           | 5.2    | 54.0          | 3.5   |
| Nickel                      | 30       | 2.6 U         | 2.6   |               |      | 11.3          | 4.3    | 2.9 U         | 2.9   |
| Lead                        | 35       | 6.4           | 1.5 * |               |      | 142           | 10.8 * | 9.3           | 1.8 * |
| Antimony                    |          | 4.4 U         | 4.4   |               |      | 7.3 U         | 7.3    | 4.9 U         | 4.9   |
| Selenium                    |          | 0.21 U        | 0.21  |               |      | 0.68          | 0.30   | 0.20 U        | 0.2   |
| Thallium                    |          | 0.26 U        | 0.26  |               |      | 0.37 U        | 0.37   | 0.24 U        | 0.24  |
| Vanadium                    |          | 11.3          | 0.59  |               |      | 39.5          | 0.99   | 5.4           | 0.66  |
| Zinc                        | 120      | 14.3          | 0.57  |               |      | 126           | 0.95   | 22.5          | 0.64  |
| Cyanide                     |          | 1.1           | 0.63  |               |      | 0.87 U        | 0.87   | 0.47 U        | 0.47  |
| Dilution Factor             |          | * = 4.00      |       |               |      | * = 20.0      |        | * = 5.00      |       |
| Method: TAL Metals, Cyanide |          |               |       |               |      |               |        |               |       |

**CHARLES WOOD  
SEDIMENT PESTICIDES/PCBS**

| Geographical Location      |          | Background    |        | Background    |       | Background      |       | CW5           |        |
|----------------------------|----------|---------------|--------|---------------|-------|-----------------|-------|---------------|--------|
| Sample                     |          | CW02-SD01-A01 |        | CW05-SD01-A01 |       | CW05-SD01-A01DL |       | CW06-SD01-A01 |        |
| Batch#                     |          | 9412G923      |        | 9412G923      |       | 9412G923        |       | 9412G923      |        |
| Prep#                      |          | 94GP1049      |        | 94GP1049      |       | 94GP1049        |       | 94GP1049      |        |
| RFW#                       |          | 005           |        | 006           |       | 006DL           |       | 007           |        |
| Sample Depth               |          | 0-6"          |        | 0-6"          |       | 0-6"            |       | 0-6"          |        |
| Dilution Factor            |          | 1.00          |        | 1.00          |       | 2.00            |       | 1.00          |        |
| Matrix                     |          | soil          |        | soil          |       | soil            |       | soil          |        |
| Units                      | mg/kg    | mg/kg         |        | mg/kg         |       | mg/kg           |       | mg/kg         |        |
| Sampling Date              |          | 12/1/94       |        | 12/1/94       |       | 12/1/94         |       | 12/1/94       |        |
| Analysis Date              |          | 1/12/95       |        | 1/12/95       |       | 1/12/95         |       | 1/12/95       |        |
| Analysis                   | Standard | Analytical    | MDL    | Analytical    | MDL   | Analytical      | MDL   | Analytical    | MDL    |
|                            |          | Result        |        | Result        |       | Result          |       | Result        |        |
| alpha-BHC                  |          | 0.0023 U      | 0.0023 | 0.003 U       | 0.003 | 0.006 U         | 0.006 | 0.0021 U      | 0.0021 |
| beta-BHC                   |          | 0.0023 U      | 0.0023 | 0.003 U       | 0.003 | 0.006 U         | 0.006 | 0.0021 U      | 0.0021 |
| delta-BHC                  |          | 0.0023 U      | 0.0023 | 0.003 U       | 0.003 | 0.006 U         | 0.006 | 0.0021 U      | 0.0021 |
| gamma-BHC (Lindane)        |          | 0.0023 U      | 0.0023 | 0.003 U       | 0.003 | 0.006 U         | 0.006 | 0.0021 U      | 0.0021 |
| Heptachlor                 |          | 0.0023 U      | 0.0023 | 0.003 U       | 0.003 | 0.006 U         | 0.006 | 0.0021 U      | 0.0021 |
| Aldrin                     |          | 0.0023 U      | 0.0023 | 0.003 U       | 0.003 | 0.006 U         | 0.006 | 0.0021 U      | 0.0021 |
| Heptachlor epoxide         |          | 0.0023 U      | 0.0023 | 0.003 U       | 0.003 | 0.006 U         | 0.006 | 0.0042 P      | 0.0021 |
| Endosulfan I               |          | 0.0023 U      | 0.0023 | 0.003 U       | 0.003 | 0.006 U         | 0.006 | 0.0021 U      | 0.0021 |
| Dieldrin                   |          | 0.0047 U      | 0.0047 | 0.006 U       | 0.006 | 0.012 U         | 0.012 | 0.0042 U      | 0.0042 |
| 4,4'-DDE                   | 0.002    | 0.0028 J      | 0.0047 | 0.096         | 0.006 | .085 D          | 0.012 | 0.0067        | 0.0042 |
| Endrin                     |          | 0.0047 U      | 0.0047 | 0.006 U       | 0.006 | 0.012 U         | 0.012 | 0.0042 U      | 0.0042 |
| Endosulfan II              |          | 0.0047 U      | 0.0047 | 0.006 U       | 0.006 | 0.012 U         | 0.012 | 0.0042 U      | 0.0042 |
| 4,4'-DDD                   | 0.002    | 0.0065        | 0.0047 | 0.013 P       | 0.006 | .015 PD         | 0.012 | 0.005 P       | 0.0042 |
| Endosulfan sulfate         |          | 0.0047 U      | 0.0047 | 0.006 U       | 0.006 | 0.012 U         | 0.012 | 0.0042 U      | 0.0042 |
| 4,4'-DDT                   | 0.00183  | 0.007         | 0.0047 | 0.11          | 0.006 | .11 D           | 0.012 | 0.0029 JP     | 0.0042 |
| Methoxychlor               |          | 0.023 U       | 0.023  | 0.03 U        | 0.03  | 0.06 U          | 0.06  | 0.021 U       | 0.021  |
| Endrin ketone              |          | 0.0047 U      | 0.0047 | 0.006 U       | 0.006 | 0.012 U         | 0.012 | 0.0042 U      | 0.0042 |
| Endrin aldehyde            |          | 0.0047 U      | 0.0047 | 0.006 U       | 0.006 | 0.012 U         | 0.012 | 0.0042 U      | 0.0042 |
| alpha-Chlordane            |          | 0.0023 U      | 0.0023 | 0.003 U       | 0.003 | 0.006 U         | 0.006 | 0.0021 U      | 0.0021 |
| gamma-Chlordane            |          | 0.0023 U      | 0.0023 | 0.003 U       | 0.003 | 0.006 U         | 0.006 | 0.0021 U      | 0.0021 |
| Toxaphene                  |          | 0.23 U        | 0.23   | 0.3 U         | 0.3   | 0.6 U           | 0.6   | 0.21 U        | 0.21   |
| Aroclor-1016               |          | 0.047 U       | 0.047  | 0.06 U        | 0.06  | 0.12 U          | 0.12  | 0.042 U       | 0.042  |
| Aroclor-1221               |          | 0.093 U       | 0.093  | 0.12 U        | 0.12  | 0.24 U          | 0.24  | 0.084 U       | 0.084  |
| Aroclor-1232               |          | 0.047 U       | 0.047  | 0.06 U        | 0.06  | 0.12 U          | 0.12  | 0.042 U       | 0.042  |
| Aroclor-1242               |          | 0.047 U       | 0.047  | 0.06 U        | 0.06  | 0.12 U          | 0.12  | 0.042 U       | 0.042  |
| Aroclor-1248               |          | 0.047 U       | 0.047  | 0.06 U        | 0.06  | 0.12 U          | 0.12  | 0.042 U       | 0.042  |
| Aroclor-1254               |          | 0.047 U       | 0.047  | 0.06 U        | 0.06  | 0.12 U          | 0.12  | 0.042 U       | 0.042  |
| Aroclor-1260               |          | 0.047 U       | 0.047  | 0.06 U        | 0.06  | 0.12 U          | 0.12  | 0.042 U       | 0.042  |
| Method:TCL Pesticides/PCBs |          |               |        |               |       |                 |       |               |        |

**CHARLES WOOD  
SURFACE WATER VOLATILES**

| Geographical Location      |          |     | Background    |      | Background    |      |
|----------------------------|----------|-----|---------------|------|---------------|------|
| Sample                     |          |     | CW02-SW01-A01 |      | CW05-SW01-A01 |      |
| Batch#                     |          |     | 9412G923      |      | 9412G923      |      |
| Prep#                      |          |     | 94GVE348      |      | 94GVE348      |      |
| RFV#                       |          |     | 001           |      | 003           |      |
| Dilution Factor            |          |     | 1.00          |      | 1.00          |      |
| Matrix                     |          |     | water         |      | water         |      |
| Units                      | ug/l     |     | ug/l          |      | ug/l          |      |
| Sampling Date              |          |     | 12/1/94       |      | 12/1/94       |      |
| Analysis Date              |          |     | 12/9/94       |      | 12/9/94       |      |
| Analysis                   | Standard | MDL | Analytical    | CRQL | Analytical    | CRQL |
|                            |          |     | Result        |      | Result        |      |
| Chloromethane              | 5.7      | 7.3 | 10 U          | 10   | 10 U          | 10   |
| Bromomethane               | 48.4     | 6.7 | 10 U          | 10   | 10 U          | 10   |
| Vinyl Chloride             | 0.083    | 7.9 | 10 U          | 10   | 10 U          | 10   |
| Chloroethane               |          | 9.1 | 10 U          | 10   | 10 U          | 10   |
| Methylene Chloride         | 2.49     | 2.7 | 10 U          | 10   | 10 U          | 10   |
| Acetone                    |          | 6.9 | 10 U          | 10   | 10 U          | 10   |
| Carbon Disulfide           |          | 4.4 | 10 U          | 10   | 10 U          | 10   |
| 1,1-Dichloroethene         | 4.81     | 4.9 | 10 U          | 10   | 10 U          | 10   |
| 1,1-Dichloroethane         |          | 3.0 | 10 U          | 10   | 10 U          | 10   |
| 1,2-Dichloroethene (total) |          | 4.4 | 10 U          | 10   | 10 U          | 10   |
| Chloroform                 | 5.67     | 2.9 | 10 U          | 10   | 10 U          | 10   |
| 1,2-Dichloroethane         | 0.291    | 2.4 | 10 U          | 10   | 10 U          | 10   |
| 2-Butanone                 |          | 4.1 | 10 U          | 10   | 10 U          | 10   |
| 1,1,1-Trichloroethane      | 127      | 1.7 | 10 U          | 10   | 10 U          | 10   |
| Carbon Tetrachloride       | 0.363    | 1.5 | 10 U          | 10   | 10 U          | 10   |
| Bromodichloromethane       | 0.266    | 2.0 | 10 U          | 10   | 10 U          | 10   |
| 1,2-Dichloropropane        |          | 1.7 | 10 U          | 10   | 10 U          | 10   |
| cis-1,3-Dichloropropene    |          | 3.0 | 10 U          | 10   | 10 U          | 10   |
| Trichloroethene            | 1.09     | 2.0 | 10 U          | 10   | 10 U          | 10   |
| Dibromochloromethane       | 72.6     | 2.4 | 10 U          | 10   | 10 U          | 10   |
| 1,1,2-Trichloroethane      | 13.5     | 4.3 | 10 U          | 10   | 10 U          | 10   |
| Benzene                    | 0.15     | 3.3 | 10 U          | 10   | 10 U          | 10   |
| trans-1,3-Dichloropropene  | 0.193    | 2.4 | 10 U          | 10   | 10 U          | 10   |
| Bromoform                  | 4.38     | 3.1 | 10 U          | 10   | 10 U          | 10   |
| 4-Methyl-2-pentanone       |          | 5.5 | 10 U          | 10   | 10 U          | 10   |
| 2-Hexanone                 |          | 3.9 | 10 U          | 10   | 10 U          | 10   |
| Tetrachloroethene          | 0.388    | 4.0 | 10 U          | 10   | 10 U          | 10   |
| 1,1,2,2-Tetrachloroethane  | 1.72     | 4.2 | 10 U          | 10   | 10 U          | 10   |
| Toluene                    | 7440     | 2.7 | 10 U          | 10   | 10 U          | 10   |
| Chlorobenzene              | 22       | 2.7 | 10 U          | 10   | 10 U          | 10   |
| Ethylbenzene               | 3030     | 3.1 | 10 U          | 10   | 10 U          | 10   |
| Styrene                    |          | 3.8 | 10 U          | 10   | 10 U          | 10   |
| Xylene (total)             |          | 3.8 | 10 U          | 10   | 10 U          | 10   |
| Method: TCL Volatiles      |          |     |               |      |               |      |

**CHARLES WOOD  
SURFACE WATER SEMIVOLATILES**

|                              |          |      |               |      |               |      |
|------------------------------|----------|------|---------------|------|---------------|------|
| Geographical Location        |          |      | Background    |      | Background    |      |
| Sample                       |          |      | CW02-SW01-A01 |      | CW05-SW01-A01 |      |
| Batch#                       |          |      | 9412G923      |      | 9412G923      |      |
| Prep#                        |          |      | 94GBO800      |      | 94GBO800      |      |
| RFW#                         |          |      | 001           |      | 003           |      |
| Dilution Factor              |          |      | 1.00          |      | 1.00          |      |
| Matrix                       |          |      | water         |      | water         |      |
| Units                        | ug/l     | ug/l | ug/l          |      | ug/l          |      |
| Sampling Date                |          |      | 12/1/94       |      | 12/1/94       |      |
| Analysis Date                |          |      | 12/22/94      |      | 12/22/94      |      |
| Analysis                     | Standard | MDL  | Analytical    | CRQL | Analytical    | CRQL |
|                              |          |      | Result        |      | Result        |      |
| Phenol                       | 20900    | 7.1  | 10 U          | 10   | 10 U          | 10   |
| bis(2-Chloroethyl) ether     | 0.0311   | 9.7  | 10 U          | 10   | 10 U          | 10   |
| 2-Chlorophenol               | 122      | 7.3  | 10 U          | 10   | 10 U          | 10   |
| 1,3-Dichlorobenzene          | 2620     | 5.3  | 10 U          | 10   | 10 U          | 10   |
| 1,4-Dichlorobenzene          | 343      | 4.8  | 10 U          | 10   | 10 U          | 10   |
| 1,2-Dichlorobenzene          | 2520     | 5.7  | 10 U          | 10   | 10 U          | 10   |
| 2-Methylphenol               |          | 6.7  | 10 U          | 10   | 10 U          | 10   |
| 2,2'-oxybis(1-Chloropropane) |          | 7.0  | 10 U          | 10   | 10 U          | 10   |
| 4-Methylphenol               |          | 12.9 | 10 U          | 10   | 10 U          | 10   |
| N-Nitroso-di-n-propylamine   |          | 8.0  | 10 U          | 10   | 10 U          | 10   |
| Hexachloroethane             | 2.73     | 5.3  | 10 U          | 10   | 10 U          | 10   |
| Nitrobenzene                 | 16       | 7.4  | 10 U          | 10   | 10 U          | 10   |
| Isophorone                   | 552      | 3.9  | 10 U          | 10   | 10 U          | 10   |
| 2-Nitrophenol                |          | 7.0  | 10 U          | 10   | 10 U          | 10   |
| 2,4-Dimethylphenol           |          | 4.8  | 10 U          | 10   | 10 U          | 10   |
| bis(2-Chloroethoxy) methane  |          | 6.1  | 10 U          | 10   | 10 U          | 10   |
| 2,4-Dichlorophenol           | 92.7     | 4.4  | 10 U          | 10   | 10 U          | 10   |
| 1,2,4-Trichlorobenzene       | 30.6     | 9.6  | 10 U          | 10   | 10 U          | 10   |
| Naphthalene                  |          | 8.4  | 10 U          | 10   | 10 U          | 10   |
| 4-Chloroaniline              |          | 2.9  | 10 U          | 10   | 10 U          | 10   |
| Hexachlorobutadiene          | 6.94     | 4.6  | 10 U          | 10   | 10 U          | 10   |
| 4-Chloro-3-methylphenol      |          | 3.1  | 10 U          | 10   | 10 U          | 10   |
| 2-Methylnaphthalene          |          | 8.7  | 10 U          | 10   | 10 U          | 10   |
| Hexachlorocyclopentadiene    | 245      | 3.6  | 10 U          | 10   | 10 U          | 10   |
| 2,4,6-Trichlorophenol        | 2.14     | 5.6  | 10 U          | 10   | 10 U          | 10   |
| 2,4,5-Trichlorophenol        | 2580     | 4.7  | 25 U          | 25   | 25 U          | 25   |
| 2-Chloronaphthalene          |          | 8.2  | 10 U          | 10   | 10 U          | 10   |
| 2-Nitroaniline               |          | 6.1  | 25 U          | 25   | 25 U          | 25   |
| Dimethylphthalate            | 313000   | 4.4  | 10 U          | 10   | 10 U          | 10   |
| Acenaphthylene               |          | 6.0  | 10 U          | 10   | 10 U          | 10   |
| 2,6-Dinitrotoluene           |          | 5.2  | 10 U          | 10   | 10 U          | 10   |
| 3-Nitroaniline               |          | 5.2  | 25 U          | 25   | 25 U          | 25   |
| Acenaphthene                 |          | 6.7  | 10 U          | 10   | 10 U          | 10   |
| 2,4-Dinitrophenol            | 69.7     | 4.6  | 25 U          | 25   | 25 U          | 25   |
| 4-Nitrophenol                |          | 7.5  | 25 U          | 25   | 25 U          | 25   |

**CHARLES WOOD  
SURFACE WATER SEMIVOLATILES**

| Geographical Location      |          |      | Background    |      | Background    |       |
|----------------------------|----------|------|---------------|------|---------------|-------|
| Sample                     |          |      | CW02-SW01-A01 |      | CW05-SW01-A01 |       |
| Batch#                     |          |      | 9412G923      |      | 9412G923      |       |
| Prep#                      |          |      | 94GBO800      |      | 94GBO800      |       |
| RFW#                       |          |      | 001           |      | 003           |       |
| Dilution Factor            |          |      | 1.00          |      | 1.00          |       |
| Matrix                     |          |      | water         |      | water         |       |
| Units                      | ug/l     | ug/l | ug/l          |      | ug/l          |       |
| Sampling Date              |          |      | 12/1/94       |      | 12/1/94       |       |
| Analysis Date              |          |      | 12/22/94      |      | 12/22/94      |       |
| Analysis                   | Standard | MDL  | Analytical    | CRQL | Analytical    | CRQL  |
|                            |          |      | Result        |      | Result        |       |
| Dibenzofuran               |          | 6.5  | 10 U          | 10   | 10 U          | 10    |
| 2,4-Dinitrotoluene         | 0.11     | 5.8  | 10 U          | 10   | 10 U          | 10    |
| Diethylphthalate           | 21200    | 5.4  | 10 U          | 10   | 10 U          | 10    |
| 4-Chlorophenyl-phenylether |          | 7.0  | 10 U          | 10   | 10 U          | 10    |
| Fluorene                   | 1340     | 6.3  | 25 U          | 25   | 25 U          | 25    |
| 4-Nitroaniline             |          | 6.4  | 25 U          | 25   | 25 U          | 25    |
| 4,6-Dinitro-2-methylphenol |          | 5.3  | 10 U          | 10   | 10 U          | 10    |
| N-Nitrosodiphenylamine (1) |          | 4.2  | 10 U          | 10   | 10 U          | 10    |
| 4-Bromophenyl-phenylether  |          | 5.3  | 10 U          | 10   | 10 U          | 10    |
| Hexachlorobenzene          | 0.000748 | 5.5  | 25 U          | 25   | 25 U          | 25    |
| Pentachlorophenol          | 0.282    | 4.0  | 10 U          | 10   | 10 U          | 10    |
| Phenanthrene               |          | 5.0  | 10 U          | 10   | 10 U          | 10    |
| Anthracene                 | 9570     | 4.6  | 10 U          | 10   | 10 U          | 10    |
| Carbazole                  |          | 4.4  | 10 U          | 10   | 10 U          | 10    |
| Di-n-butylphthalate        | 3530     | 6.5  | 10 U          | 10   | 10 U          | 10    |
| Fluoranthene               | 310      | 6.0  | 10 U          | 10   | 10 U          | 10    |
| Pyrene                     | 797      | 5.4  | 10 U          | 10   | 10 U          | 10    |
| Butylbenzylphthalate       | 239      | 5.3  | 10 U          | 10   | 10 U          | 10    |
| 3,3'-Dichlorobenzidine     | 0.0386   | 2.8  | 10 U          | 10   | 10 U          | 10    |
| Benzo(a)anthracene         | 0.0028   | 4.9  | 10 U          | 10   | 10 U          | 10    |
| Chrysene                   | 0.0028   | 4.4  | 10 U          | 10   | 10 U          | 10    |
| bis(2-Ethylhexy)phthalate  | 1.76     | 9.7  | 1 J           | 10   | 1 J           | 10 JB |
| Di-n-octyl phthalate       |          | 5.6  | 10 U          | 10   | 10 U          | 10    |
| Benzo(b)fluoranthene       | 0.0028   | 5.7  | 10 U          | 10   | 10 U          | 10    |
| Benzo(k)fluoranthene       | 0.0028   | 6.2  | 10 U          | 10   | 10 U          | 10    |
| Benzo(a)pyrene             | 0.0028   | 4.9  | 10 U          | 10   | 10 U          | 10    |
| Indeno(1,2,3-cd)pyrene     | 0.0028   | 7.1  | 10 U          | 10   | 10 U          | 10    |
| Dibenzo(a,h)anthracene     | 0.0028   | 6.0  | 10 U          | 10   | 10 U          | 10    |
| Benzo(g,h,i)perylene       |          | 6.8  | 10 U          | 10   | 10 U          | 10    |
| Total Est. Conc. of TIC    |          |      | 70            |      |               |       |
| Method: TCL Semivolatiles  |          |      |               |      |               |       |

**CHARLES WOOD  
SURFACE WATER INORGANICS**

|                             |          |               |      |                   |      |               |      |                   |      |
|-----------------------------|----------|---------------|------|-------------------|------|---------------|------|-------------------|------|
| Geographical Location       |          | Background    |      | Background        |      | Background    |      | Background        |      |
| Sample                      |          | CW02-SW01-A01 |      | CW02-SW01-A01 SOL |      | CW05-SW01-A01 |      | CW05-SW01-A01 SOL |      |
| Sample Type                 |          | Total         |      | Soluble           |      | Total         |      | Soluble           |      |
| Batch#                      |          | 9412G923      |      | 9412G923          |      | 9412G923      |      | 9412G923          |      |
| Prep#                       |          | 94GCN264      |      | 94GI186           |      | 94GCN264      |      | 94GI186           |      |
| RFVW#                       |          | 001           |      | 002               |      | 003           |      | 004               |      |
| Dilution Factor             |          | 1.00          |      | 1.00              |      | 1.00          |      | 1.00              |      |
| Matrix                      |          | water         |      | water, filtered   |      | water         |      | water, filtered   |      |
| Units                       | ug/l     | ug/l          |      | ug/l              |      | ug/l          |      | ug/l              |      |
| Sampling Date               |          | 12/1/94       |      | 12/1/94           |      | 12/1/94       |      | 12/1/94           |      |
| Analysis Date               |          | 12/14/94      |      | 12/21/94          |      | 12/14/94      |      | 12/21/94          |      |
| Analysis                    | Standard | Analytical    | MDL  | Analytical        | MDL  | Analytical    | MDL  | Analytical        | MDL  |
|                             |          | Result        |      | Result            |      | Result        |      | Result            |      |
| Silver                      | 164      | 3.1 U         | 3.1  | 3.1 U             | 3.1  | 3.1 U         | 3.1  | 3.1 U             | 3.1  |
| Aluminum                    |          | 134           | 26.7 | 86.6              | 26.7 | 265           | 26.7 | 160               | 26.7 |
| Arsenic                     | 0.017    | 1.6 U         | 1.6  | 1.6 U             | 1.6  | 1.6 U         | 1.6  | 1.6 U             | 1.6  |
| Barium                      | 2000     | 77.1          | 2.1  | 78.2              | 2.1  | 60.6          | 2.1  | 60.3              | 2.1  |
| Beryllium                   |          | 1.5 U         | 1.5  | 1.5 U             | 1.5  | 1.5 U         | 1.5  | 1.5 U             | 1.5  |
| Calcium                     |          | 15100         | 12.0 | 15700             | 12.0 | 22900         | 12.0 | 24000             | 12   |
| Cadmium                     | 10       | 3.4 U         | 3.4  | 3.4 U             | 3.4  | 3.4 U         | 3.4  | 3.4 U             | 3.4  |
| Cobalt                      |          | 2.8           | 2.8  | 2.8 U             | 2.8  | 2.8 U         | 2.8  | 2.8 U             | 2.8  |
| Chromium                    | 160      | 6.4 U         | 6.4  | 6.4 U             | 6.4  | 6.4 U         | 6.4  | 6.4 U             | 6.4  |
| Copper                      |          | 2.4 U         | 2.4  | 4.8               | 2.4  | 8.0           | 2.4  | 10.2              | 2.4  |
| Iron                        |          | 608           | 4.7  | 352               | 4.7  | 715           | 4.7  | 435               | 4.7  |
| Mercury                     | 0.144    | 0.20 U        | 0.20 | 0.20 U            | 0.20 | 0.20 U        | 0.20 | 0.20 U            | 0.20 |
| Potassium                   |          | 3590          | 821  | 4040              | 821  | 1110          | 821  | 1030              | 821  |
| Magnesium                   |          | 7050          | 38.2 | 7390              | 38.2 | 4150          | 38.2 | 4280              | 38.2 |
| Manganese                   | 100      | 97.4          | 2.0  | 100               | 2.0  | 43.0          | 2.0  | 44.4              | 2.0  |
| Sodium                      |          | 156000        | 15.4 | 164000            | 15.4 | 10700         | 15.4 | 11200             | 15.4 |
| Nickel                      | 516      | 12.8 U        | 12.8 | 12.8 U            | 12.8 | 12.8 U        | 12.8 | 12.8 U            | 12.8 |
| Lead                        | 5        | 2.2           | 1.6  | 1.8               | 1.6  | 4.7           | 0.8  | 3.9               | 0.8  |
| Antimony                    | 12.2     | 26.8          | 21.5 | 21.5 U            | 21.5 | 21.5 U        | 21.5 | 21.5 U            | 21.5 |
| Selenium                    | 10       | 0.90 U        | 0.90 | 0.90 U            | 0.90 | 0.90 U        | 0.90 | 0.90 U            | 0.90 |
| Thallium                    | 1.7      | 1.1 U         | 1.1  | 1.1 U             | 1.1  | 1.1 U         | 1.1  | 1.1 U             | 1.1  |
| Vanadium                    |          | 2.9 U         | 2.9  | 2.9 U             | 2.9  | 2.9 U         | 2.9  | 2.9 U             | 2.9  |
| Zinc                        |          | 55.1          | 2.8  | 58.8              | 2.8  | 204           | 2.8  | 215               | 2.8  |
| Cyanide                     | 5.2      | 10.0 U        | 10.0 |                   |      | 10.0 U        | 10.0 |                   |      |
| Method: TAL Metals, Cyanide |          |               |      |                   |      |               |      |                   |      |



**CHARLES WOOD**  
**SURFACE WATER PESTICIDES/PCBS**

|                             |          |               |           |               |           |
|-----------------------------|----------|---------------|-----------|---------------|-----------|
| Geographical Location       |          | Background    |           | Background    |           |
| Sample                      |          | CW02-SW01-A01 |           | CW05-SW01-A01 |           |
| Batch#                      |          | 9412G923      |           | 9412G923      |           |
| Prep#                       |          | 94GP1038      |           | 94GP1038      |           |
| RFW#                        |          | 001           |           | 003           |           |
| Dilution Factor             |          | 1.00          |           | 1.00          |           |
| Matrix                      |          | water         |           | water         |           |
| Units                       | ug/l     | ug/l          |           | ug/l          |           |
| Sampling Date               |          | 12/1/94       |           | 12/1/94       |           |
| Analysis Date               |          | 12/17/94      |           | 12/17/94      |           |
| Analysis                    | Standard | Analytical    | Reporting | Analytical    | Reporting |
|                             |          | Result        | Limit     | Result        | Limit     |
| alpha-BHC                   | 0.00391  | 0.050 U       | 0.050     | 0.040 U       | 0.040     |
| beta-BHC                    | 0.137    | 0.050 U       | 0.050     | 0.040 U       | 0.040     |
| delta-BHC                   |          | 0.050 U       | 0.050     | 0.040 U       | 0.040     |
| gamma-BHC (Lindane)         | 0.08     | 0.050 U       | 0.050     | 0.040 U       | 0.040     |
| Heptachlor                  | 0.000208 | 0.050 U       | 0.050     | 0.040 U       | 0.040     |
| Aldrin                      | 0.000135 | 0.050 U       | 0.050     | 0.040 U       | 0.040     |
| Heptachlor epoxide          | 0.000103 | 0.050 U       | 0.050     | 0.040 U       | 0.040     |
| Endosulfan I                |          | 0.050 U       | 0.050     | 0.040 U       | 0.040     |
| Dieldrin                    | 0.000135 | 0.1 U         | 0.10      | 0.080 U       | 0.080     |
| 4,4'-DDE                    | 0.000588 | 0.1 U         | 0.10      | 0.080 U       | 0.080     |
| Endrin                      | 0.0023   | 0.1 U         | 0.10      | 0.080 U       | 0.080     |
| Endosulfan II               |          | 0.1 U         | 0.10      | 0.080 U       | 0.080     |
| 4,4'-DDD                    | 0.000832 | 0.1 U         | 0.10      | 0.080 U       | 0.080     |
| Endosulfan sulfate          | 0.93     | 0.1 U         | 0.10      | 0.080 U       | 0.080     |
| 4,4'-DDT                    | 0.000588 | 0.1 U         | 0.10      | 0.080 U       | 0.080     |
| Methoxychlor                | 0.03     | 0.5 U         | 0.50      | 0.40 U        | 0.4       |
| Endrin ketone               |          | 0.1 U         | 0.10      | 0.080 U       | 0.080     |
| Endrin aldehyde             | 0.76     | 0.1 U         | 0.10      | 0.080 U       | 0.080     |
| alpha-Chlordane             | 0.000277 | 0.050 U       | 0.050     | 0.040 U       | 0.040     |
| gamma-Chlordane             |          | 0.050 U       | 0.050     | 0.040 U       | 0.040     |
| Toxaphene                   | 0.00073  | 5 U           | 5         | 4 U           | 4         |
| Aroclor-1016                | 0.000244 | 1 U           | 1         | 0.80 U        | 0.8       |
| Aroclor-1221                | 0.000244 | 2 U           | 2         | 1.6 U         | 1.6       |
| Aroclor-1232                | 0.000244 | 1 U           | 1         | 0.80 U        | 0.80      |
| Aroclor-1242                | 0.000244 | 1 U           | 1         | 0.80 U        | 0.80      |
| Aroclor-1248                | 0.000244 | 1 U           | 1         | 0.80 U        | 0.80      |
| Aroclor-1254                | 0.000244 | 1 U           | 1         | 0.80 U        | 0.80      |
| Aroclor-1260                | 0.000244 | 1 U           | 1         | 0.80 U        | 0.80      |
| Method: TCL Pesticides/PCBs |          |               |           |               |           |

**CHARLES WOOD  
SURFACE SOIL VOLATILES**

| Geographical Location      |          |        | CW6           |       | CW9           |      | CW9                 |      |
|----------------------------|----------|--------|---------------|-------|---------------|------|---------------------|------|
| Sample                     |          |        | CW06-SS01-A01 |       | CW09-SS01-D01 |      | CW09-SS01-E01       |      |
| Sample Type                |          |        |               |       | Duplicate     |      | Field Rinsate Blank |      |
| Batch#                     |          |        | 9412G854      |       | 9412G854      |      | 9412G854            |      |
| Prep#                      |          |        | 94GVT027      |       | 94GVE343      |      | 94GVE343            |      |
| RFW#                       |          |        | 014           |       | 001           |      | 002                 |      |
| Sample Depth               |          |        | 0-6"          |       | 0-6"          |      | 0-6"                |      |
| Dilution Factor            |          |        | 1.00          |       | 1.00          |      | 1.00                |      |
| Matrix                     |          |        | soil          |       | water         |      | water               |      |
| Units                      | mg/kg    | mg/kg  | mg/kg         |       | mg/l          |      | mg/l                |      |
| Sampling Date              |          |        | 11/30/94      |       | 11/30/94      |      | 11/30/94            |      |
| Analysis Date              |          |        | 12/5/94       |       | 12/7/94       |      | 12/7/94             |      |
| Analysis                   | Standard | MDL    | Analytical    | CRQL  | Analytical    | CRQL | Analytical          | CRQL |
|                            |          |        | Result        |       | Result        |      | Result              |      |
| Chloromethane              | 520      | 0.0073 | 0.022 U       | 0.022 | 0.01 U        | 0.01 | 0.01 U              | 0.01 |
| Bromomethane               | 79       | 0.0067 | 0.022 U       | 0.022 | 0.01 U        | 0.01 | 0.01 U              | 0.01 |
| Vinyl Chloride             | 2        | 0.0079 | 0.022 U       | 0.022 | 0.01 U        | 0.01 | 0.01 U              | 0.01 |
| Chloroethane               |          | 0.0091 | 0.022 U       | 0.022 | 0.01 U        | 0.01 | 0.01 U              | 0.01 |
| Methylene Chloride         | 49       | 0.0027 | 0.022 U       | 0.022 | 0.01 U        | 0.01 | 0.01 U              | 0.01 |
| Acetone                    | 1000     | 0.0069 | 0.022 U       | 0.022 | 0.01 U        | 0.01 | 0.01 U              | 0.01 |
| Carbon Disulfide           |          | 0.0044 | 0.022 U       | 0.022 | 0.01 U        | 0.01 | 0.01 U              | 0.01 |
| 1,1-Dichloroethene         | 8        | 0.0049 | 0.022 U       | 0.022 | 0.01 U        | 0.01 | 0.01 U              | 0.01 |
| 1,1-Dichloroethane         | 570      | 0.003  | 0.022 U       | 0.022 | 0.01 U        | 0.01 | 0.01 U              | 0.01 |
| 1,2-Dichloroethene (total) | 79       | 0.0044 | 0.022 U       | 0.022 | 0.01 U        | 0.01 | 0.01 U              | 0.01 |
| Chloroform                 | 19       | 0.0029 | 0.022 U       | 0.022 | 0.01 U        | 0.01 | 0.01 U              | 0.01 |
| 1,2-Dichloroethane         | 6        | 0.0024 | 0.022 U       | 0.022 | 0.01 U        | 0.01 | 0.01 U              | 0.01 |
| 2-Butanone                 | 1000     | 0.0041 | 0.022 U       | 0.022 | 0.01 U        | 0.01 | 0.01 U              | 0.01 |
| 1,1,1-Trichloroethane      | 210      | 0.0017 | 0.022 U       | 0.022 | 0.01 U        | 0.01 | 0.01 U              | 0.01 |
| Carbon Tetrachloride       | 2        | 0.0015 | 0.022 U       | 0.022 | 0.01 U        | 0.01 | 0.01 U              | 0.01 |
| Bromodichloromethane       | 11       | 0.002  | 0.022 U       | 0.022 | 0.01 U        | 0.01 | 0.01 U              | 0.01 |
| 1,2-Dichloropropane        | 10       | 0.0017 | 0.022 U       | 0.022 | 0.01 U        | 0.01 | 0.01 U              | 0.01 |
| cis-1,3-Dichloropropene    | 4        | 0.003  | 0.022 U       | 0.022 | 0.01 U        | 0.01 | 0.01 U              | 0.01 |
| Trichloroethene            | 23       | 0.002  | 0.022 U       | 0.022 | 0.01 U        | 0.01 | 0.01 U              | 0.01 |
| Dibromochloromethane       | 110      | 0.0024 | 0.022 U       | 0.022 | 0.01 U        | 0.01 | 0.01 U              | 0.01 |
| 1,1,2-Trichloroethane      | 22       | 0.0043 | 0.022 U       | 0.022 | 0.01 U        | 0.01 | 0.01 U              | 0.01 |
| Benzene                    | 3        | 0.0033 | 0.022 U       | 0.022 | 0.01 U        | 0.01 | 0.01 U              | 0.01 |
| trans-1,3-Dichloropropene  | 4        | 0.0024 | 0.022 U       | 0.022 | 0.01 U        | 0.01 | 0.01 U              | 0.01 |
| Bromoform                  | 86       | 0.0031 | 0.022 U       | 0.022 | 0.01 U        | 0.01 | 0.01 U              | 0.01 |
| 4-Methyl-2-pentanone       | 1000     | 0.0055 | 0.022 U       | 0.022 | 0.01 U        | 0.01 | 0.01 U              | 0.01 |
| 2-Hexanone                 |          | 0.0039 | 0.022 U       | 0.022 | 0.01 U        | 0.01 | 0.01 U              | 0.01 |
| Tetrachloroethene          | 4        | 0.004  | 0.022 U       | 0.022 | 0.01 U        | 0.01 | 0.01 U              | 0.01 |
| 1,1,2,2-Tetrachloroethane  | 34       | 0.0042 | 0.022 U       | 0.022 | 0.01 U        | 0.01 | 0.01 U              | 0.01 |
| Toluene                    | 1000     | 0.0027 | 0.022 U       | 0.022 | 0.01 U        | 0.01 | 0.01 U              | 0.01 |
| Chlorobenzene              | 37       | 0.0027 | 0.022 U       | 0.022 | 0.01 U        | 0.01 | 0.01 U              | 0.01 |
| Ethylbenzene               | 1000     | 0.0031 | 0.022 U       | 0.022 | 0.01 U        | 0.01 | 0.01 U              | 0.01 |
| Styrene                    | 23       | 0.0038 | 0.022 U       | 0.022 | 0.01 U        | 0.01 | 0.01 U              | 0.01 |
| Xylene (total)             | 410      | 0.0038 | 0.022 U       | 0.022 | 0.01 U        | 0.01 | 0.01 U              | 0.01 |
| Method: TCL Volatiles      |          |        |               |       |               |      |                     |      |

**CHARLES WOOD  
SURFACE SOIL SEMIVOLATILES**

|                              |          |       |               |      |
|------------------------------|----------|-------|---------------|------|
| Geographical Location        |          |       | CW6           |      |
| Sample                       |          |       | CW06-SS01-A01 |      |
| Batch#                       |          |       | 9412G854      |      |
| Prep#                        |          |       | 94GB0796      |      |
| RFVW#                        |          |       | 014           |      |
| Sample Depth                 |          |       | 0-6"          |      |
| Dilution Factor              |          |       | 10.00         |      |
| Matrix                       |          |       | soil          |      |
| Units                        | mg/kg    | mg/kg | mg/kg         |      |
| Sampling Date                |          |       | 11/30/94      |      |
| Analysis Date                |          |       | 12/21/94      |      |
| Analysis                     | Standard | MDL   | Analytical    | CRQL |
|                              |          |       | Result        |      |
| Phenol                       | 10000    | 0.234 | 7.2 U         | 7.2  |
| bis(2-Chloroethyl) ether     | 0.66     | 0.32  | 7.2 U         | 7.2  |
| 2-Chlorophenol               | 280      | 0.241 | 7.2 U         | 7.2  |
| 1,3-Dichlorobenzene          | 5100     | 0.175 | 7.2 U         | 7.2  |
| 1,4-Dichlorobenzene          | 570      | 0.158 | 7.2 U         | 7.2  |
| 1,2-Dichlorobenzene          | 5100     | 0.188 | 7.2 U         | 7.2  |
| 2-Methylphenol               | 2800     | 0.221 | 7.2 U         | 7.2  |
| 2,2'-oxybis(1-Chloropropane) |          | 0.231 | 7.2 U         | 7.2  |
| 4-Methylphenol               | 2800     | 0.426 | 7.2 U         | 7.2  |
| N-Nitroso-di-n-propylamine   | 0.66     | 0.264 | 7.2 U         | 7.2  |
| Hexachloroethane             | 6        | 0.175 | 7.2 U         | 7.2  |
| Nitrobenzene                 | 28       | 0.244 | 7.2 U         | 7.2  |
| Isophorone                   | 1100     | 0.129 | 7.2 U         | 7.2  |
| 2-Nitrophenol                |          | 0.231 | 7.2 U         | 7.2  |
| 2,4-Dimethylphenol           | 1100     | 0.158 | 7.2 U         | 7.2  |
| bis(2-Chloroethoxy) methane  |          | 0.201 | 7.2 U         | 7.2  |
| 2,4-Dichlorophenol           | 170      | 0.145 | 7.2 U         | 7.2  |
| 1,2,4-Trichlorobenzene       | 68       | 0.317 | 7.2 U         | 7.2  |
| Naphthalene                  | 230      | 0.277 | 7.2 U         | 7.2  |
| 4-Chloroaniline              | 230      | 0.096 | 7.2 U         | 7.2  |
| Hexachlorobutadiene          | 1        | 0.152 | 7.2 U         | 7.2  |
| 4-Chloro-3-methylphenol      | 10000    | 0.102 | 7.2 U         | 7.2  |
| 2-Methylnaphthalene          |          | 0.287 | 7.2 U         | 7.2  |
| Hexachlorocyclopentadiene    | 400      | 0.119 | 7.2 U         | 7.2  |
| 2,4,6-Trichlorophenol        | 62       | 0.185 | 7.2 U         | 7.2  |
| 2,4,5-Trichlorophenol        | 5600     | 0.155 | 18 U          | 18   |
| 2-Chloronaphthalene          |          | 0.271 | 7.2 U         | 7    |
| 2-Nitroaniline               |          | 0.201 | 18 U          | 18   |
| Dimethylphthalate            | 10000    | 0.145 | 7.2 U         | 7    |
| Acenaphthylene               |          | 0.198 | 7.2 U         | 7    |
| 2,6-Dinitrotoluene           | 1        | 0.172 | 7.2 U         | 7    |
| 3-Nitroaniline               |          | 0.172 | 18 U          | 18   |
| Acenaphthene                 | 3400     | 0.221 | 7.2 U         | 7    |
| 2,4-Dinitrophenol            | 110      | 0.152 | 18 U          | 18   |

**CHARLES WOOD  
SURFACE SOIL SEMIVOLATILES**

|                            |          |       |               |      |
|----------------------------|----------|-------|---------------|------|
| Geographical Location      |          |       | CW6           |      |
| Sample                     |          |       | CW06-SS01-A01 |      |
| Batch#                     |          |       | 9412G854      |      |
| Prep#                      |          |       | 94GB0796      |      |
| RFW#                       |          |       | 014           |      |
| Sample Depth               |          |       | 0-6"          |      |
| Dilution Factor            |          |       | 10.00         |      |
| Matrix                     |          |       | soil          |      |
| Units                      | mg/kg    | mg/kg | mg/kg         |      |
| Sampling Date              |          |       | 11/30/94      |      |
| Analysis Date              |          |       | 12/21/94      |      |
| Analysis                   | Standard | MDL   | Analytical    | CRQL |
|                            |          |       | Result        |      |
| 4-Nitrophenol              |          | 0.248 | 18 U          | 18   |
| Dibenzofuran               |          | 0.215 | 7.2 U         | 7.2  |
| 2,4-Dinitrotoluene         | 1        | 0.191 | 7.2 U         | 7.2  |
| Diethylphthalate           | 10000    | 0.178 | 7.2 U         | 7.2  |
| 4-Chlorophenyl-phenylether |          | 0.231 | 7.2 U         | 7.2  |
| Fluorene                   | 2300     | 0.208 | 7.2 U         | 7.2  |
| 4-Nitroaniline             |          | 0.211 | 18 U          | 18   |
| 4,6-Dinitro-2-methylphenol |          | 0.175 | 18 U          | 18   |
| N-Nitrosodiphenylamine (1) | 140      | 0.139 | 7.2 U         | 7.2  |
| 4-Bromophenyl-phenylether  |          | 0.175 | 7.2 U         | 7.2  |
| Hexachlorobenzene          | 0.66     | 0.182 | 7.2 U         | 7.2  |
| Pentachlorophenol          | 6        | 0.132 | 18 U          | 18   |
| Phenanthrene               |          | 0.165 | 7.2 U         | 7.2  |
| Anthracene                 | 10000    | 0.152 | 7.2 U         | 7.2  |
| Carbazole                  |          | 0.145 | 7.2 U         | 7.2  |
| Di-n-butylphthalate        | 5700     | 0.215 | 7.2 U         | 7.2  |
| Fluoranthene               | 2300     | 0.198 | 7.2 U         | 7.2  |
| Pyrene                     | 1700     | 0.178 | 7.2 U         | 7.2  |
| Butylbenzylphthalate       | 1100     | 0.175 | 7.2 U         | 7.2  |
| 3,3'-Dichlorobenzidine     | 2        | 0.092 | 7.2 U         | 7.2  |
| Benzo(a)anthracene         | 0.9      | 0.162 | 7.2 U         | 7.2  |
| Chrysene                   | 9        | 0.145 | 7.2 U         | 7.2  |
| bis(2-Ethylhexy)phthalate  | 49       | 0.32  | 0.76 J        |      |
| Di-n-octyl phthalate       | 1100     | 0.185 | 7.2 U         | 7.2  |
| Benzo(b)fluoranthene       | 0.9      | 0.188 | 7.2 U         | 7.2  |
| Benzo(k)fluoranthene       | 0.9      | 0.205 | 7.2 U         | 7.2  |
| Benzo(a)pyrene             | 0.66     | 0.162 | 7.2 U         | 7.2  |
| Indeno(1,2,3-cd)pyrene     | 0.9      | 0.234 | 7.2 U         | 7.2  |
| Dibenzo(a,h)anthracene     | 0.66     | 0.198 | 7.2 U         | 7.2  |
| Benzo(g,h,i)perylene       |          | 0.224 | 7.2 U         | 7.2  |
| Method: TCL Semivolatiles  |          |       |               |      |

**CHARLES WOOD  
SURFACE SOIL INORGANICS**

| Geographical Location |          | CW4           |           | CW6           |           | CW9                |           | CW9                 |           | CW9           |           | CW9           |           |
|-----------------------|----------|---------------|-----------|---------------|-----------|--------------------|-----------|---------------------|-----------|---------------|-----------|---------------|-----------|
| Sample                |          | CW04-SS01-A01 |           | CW06-SS01-A01 |           | CW09-SS01-A01      |           | CW09-SS01-C01       |           | CW09-SS02-A01 |           | CW09-SS03-A01 |           |
| Sample Type           |          |               |           |               |           |                    |           | Duplicate           |           |               |           |               |           |
| Batch#                |          | 9412G854      |           | 9412G854      |           | 9412G854           |           | 9412G854            |           | 9412G854      |           | 9412G854      |           |
| Prep#                 |          | 94GTS467      |           | 94GTS467      |           | 94GTS467           |           | 94GTS467            |           | 94GTS467      |           | 94GTS467      |           |
| RFW#                  |          | 013           |           | 014           |           | 003                |           | 004                 |           | 005           |           | 006           |           |
| Sample Depth          |          | 0-6"          |           | 0-6"          |           | 0-6"               |           | 0-6"                |           | 0-6"          |           | 0-6"          |           |
| Dilution Factor       |          | 1.00          |           | 1.00          |           | 1.00               |           | 1.00                |           | 1.00          |           | 1.00          |           |
| Matrix                |          | soil          |           | soil          |           | soil               |           | soil                |           | soil          |           | soil          |           |
| Units                 | mg/kg    | mg/kg         |           | mg/kg         |           | mg/kg              |           | mg/kg               |           | mg/kg         |           | mg/kg         |           |
| Sampling Date         |          | 11/30/94      |           | 11/30/94      |           | 11/30/94           |           | 11/30/94            |           | 11/30/94      |           | 11/30/94      |           |
| Analysis Date         |          | 12/6/94       |           | 12/6/94       |           | 12/6/94            |           | 12/6/94             |           | 12/6/94       |           | 12/6/94       |           |
| Analysis              | Standard | Analytical    | Reporting | Analytical    | Reporting | Analytical         | Reporting | Analytical          | Reporting | Analytical    | Reporting | Analytical    | Reporting |
|                       |          | Result        | Limit     | Result        | Limit     | Result             | Limit     | Result              | Limit     | Result        | Limit     | Result        | Limit     |
| % Solids              |          | 90.1          | 0.10      | 46.0          | 0.10      | 77.4               | 0.10      | 78.8                | 0.10      | 80.5          | 0.10      | 78.6          | 0.10      |
| Silver                | 110      | 0.76          | 0.5       | 1.5           | 1.3       | 2.5                | 0.72      | 2.4                 | 0.64      | 2.8           | 0.53      | 0.65 U        | 0.65      |
| Aluminum              |          | 6870          | 4.3       | 5130          | 11        | 7350               | 6.2       | 7470                | 5.6       | 5730          | 4.6       | 3600          | 5.6       |
| Arsenic               | 20       | 7.8           | 0.58 *    | 11.6          | 0.61      | 13.6               | 1.9 *     | 14.1                | 0.76 *    | 12.1          | 0.69 *    | 6.9           | 0.33      |
| Barium                | 700      | 17.7          | 0.34      | 72.2          | 0.86      | 23.4               | 0.49      | 24.1                | 0.44      | 28.9          | 0.36      | 65.4          | 0.44      |
| Beryllium             | 1        | 0.76          | 0.24      | 0.62 U        | 0.62      | 0.73               | 0.35      | 0.91                | 0.31      | 0.68          | 0.26      | 0.57          | 0.32      |
| Calcium               |          | 699           | 1.9       | 4430          | 5         | 2680               | 2.8       | 2620                | 2.5       | 2650          | 2.1       | 1960          | 2.5       |
| Cadmium               | 1        | 0.45 U        | 0.45      | 4.4           | 1.1       | 0.65 U             | 0.65      | 0.58 U              | 0.58      | 0.48 U        | 0.48      | 0.59 U        | 0.59      |
| Cobalt                |          | 0.62          | 0.43      | 1.1 U         | 1.1       | 0.63 U             | 0.63      | 1.2                 | 0.56      | 0.46 U        | 0.46      | 0.57 U        | 0.57      |
| Chromium              |          | 58.3          | 0.48      | 65.8          | 1.2       | 56.7               | 0.7       | 60.6                | 0.62      | 57.2          | 0.51      | 24.9          | 0.63      |
| Copper                | 600      | 3.2           | 0.37      | 69.8          | 0.94      | 9.6                | 0.54      | 9.7                 | 0.48      | 10.3          | 0.39      | 5             | 0.48      |
| Iron                  |          | 19700         | 0.76      | 10900         | 1.9       | 20600              | 1.1       | 22100               | 0.98      | 18200         | 0.81      | 10800         | 0.99      |
| Mercury               | 14       | 0.10 U        | 0.1       | 6             | 0.35 *    | 0.2                | 0.12      | 0.19                | 0.091     | 0.23          | 0.099     | 0.094 U       | 0.094     |
| Potassium             |          | 2720          | 132       | 1420          | 337       | 1600               | 191       | 1630                | 171       | 2620          | 141       | 1460          | 173       |
| Magnesium             |          | 1450          | 3.9       | 1260          | 10        | 1910               | 5.7       | 1920                | 5.1       | 2010          | 4.2       | 815           | 5.1       |
| Manganese             |          | 26.2          | 0.32      | 78.8          | 0.82      | 85.1               | 0.47      | 91                  | 0.42      | 46.8          | 0.34      | 22.3          | 0.42      |
| Sodium                |          | 16            | 2.5       | 103           | 6.3       | 35.6               | 3.6       | 33.1                | 3.2       | 33.9          | 2.6       | 77.4          | 3.2       |
| Nickel                | 250      | 2.3           | 2.1       | 5.30 U        | 5.3       | 6                  | 3         | 4.6                 | 2.7       | 3.3           | 2.2       | 2.7 U         | 2.7       |
| Lead                  | 400      | 8.9           | 0.58 *    | 203           | 10.3      | 19.9               | 3.8 **    | 20.1                | 3.8 **    | 30.1          | 4.3       | 13.5          | 1.6 *     |
| Antimony              | 14       | 3.50 U        | 3.5       | 8.8 U         | 8.8       | 5.0 U              | 5         | 4.5 U               | 4.5       | 3.7 U         | 3.7       | 4.5 U         | 4.5       |
| Selenium              | 63       | 0.33          | 0.16      | 0.7           | 0.34      | 0.56               | 0.21      | 0.97                | 0.21      | 0.62          | 0.19      | 0.75          | 0.18      |
| Thallium              | 2        | 0.20 U        | 0.2       | 0.42 U        | 0.42      | 0.26 U             | 0.26      | 0.26 U              | 0.26      | 0.24 U        | 0.24      | 0.22 U        | 0.22      |
| Vanadium              | 370      | 37.3          | 0.47      | 21.8          | 1.2       | 45.7               | 0.68      | 48.5                | 0.6       | 34            | 0.5       | 15.7          | 0.61      |
| Zinc                  | 1500     | 24.6          | 0.45      | 463           | 1.1       | 53.7               | 0.65      | 45.9                | 0.58      | 61.2          | 0.48      | 25.8          | 0.59      |
| Dilution Factor       |          | * = 2.00      |           | * = 2.00      |           | * = 5.0, ** = 10.0 |           | * = 2.00, ** = 10.0 |           | * = 2.00      |           | * = 5.00      |           |
| Method:TAL Metals     |          |               |           |               |           |                    |           |                     |           |               |           |               |           |

**CHARLES WOOD  
SURFACE SOIL INORGANICS**

| Geographical Location |          | CW9           |           | CW9           |           | CW9                 |           | CW9           |           | CW9           |           | CW9           |           |
|-----------------------|----------|---------------|-----------|---------------|-----------|---------------------|-----------|---------------|-----------|---------------|-----------|---------------|-----------|
| Sample                |          | CW09-SS04-A01 |           | CW09-SS05-A01 |           | CW09-SS06-A01       |           | CW09-SS07-A01 |           | CW09-SS08-A01 |           | CW09-SS09-A01 |           |
| Sample Type           |          |               |           |               |           |                     |           |               |           |               |           |               |           |
| Batch#                |          | 9412G854      |           | 9412G854      |           | 9412G854            |           | 9412G854      |           | 9412G854      |           | 9412G854      |           |
| Prep#                 |          | 94GTS467      |           | 94GTS467      |           | 94GTS467            |           | 94GTS467      |           | 94GTS467      |           | 94GTS467      |           |
| RFW#                  |          | 007           |           | 008           |           | 009                 |           | 010           |           | 011           |           | 012           |           |
| Sample Depth          |          | 0-6"          |           | 0-6"          |           | 0-6"                |           | 0-6"          |           | 0-6"          |           | 0-6"          |           |
| Dilution Factor       |          | 1.00          |           | 1.00          |           | 1.00                |           | 1.00          |           | 1.00          |           | 1.00          |           |
| Matrix                |          | soil          |           | soil          |           | soil                |           | soil          |           | soil          |           | soil          |           |
| Units                 | mg/kg    | mg/kg         |           | mg/kg         |           | mg/kg               |           | mg/kg         |           | mg/kg         |           | mg/kg         |           |
| Sampling Date         |          | 11/30/94      |           | 11/30/94      |           | 11/30/94            |           | 11/30/94      |           | 11/30/94      |           | 11/30/94      |           |
| Analysis Date         |          | 12/6/94       |           | 12/6/94       |           | 12/6/94             |           | 12/6/94       |           | 12/6/94       |           | 12/6/94       |           |
| Analysis              | Standard | Analytical    | Reporting | Analytical    | Reporting | Analytical          | Reporting | Analytical    | Reporting | Analytical    | Reporting | Analytical    | Reporting |
|                       |          | Result        | Limit     | Result        | Limit     | Result              | Limit     | Result        | Limit     | Result        | Limit     | Result        | Limit     |
| % Solids              |          | 71.9          | 0.10      | 79.7          | 0.10      | 82.3                | 0.10      | 68.5          | 0.10      | 83.2          | 0.10      | 86.4          | 0.10      |
| Silver                | 110      | 0.58 U        | 0.58      | 0.77          | 0.57      | 0.71                | 0.59      | 1.2           | 0.85      | 3.3           | 0.56      | 1.3           | 0.51      |
| Aluminum              |          | 4380          | 5         | 6930          | 4.9       | 5450                | 5.1       | 3910          | 7.4       | 4070          | 4.9       | 7700          | 4.4       |
| Arsenic               | 20       | 6.3           | 0.52 *    | 15.6          | 1.4       | 9.3                 | 0.62 *    | 10.5          | 0.46      | 7.2           | 0.67 *    | 7.7           | 0.36      |
| Barium                | 700      | 51.2          | 0.39      | 32.5          | 0.38      | 33                  | 0.4       | 40.7          | 0.58      | 19.2          | 0.38      | 40.8          | 0.34      |
| Beryllium             | 1        | 0.55          | 0.28      | 0.9           | 0.27      | 0.72                | 0.29      | 0.58          | 0.41      | 0.56          | 0.27      | 1             | 0.24      |
| Calcium               |          | 19600         | 2.3       | 3570          | 2.2       | 3610                | 2.3       | 4370          | 3.3       | 1630          | 2.2       | 3440          | 2         |
| Cadmium               | 1        | 0.53 U        | 0.53      | 0.51 U        | 0.51      | 0.54 U              | 0.54      | 2.6           | 0.77      | 0.51 U        | 0.51      | 0.46 U        | 0.46      |
| Cobalt                |          | 1.3           | 0.51      | 1.9           | 0.49      | 1.7                 | 0.52      | 0.74 U        | 0.74      | 0.49 U        | 0.49      | 1.8           | 0.44      |
| Chromium              |          | 28.3          | 0.56      | 60.5          | 0.55      | 46.9                | 0.57      | 164           | 0.83      | 56.2          | 0.55      | 70            | 0.49      |
| Copper                | 600      | 17.7          | 0.43      | 8.8           | 0.42      | 11.1                | 0.44      | 17.4          | 0.63      | 9             | 0.42      | 9.6           | 0.37      |
| Iron                  |          | 12200         | 0.88      | 22200         | 0.86      | 17900               | 0.9       | 9880          | 1.3       | 11300         | 0.86      | 25600         | 0.77      |
| Mercury               | 14       | 0.11 U        | 0.11      | 0.14          | 0.1       | 0.09 U              | 0.09      | 7.9           | 1.2 *     | 0.69          | 0.12      | 0.093 U       | 0.093     |
| Potassium             |          | 2060          | 154       | 3950          | 150       | 3180                | 157       | 1720          | 226       | 1250          | 149       | 5130          | 134       |
| Magnesium             |          | 2260          | 4.6       | 2280          | 4.5       | 1720                | 4.7       | 1620          | 6.7       | 893           | 4.4       | 2590          | 4         |
| Manganese             |          | 106           | 0.38      | 59.2          | 0.37      | 56                  | 0.38      | 140           | 0.55      | 37            | 0.36      | 69.5          | 0.33      |
| Sodium                |          | 118           | 2.9       | 49.7          | 2.8       | 49.7                | 2.9       | 40.6          | 4.2       | 34.5          | 2.8       | 60.9          | 2.5       |
| Nickel                | 250      | 5.7           | 2.4       | 6.9           | 2.3       | 4.9                 | 2.4       | 4.3           | 3.5       | 2.4           | 2.3       | 5.8           | 2.1       |
| Lead                  | 400      | 56.8          | 4.7       | 27.4          | 2.7 *     | 17                  | 3.1 **    | 82.3          | 6.9       | 35.5          | 4.6       | 20.1          | 3.6 *     |
| Antimony              | 14       | 4.0 U         | 4         | 3.90 U        | 3.9       | 4.10 U              | 4.1       | 5.90 U        | 5.9       | 3.90 U        | 3.9       | 3.5 U         | 3.5       |
| Selenium              | 63       | 0.28          | 0.15      | 0.63          | 0.15      | 0.41                | 0.17      | 0.57          | 0.26      | 0.6           | 0.19      | 0.48          | 0.2       |
| Thallium              | 2        | 0.18 U        | 0.18      | 0.19 U        | 0.19      | 0.21 U              | 0.21      | 0.32 U        | 0.32      | 0.23 U        | 0.23      | 0.24 U        | 0.24      |
| Vanadium              | 370      | 22.9          | 0.54      | 33.1          | 0.53      | 30.3                | 0.55      | 15.6          | 0.8       | 29.3          | 0.53      | 32            | 0.47      |
| Zinc                  | 1500     | 92.5          | 0.53      | 47.8          | 0.51      | 62.3                | 0.54      | 77            | 0.77      | 36            | 0.51      | 48.1          | 0.46      |
| Dilution Factor       |          | * = 2.00      |           | * = 10.0      |           | * = 2.00, ** = 10.0 |           | * = 10.0      |           | * = 2.00      |           | * = 10.0      |           |
| Method: TAL Metals    |          |               |           |               |           |                     |           |               |           |               |           |               |           |

**CHARLES WOOD**  
**SURFACE SOIL PESTICIDES/PCBS**

| Geographical Location   |          | CW6                  |                    | CW6                  |                    |
|-------------------------|----------|----------------------|--------------------|----------------------|--------------------|
| Sample                  |          | CW06-SS01-A01        |                    | CW06-SS01-A01DL      |                    |
| Batch#                  |          | 9412G854             |                    | 9412G854             |                    |
| Prep#                   |          | 94GP1033             |                    | 94GP1033             |                    |
| RFW#                    |          | 014                  |                    | 014 DL               |                    |
| Sample Depth            |          | 0-6"                 |                    | 0-6"                 |                    |
| Dilution Factor         |          | 5.00                 |                    | 50.00                |                    |
| Matrix                  |          | soil                 |                    | soil                 |                    |
| Units                   | mg/kg    | mg/kg                |                    | mg/kg                |                    |
| Sampling Date           |          | 11/30/94             |                    | 11/30/94             |                    |
| Analysis Date           |          | 12/18/94             |                    | 12/14/94             |                    |
| Analysis                | Standard | Analytical<br>Result | Reporting<br>Limit | Analytical<br>Result | Reporting<br>Limit |
| alpha-BHC               |          | 0.018 U              | 0.018              | 0.18 U               | 0.18               |
| beta-BHC                |          | 0.018 U              | 0.018              | 0.18 U               | 0.18               |
| delta-BHC               |          | 0.018 U              | 0.018              | 0.18 U               | 0.18               |
| gamma-BHC (Lindane)     | 0.52     | 0.018 U              | 0.018              | 0.18 U               | 0.18               |
| Heptachlor              | 0.15     | 0.018 U              | 0.018              | 0.18 U               | 0.18               |
| Aldrin                  | 0.04     | 0.018 U              | 0.018              | 0.18 U               | 0.18               |
| Heptachlor epoxide      |          | 0.032                |                    | 0.18 U               | 0.18               |
| Endosulfan I            | 340      | 0.018 U              | 0.018              | 0.18 U               | 0.18               |
| Dieldrin                | 0.042    | 0.036 U              | 0.036              | 0.36 U               | 0.36               |
| 4,4'-DDE                | 2        | 0.13                 |                    | 0.36 U               | 0.36               |
| Endrin                  | 17       | 0.036 U              | 0.036              | 0.36 U               | 0.36               |
| Endosulfan II           | 340      | 0.036 U              | 0.036              | 0.36 U               | 0.36               |
| 4,4'-DDD                | 3        | 0.86 C               |                    | .66 CD               |                    |
| Endosulfan sulfate      |          | 0.036 U              | 0.036              | 0.36 U               | 0.36               |
| 4,4'-DDT                | 2        | 0.81 C               |                    | .79 CD               |                    |
| Methoxychlor            | 280      | 0.180 U              | 0.18               | 1.8 U                | 1.8                |
| Endrin ketone           |          | 0.036 U              | 0.036              | 0.36 U               | 0.36               |
| Endrin aldehyde         |          | 0.036 U              | 0.036              | 0.36 U               | 0.36               |
| alpha-Chlordane         |          | 0.85 C               |                    | .87 CD               |                    |
| gamma-Chlordane         |          | 0.81 C               |                    | .8 CD                |                    |
| Toxaphene               | 0.1      | 1.8 U                | 1.8                | 18 U                 | 18                 |
| Aroclor-1016            | 0.49     | 0.36 U               | 0.36               | 3.6 U                | 3.6                |
| Aroclor-1221            | 0.49     | 0.72 U               | 0.72               | 7.2 U                | 7.2                |
| Aroclor-1232            | 0.49     | 0.36 U               | 0.36               | 3.6 U                | 3.6                |
| Aroclor-1242            | 0.49     | 0.36 U               | 0.36               | 3.6 U                | 3.6                |
| Aroclor-1248            | 0.49     | 0.36 U               | 0.36               | 3.6 U                | 3.6                |
| Aroclor-1254            | 0.49     | 0.36 U               | 0.36               | 3.6 U                | 3.6                |
| Aroclor-1260            | 0.49     | 0.36 U               | 0.36               | 3.6 U                | 3.6                |
| Method: Pesticides/PCBs |          |                      |                    |                      |                    |

**CHARLES WOOD  
SOIL BORING VOLATILES**

| Geographical Location      |          |        | AOC7          |        | AOC7          |       | AOC7          |       | AOC7          |       | AOC7          |      | AOC7          |       | AOC7          |       |
|----------------------------|----------|--------|---------------|--------|---------------|-------|---------------|-------|---------------|-------|---------------|------|---------------|-------|---------------|-------|
| Sample                     |          |        | CWA7-SB01-A02 |        | CWA7-SB02-A02 |       | CWA7-SB03-A02 |       | CWA7-SB04-A02 |       | CWA7-SB04-D02 |      | CWA7-SB05-A02 |       | CWA7-SB06-A03 |       |
| Sample Type                |          |        |               |        |               |       |               |       |               |       | Trip Blank    |      |               |       |               |       |
| Batch#                     |          |        | 9412G264      |        | 9412G264      |       | 9412G264      |       | 9412G264      |       | 9412G264      |      | 9412G264      |       | 9412G264      |       |
| Prep#                      |          |        | 94GVT034 & 35 |        | 94GVT034      |       | 94GVT034 & 35 |       | 94GVT034      |       | 94GVB441      |      | 94GVT034      |       | 94GVT034      |       |
| RFW#                       |          |        | 001           |        | 003           |       | 002           |       | 006           |       | 007           |      | 004           |       | 005           |       |
| Sample Depth (bgs)         |          |        | 10 - 12'      |        | 10 - 12'      |       | 6 - 8'        |       | 8 - 10'       |       |               |      | 8 - 10'       |       | 12 - 14'      |       |
| Dilution Factor            |          |        | 1.00          |        | 1.00          |       | 1.00          |       | 1.00          |       | 1.00          |      | 1.00          |       | 1.00          |       |
| Matrix                     |          |        | soil          |        | soil          |       | soil          |       | soil          |       | water         |      | soil          |       | soil          |       |
| Units                      | mg/kg    | mg/kg  | mg/kg         |        | mg/kg         |       | mg/kg         |       | mg/kg         |       | mg/l          |      | mg/kg         |       | mg/kg         |       |
| Sampling Date              |          |        | 12/21/94      |        | 12/21/94      |       | 12/21/94      |       | 12/21/94      |       | 12/21/94      |      | 12/21/94      |       | 12/21/94      |       |
| Analysis Date              |          |        | 12/27/94      |        | 12/27/94      |       | 12/27/94      |       | 12/27/94      |       | 12/28/94      |      | 12/27/94      |       | 12/27/94      |       |
| Analysis                   | Standard | MDL    | Analytical    | CRQL   | Analytical    | CRQL  | Analytical    | CRQL  | Analytical    | CRQL  | Analytical    | CRQL | Analytical    | CRQL  | Analytical    | CRQL  |
|                            |          |        | Result        |        | Result        |       | Result        |       | Result        |       | Result        |      | Result        |       | Result        |       |
| Chloromethane              | 520      | 0.0073 | 0.011 U       | 0.011  | 0.011 U       | 0.011 | 0.011 U       | 0.011 | 0.011 U       | 0.011 | 0.01 U        | 0.01 | 0.011 U       | 0.011 | 0.011 U       | 0.011 |
| Bromomethane               | 79       | 0.0067 | 0.011 U       | 0.011  | 0.011 U       | 0.011 | 0.011 U       | 0.011 | 0.011 U       | 0.011 | 0.01 U        | 0.01 | 0.011 U       | 0.011 | 0.011 U       | 0.011 |
| Vinyl Chloride             | 2        | 0.0079 | 0.011 U       | 0.011  | 0.011 U       | 0.011 | 0.011 U       | 0.011 | 0.011 U       | 0.011 | 0.01 U        | 0.01 | 0.011 U       | 0.011 | 0.011 U       | 0.011 |
| Chloroethane               |          | 0.0091 | 0.011 U       | 0.011  | 0.011 U       | 0.011 | 0.011 U       | 0.011 | 0.011 U       | 0.011 | 0.01 U        | 0.01 | 0.011 U       | 0.011 | 0.011 U       | 0.011 |
| Methylene Chloride         | 49       | 0.0027 | 0.011 U       | 0.011  | 0.011 U       | 0.011 | 0.011 U       | 0.011 | 0.011 U       | 0.011 | 0.01 U        | 0.01 | 0.011 U       | 0.011 | 0.011 U       | 0.011 |
| Acetone                    | 1000     | 0.0069 | 0.68 B        | 0.11 * | 0.063 B       | 0.011 | 0.11 B        | 0.022 | 0.019 B       | 0.011 | 0.01 U        | 0.01 | 0.060 B       | 0.011 | 0.043 B       | 0.011 |
| Carbon Disulfide           |          | 0.0044 | 0.011 U       | 0.011  | 0.011 U       | 0.011 | 0.011 U       | 0.011 | 0.011 U       | 0.011 | 0.01 U        | 0.01 | 0.011 U       | 0.011 | 0.011 U       | 0.011 |
| 1,1-Dichloroethene         | 8        | 0.0049 | 0.011 U       | 0.011  | 0.011 U       | 0.011 | 0.011 U       | 0.011 | 0.011 U       | 0.011 | 0.01 U        | 0.01 | 0.011 U       | 0.011 | 0.011 U       | 0.011 |
| 1,1-Dichloroethane         | 570      | 0.003  | 0.011 U       | 0.011  | 0.011 U       | 0.011 | 0.011 U       | 0.011 | 0.011 U       | 0.011 | 0.01 U        | 0.01 | 0.011 U       | 0.011 | 0.011 U       | 0.011 |
| 1,2-Dichloroethene (total) | 79       | 0.0044 | 0.011 U       | 0.011  | 0.011 U       | 0.011 | 0.011 U       | 0.011 | 0.011 U       | 0.011 | 0.01 U        | 0.01 | 0.011 U       | 0.011 | 0.011 U       | 0.011 |
| Chloroform                 | 19       | 0.0029 | 0.011 U       | 0.011  | 0.011 U       | 0.011 | 0.011 U       | 0.011 | 0.011 U       | 0.011 | 0.01 U        | 0.01 | 0.011 U       | 0.011 | 0.011 U       | 0.011 |
| 1,2-Dichloroethane         | 6        | 0.0024 | 0.011 U       | 0.011  | 0.011 U       | 0.011 | 0.011 U       | 0.011 | 0.011 U       | 0.011 | 0.01 U        | 0.01 | 0.011 U       | 0.011 | 0.011 U       | 0.011 |
| 2-Butanone                 | 1000     | 0.0041 | 0.011 U       | 0.011  | 0.002 J       | 0.011 | 0.011 U       | 0.011 | 0.011 U       | 0.011 | 0.01 U        | 0.01 | 0.011 U       | 0.011 | 0.011 U       | 0.011 |
| 1,1,1-Trichloroethane      | 210      | 0.0017 | 0.011 U       | 0.011  | 0.011 U       | 0.011 | 0.011 U       | 0.011 | 0.011 U       | 0.011 | 0.01 U        | 0.01 | 0.011 U       | 0.011 | 0.011 U       | 0.011 |
| Carbon Tetrachloride       | 2        | 0.0015 | 0.011 U       | 0.011  | 0.011 U       | 0.011 | 0.011 U       | 0.011 | 0.011 U       | 0.011 | 0.01 U        | 0.01 | 0.011 U       | 0.011 | 0.011 U       | 0.011 |
| Bromodichloromethane       | 11       | 0.002  | 0.011 U       | 0.011  | 0.011 U       | 0.011 | 0.011 U       | 0.011 | 0.011 U       | 0.011 | 0.01 U        | 0.01 | 0.011 U       | 0.011 | 0.011 U       | 0.011 |
| 1,2-Dichloropropane        | 10       | 0.0017 | 0.011 U       | 0.011  | 0.011 U       | 0.011 | 0.011 U       | 0.011 | 0.011 U       | 0.011 | 0.01 U        | 0.01 | 0.011 U       | 0.011 | 0.011 U       | 0.011 |
| cis-1,3-Dichloropropene    | 4        | 0.003  | 0.011 U       | 0.011  | 0.011 U       | 0.011 | 0.011 U       | 0.011 | 0.011 U       | 0.011 | 0.01 U        | 0.01 | 0.011 U       | 0.011 | 0.011 U       | 0.011 |
| Trichloroethene            | 23       | 0.002  | 0.011 U       | 0.011  | 0.011 U       | 0.011 | 0.011 U       | 0.011 | 0.011 U       | 0.011 | 0.01 U        | 0.01 | 0.011 U       | 0.011 | 0.011 U       | 0.011 |
| Dibromochloromethane       | 110      | 0.0024 | 0.011 U       | 0.011  | 0.011 U       | 0.011 | 0.011 U       | 0.011 | 0.011 U       | 0.011 | 0.01 U        | 0.01 | 0.011 U       | 0.011 | 0.011 U       | 0.011 |
| 1,1,2-Trichloroethane      | 22       | 0.0043 | 0.011 U       | 0.011  | 0.011 U       | 0.011 | 0.011 U       | 0.011 | 0.011 U       | 0.011 | 0.01 U        | 0.01 | 0.011 U       | 0.011 | 0.011 U       | 0.011 |
| Benzene                    | 3        | 0.0033 | 0.011 U       | 0.011  | 0.011 U       | 0.011 | 0.011 U       | 0.011 | 0.011 U       | 0.011 | 0.01 U        | 0.01 | 0.011 U       | 0.011 | 0.011 U       | 0.011 |
| trans-1,3-Dichloropropene  | 4        | 0.0024 | 0.011 U       | 0.011  | 0.011 U       | 0.011 | 0.011 U       | 0.011 | 0.011 U       | 0.011 | 0.01 U        | 0.01 | 0.011 U       | 0.011 | 0.011 U       | 0.011 |
| Bromoform                  | 86       | 0.0031 | 0.011 U       | 0.011  | 0.011 U       | 0.011 | 0.011 U       | 0.011 | 0.011 U       | 0.011 | 0.01 U        | 0.01 | 0.011 U       | 0.011 | 0.011 U       | 0.011 |
| 4-Methyl-2-pentanone       | 1000     | 0.0055 | 0.011 U       | 0.011  | 0.011 U       | 0.011 | 0.011 U       | 0.011 | 0.011 U       | 0.011 | 0.01 U        | 0.01 | 0.011 U       | 0.011 | 0.011 U       | 0.011 |
| 2-Hexanone                 |          | 0.0039 | 0.011 U       | 0.011  | 0.011 U       | 0.011 | 0.011 U       | 0.011 | 0.011 U       | 0.011 | 0.01 U        | 0.01 | 0.011 U       | 0.011 | 0.011 U       | 0.011 |
| Tetrachloroethene          | 4        | 0.004  | 0.011 U       | 0.011  | 0.011 U       | 0.011 | 0.011 U       | 0.011 | 0.011 U       | 0.011 | 0.01 U        | 0.01 | 0.011 U       | 0.011 | 0.011 U       | 0.011 |
| 1,1,2,2-Tetrachloroethane  | 34       | 0.0042 | 0.011 U       | 0.011  | 0.011 U       | 0.011 | 0.011 U       | 0.011 | 0.011 U       | 0.011 | 0.01 U        | 0.01 | 0.011 U       | 0.011 | 0.011 U       | 0.011 |
| Toluene                    | 1000     | 0.0027 | 0.011 U       | 0.011  | 0.011 U       | 0.011 | 0.011 U       | 0.011 | 0.011 U       | 0.011 | 0.01 U        | 0.01 | 0.011 U       | 0.011 | 0.011 U       | 0.011 |
| Chlorobenzene              | 37       | 0.0027 | 0.011 U       | 0.011  | 0.011 U       | 0.011 | 0.011 U       | 0.011 | 0.011 U       | 0.011 | 0.01 U        | 0.01 | 0.011 U       | 0.011 | 0.011 U       | 0.011 |
| Ethylbenzene               | 1000     | 0.0031 | 0.011 U       | 0.011  | 0.011 U       | 0.011 | 0.011 U       | 0.011 | 0.011 U       | 0.011 | 0.01 U        | 0.01 | 0.011 U       | 0.011 | 0.011 U       | 0.011 |
| Styrene                    | 23       | 0.0038 | 0.011 U       | 0.011  | 0.011 U       | 0.011 | 0.011 U       | 0.011 | 0.011 U       | 0.011 | 0.01 U        | 0.01 | 0.011 U       | 0.011 | 0.011 U       | 0.011 |
| Xylene (total)             | 410      | 0.0038 | 0.011 U       | 0.011  | 0.011 U       | 0.011 | 0.011 U       | 0.011 | 0.011 U       | 0.011 | 0.01 U        | 0.01 | 0.011 U       | 0.011 | 0.011 U       | 0.011 |
| Total Est. Conc. of TIC.   |          |        | 0.006         |        | 0.007         |       | .006, .01 *   |       |               |       |               |      | 0.006         |       |               |       |
| Dilution Factor            |          |        | * = 10.0      |        |               |       | * = 2.00      |       |               |       |               |      |               |       |               |       |
| Method: TCL Volatiles      |          |        |               |        |               |       |               |       |               |       |               |      |               |       |               |       |



**CHARLES WOOD  
SOIL BORING VOLATILES**

| Geographical Location      |          |        | CW1           |       | CW1           |      | CW1           |       | CW1           |       | CW1           |       | CW2           |       | CW2           |        |
|----------------------------|----------|--------|---------------|-------|---------------|------|---------------|-------|---------------|-------|---------------|-------|---------------|-------|---------------|--------|
| Sample                     |          |        | CW01-SB26-A02 |       | CW01-SB26-D02 |      | CW01-SB27-A02 |       | CW01-SB28-A02 |       | CW01-SB29-A02 |       | CW02-SB30-A02 |       | CW02-SB31-A02 |        |
| Sample Type                |          |        |               |       | Trip Blank    |      |               |       |               |       |               |       |               |       |               |        |
| Batch#                     |          |        | 9412G922      |       | 9412G922      |      | 9412G216      |       | 9412G216      |       | 9412G216      |       | 9412G182      |       | 9412G182      |        |
| Prep#                      |          |        | 94GVT033      |       | 94GVE365      |      | 94GVT033      |       | 94GVT033      |       | 94GVT033      |       | 94GVT031      |       | 94GVT031      |        |
| RFW#                       |          |        | 004           |       | 005           |      | 002           |       | 003           |       | 001           |       | 002           |       | 003           |        |
| Sample Depth (bgs)         |          |        | 7 - 9'        |       |               |      | 7 - 9'        |       | 7 - 9'        |       | 7 - 9'        |       | 7 - 9'        |       | 7 - 9'        |        |
| Dilution Factor            |          |        | 1.00          |       | 1.00          |      | 1.00          |       | 1.00          |       | 1.00          |       | 1.00          |       | 1.00          |        |
| Matrix                     |          |        | soil          |       | water         |      | soil          |       | soil          |       | soil          |       | soil          |       | soil          |        |
| Units                      | mg/kg    | mg/kg  | mg/kg         |       | mg/l          |      | mg/kg         |       | mg/kg         |       | mg/kg         |       | mg/kg         |       | mg/kg         |        |
| Sampling Date              |          |        | 12/19/94      |       | 12/19/94      |      | 12/19/94      |       | 12/19/94      |       | 12/19/94      |       | 12/16/94      |       | 12/16/94      |        |
| Analysis Date              |          |        | 12/22/94      |       | 12/21/94      |      | 12/22/94      |       | 12/22/94      |       | 12/22/94      |       | 12/20/94      |       | 12/20/94      |        |
| Analysis                   | Standard | MDL    | Analytical    | CRQL  | Analytical    | CRQL | Analytical    | CRQL  | Analytical    | CRQL  | Analytical    | CRQL  | Analytical    | CRQL  | Analytical    | CRQL   |
|                            |          |        | Result        |       | Result        |      | Result        |       | Result        |       | Result        |       | Result        |       | Result        |        |
| Chloromethane              | 520      | 0.0073 | 0.013 U       | 0.013 | 0.01 U        | 0.01 | 0.013 U       | 0.013 | 0.012 U       | 0.012 | 0.013 U       | 0.013 | 0.012 U       | 0.012 | 0.014 U       | 0.014  |
| Bromomethane               | 79       | 0.0067 | 0.013 U       | 0.013 | 0.01 U        | 0.01 | 0.013 U       | 0.013 | 0.012 U       | 0.012 | 0.013 U       | 0.013 | 0.012 U       | 0.012 | 0.014 U       | 0.014  |
| Vinyl Chloride             | 2        | 0.0079 | 0.013 U       | 0.013 | 0.01 U        | 0.01 | 0.013 U       | 0.013 | 0.012 U       | 0.012 | 0.013 U       | 0.013 | 0.012 U       | 0.012 | 0.014 U       | 0.014  |
| Chloroethane               |          | 0.0091 | 0.013 U       | 0.013 | 0.01 U        | 0.01 | 0.013 U       | 0.013 | 0.012 U       | 0.012 | 0.013 U       | 0.013 | 0.012 U       | 0.012 | 0.014 U       | 0.014  |
| Methylene Chloride         | 49       | 0.0027 | 0.013 U       | 0.013 | 0.01 U        | 0.01 | 0.013 U       | 0.013 | 0.012 U       | 0.012 | 0.013 U       | 0.013 | 0.088         | 0.012 | 0.086         | 0.014  |
| Acetone                    | 1000     | 0.0069 | 0.013 U       | 0.013 | 0.01 U        | 0.01 | 0.013 U       | 0.013 | 0.057 B       | 0.012 | 0.120 B       | 0.013 | 98 B          | 12 *  | 0.74 B        | 0.68 * |
| Carbon Disulfide           |          | 0.0044 | 0.013 U       | 0.013 | 0.01 U        | 0.01 | 0.013 U       | 0.013 | 0.012 U       | 0.012 | 0.013 U       | 0.013 | 0.012 U       | 0.012 | 0.014 U       | 0.014  |
| 1,1-Dichloroethene         | 8        | 0.0049 | 0.013 U       | 0.013 | 0.01 U        | 0.01 | 0.013 U       | 0.013 | 0.012 U       | 0.012 | 0.013 U       | 0.013 | 0.012 U       | 0.012 | 0.014 U       | 0.014  |
| 1,1-Dichloroethane         | 570      | 0.003  | 0.013 U       | 0.013 | 0.01 U        | 0.01 | 0.013 U       | 0.013 | 0.012 U       | 0.012 | 0.013 U       | 0.013 | 0.012 U       | 0.012 | 0.014 U       | 0.014  |
| 1,2-Dichloroethene (total) | 79       | 0.0044 | 0.013 U       | 0.013 | 0.01 U        | 0.01 | 0.013 U       | 0.013 | 0.012 U       | 0.012 | 0.013 U       | 0.013 | 0.012 U       | 0.012 | 0.014 U       | 0.014  |
| Chloroform                 | 19       | 0.0029 | 0.013 U       | 0.013 | 0.01 U        | 0.01 | 0.013 U       | 0.013 | 0.012 U       | 0.012 | 0.013 U       | 0.013 | 0.012 U       | 0.012 | 0.014 U       | 0.014  |
| 1,2-Dichloroethane         | 6        | 0.0024 | 0.013 U       | 0.013 | 0.01 U        | 0.01 | 0.013 U       | 0.013 | 0.012 U       | 0.012 | 0.013 U       | 0.013 | 0.012 U       | 0.012 | 0.014 U       | 0.014  |
| 2-Butanone                 | 1000     | 0.0041 | 0.013 U       | 0.013 | 0.01 U        | 0.01 | 0.013 U       | 0.013 | 0.012 U       | 0.012 | 0.013 U       | 0.013 | 0.012 U       | 0.012 | 0.012 J       | 0.014  |
| 1,1,1-Trichloroethane      | 210      | 0.0017 | 0.013 U       | 0.013 | 0.01 U        | 0.01 | 0.013 U       | 0.013 | 0.012 U       | 0.012 | 0.013 U       | 0.013 | 0.012 U       | 0.012 | 0.014 U       | 0.014  |
| Carbon Tetrachloride       | 2        | 0.0015 | 0.013 U       | 0.013 | 0.01 U        | 0.01 | 0.013 U       | 0.013 | 0.012 U       | 0.012 | 0.013 U       | 0.013 | 0.012 U       | 0.012 | 0.014 U       | 0.014  |
| Bromodichloromethane       | 11       | 0.002  | 0.013 U       | 0.013 | 0.01 U        | 0.01 | 0.013 U       | 0.013 | 0.012 U       | 0.012 | 0.013 U       | 0.013 | 0.012 U       | 0.012 | 0.014 U       | 0.014  |
| 1,2-Dichloropropane        | 10       | 0.0017 | 0.013 U       | 0.013 | 0.01 U        | 0.01 | 0.013 U       | 0.013 | 0.012 U       | 0.012 | 0.013 U       | 0.013 | 0.012 U       | 0.012 | 0.014 U       | 0.014  |
| cis-1,3-Dichloropropene    | 4        | 0.003  | 0.013 U       | 0.013 | 0.01 U        | 0.01 | 0.013 U       | 0.013 | 0.012 U       | 0.012 | 0.013 U       | 0.013 | 0.012 U       | 0.012 | 0.014 U       | 0.014  |
| Trichloroethene            | 23       | 0.002  | 0.013 U       | 0.013 | 0.01 U        | 0.01 | 0.013 U       | 0.013 | 0.012 U       | 0.012 | 0.013 U       | 0.013 | 0.012 U       | 0.012 | 0.014 U       | 0.014  |
| Dibromochloromethane       | 110      | 0.0024 | 0.013 U       | 0.013 | 0.01 U        | 0.01 | 0.013 U       | 0.013 | 0.012 U       | 0.012 | 0.013 U       | 0.013 | 0.012 U       | 0.012 | 0.014 U       | 0.014  |
| 1,1,2-Trichloroethane      | 22       | 0.0043 | 0.013 U       | 0.013 | 0.01 U        | 0.01 | 0.013 U       | 0.013 | 0.012 U       | 0.012 | 0.013 U       | 0.013 | 0.012 U       | 0.012 | 0.014 U       | 0.014  |
| Benzene                    | 3        | 0.0033 | 0.013 U       | 0.013 | 0.01 U        | 0.01 | 0.013 U       | 0.013 | 0.012 U       | 0.012 | 0.013 U       | 0.013 | 0.012 U       | 0.012 | 0.014 U       | 0.014  |
| trans-1,3-Dichloropropene  | 4        | 0.0024 | 0.013 U       | 0.013 | 0.01 U        | 0.01 | 0.013 U       | 0.013 | 0.012 U       | 0.012 | 0.013 U       | 0.013 | 0.012 U       | 0.012 | 0.014 U       | 0.014  |
| Bromoform                  | 86       | 0.0031 | 0.013 U       | 0.013 | 0.01 U        | 0.01 | 0.013 U       | 0.013 | 0.012 U       | 0.012 | 0.013 U       | 0.013 | 0.012 U       | 0.012 | 0.014 U       | 0.014  |
| 4-Methyl-2-pentanone       | 1000     | 0.0055 | 0.013 U       | 0.013 | 0.01 U        | 0.01 | 0.013 U       | 0.013 | 0.012 U       | 0.012 | 0.013 U       | 0.013 | 0.012 U       | 0.012 | 0.014 U       | 0.014  |
| 2-Hexanone                 |          | 0.0039 | 0.013 U       | 0.013 | 0.01 U        | 0.01 | 0.013 U       | 0.013 | 0.012 U       | 0.012 | 0.013 U       | 0.013 | 0.012 U       | 0.012 | 0.014 U       | 0.014  |
| Tetrachloroethene          | 4        | 0.004  | 0.013 U       | 0.013 | 0.01 U        | 0.01 | 0.013 U       | 0.013 | 0.012 U       | 0.012 | 0.013 U       | 0.013 | 0.012 U       | 0.012 | 0.014 U       | 0.014  |
| 1,1,2,2-Tetrachloroethane  | 34       | 0.0042 | 0.013 U       | 0.013 | 0.01 U        | 0.01 | 0.013 U       | 0.013 | 0.012 U       | 0.012 | 0.013 U       | 0.013 | 0.012 U       | 0.012 | 0.014 U       | 0.014  |
| Toluene                    | 1000     | 0.0027 | 0.013 U       | 0.013 | 0.01 U        | 0.01 | 0.013 U       | 0.013 | 0.012 U       | 0.012 | 0.013 U       | 0.013 | 0.012 U       | 0.012 | 0.014 U       | 0.014  |
| Chlorobenzene              | 37       | 0.0027 | 0.013 U       | 0.013 | 0.01 U        | 0.01 | 0.013 U       | 0.013 | 0.012 U       | 0.012 | 0.013 U       | 0.013 | 0.012 U       | 0.012 | 0.014 U       | 0.014  |
| Ethylbenzene               | 1000     | 0.0031 | 0.013 U       | 0.013 | 0.01 U        | 0.01 | 0.013 U       | 0.013 | 0.012 U       | 0.012 | 0.013 U       | 0.013 | 0.012 U       | 0.012 | 0.014 U       | 0.014  |
| Styrene                    | 23       | 0.0038 | 0.013 U       | 0.013 | 0.01 U        | 0.01 | 0.013 U       | 0.013 | 0.012 U       | 0.012 | 0.013 U       | 0.013 | 0.012 U       | 0.012 | 0.014 U       | 0.014  |
| Xylene (total)             | 410      | 0.0038 | 0.013 U       | 0.013 | 0.01 U        | 0.01 | 0.013 U       | 0.013 | 0.012 U       | 0.012 | 0.013 U       | 0.013 | 0.012 U       | 0.012 | 0.014 U       | 0.014  |
| Total Est. Conc. of TIC.   |          |        |               |       |               |      | 0.007         |       |               |       |               |       | .008, 6 *     |       | .9 *          |        |
| Dilution Factor            |          |        |               |       |               |      |               |       |               |       |               |       | * = 1000      |       | * = 50.0      |        |
| Method: TCL Volatiles      |          |        |               |       |               |      |               |       |               |       |               |       |               |       |               |        |

**CHARLES WOOD  
SOIL BORING VOLATILES**

| Geographical Location      |          |        | CW2           |      | CW2                 |      | CW2           |       | CW2           |       | CW2           |       | CW2           |      | CW4           |       |
|----------------------------|----------|--------|---------------|------|---------------------|------|---------------|-------|---------------|-------|---------------|-------|---------------|------|---------------|-------|
| Sample                     |          |        | CW02-SB31-D02 |      | CW02-SB31-E02       |      | CW02-SB32-A02 |       | CW02-SB33-A02 |       | CW02-SB33-A02 |       | CW02-SB33-D02 |      | CW04-SB01-A02 |       |
| Sample Type                |          |        | Trip Blank    |      | Field Rinsate Blank |      |               |       |               |       | Trip Blank    |       |               |      |               |       |
| Batch#                     |          |        | 9412G182      |      | 9412G182            |      | 9412G182      |       | 9412G154      |       | 9412G154      |       | 9412G154      |      | 9412G264      |       |
| Prep#                      |          |        | 94GVT365      |      | 94GVT365            |      | 94GVT031      |       | 94GVT030 & 31 |       | 94GVT030 & 35 |       | 94GVB439      |      | 94GVT034 & 35 |       |
| RFW#                       |          |        | 004           |      | 005                 |      | 001           |       | 001           |       | 002           |       | 003           |      | 008           |       |
| Sample Depth (bgs)         |          |        |               |      |                     |      | 7 - 9'        |       | 7 - 9'        |       | 7 - 9'        |       |               |      | 4 - 6'        |       |
| Dilution Factor            |          |        | 1.00          |      | 1.00                |      | 1.00          |       | 1.00          |       | 1.00          |       | 1.00          |      | 1.00          |       |
| Matrix                     |          |        | water         |      | water               |      | soil          |       | soil          |       | soil          |       | water         |      | soil          |       |
| Units                      | mg/kg    | mg/kg  | mg/l          |      | mg/l                |      | mg/kg         |       | mg/kg         |       | mg/kg         |       | mg/l          |      | mg/kg         |       |
| Sampling Date              |          |        | 12/16/94      |      | 12/16/94            |      | 12/16/94      |       | 12/15/94      |       | 12/15/94      |       | 12/16/94      |      | 12/21/94      |       |
| Analysis Date              |          |        | 12/21/94      |      | 12/12/94            |      | 12/20/94      |       | 12/19/94      |       | 12/19/94      |       | 12/20/94      |      | 12/27/94      |       |
| Analysis                   | Standard | MDL    | Analytical    | CRQL | Analytical          | CRQL | Analytical    | CRQL  | Analytical    | CRQL  | Analytical    | CRQL  | Analytical    | CRQL | Analytical    | CRQL  |
|                            |          |        | Result        |      | Result              |      | Result        |       | Result        |       | Result        |       | Result        |      | Result        |       |
| Chloromethane              | 520      | 0.0073 | 0.01 U        | 0.01 | 0.01 U              | 0.01 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.01 U        | 0.01 | 0.012 U       | 0.012 |
| Bromomethane               | 79       | 0.0067 | 0.01 U        | 0.01 | 0.01 U              | 0.01 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.01 U        | 0.01 | 0.012 U       | 0.012 |
| Vinyl Chloride             | 2        | 0.0079 | 0.01 U        | 0.01 | 0.01 U              | 0.01 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.01 U        | 0.01 | 0.012 U       | 0.012 |
| Chloroethane               |          | 0.0091 | 0.01 U        | 0.01 | 0.01 U              | 0.01 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.01 U        | 0.01 | 0.012 U       | 0.012 |
| Methylene Chloride         | 49       | 0.0027 | 0.01 U        | 0.01 | 0.01 U              | 0.01 | 0.017         | 0.012 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.01 U        | 0.01 | 0.012 U       | 0.012 |
| Acetone                    | 1000     | 0.0069 | 0.01 U        | 0.01 | 0.11                | 0.01 | 5.9 B         | 1.2   | 0.98 B        | .24 * | 2.1 B         | 0.12  | 0.01 U        | 0.01 | 1.4 B         | .12 * |
| Carbon Disulfide           |          | 0.0044 | 0.01 U        | 0.01 | 0.01 U              | 0.01 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.01 U        | 0.01 | 0.012 U       | 0.012 |
| 1,1-Dichloroethene         | 8        | 0.0049 | 0.01 U        | 0.01 | 0.01 U              | 0.01 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.01 U        | 0.01 | 0.012 U       | 0.012 |
| 1,1,1-Trichloroethane      | 570      | 0.003  | 0.01 U        | 0.01 | 0.01 U              | 0.01 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.01 U        | 0.01 | 0.012 U       | 0.012 |
| 1,2-Dichloroethene (total) | 79       | 0.0044 | 0.01 U        | 0.01 | 0.01 U              | 0.01 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.01 U        | 0.01 | 0.012 U       | 0.012 |
| Chloroform                 | 19       | 0.0029 | 0.01 U        | 0.01 | 0.01 U              | 0.01 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.01 U        | 0.01 | 0.012 U       | 0.012 |
| 1,2-Dichloroethane         | 6        | 0.0024 | 0.01 U        | 0.01 | 0.01 U              | 0.01 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.01 U        | 0.01 | 0.012 U       | 0.012 |
| 2-Butanone                 | 1000     | 0.0041 | 0.01 U        | 0.01 | 0.01 U              | 0.01 | 0.008 J       | 0.012 | 0.012 U       | 0.012 | 0.031         | 0.012 | 0.01 U        | 0.01 | 0.012 U       | 0.012 |
| 1,1,1-Trichloroethane      | 210      | 0.0017 | 0.01 U        | 0.01 | 0.01 U              | 0.01 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.01 U        | 0.01 | 0.012 U       | 0.012 |
| Carbon Tetrachloride       | 2        | 0.0015 | 0.01 U        | 0.01 | 0.01 U              | 0.01 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.01 U        | 0.01 | 0.012 U       | 0.012 |
| Bromodichloromethane       | 11       | 0.002  | 0.01 U        | 0.01 | 0.01 U              | 0.01 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.01 U        | 0.01 | 0.012 U       | 0.012 |
| 1,2-Dichloropropane        | 10       | 0.0017 | 0.01 U        | 0.01 | 0.01 U              | 0.01 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.01 U        | 0.01 | 0.012 U       | 0.012 |
| cis-1,3-Dichloropropene    | 4        | 0.003  | 0.01 U        | 0.01 | 0.01 U              | 0.01 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.01 U        | 0.01 | 0.012 U       | 0.012 |
| Trichloroethene            | 23       | 0.002  | 0.01 U        | 0.01 | 0.01 U              | 0.01 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.01 U        | 0.01 | 0.012 U       | 0.012 |
| Dibromochloromethane       | 110      | 0.0024 | 0.01 U        | 0.01 | 0.01 U              | 0.01 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.01 U        | 0.01 | 0.012 U       | 0.012 |
| 1,1,2-Trichloroethane      | 22       | 0.0043 | 0.01 U        | 0.01 | 0.01 U              | 0.01 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.01 U        | 0.01 | 0.012 U       | 0.012 |
| Benzene                    | 3        | 0.0033 | 0.01 U        | 0.01 | 0.01 U              | 0.01 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.01 U        | 0.01 | 0.012 U       | 0.012 |
| trans-1,3-Dichloropropene  | 4        | 0.0024 | 0.01 U        | 0.01 | 0.01 U              | 0.01 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.01 U        | 0.01 | 0.012 U       | 0.012 |
| Bromoform                  | 86       | 0.0031 | 0.01 U        | 0.01 | 0.01 U              | 0.01 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.01 U        | 0.01 | 0.012 U       | 0.012 |
| 4-Methyl-2-pentanone       | 1000     | 0.0055 | 0.01 U        | 0.01 | 0.01 U              | 0.01 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.01 U        | 0.01 | 0.012 U       | 0.012 |
| 2-Hexanone                 |          | 0.0039 | 0.01 U        | 0.01 | 0.01 U              | 0.01 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.01 U        | 0.01 | 0.012 U       | 0.012 |
| Tetrachloroethene          | 4        | 0.004  | 0.01 U        | 0.01 | 0.01 U              | 0.01 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.01 U        | 0.01 | 0.012 U       | 0.012 |
| 1,1,2,2-Tetrachloroethane  | 34       | 0.0042 | 0.01 U        | 0.01 | 0.01 U              | 0.01 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.01 U        | 0.01 | 0.012 U       | 0.012 |
| Toluene                    | 1000     | 0.0027 | 0.01 U        | 0.01 | 0.01 U              | 0.01 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.01 U        | 0.01 | 0.012 U       | 0.012 |
| Chlorobenzene              | 37       | 0.0027 | 0.01 U        | 0.01 | 0.01 U              | 0.01 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.01 U        | 0.01 | 0.012 U       | 0.012 |
| Ethylbenzene               | 1000     | 0.0031 | 0.01 U        | 0.01 | 0.01 U              | 0.01 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.01 U        | 0.01 | 0.012 U       | 0.012 |
| Styrene                    | 23       | 0.0038 | 0.01 U        | 0.01 | 0.01 U              | 0.01 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.01 U        | 0.01 | 0.012 U       | 0.012 |
| Xylene (total)             | 410      | 0.0038 | 0.01 U        | 0.01 | 0.01 U              | 0.01 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.012 U       | 0.012 | 0.01 U        | 0.01 | 0.012 U       | 0.012 |
| Total Est. Conc. of TIC.   |          |        |               |      |                     |      |               |       |               |       |               |       |               |      |               | .06 * |
| Dilution Factor            |          |        |               |      |                     |      | * = 100.0     |       | * = 20.0      |       | * = 10.0      |       |               |      | * = 10.0      |       |
| Method: TCL Volatiles      |          |        |               |      |                     |      |               |       |               |       |               |       |               |      |               |       |

**CHARLES WOOD  
SOIL BORING VOLATILES**

| Geographical Location      |  |  | CW5           |        |          |       | CW5           |      |         |       | CW5           |       |         |       | CW6           |       |        |      | CW6           |       |         |       | CW6           |       |         |       |               |      |      |  |
|----------------------------|--|--|---------------|--------|----------|-------|---------------|------|---------|-------|---------------|-------|---------|-------|---------------|-------|--------|------|---------------|-------|---------|-------|---------------|-------|---------|-------|---------------|------|------|--|
| Sample                     |  |  | CW05-SB01-A02 |        |          |       | CW05-SB01-D02 |      |         |       | CW05-SB02-A02 |       |         |       | CW06-SB02-A01 |       |        |      | CW06-SB34-A01 |       |         |       | CW06-SB34-A02 |       |         |       | CW06-SB34-D02 |      |      |  |
| Sample Type                |  |  |               |        |          |       | Trip Blank    |      |         |       |               |       |         |       |               |       |        |      |               |       |         |       | Trip Blank    |       |         |       |               |      |      |  |
| Batch#                     |  |  | 9412G245      |        |          |       | 9412G923      |      |         |       | 9412G245      |       |         |       | 9505G840      |       |        |      | 9501G423      |       |         |       | 9501G423      |       |         |       |               |      |      |  |
| Prep#                      |  |  | 94GVT035 & 99 |        |          |       | 94GVB441      |      |         |       | 94GVT035 & 99 |       |         |       | 95GVB138      |       |        |      | 95GVT002      |       |         |       | 95GVT002      |       |         |       | 95GVT006      |      |      |  |
| RFW#                       |  |  | 001           |        |          |       | 003           |      |         |       | 001           |       |         |       | 001           |       |        |      | 001           |       |         |       | 002           |       |         |       | 003           |      |      |  |
| Sample Depth (bgs)         |  |  | 6 - 8'        |        |          |       |               |      |         |       | 6 - 8'        |       |         |       | 0.5 - 1'      |       |        |      | 0-2'          |       |         |       | 2-4'          |       |         |       |               |      |      |  |
| Dilution Factor            |  |  | 1.00          |        |          |       | 5.00          |      |         |       | 1.00          |       |         |       | 1.00          |       |        |      | 1.00          |       |         |       | 1.00          |       |         |       | 1.00          |      |      |  |
| Matrix                     |  |  | soil          |        |          |       | water         |      |         |       | soil          |       |         |       | soil          |       |        |      | soil          |       |         |       | soil          |       |         |       | water         |      |      |  |
| Units                      |  |  | mg/kg         |        | mg/kg    |       | mg/kg         |      | mg/l    |       | mg/kg         |       | mg/kg   |       | mg/kg         |       | mg/kg  |      | mg/kg         |       | mg/kg   |       | mg/kg         |       | mg/l    |       | mg/l          |      |      |  |
| Sampling Date              |  |  | 12/20/94      |        |          |       | 12/20/94      |      |         |       | 12/20/94      |       |         |       | 5/10/95       |       |        |      | 1/3/95        |       |         |       | 1/3/95        |       |         |       | 1/3/95        |      |      |  |
| Analysis Date              |  |  | 12/28/94      |        |          |       | 12/28/94      |      |         |       | 12/28/94      |       |         |       | 5/24/95       |       |        |      | 1/5/95        |       |         |       | 1/5/95        |       |         |       | 1/6/95        |      |      |  |
| Analysis                   |  |  | Standard      |        | MDL      |       | Analytical    |      | CRQL    |       | Analytical    |       | CRQL    |       | Analytical    |       | CRQL   |      | Analytical    |       | CRQL    |       | Analytical    |       | CRQL    |       | Analytical    |      | CRQL |  |
|                            |  |  |               |        |          |       | Result        |      |         |       | Result        |       |         |       | Result        |       |        |      | Result        |       |         |       | Result        |       |         |       | Result        |      |      |  |
|                            |  |  |               |        |          |       |               |      |         |       |               |       |         |       |               |       |        |      |               |       |         |       |               |       |         |       |               |      |      |  |
| Chloromethane              |  |  | 520           | 0.0073 | 0.012 U  | 0.012 | 0.01 U        | 0.01 | 0.012 U | 0.012 | 0.014 U       | 0.014 | 0.012 U | 0.012 | 0.012 U       | 0.012 | 0.01 U | 0.01 | 0.012 U       | 0.012 | 0.014 U | 0.014 | 0.012 U       | 0.012 | 0.012 U | 0.012 | 0.01 U        | 0.01 | 0.01 |  |
| Bromomethane               |  |  | 79            | 0.0067 | 0.012 U  | 0.012 | 0.01 U        | 0.01 | 0.012 U | 0.012 | 0.014 U       | 0.014 | 0.012 U | 0.012 | 0.012 U       | 0.012 | 0.01 U | 0.01 | 0.012 U       | 0.012 | 0.014 U | 0.014 | 0.012 U       | 0.012 | 0.012 U | 0.012 | 0.01 U        | 0.01 | 0.01 |  |
| Vinyl Chloride             |  |  | 2             | 0.0079 | 0.012 U  | 0.012 | 0.01 U        | 0.01 | 0.012 U | 0.012 | 0.014 U       | 0.014 | 0.012 U | 0.012 | 0.012 U       | 0.012 | 0.01 U | 0.01 | 0.012 U       | 0.012 | 0.014 U | 0.014 | 0.012 U       | 0.012 | 0.012 U | 0.012 | 0.01 U        | 0.01 | 0.01 |  |
| Chloroethane               |  |  |               | 0.0091 | 0.012 U  | 0.012 | 0.01 U        | 0.01 | 0.012 U | 0.012 | 0.014 U       | 0.014 | 0.012 U | 0.012 | 0.012 U       | 0.012 | 0.01 U | 0.01 | 0.012 U       | 0.012 | 0.014 U | 0.014 | 0.012 U       | 0.012 | 0.012 U | 0.012 | 0.01 U        | 0.01 | 0.01 |  |
| Methylene Chloride         |  |  | 49            | 0.0027 | 0.012 U  | 0.012 | 0.01 U        | 0.01 | 0.012 U | 0.012 | 0.014 U       | 0.014 | 0.012 U | 0.012 | 0.012 U       | 0.012 | 0.01 U | 0.01 | 0.012 U       | 0.012 | 0.014 U | 0.014 | 0.012 U       | 0.012 | 0.012 U | 0.012 | 0.01 U        | 0.01 | 0.01 |  |
| Acetone                    |  |  | 1000          | 0.0069 | 2.7 B    | 0.23  | 0.01 U        | 0.01 | 0.57 B  | 0.06  | 0.016 B       | 0.014 | 0.012 U | 0.012 | 0.012 U       | 0.012 | 0.01 U | 0.01 | 0.012 U       | 0.012 | 0.016 B | 0.014 | 0.012 U       | 0.012 | 0.012 U | 0.012 | 0.01 U        | 0.01 | 0.01 |  |
| Carbon Disulfide           |  |  |               | 0.0044 | 0.012 U  | 0.012 | 0.01 U        | 0.01 | 0.012 U | 0.012 | 0.014 U       | 0.014 | 0.012 U | 0.012 | 0.012 U       | 0.012 | 0.01 U | 0.01 | 0.012 U       | 0.012 | 0.014 U | 0.014 | 0.012 U       | 0.012 | 0.012 U | 0.012 | 0.01 U        | 0.01 | 0.01 |  |
| 1,1-Dichloroethene         |  |  | 8             | 0.0049 | 0.012 U  | 0.012 | 0.01 U        | 0.01 | 0.012 U | 0.012 | 0.014 U       | 0.014 | 0.012 U | 0.012 | 0.012 U       | 0.012 | 0.01 U | 0.01 | 0.012 U       | 0.012 | 0.014 U | 0.014 | 0.012 U       | 0.012 | 0.012 U | 0.012 | 0.01 U        | 0.01 | 0.01 |  |
| 1,1-Dichloroethane         |  |  | 570           | 0.003  | 0.012 U  | 0.012 | 0.01 U        | 0.01 | 0.012 U | 0.012 | 0.014 U       | 0.014 | 0.012 U | 0.012 | 0.012 U       | 0.012 | 0.01 U | 0.01 | 0.012 U       | 0.012 | 0.014 U | 0.014 | 0.012 U       | 0.012 | 0.012 U | 0.012 | 0.01 U        | 0.01 | 0.01 |  |
| 1,2-Dichloroethene (total) |  |  | 79            | 0.0044 | 0.012 U  | 0.012 | 0.01 U        | 0.01 | 0.012 U | 0.012 | 0.014 U       | 0.014 | 0.012 U | 0.012 | 0.012 U       | 0.012 | 0.01 U | 0.01 | 0.012 U       | 0.012 | 0.014 U | 0.014 | 0.012 U       | 0.012 | 0.012 U | 0.012 | 0.01 U        | 0.01 | 0.01 |  |
| Chloroform                 |  |  | 19            | 0.0029 | 0.012 U  | 0.012 | 0.01 U        | 0.01 | 0.012 U | 0.012 | 0.014 U       | 0.014 | 0.012 U | 0.012 | 0.012 U       | 0.012 | 0.01 U | 0.01 | 0.012 U       | 0.012 | 0.014 U | 0.014 | 0.012 U       | 0.012 | 0.012 U | 0.012 | 0.01 U        | 0.01 | 0.01 |  |
| 1,2-Dichloroethane         |  |  | 6             | 0.0024 | 0.012 U  | 0.012 | 0.01 U        | 0.01 | 0.012 U | 0.012 | 0.014 U       | 0.014 | 0.012 U | 0.012 | 0.012 U       | 0.012 | 0.01 U | 0.01 | 0.012 U       | 0.012 | 0.014 U | 0.014 | 0.012 U       | 0.012 | 0.012 U | 0.012 | 0.01 U        | 0.01 | 0.01 |  |
| 2-Butanone                 |  |  | 1000          | 0.0041 | 0.013    | 0.012 | 0.01 U        | 0.01 | 0.01 J  | 0.012 | 0.014 U       | 0.014 | 0.012 U | 0.012 | 0.012 U       | 0.012 | 0.01 U | 0.01 | 0.012 U       | 0.012 | 0.014 U | 0.014 | 0.012 U       | 0.012 | 0.012 U | 0.012 | 0.01 U        | 0.01 | 0.01 |  |
| 1,1,1-Trichloroethane      |  |  | 210           | 0.0017 | 0.012 U  | 0.012 | 0.01 U        | 0.01 | 0.012 U | 0.012 | 0.014 U       | 0.014 | 0.012 U | 0.012 | 0.012 U       | 0.012 | 0.01 U | 0.01 | 0.012 U       | 0.012 | 0.014 U | 0.014 | 0.012 U       | 0.012 | 0.012 U | 0.012 | 0.01 U        | 0.01 | 0.01 |  |
| Carbon Tetrachloride       |  |  | 2             | 0.0015 | 0.012 U  | 0.012 | 0.01 U        | 0.01 | 0.012 U | 0.012 | 0.014 U       | 0.014 | 0.012 U | 0.012 | 0.012 U       | 0.012 | 0.01 U | 0.01 | 0.012 U       | 0.012 | 0.014 U | 0.014 | 0.012 U       | 0.012 | 0.012 U | 0.012 | 0.01 U        | 0.01 | 0.01 |  |
| Bromodichloromethane       |  |  | 11            | 0.002  | 0.012 U  | 0.012 | 0.01 U        | 0.01 | 0.012 U | 0.012 | 0.014 U       | 0.014 | 0.012 U | 0.012 | 0.012 U       | 0.012 | 0.01 U | 0.01 | 0.012 U       | 0.012 | 0.014 U | 0.014 | 0.012 U       | 0.012 | 0.012 U | 0.012 | 0.01 U        | 0.01 | 0.01 |  |
| 1,2-Dichloropropane        |  |  | 10            | 0.0017 | 0.012 U  | 0.012 | 0.01 U        | 0.01 | 0.012 U | 0.012 | 0.014 U       | 0.014 | 0.012 U | 0.012 | 0.012 U       | 0.012 | 0.01 U | 0.01 | 0.012 U       | 0.012 | 0.014 U | 0.014 | 0.012 U       | 0.012 | 0.012 U | 0.012 | 0.01 U        | 0.01 | 0.01 |  |
| cis-1,3-Dichloropropene    |  |  | 4             | 0.003  | 0.012 U  | 0.012 | 0.01 U        | 0.01 | 0.012 U | 0.012 | 0.014 U       | 0.014 | 0.012 U | 0.012 | 0.012 U       | 0.012 | 0.01 U | 0.01 | 0.012 U       | 0.012 | 0.014 U | 0.014 | 0.012 U       | 0.012 | 0.012 U | 0.012 | 0.01 U        | 0.01 | 0.01 |  |
| Trichloroethene            |  |  | 23            | 0.002  | 0.012 U  | 0.012 | 0.01 U        | 0.01 | 0.012 U | 0.012 | 0.014 U       | 0.014 | 0.012 U | 0.012 | 0.012 U       | 0.012 | 0.01 U | 0.01 | 0.012 U       | 0.012 | 0.014 U | 0.014 | 0.012 U       | 0.012 | 0.012 U | 0.012 | 0.01 U        | 0.01 | 0.01 |  |
| Dibromochloromethane       |  |  | 110           | 0.0024 | 0.012 U  | 0.012 | 0.01 U        | 0.01 | 0.012 U | 0.012 | 0.014 U       | 0.014 | 0.012 U | 0.012 | 0.012 U       | 0.012 | 0.01 U | 0.01 | 0.012 U       | 0.012 | 0.014 U | 0.014 | 0.012 U       | 0.012 | 0.012 U | 0.012 | 0.01 U        | 0.01 | 0.01 |  |
| 1,1,2-Trichloroethane      |  |  | 22            | 0.0043 | 0.012 U  | 0.012 | 0.01 U        | 0.01 | 0.012 U | 0.012 | 0.014 U       | 0.014 | 0.012 U | 0.012 | 0.012 U       | 0.012 | 0.01 U | 0.01 | 0.012 U       | 0.012 | 0.014 U | 0.014 | 0.012 U       | 0.012 | 0.012 U | 0.012 | 0.01 U        | 0.01 | 0.01 |  |
| Benzene                    |  |  | 3             | 0.0033 | 0.012 U  | 0.012 | 0.01 U        | 0.01 | 0.012 U | 0.012 | 0.014 U       | 0.014 | 0.012 U | 0.012 | 0.012 U       | 0.012 | 0.01 U | 0.01 | 0.012 U       | 0.012 | 0.014 U | 0.014 | 0.012 U       | 0.012 | 0.012 U | 0.012 | 0.01 U        | 0.01 | 0.01 |  |
| trans-1,3-Dichloropropene  |  |  | 4             | 0.0024 | 0.012 U  | 0.012 | 0.01 U        | 0.01 | 0.012 U | 0.012 | 0.014 U       | 0.014 | 0.012 U | 0.012 | 0.012 U       | 0.012 | 0.01 U | 0.01 | 0.012 U       | 0.012 | 0.014 U | 0.014 | 0.012 U       | 0.012 | 0.012 U | 0.012 | 0.01 U        | 0.01 | 0.01 |  |
| Bromoform                  |  |  | 86            | 0.0031 | 0.012 U  | 0.012 | 0.01 U        | 0.01 | 0.012 U | 0.012 | 0.014 U       | 0.014 | 0.012 U | 0.012 | 0.012 U       | 0.012 | 0.01 U | 0.01 | 0.012 U       | 0.012 | 0.014 U | 0.014 | 0.012 U       | 0.012 | 0.012 U | 0.012 | 0.01 U        | 0.01 | 0.01 |  |
| 4-Methyl-2-pentanone       |  |  | 1000          | 0.0055 | 0.012 U  | 0.012 | 0.01 U        | 0.01 | 0.012 U | 0.012 | 0.014 U       | 0.014 | 0.012 U | 0.012 | 0.012 U       | 0.012 | 0.01 U | 0.01 | 0.012 U       | 0.012 | 0.014 U | 0.014 | 0.012 U       | 0.012 | 0.012 U | 0.012 | 0.01 U        | 0.01 | 0.01 |  |
| 2-Hexanone                 |  |  |               | 0.0039 | 0.012 U  | 0.012 | 0.01 U        | 0.01 | 0.012 U | 0.012 | 0.014 U       | 0.014 | 0.012 U | 0.012 | 0.012 U       | 0.012 | 0.01 U | 0.01 | 0.012 U       | 0.012 | 0.014 U | 0.014 | 0.012 U       | 0.012 | 0.012 U | 0.012 | 0.01 U        | 0.01 | 0.01 |  |
| Tetrachloroethene          |  |  | 4             | 0.004  | 0.012 U  | 0.012 | 0.01 U        | 0.01 | 0.012 U | 0.012 | 0.014 U       | 0.014 | 0.012 U | 0.012 | 0.012 U       | 0.012 | 0.01 U | 0.01 | 0.012 U       | 0.012 | 0.014 U | 0.014 | 0.012 U       | 0.012 | 0.012 U | 0.012 | 0.01 U        | 0.01 | 0.01 |  |
| 1,1,2,2-Tetrachloroethane  |  |  | 34            | 0.0042 | 0.012 U  | 0.012 | 0.01 U        | 0.01 | 0.012 U | 0.012 | 0.014 U       | 0.014 | 0.012 U | 0.012 | 0.012 U       | 0.012 | 0.01 U | 0.01 | 0.012 U       | 0.012 | 0.014 U | 0.014 | 0.012 U       | 0.012 | 0.012 U | 0.012 | 0.01 U        | 0.01 | 0.01 |  |
| Toluene                    |  |  | 1000          | 0.0027 | 0.012 U  | 0.012 | 0.01 U        | 0.01 | 0.012 U | 0.012 | 0.014 U       | 0.014 | 0.012 U | 0.012 | 0.012 U       | 0.012 | 0.01 U | 0.01 | 0.012 U       | 0.012 | 0.014 U | 0.014 | 0.012 U       | 0.012 | 0.012 U | 0.012 | 0.01 U        | 0.01 | 0.01 |  |
| Chlorobenzene              |  |  | 37            | 0.0027 | 0.012 U  | 0.012 | 0.01 U        | 0.01 | 0.012 U | 0.012 | 0.014 U       | 0.014 | 0.012 U | 0.012 | 0.012 U       | 0.012 | 0.01 U | 0.01 | 0.012 U       | 0.012 | 0.014 U | 0.014 | 0.012 U       | 0.012 | 0.012 U | 0.012 | 0.01 U        | 0.01 | 0.01 |  |
| Ethylbenzene               |  |  | 1000          | 0.0031 | 0.012 U  | 0.012 | 0.01 U        | 0.01 | 0.012 U | 0.012 | 0.014 U       | 0.014 | 0.012 U | 0.012 | 0.012 U       | 0.012 | 0.01 U | 0.01 | 0.012 U       | 0.012 | 0.014 U | 0.014 | 0.012 U       | 0.012 | 0.012 U | 0.012 | 0.01 U        | 0.01 | 0.01 |  |
| Styrene                    |  |  | 23            | 0.0038 | 0.012 U  | 0.012 | 0.01 U        | 0.01 | 0.012 U | 0.012 | 0.014 U       | 0.014 | 0.012 U | 0.012 | 0.012 U       | 0.012 | 0.01 U | 0.01 | 0.012 U       | 0.012 | 0.014 U | 0.014 | 0.012 U       | 0.012 | 0.012 U | 0.012 | 0.01 U        | 0.01 | 0.01 |  |
| Xylene (total)             |  |  | 410           | 0.0038 | 0.012 U  | 0.012 | 0.01 U        | 0.01 | 0.012 U | 0.012 | 0.014 U       | 0.014 | 0.012 U | 0.012 | 0.012 U       | 0.012 | 0.01 U | 0.01 | 0.012 U       | 0.012 | 0.014 U | 0.014 | 0.012 U       | 0.012 | 0.012 U | 0.012 | 0.01 U        | 0.01 | 0.01 |  |
| Total Est. Conc. of TIC.   |  |  |               |        | 0.016    |       |               |      |         |       | 0.007         |       |         |       |               |       |        |      |               |       |         |       |               |       |         |       |               |      |      |  |
| Dilution Factor            |  |  |               |        | * = 20.0 |       |               |      |         |       | * = 5.00      |       |         |       |               |       |        |      |               |       |         |       |               |       |         |       |               |      |      |  |
| Method:TCL Volatiles       |  |  |               |        |          |       |               |      |         |       |               |       |         |       |               |       |        |      |               |       |         |       |               |       |         |       |               |      |      |  |

**CHARLES WOOD  
SOIL BORING VOLATILES**

| Geographical Location      |          |        | CW9           |       | CW9           |      | CW9                 |      | CW9                 |      | B6          |       | B6          |       | B7          |       |
|----------------------------|----------|--------|---------------|-------|---------------|------|---------------------|------|---------------------|------|-------------|-------|-------------|-------|-------------|-------|
| Sample                     |          |        | CW09-SB01-A02 |       | CW09-SB01-D02 |      | CW09-SB01-E02       |      | CW09-SB01-E02DL     |      | B6-SB01-A01 |       | B6-SB01-A02 |       | B7-SB01-A01 |       |
| Sample Type                |          |        |               |       | Trip Blank    |      | Field Rinsate Blank |      | Field Rinsate Blank |      |             |       |             |       |             |       |
| Batch#                     |          |        | 9501G450      |       | 9501G450      |      | 9501G450            |      | 9501G450            |      | 9501G553    |       | 9501G553    |       | 9501G553    |       |
| Prep#                      |          |        | 95GVF011      |       | 95GVE009      |      | 95GVE009            |      | 95GVF009            |      | 95GVF013    |       | 95GVF013    |       | 95GVF012    |       |
| RFW#                       |          |        | 001           |       | 003           |      | 002DL               |      | 002                 |      | 008         |       | 019         |       | 006         |       |
| Sample Depth (bgs)         |          |        | 2 - 4'        |       |               |      |                     |      |                     |      | 1 - 2'      |       | 2 - 4'      |       | 1 - 2'      |       |
| Dilution Factor            |          |        | 1.00          |       | 1.00          |      | 50.0                |      | 1.00                |      | 1.00        |       | 1.00        |       | 1.00        |       |
| Matrix                     |          |        | soil          |       | water         |      | water               |      | water               |      | soil        |       | soil        |       | soil        |       |
| Units                      | mg/kg    | mg/kg  | mg/kg         |       | mg/l          |      | mg/l                |      | mg/l                |      | mg/kg       |       | mg/kg       |       | mg/kg       |       |
| Sampling Date              |          |        | 1/4/95        |       | 1/4/95        |      | 1/4/95              |      | 1/4/95              |      | 1/10/95     |       | 1/10/95     |       | 1/10/95     |       |
| Analysis Date              |          |        | 1/13/95       |       | 1/10/95       |      | 1/10/95             |      | 1/10/95             |      | 1/16/95     |       | 1/16/95     |       | 1/15/95     |       |
| Analysis                   | Standard | MDL    | Analytical    | CRQL  | Analytical    | CRQL | Analytical          | CRQL | Analytical          | CRQL | Analytical  | CRQL  | Analytical  | CRQL  | Analytical  | CRQL  |
|                            |          |        | Result        |       | Result        |      | Result              |      | Result              |      | Result      |       | Result      |       | Result      |       |
| Chloromethane              | 520      | 0.0073 | 0.012 U       | 0.012 | 0.01 U        | 0.01 | 0.01 U              | 0.01 | NA                  | NA   | 0.011 U     | 0.011 | 0.012 U     | 0.012 | 0.012 U     | 0.012 |
| Bromomethane               | 79       | 0.0067 | 0.012 U       | 0.012 | 0.01 U        | 0.01 | 0.01 U              | 0.01 | NA                  | NA   | 0.011 U     | 0.011 | 0.012 U     | 0.012 | 0.012 U     | 0.012 |
| Vinyl Chloride             | 2        | 0.0079 | 0.012 U       | 0.012 | 0.01 U        | 0.01 | 0.01 U              | 0.01 | NA                  | NA   | 0.011 U     | 0.011 | 0.012 U     | 0.012 | 0.012 U     | 0.012 |
| Chloroethane               |          | 0.0091 | 0.012 U       | 0.012 | 0.01 U        | 0.01 | 0.01 U              | 0.01 | NA                  | NA   | 0.011 U     | 0.011 | 0.012 U     | 0.012 | 0.012 U     | 0.012 |
| Methylene Chloride         | 49       | 0.0027 | 0.012 U       | 0.012 | 0.01 U        | 0.01 | 0.01 U              | 0.01 | NA                  | NA   | 0.011 U     | 0.011 | 0.012 U     | 0.012 | 0.012 U     | 0.012 |
| Acetone                    | 1000     | 0.0069 | 1.2           | *     | 0.01 U        | 0.01 | E                   | 0.01 | 5.2                 |      | 0.011 U     | 0.011 | 0.012 U     | 0.012 | 0.012 U     | 0.012 |
| Carbon Disulfide           |          | 0.0044 | 0.012 U       | 0.012 | 0.01 U        | 0.01 | 0.01 U              | 0.01 | NA                  | NA   | 0.011 U     | 0.011 | 0.012 U     | 0.012 | 0.012 U     | 0.012 |
| 1,1-Dichloroethene         | 8        | 0.0049 | 0.012 U       | 0.012 | 0.01 U        | 0.01 | 0.01 U              | 0.01 | NA                  | NA   | 0.011 U     | 0.011 | 0.012 U     | 0.012 | 0.012 U     | 0.012 |
| 1,1-Dichloroethane         | 570      | 0.003  | 0.012 U       | 0.012 | 0.01 U        | 0.01 | 0.01 U              | 0.01 | NA                  | NA   | 0.011 U     | 0.011 | 0.012 U     | 0.012 | 0.012 U     | 0.012 |
| 1,2-Dichloroethene (total) | 79       | 0.0044 | 0.012 U       | 0.012 | 0.01 U        | 0.01 | 0.01 U              | 0.01 | NA                  | NA   | 0.011 U     | 0.011 | 0.012 U     | 0.012 | 0.012 U     | 0.012 |
| Chloroform                 | 19       | 0.0029 | 0.012 U       | 0.012 | 0.01 U        | 0.01 | 0.003 J             | 0.01 | NA                  | NA   | 0.011 U     | 0.011 | 0.012 U     | 0.012 | 0.012 U     | 0.012 |
| 1,2-Dichloroethane         | 6        | 0.0024 | 0.012 U       | 0.012 | 0.01 U        | 0.01 | 0.01 U              | 0.01 | NA                  | NA   | 0.011 U     | 0.011 | 0.012 U     | 0.012 | 0.012 U     | 0.012 |
| 2-Butanone                 | 1000     | 0.0041 | 0.012 U       | 0.012 | 0.01 U        | 0.01 | 0.01 U              | 0.01 | NA                  | NA   | 0.011 U     | 0.011 | 0.012 U     | 0.012 | 0.012 U     | 0.012 |
| 1,1,1-Trichloroethane      | 210      | 0.0017 | 0.012 U       | 0.012 | 0.01 U        | 0.01 | 0.01 U              | 0.01 | NA                  | NA   | 0.011 U     | 0.011 | 0.012 U     | 0.012 | 0.012 U     | 0.012 |
| Carbon Tetrachloride       | 2        | 0.0015 | 0.012 U       | 0.012 | 0.01 U        | 0.01 | 0.01 U              | 0.01 | NA                  | NA   | 0.011 U     | 0.011 | 0.012 U     | 0.012 | 0.012 U     | 0.012 |
| Bromodichloromethane       | 11       | 0.002  | 0.012 U       | 0.012 | 0.01 U        | 0.01 | 0.01 U              | 0.01 | NA                  | NA   | 0.011 U     | 0.011 | 0.012 U     | 0.012 | 0.012 U     | 0.012 |
| 1,2-Dichloropropane        | 10       | 0.0017 | 0.012 U       | 0.012 | 0.01 U        | 0.01 | 0.01 U              | 0.01 | NA                  | NA   | 0.011 U     | 0.011 | 0.012 U     | 0.012 | 0.012 U     | 0.012 |
| cis-1,3-Dichloropropene    | 4        | 0.003  | 0.012 U       | 0.012 | 0.01 U        | 0.01 | 0.01 U              | 0.01 | NA                  | NA   | 0.011 U     | 0.011 | 0.012 U     | 0.012 | 0.012 U     | 0.012 |
| Trichloroethene            | 23       | 0.002  | 0.012 U       | 0.012 | 0.01 U        | 0.01 | 0.01 U              | 0.01 | NA                  | NA   | 0.011 U     | 0.011 | 0.012 U     | 0.012 | 0.012 U     | 0.012 |
| Dibromochloromethane       | 110      | 0.0024 | 0.012 U       | 0.012 | 0.01 U        | 0.01 | 0.01 U              | 0.01 | NA                  | NA   | 0.011 U     | 0.011 | 0.012 U     | 0.012 | 0.012 U     | 0.012 |
| 1,1,2-Trichloroethane      | 22       | 0.0043 | 0.012 U       | 0.012 | 0.01 U        | 0.01 | 0.01 U              | 0.01 | NA                  | NA   | 0.011 U     | 0.011 | 0.012 U     | 0.012 | 0.012 U     | 0.012 |
| Benzene                    | 3        | 0.0033 | 0.012 U       | 0.012 | 0.01 U        | 0.01 | 0.01 U              | 0.01 | NA                  | NA   | 0.011 U     | 0.011 | 0.012 U     | 0.012 | 0.012 U     | 0.012 |
| trans-1,3-Dichloropropene  | 4        | 0.0024 | 0.012 U       | 0.012 | 0.01 U        | 0.01 | 0.01 U              | 0.01 | NA                  | NA   | 0.011 U     | 0.011 | 0.012 U     | 0.012 | 0.012 U     | 0.012 |
| Bromoform                  | 86       | 0.0031 | 0.012 U       | 0.012 | 0.01 U        | 0.01 | 0.01 U              | 0.01 | NA                  | NA   | 0.011 U     | 0.011 | 0.012 U     | 0.012 | 0.012 U     | 0.012 |
| 4-Methyl-2-pentanone       | 1000     | 0.0055 | 0.012 U       | 0.012 | 0.01 U        | 0.01 | 0.01 U              | 0.01 | NA                  | NA   | 0.011 U     | 0.011 | 0.012 U     | 0.012 | 0.012 U     | 0.012 |
| 2-Hexanone                 |          | 0.0039 | 0.012 U       | 0.012 | 0.01 U        | 0.01 | 0.01 U              | 0.01 | NA                  | NA   | 0.011 U     | 0.011 | 0.012 U     | 0.012 | 0.012 U     | 0.012 |
| Tetrachloroethene          | 4        | 0.004  | 0.012 U       | 0.012 | 0.01 U        | 0.01 | 0.01 U              | 0.01 | NA                  | NA   | 0.011 U     | 0.011 | 0.012 U     | 0.012 | 0.012 U     | 0.012 |
| 1,1,2,2-Tetrachloroethane  | 34       | 0.0042 | 0.012 U       | 0.012 | 0.01 U        | 0.01 | 0.01 U              | 0.01 | NA                  | NA   | 0.011 U     | 0.011 | 0.012 U     | 0.012 | 0.012 U     | 0.012 |
| Toluene                    | 1000     | 0.0027 | 0.012 U       | 0.012 | 0.01 U        | 0.01 | 0.01 U              | 0.01 | NA                  | NA   | 0.011 U     | 0.011 | 0.012 U     | 0.012 | 0.012 U     | 0.012 |
| Chlorobenzene              | 37       | 0.0027 | 0.012 U       | 0.012 | 0.01 U        | 0.01 | 0.01 U              | 0.01 | NA                  | NA   | 0.011 U     | 0.011 | 0.012 U     | 0.012 | 0.012 U     | 0.012 |
| Ethylbenzene               | 1000     | 0.0031 | 0.012 U       | 0.012 | 0.01 U        | 0.01 | 0.01 U              | 0.01 | NA                  | NA   | 0.011 U     | 0.011 | 0.012 U     | 0.012 | 0.012 U     | 0.012 |
| Styrene                    | 23       | 0.0038 | 0.012 U       | 0.012 | 0.01 U        | 0.01 | 0.01 U              | 0.01 | NA                  | NA   | 0.011 U     | 0.011 | 0.012 U     | 0.012 | 0.012 U     | 0.012 |
| Xylene (total)             | 410      | 0.0038 | 0.012 U       | 0.012 | 0.01 U        | 0.01 | 0.01 U              | 0.01 | NA                  | NA   | 0.011 U     | 0.011 | 0.012 U     | 0.012 | 0.012 U     | 0.012 |
| Total Est. Conc. of TIC.   |          |        |               |       |               |      |                     |      |                     |      | 0.006       |       |             |       |             |       |
| Dilution Factor            |          |        |               |       |               |      |                     |      |                     |      |             |       |             |       |             |       |
| Method: TCL Volatiles      |          |        |               |       |               |      |                     |      |                     |      |             |       |             |       |             |       |

**CHARLES WOOD  
SOIL BORING VOLATILES**

| Geographical Location      |          |        | B7          |       | B8          |       | B8          |       | B9          |       | B9          |       | B9          |       | B9          |        |
|----------------------------|----------|--------|-------------|-------|-------------|-------|-------------|-------|-------------|-------|-------------|-------|-------------|-------|-------------|--------|
| Sample                     |          |        | B7-SB01-A02 |       | B8-SB01-A01 |       | B8-SB01-A02 |       | B9-SB01-A01 |       | B9-SB01-A02 |       | B9-SB01-C02 |       | B9-SB01-D02 |        |
| Sample Type                |          |        |             |       |             |       |             |       |             |       |             |       | Duplicate   |       | Trip Blank  |        |
| Batch#                     |          |        | 9501G553    |       | 9501G553    |       | 9501G553    |       | 9501G831    |       | 9501G831    |       | 9501G831    |       | 9501G831    |        |
| Prep#                      |          |        | 95GVF013    |       | 95GVF012    |       | 95GVF012    |       | 95GVT020    |       | 95GVT020    |       | 95GVT020    |       | 95GVC014    |        |
| RFW#                       |          |        | 007         |       | 004         |       | 005         |       | 001         |       | 002         |       | 003         |       | 005         |        |
| Sample Depth (bgs)         |          |        | 4 - 6'      |       | 1 - 2'      |       | 4 - 6'      |       | 1 - 2'      |       | 6 - 8'      |       |             |       |             |        |
| Dilution Factor            |          |        | 1.00        |       | 1.00        |       | 1.00        |       | 1.00        |       | 1.00        |       | 1.00        |       | 1.00        |        |
| Matrix                     |          |        | soil        |       | soil        |       | soil        |       | soil        |       | soil        |       | soil        |       | water       |        |
| Units                      | mg/kg    | mg/kg  | mg/kg       |       | mg/kg       |       | mg/kg       |       | mg/kg       |       | mg/kg       |       | mg/kg       |       | mg/l        |        |
| Sampling Date              |          |        | 1/10/95     |       | 1/10/95     |       | 1/10/95     |       | 1/23/95     |       | 1/23/95     |       | 1/23/95     |       | 1/23/95     |        |
| Analysis Date              |          |        | 1/16/95     |       | 1/15/95     |       | 1/15/95     |       | 2/1/95      |       | 2/1/95      |       | 2/1/95      |       | 2/1/95      |        |
| Analysis                   | Standard | MDL    | Analytical  | CRQL  | Analytical  | CRQL  | Analytical  | CRQL  | Analytical  | CRQL  | Analytical  | CRQL  | Analytical  | CRQL  | Analytical  | CRQL   |
|                            |          |        | Result      |       | Result      |       | Result      |       | Result      |       | Result      |       | Result      |       | Result      |        |
| Chloromethane              | 520      | 0.0073 | 0.012 U     | 0.012 | 0.011 U     | 0.011 | 0.012 U     | 0.012 | 0.012 U     | 0.012 | 0.012 U     | 0.012 | 0.012 U     | 0.012 | 0.01 U      | 0.01   |
| Bromomethane               | 79       | 0.0067 | 0.012 U     | 0.012 | 0.011 U     | 0.011 | 0.012 U     | 0.012 | 0.012 U     | 0.012 | 0.012 U     | 0.012 | 0.012 U     | 0.012 | 0.01 U      | 0.01   |
| Vinyl Chloride             | 2        | 0.0079 | 0.012 U     | 0.012 | 0.011 U     | 0.011 | 0.012 U     | 0.012 | 0.012 U     | 0.012 | 0.012 U     | 0.012 | 0.012 U     | 0.012 | 0.01 U      | 0.01   |
| Chloroethane               |          | 0.0091 | 0.012 U     | 0.012 | 0.011 U     | 0.011 | 0.012 U     | 0.012 | 0.012 U     | 0.012 | 0.012 U     | 0.012 | 0.012 U     | 0.012 | 0.01 U      | 0.01   |
| Methylene Chloride         | 49       | 0.0027 | 0.012 U     | 0.012 | 0.011 U     | 0.011 | 0.012 U     | 0.012 | 0.012 U     | 0.012 | 0.014 B     | 0.012 | 0.012 U     | 0.012 | 0.01 U      | 0.01   |
| Acetone                    | 1000     | 0.0069 | 0.015 B     | 0.012 | 0.011 U     | 0.011 | 0.13        | 0.012 | 0.9 B       | 0.3 * | 0.012 U     | 0.012 | 0.012 U     | 0.012 | 8300        | 1000 * |
| Carbon Disulfide           |          | 0.0044 | 0.012 U     | 0.012 | 0.011 U     | 0.011 | 0.002 J     | 0.012 | 0.012 U     | 0.012 | 0.012 U     | 0.012 | 0.012 U     | 0.012 | 0.01 U      | 0.01   |
| 1,1-Dichloroethene         | 8        | 0.0049 | 0.012 U     | 0.012 | 0.011 U     | 0.011 | 0.012 U     | 0.012 | 0.012 U     | 0.012 | 0.012 U     | 0.012 | 0.012 U     | 0.012 | 0.01 U      | 0.01   |
| 1,1-Dichloroethane         | 570      | 0.003  | 0.012 U     | 0.012 | 0.011 U     | 0.011 | 0.012 U     | 0.012 | 0.012 U     | 0.012 | 0.012 U     | 0.012 | 0.012 U     | 0.012 | 0.01 U      | 0.01   |
| 1,2-Dichloroethene (total) | 79       | 0.0044 | 0.012 U     | 0.012 | 0.011 U     | 0.011 | 0.012 U     | 0.012 | 0.012 U     | 0.012 | 0.012 U     | 0.012 | 0.012 U     | 0.012 | 0.01 U      | 0.01   |
| Chloroform                 | 19       | 0.0029 | 0.012 U     | 0.012 | 0.011 U     | 0.011 | 0.012 U     | 0.012 | 0.012 U     | 0.012 | 0.012 U     | 0.012 | 0.012 U     | 0.012 | 0.01 U      | 0.01   |
| 1,2-Dichloroethane         | 6        | 0.0024 | 0.012 U     | 0.012 | 0.011 U     | 0.011 | 0.012 U     | 0.012 | 0.012 U     | 0.012 | 0.012 U     | 0.012 | 0.012 U     | 0.012 | 0.01 U      | 0.01   |
| 2-Butanone                 | 1000     | 0.0041 | 0.012 U     | 0.012 | 0.011 U     | 0.011 | 0.012 U     | 0.012 | 0.012 U     | 0.012 | 0.012 U     | 0.012 | 0.012 U     | 0.012 | 0.01 U      | 0.01   |
| 1,1,1-Trichloroethane      | 210      | 0.0017 | 0.012 U     | 0.012 | 0.011 U     | 0.011 | 0.012 U     | 0.012 | 0.012 U     | 0.012 | 0.012 U     | 0.012 | 0.012 U     | 0.012 | 0.01 U      | 0.01   |
| Carbon Tetrachloride       | 2        | 0.0015 | 0.012 U     | 0.012 | 0.011 U     | 0.011 | 0.012 U     | 0.012 | 0.012 U     | 0.012 | 0.012 U     | 0.012 | 0.012 U     | 0.012 | 0.01 U      | 0.01   |
| Bromodichloromethane       | 11       | 0.002  | 0.012 U     | 0.012 | 0.011 U     | 0.011 | 0.012 U     | 0.012 | 0.012 U     | 0.012 | 0.012 U     | 0.012 | 0.012 U     | 0.012 | 0.01 U      | 0.01   |
| 1,2-Dichloropropane        | 10       | 0.0017 | 0.012 U     | 0.012 | 0.011 U     | 0.011 | 0.012 U     | 0.012 | 0.012 U     | 0.012 | 0.012 U     | 0.012 | 0.012 U     | 0.012 | 0.01 U      | 0.01   |
| cis-1,3-Dichloropropene    | 4        | 0.003  | 0.012 U     | 0.012 | 0.011 U     | 0.011 | 0.012 U     | 0.012 | 0.012 U     | 0.012 | 0.012 U     | 0.012 | 0.012 U     | 0.012 | 0.01 U      | 0.01   |
| Trichloroethene            | 23       | 0.002  | 0.012 U     | 0.012 | 0.011 U     | 0.011 | 0.012 U     | 0.012 | 0.012 U     | 0.012 | 0.012 U     | 0.012 | 0.012 U     | 0.012 | 0.01 U      | 0.01   |
| Dibromochloromethane       | 110      | 0.0024 | 0.012 U     | 0.012 | 0.011 U     | 0.011 | 0.012 U     | 0.012 | 0.012 U     | 0.012 | 0.012 U     | 0.012 | 0.012 U     | 0.012 | 0.01 U      | 0.01   |
| 1,1,2-Trichloroethane      | 22       | 0.0043 | 0.012 U     | 0.012 | 0.011 U     | 0.011 | 0.012 U     | 0.012 | 0.012 U     | 0.012 | 0.012 U     | 0.012 | 0.012 U     | 0.012 | 0.01 U      | 0.01   |
| Benzene                    | 3        | 0.0033 | 0.012 U     | 0.012 | 0.011 U     | 0.011 | 0.012 U     | 0.012 | 0.012 U     | 0.012 | 0.012 U     | 0.012 | 0.012 U     | 0.012 | 0.006 J     | 0.01   |
| trans-1,3-Dichloropropene  | 4        | 0.0024 | 0.012 U     | 0.012 | 0.011 U     | 0.011 | 0.012 U     | 0.012 | 0.012 U     | 0.012 | 0.012 U     | 0.012 | 0.012 U     | 0.012 | 0.01 U      | 0.01   |
| Bromoform                  | 86       | 0.0031 | 0.012 U     | 0.012 | 0.011 U     | 0.011 | 0.012 U     | 0.012 | 0.012 U     | 0.012 | 0.012 U     | 0.012 | 0.012 U     | 0.012 | 0.01 U      | 0.01   |
| 4-Methyl-2-pentanone       | 1000     | 0.0055 | 0.012 U     | 0.012 | 0.011 U     | 0.011 | 0.012 U     | 0.012 | 0.012 U     | 0.012 | 0.012 U     | 0.012 | 0.012 U     | 0.012 | 0.01 U      | 0.01   |
| 2-Hexanone                 |          | 0.0039 | 0.012 U     | 0.012 | 0.011 U     | 0.011 | 0.012 U     | 0.012 | 0.012 U     | 0.012 | 0.012 U     | 0.012 | 0.012 U     | 0.012 | 0.01 U      | 0.01   |
| Tetrachloroethene          | 4        | 0.004  | 0.012 U     | 0.012 | 0.011 U     | 0.011 | 0.012 U     | 0.012 | 0.012 U     | 0.012 | 0.012 U     | 0.012 | 0.012 U     | 0.012 | 0.01 U      | 0.01   |
| 1,1,2,2-Tetrachloroethane  | 34       | 0.0042 | 0.012 U     | 0.012 | 0.011 U     | 0.011 | 0.012 U     | 0.012 | 0.012 U     | 0.012 | 0.012 U     | 0.012 | 0.012 U     | 0.012 | 0.01 U      | 0.01   |
| Toluene                    | 1000     | 0.0027 | 0.012 U     | 0.012 | 0.011 U     | 0.011 | 0.012 U     | 0.012 | 0.012 U     | 0.012 | 0.012 U     | 0.012 | 0.012 U     | 0.012 | 0.01 U      | 0.01   |
| Chlorobenzene              | 37       | 0.0027 | 0.012 U     | 0.012 | 0.011 U     | 0.011 | 0.012 U     | 0.012 | 0.012 U     | 0.012 | 0.012 U     | 0.012 | 0.012 U     | 0.012 | 0.01 U      | 0.01   |
| Ethylbenzene               | 1000     | 0.0031 | 0.012 U     | 0.012 | 0.011 U     | 0.011 | 0.012 U     | 0.012 | 0.012 U     | 0.012 | 0.012 U     | 0.012 | 0.012 U     | 0.012 | 0.01 U      | 0.01   |
| Styrene                    | 23       | 0.0038 | 0.012 U     | 0.012 | 0.011 U     | 0.011 | 0.012 U     | 0.012 | 0.012 U     | 0.012 | 0.012 U     | 0.012 | 0.012 U     | 0.012 | 0.01 U      | 0.01   |
| Xylene (total)             | 410      | 0.0038 | 0.012 U     | 0.012 | 0.011 U     | 0.011 | 0.012 U     | 0.012 | 0.012 U     | 0.012 | 0.012 U     | 0.012 | 0.012 U     | 0.012 | 0.01 U      | 0.01   |
| Total Est. Conc. of TIC.   |          |        |             |       |             |       |             |       | .008, .8 *  |       |             |       |             |       |             |        |
| Dilution Factor            |          |        |             |       |             |       |             |       | * = 25.0    |       |             |       |             |       | * = 100000  |        |
| Method: TCL Volatiles      |          |        |             |       |             |       |             |       |             |       |             |       |             |       |             |        |

**CHARLES WOOD  
SOIL BORING VOLATILES**

| Geographical Location      |          |        | B9                  |       | B10          |       | B10            |       | B10          |       | B10          |      |
|----------------------------|----------|--------|---------------------|-------|--------------|-------|----------------|-------|--------------|-------|--------------|------|
| Sample                     |          |        | B9-SB01-E02         |       | B10-SB01-A01 |       | B10-SB01-A01RE |       | B10-SB01-A02 |       | B10-SB01-D02 |      |
| Sample Type                |          |        | Field Rinsate Blank |       |              |       |                |       |              |       | Trip Blank   |      |
| Batch#                     |          |        | 9501G831            |       | 9501G553     |       | 9501G553       |       | 9501G553     |       | 9501G553     |      |
| Prep#                      |          |        | 95GVF014            |       | 95GVF012     |       | 95GVF013       |       | 95GVF012     |       | 95GVF012     |      |
| RFW#                       |          |        | 004                 |       | 001          |       | 001RE          |       | 002          |       | 003          |      |
| Sample Depth (bgs)         |          |        |                     |       | 1 - 2'       |       |                |       | 2 - 4'       |       |              |      |
| Dilution Factor            |          |        | 1.00                |       | 1.00         |       | 1.00           |       | 1.00         |       | 1.00         |      |
| Matrix                     |          |        | water               |       | soil         |       | soil           |       | soil         |       | water        |      |
| Units                      | mg/kg    | mg/kg  | mg/l                |       | mg/kg        |       | mg/kg          |       | mg/kg        |       | mg/l         |      |
| Sampling Date              |          |        | 1/23/95             |       | 1/10/95      |       | 1/10/95        |       | 1/10/95      |       | 1/10/95      |      |
| Analysis Date              |          |        | 2/1/95              |       | 1/15/95      |       | 1/16/95        |       | 1/15/95      |       | 1/12/95      |      |
| Analysis                   | Standard | MDL    | Analytical          | CRQL  | Analytical   | CRQL  | Analytical     | CRQL  | Analytical   | CRQL  | Analytical   | CRQL |
|                            |          |        | Result              |       | Result       |       | Result         |       | Result       |       | Result       |      |
| Chloromethane              | 520      | 0.0073 | 0.01 U              | 0.01  | 0.012 U      | 0.012 | 0.012 U        | 0.012 | 0.012 U      | 0.012 | 0.01 U       | 0.01 |
| Bromomethane               | 79       | 0.0067 | 0.01 U              | 0.01  | 0.012 U      | 0.012 | 0.012 U        | 0.012 | 0.012 U      | 0.012 | 0.01 U       | 0.01 |
| Vinyl Chloride             | 2        | 0.0079 | 0.01 U              | 0.01  | 0.012 U      | 0.012 | 0.012 U        | 0.012 | 0.012 U      | 0.012 | 0.01 U       | 0.01 |
| Chloroethane               |          | 0.0091 | 0.01 U              | 0.01  | 0.012 U      | 0.012 | 0.012 U        | 0.012 | 0.012 U      | 0.012 | 0.01 U       | 0.01 |
| Methylene Chloride         | 49       | 0.0027 | 0.01 U              | 0.01  | 0.012 U      | 0.012 | 0.012 U        | 0.012 | 0.012 U      | 0.012 | 0.01 U       | 0.01 |
| Acetone                    | 1000     | 0.0069 | 0.13                | .02 * | 0.012 U      | 0.012 | 0.016 B        | 0.012 | 0.24         | 0.012 | 0.022        | 0.01 |
| Carbon Disulfide           |          | 0.0044 | 0.01 U              | 0.01  | 0.012 U      | 0.012 | 0.012 U        | 0.012 | 0.012 U      | 0.012 | 0.01 U       | 0.01 |
| 1,1-Dichloroethene         | 8        | 0.0049 | 0.01 U              | 0.01  | 0.012 U      | 0.012 | 0.012 U        | 0.012 | 0.012 U      | 0.012 | 0.01 U       | 0.01 |
| 1,1-Dichloroethane         | 570      | 0.003  | 0.01 U              | 0.01  | 0.012 U      | 0.012 | 0.012 U        | 0.012 | 0.012 U      | 0.012 | 0.01 U       | 0.01 |
| 1,2-Dichloroethene (total) | 79       | 0.0044 | 0.01 U              | 0.01  | 0.012 U      | 0.012 | 0.012 U        | 0.012 | 0.012 U      | 0.012 | 0.01 U       | 0.01 |
| Chloroform                 | 19       | 0.0029 | 0.01 U              | 0.01  | 0.012 U      | 0.012 | 0.012 U        | 0.012 | 0.012 U      | 0.012 | 0.01 U       | 0.01 |
| 1,2-Dichloroethane         | 6        | 0.0024 | 0.01 U              | 0.01  | 0.012 U      | 0.012 | 0.012 U        | 0.012 | 0.012 U      | 0.012 | 0.01 U       | 0.01 |
| 2-Butanone                 | 1000     | 0.0041 | 0.01 U              | 0.01  | 0.012 U      | 0.012 | 0.012 U        | 0.012 | 0.012 U      | 0.012 | 0.01 U       | 0.01 |
| 1,1,1-Trichloroethane      | 210      | 0.0017 | 0.01 U              | 0.01  | 0.012 U      | 0.012 | 0.012 U        | 0.012 | 0.012 U      | 0.012 | 0.01 U       | 0.01 |
| Carbon Tetrachloride       | 2        | 0.0015 | 0.01 U              | 0.01  | 0.012 U      | 0.012 | 0.012 U        | 0.012 | 0.012 U      | 0.012 | 0.01 U       | 0.01 |
| Bromodichloromethane       | 11       | 0.002  | 0.01 U              | 0.01  | 0.012 U      | 0.012 | 0.012 U        | 0.012 | 0.012 U      | 0.012 | 0.01 U       | 0.01 |
| 1,2-Dichloropropane        | 10       | 0.0017 | 0.01 U              | 0.01  | 0.012 U      | 0.012 | 0.012 U        | 0.012 | 0.012 U      | 0.012 | 0.01 U       | 0.01 |
| cis-1,3-Dichloropropene    | 4        | 0.003  | 0.01 U              | 0.01  | 0.012 U      | 0.012 | 0.012 U        | 0.012 | 0.012 U      | 0.012 | 0.01 U       | 0.01 |
| Trichloroethene            | 23       | 0.002  | 0.01 U              | 0.01  | 0.012 U      | 0.012 | 0.012 U        | 0.012 | 0.012 U      | 0.012 | 0.01 U       | 0.01 |
| Dibromochloromethane       | 110      | 0.0024 | 0.01 U              | 0.01  | 0.012 U      | 0.012 | 0.012 U        | 0.012 | 0.012 U      | 0.012 | 0.01 U       | 0.01 |
| 1,1,2-Trichloroethane      | 22       | 0.0043 | 0.01 U              | 0.01  | 0.012 U      | 0.012 | 0.012 U        | 0.012 | 0.012 U      | 0.012 | 0.01 U       | 0.01 |
| Benzene                    | 3        | 0.0033 | 0.01 U              | 0.01  | 0.012 U      | 0.012 | 0.012 U        | 0.012 | 0.012 U      | 0.012 | 0.01 U       | 0.01 |
| trans-1,3-Dichloropropene  | 4        | 0.0024 | 0.01 U              | 0.01  | 0.012 U      | 0.012 | 0.012 U        | 0.012 | 0.012 U      | 0.012 | 0.01 U       | 0.01 |
| Bromoform                  | 86       | 0.0031 | 0.01 U              | 0.01  | 0.012 U      | 0.012 | 0.012 U        | 0.012 | 0.012 U      | 0.012 | 0.01 U       | 0.01 |
| 4-Methyl-2-pentanone       | 1000     | 0.0055 | 0.01 U              | 0.01  | 0.012 U      | 0.012 | 0.012 U        | 0.012 | 0.012 U      | 0.012 | 0.01 U       | 0.01 |
| 2-Hexanone                 |          | 0.0039 | 0.01 U              | 0.01  | 0.012 U      | 0.012 | 0.012 U        | 0.012 | 0.012 U      | 0.012 | 0.01 U       | 0.01 |
| Tetrachloroethene          | 4        | 0.004  | 0.01 U              | 0.01  | 0.012 U      | 0.012 | 0.012 U        | 0.012 | 0.012 U      | 0.012 | 0.01 U       | 0.01 |
| 1,1,2,2-Tetrachloroethane  | 34       | 0.0042 | 0.01 U              | 0.01  | 0.012 U      | 0.012 | 0.012 U        | 0.012 | 0.012 U      | 0.012 | 0.01 U       | 0.01 |
| Toluene                    | 1000     | 0.0027 | 0.01 U              | 0.01  | 0.012 U      | 0.012 | 0.012 U        | 0.012 | 0.012 U      | 0.012 | 0.01 U       | 0.01 |
| Chlorobenzene              | 37       | 0.0027 | 0.01 U              | 0.01  | 0.012 U      | 0.012 | 0.012 U        | 0.012 | 0.012 U      | 0.012 | 0.01 U       | 0.01 |
| Ethylbenzene               | 1000     | 0.0031 | 0.01 U              | 0.01  | 0.012 U      | 0.012 | 0.012 U        | 0.012 | 0.012 U      | 0.012 | 0.01 U       | 0.01 |
| Styrene                    | 23       | 0.0038 | 0.01 U              | 0.01  | 0.012 U      | 0.012 | 0.012 U        | 0.012 | 0.012 U      | 0.012 | 0.01 U       | 0.01 |
| Xylene (total)             | 410      | 0.0038 | 0.01 U              | 0.01  | 0.012 U      | 0.012 | 0.012 U        | 0.012 | 0.012 U      | 0.012 | 0.01 U       | 0.01 |
| Total Est. Conc. of TIC.   |          |        |                     |       |              |       |                |       |              |       |              |      |
| Dilution Factor            |          |        | * = 2.00            |       |              |       |                |       |              |       |              |      |
| Method: TCL Volatiles      |          |        |                     |       |              |       |                |       |              |       |              |      |

**CHARLES WOOD  
SOIL BORING SEMIVOLATILES**

| Geographical Location        |          | AOC7          |      | AOC7          |      | AOC7          |      | AOC7          |      | AOC7          |      | AOC7          |      | CW1           |      |
|------------------------------|----------|---------------|------|---------------|------|---------------|------|---------------|------|---------------|------|---------------|------|---------------|------|
| Sample                       |          | CWA7-SB01-A02 |      | CWA7-SB02-A02 |      | CWA7-SB03-A02 |      | CWA7-SB04-A02 |      | CWA7-SB05-A02 |      | CWA7-SB06-A03 |      | CW01-SB26-A02 |      |
| Sample Type                  |          |               |      |               |      |               |      |               |      |               |      |               |      |               |      |
| Batch#                       |          | 9412G264      |      | 9412G264      |      | 9412G264      |      | 9412G264      |      | 9412G264      |      | 9412G264      |      | 9412G216      |      |
| Prep#                        |          | 94GB0847      |      | 94GB0847      |      | 94GB0847      |      | 94GB0852      |      | 94GB0847      |      | 94GB0847      |      | 94GB0835      |      |
| RFW#                         |          | 001           |      | 003           |      | 002           |      | 006           |      | 004           |      | 005           |      | 004           |      |
| Sample Depth (bgs)           |          |               |      |               |      |               |      |               |      |               |      |               |      |               |      |
| Dilution Factor              |          | 1.00          |      | 1.00          |      | 1.00          |      | 1.00          |      | 1.00          |      | 1.00          |      | 1.00          |      |
| Matrix                       |          | soil          |      | soil          |      | soil          |      | soil          |      | soil          |      | soil          |      | soil          |      |
| Units                        | mg/kg    | mg/kg         |      | mg/kg         |      | mg/kg         |      | mg/kg         |      | mg/kg         |      | mg/kg         |      | mg/kg         |      |
| Sampling Date                |          | 12/21/94      |      | 12/21/94      |      | 12/21/94      |      | 12/21/94      |      | 12/21/94      |      | 12/21/94      |      | 12/19/94      |      |
| Analysis Date                |          | 1/3/95        |      | 1/3/95        |      | 1/3/95        |      | 1/3/95        |      | 1/3/95        |      | 1/3/95        |      | 1/5/95        |      |
| Analysis                     | Standard | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL |
|                              |          | Result        |      | Result        |      | Result        |      | Result        |      | Result        |      | Result        |      | Result        |      |
| Phenol                       | 10000    | 0.37 U        | 0.37 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.36 U        | 0.36 | 0.42 U        | 0.42 |
| bis(2-Chloroethyl) ether     | 0.66     | 0.37 U        | 0.37 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.36 U        | 0.36 | 0.42 U        | 0.42 |
| 2-Chlorophenol               | 280      | 0.37 U        | 0.37 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.36 U        | 0.36 | 0.42 U        | 0.42 |
| 1,3-Dichlorobenzene          | 5100     | 0.37 U        | 0.37 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.36 U        | 0.36 | 0.42 U        | 0.42 |
| 1,4-Dichlorobenzene          | 570      | 0.37 U        | 0.37 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.36 U        | 0.36 | 0.42 U        | 0.42 |
| 1,2-Dichlorobenzene          | 5100     | 0.37 U        | 0.37 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.36 U        | 0.36 | 0.42 U        | 0.42 |
| 2-Methylphenol               | 2800     | 0.37 U        | 0.37 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.36 U        | 0.36 | 0.42 U        | 0.42 |
| 2,2'-oxybis(1-Chloropropane) |          | 0.37 U        | 0.37 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.36 U        | 0.36 | 0.42 U        | 0.42 |
| 4-Methylphenol               | 2800     | 0.37 U        | 0.37 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.36 U        | 0.36 | 0.42 U        | 0.42 |
| N-Nitroso-di-n-propylamine   | 0.66     | 0.37 U        | 0.37 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.36 U        | 0.36 | 0.42 U        | 0.42 |
| Hexachloroethane             | 6        | 0.37 U        | 0.37 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.36 U        | 0.36 | 0.42 U        | 0.42 |
| Nitrobenzene                 | 28       | 0.37 U        | 0.37 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.36 U        | 0.36 | 0.42 U        | 0.42 |
| Isophorone                   | 1100     | 0.37 U        | 0.37 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.36 U        | 0.36 | 0.42 U        | 0.42 |
| 2-Nitrophenol                |          | 0.37 U        | 0.37 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.36 U        | 0.36 | 0.42 U        | 0.42 |
| 2,4-Dimethylphenol           | 1100     | 0.37 U        | 0.37 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.36 U        | 0.36 | 0.42 U        | 0.42 |
| bis(2-Chloroethoxy) methane  |          | 0.37 U        | 0.37 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.36 U        | 0.36 | 0.42 U        | 0.42 |
| 2,4-Dichlorophenol           | 170      | 0.37 U        | 0.37 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.36 U        | 0.36 | 0.42 U        | 0.42 |
| 1,2,4-Trichlorobenzene       | 68       | 0.37 U        | 0.37 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.36 U        | 0.36 | 0.42 U        | 0.42 |
| Naphthalene                  | 230      | 0.37 U        | 0.37 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.36 U        | 0.36 | 0.42 U        | 0.42 |
| 4-Chloroaniline              | 230      | 0.37 U        | 0.37 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.36 U        | 0.36 | 0.42 U        | 0.42 |
| Hexachlorobutadiene          | 1        | 0.37 U        | 0.37 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.36 U        | 0.36 | 0.42 U        | 0.42 |
| 4-Chloro-3-methylphenol      | 10000    | 0.37 U        | 0.37 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.36 U        | 0.36 | 0.42 U        | 0.42 |
| 2-Methylnaphthalene          |          | 0.37 U        | 0.37 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.36 U        | 0.36 | 0.42 U        | 0.42 |
| Hexachlorocyclopentadiene    | 400      | 0.37 U        | 0.37 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.36 U        | 0.36 | 0.42 U        | 0.42 |
| 2,4,6-Trichlorophenol        | 62       | 0.37 U        | 0.37 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.36 U        | 0.36 | 0.42 U        | 0.42 |
| 2,4,5-Trichlorophenol        | 5600     | 0.92 U        | 0.92 | 0.92 U        | 0.92 | 0.91 U        | 0.91 | 0.92 U        | 0.92 | 0.9 U         | 0.9  | 0.9 U         | 0.9  | 1.1 U         | 1.1  |
| 2-Chloronaphthalene          |          | 0.37 U        | 0.37 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.36 U        | 0.36 | 0.42 U        | 0.42 |
| 2-Nitroaniline               |          | 0.92 U        | 0.92 | 0.92 U        | 0.92 | 0.91 U        | 0.91 | 0.92 U        | 0.92 | 0.9 U         | 0.9  | 0.9 U         | 0.9  | 1.1 U         | 1.1  |
| Dimethylphthalate            | 10000    | 0.37 U        | 0.37 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.36 U        | 0.36 | 0.40 U        | 0.42 |
| Acenaphthylene               |          | 0.37 U        | 0.37 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.36 U        | 0.36 | 0.42 U        | 0.42 |
| 2,6-Dinitrotoluene           | 1        | 0.37 U        | 0.37 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.36 U        | 0.36 | 0.42 U        | 0.42 |
| 3-Nitroaniline               |          | 0.92 U        | 0.92 | 0.92 U        | 0.92 | 0.91 U        | 0.91 | 0.92 U        | 0.92 | 0.9 U         | 0.9  | 0.9 U         | 0.9  | 1.1 U         | 1.1  |
| Acenaphthene                 | 3400     | 0.37 U        | 0.37 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.36 U        | 0.36 | 0.42 U        | 0.42 |
| 2,4-Dinitrophenol            | 110      | 0.92 U        | 0.92 | 0.92 U        | 0.92 | 0.91 U        | 0.91 | 0.92 U        | 0.92 | 0.9 U         | 0.9  | 0.9 U         | 0.9  | 1.1 U         | 1.1  |
| 4-Nitrophenol                |          | 0.92 U        | 0.92 | 0.92 U        | 0.92 | 0.91 U        | 0.91 | 0.92 U        | 0.92 | 0.9 U         | 0.9  | 0.9 U         | 0.9  | 1.1 U         | 1.1  |

**CHARLES WOOD  
SOIL BORING SEMIVOLATILES**

| Geographical Location      |          | AOC7          |      | AOC7          |      | AOC7          |      | AOC7          |      | AOC7          |      | AOC7          |      | CW1           |      |
|----------------------------|----------|---------------|------|---------------|------|---------------|------|---------------|------|---------------|------|---------------|------|---------------|------|
| Sample                     |          | CWA7-SB01-A02 |      | CWA7-SB02-A02 |      | CWA7-SB03-A02 |      | CWA7-SB04-A02 |      | CWA7-SB05-A02 |      | CWA7-SB06-A03 |      | CW01-SB26-A02 |      |
| Sample Type                |          |               |      |               |      |               |      |               |      |               |      |               |      |               |      |
| Batch#                     |          | 9412G264      |      | 9412G264      |      | 9412G264      |      | 9412G264      |      | 9412G264      |      | 9412G264      |      | 9412G216      |      |
| Prep#                      |          | 94GB0847      |      | 94GB0847      |      | 94GB0847      |      | 94GB0852      |      | 94GB0847      |      | 94GB0847      |      | 94GB0835      |      |
| RFW#                       |          | 001           |      | 003           |      | 002           |      | 006           |      | 004           |      | 005           |      | 004           |      |
| Sample Depth (bgs)         |          |               |      |               |      |               |      |               |      |               |      |               |      |               |      |
| Dilution Factor            |          | 1.00          |      | 1.00          |      | 1.00          |      | 1.00          |      | 1.00          |      | 1.00          |      | 1.00          |      |
| Matrix                     |          | soil          |      | soil          |      | soil          |      | soil          |      | soil          |      | soil          |      | soil          |      |
| Units                      | mg/kg    | mg/kg         |      | mg/kg         |      | mg/kg         |      | mg/kg         |      | mg/kg         |      | mg/kg         |      | mg/kg         |      |
| Sampling Date              |          | 12/21/94      |      | 12/21/94      |      | 12/21/94      |      | 12/21/94      |      | 12/21/94      |      | 12/21/94      |      | 12/19/94      |      |
| Analysis Date              |          | 1/3/95        |      | 1/3/95        |      | 1/3/95        |      | 1/3/95        |      | 1/3/95        |      | 1/3/95        |      | 1/5/95        |      |
| Analysis                   | Standard | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL |
|                            |          | Result        |      | Result        |      | Result        |      | Result        |      | Result        |      | Result        |      | Result        |      |
| Dibenzofuran               |          | 0.37 U        | 0.37 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.36 U        | 0.36 | 0.42 U        | 0.42 |
| 2,4-Dinitrotoluene         | 1        | 0.37 U        | 0.37 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.36 U        | 0.36 | 0.42 U        | 0.42 |
| Diethylphthalate           | 10000    | 0.37 U        | 0.37 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.36 U        | 0.36 | 0.42 U        | 0.42 |
| 4-Chlorophenyl-phenylether |          | 0.37 U        | 0.37 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.36 U        | 0.36 | 0.42 U        | 0.42 |
| Fluorene                   | 2300     | 0.37 U        | 0.37 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.36 U        | 0.36 | 0.42 U        | 0.42 |
| 4-Nitroaniline             |          | 0.92 U        | 0.92 | 0.92 U        | 0.92 | 0.91 U        | 0.91 | 0.92 U        | 0.92 | 0.9 U         | 0.9  | 0.9 U         | 0.9  | 1.1 U         | 1.1  |
| 4,6-Dinitro-2-methylphenol |          | 0.92 U        | 0.92 | 0.92 U        | 0.92 | 0.91 U        | 0.91 | 0.92 U        | 0.92 | 0.9 U         | 0.9  | 0.9 U         | 0.9  | 1.1 U         | 1.1  |
| N-Nitrosodiphenylamine (1) | 140      | 0.37 U        | 0.37 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.36 U        | 0.36 | 0.42 U        | 0.42 |
| 4-Bromophenyl-phenylether  |          | 0.37 U        | 0.37 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.36 U        | 0.36 | 0.42 U        | 0.42 |
| Hexachlorobenzene          | 0.66     | 0.37 U        | 0.37 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.36 U        | 0.36 | 0.42 U        | 0.42 |
| Pentachlorophenol          | 6        | 0.92 U        | 0.92 | 0.92 U        | 0.92 | 0.91 U        | 0.91 | 0.92 U        | 0.92 | 0.9 U         | 0.9  | 0.9 U         | 0.9  | 1.1 U         | 1.1  |
| Phenanthrene               |          | 0.37 U        | 0.37 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.36 U        | 0.36 | 0.42 U        | 0.42 |
| Anthracene                 | 10000    | 0.37 U        | 0.37 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.36 U        | 0.36 | 0.42 U        | 0.42 |
| Carbazole                  |          | 0.37 U        | 0.37 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.36 U        | 0.36 | 0.42 U        | 0.42 |
| Di-n-butylphthalate        | 5700     | 0.23 JB       | 0.37 | 1.5 B         | 0.37 | 0.48 B        | 0.36 | 0.09 J        | 0.37 | 2 B           | 0.36 | 1.8 B         | 0.36 | 0.081         | 0.42 |
| Fluoranthene               | 2300     | 0.37 U        | 0.37 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.36 U        | 0.36 | 0.42 U        | 0.42 |
| Pyrene                     | 1700     | 0.37 U        | 0.37 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.36 U        | 0.36 | 0.42 U        | 0.42 |
| Butylbenzylphthalate       | 1100     | 0.37 U        | 0.37 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.36 U        | 0.36 | 0.42 U        | 0.42 |
| 3,3'-Dichlorobenzidine     | 2        | 0.37 U        | 0.37 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.36 U        | 0.36 | 0.42 U        | 0.42 |
| Benzo(a)anthracene         | 0.9      | 0.37 U        | 0.37 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.36 U        | 0.36 | 0.42 U        | 0.42 |
| Chrysene                   | 9        | 0.37 U        | 0.37 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.36 U        | 0.36 | 0.42 U        | 0.42 |
| bis(2-Ethylhexy)phthalate  | 49       | 0.075 J       | 0.37 | 0.37 U        | 0.37 | 0.34 J        | 0.36 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.36 U        | 0.36 | 0.075 J       | 0.42 |
| Di-n-octyl phthalate       | 1100     | 0.37 U        | 0.37 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.36 U        | 0.36 | 0.42 U        | 0.42 |
| Benzo(b)fluoranthene       | 0.9      | 0.37 U        | 0.37 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.36 U        | 0.36 | 0.42 U        | 0.42 |
| Benzo(k)fluoranthene       | 0.9      | 0.37 U        | 0.37 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.36 U        | 0.36 | 0.42 U        | 0.42 |
| Benzo(a)pyrene             | 0.66     | 0.37 U        | 0.37 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.36 U        | 0.36 | 0.42 U        | 0.42 |
| Indeno(1,2,3-cd)pyrene     | 0.9      | 0.37 U        | 0.37 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.36 U        | 0.36 | 0.42 U        | 0.42 |
| Dibenzo(a,h)anthracene     | 0.66     | 0.37 U        | 0.37 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.36 U        | 0.36 | 0.42 U        | 0.42 |
| Benzo(g,h,i)perylene       |          | 0.37 U        | 0.37 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.37 U        | 0.37 | 0.36 U        | 0.36 | 0.36 U        | 0.36 | 0.42 U        | 0.42 |
| Petroleum hydrocarbons     |          |               |      |               |      |               |      |               |      |               |      |               |      |               |      |
| Total Est. Conc. of TIC    |          | 6.62          |      | 5.44          |      | 6.44          |      | 5.63          |      | 3.68          |      | 4.87          |      | 6.39          |      |
| Method:TCL Semivolatiles   |          |               |      |               |      |               |      |               |      |               |      |               |      |               |      |



**CHARLES WOOD  
SOIL BORING SEMIVOLATILES**

| Geographical Location        |          | CW1           |      | CW1           |      | CW1           |      | CW2           |      | CW2           |      | CW2           |      |
|------------------------------|----------|---------------|------|---------------|------|---------------|------|---------------|------|---------------|------|---------------|------|
| Sample                       |          | CW01-SB27-A02 |      | CW01-SB28-A02 |      | CW01-SB29-A02 |      | CW02-SB30-A02 |      | CW02-SB31-A02 |      | CW02-SB32-A02 |      |
| Sample Type                  |          |               |      |               |      |               |      |               |      |               |      |               |      |
| Batch#                       |          | 9412G216      |      | 9412G216      |      | 9412G216      |      | 9412G182      |      | 9412G182      |      | 9412G182      |      |
| Prep#                        |          | 94GB0835      |      | 94GB0835      |      | 94GB0835      |      | 94GB0835      |      | 94GB0835      |      | 94GB0835      |      |
| RFW#                         |          | 002           |      | 003           |      | 001           |      | 002           |      | 003           |      | 001           |      |
| Sample Depth (bgs)           |          |               |      |               |      |               |      |               |      |               |      |               |      |
| Dilution Factor              |          | 1.00          |      | 1.00          |      | 1.00          |      | 1.00          |      | 1.00          |      | 1.00          |      |
| Matrix                       |          | soil          |      | soil          |      | soil          |      | soil          |      | soil          |      | soil          |      |
| Units                        | mg/kg    | mg/kg         |      | mg/kg         |      | mg/kg         |      | mg/kg         |      | mg/kg         |      | mg/kg         |      |
| Sampling Date                |          | 12/19/94      |      | 12/19/94      |      | 12/19/94      |      | 12/16/94      |      | 12/16/94      |      | 12/16/94      |      |
| Analysis Date                |          | 1/5/95        |      | 1/5/95        |      | 1/5/95        |      | 12/28/94      |      | 12/28/94      |      | 12/28/94      |      |
| Analysis                     | Standard | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL |
|                              |          | Result        |      | Result        |      | Result        |      | Result        |      | Result        |      | Result        |      |
| Phenol                       | 10000    | 0.44 U        | 0.44 | 0.41 U        | 0.41 | 0.43 U        | 0.43 | 0.39 U        | 0.39 | 0.44 U        | 0.44 | 0.4 U         | 0.4  |
| bis(2-Chloroethyl) ether     | 0.66     | 0.44 U        | 0.44 | 0.41 U        | 0.41 | 0.43 U        | 0.43 | 0.39 U        | 0.39 | 0.44 U        | 0.44 | 0.4 U         | 0.4  |
| 2-Chlorophenol               | 280      | 0.44 U        | 0.44 | 0.41 U        | 0.41 | 0.43 U        | 0.43 | 0.39 U        | 0.39 | 0.44 U        | 0.44 | 0.4 U         | 0.4  |
| 1,3-Dichlorobenzene          | 5100     | 0.44 U        | 0.44 | 0.41 U        | 0.41 | 0.43 U        | 0.43 | 0.39 U        | 0.39 | 0.44 U        | 0.44 | 0.4 U         | 0.4  |
| 1,4-Dichlorobenzene          | 570      | 0.44 U        | 0.44 | 0.41 U        | 0.41 | 0.43 U        | 0.43 | 0.39 U        | 0.39 | 0.44 U        | 0.44 | 0.4 U         | 0.4  |
| 1,2-Dichlorobenzene          | 5100     | 0.44 U        | 0.44 | 0.41 U        | 0.41 | 0.43 U        | 0.43 | 0.39 U        | 0.39 | 0.44 U        | 0.44 | 0.4 U         | 0.4  |
| 2-Methylphenol               | 2800     | 0.44 U        | 0.44 | 0.41 U        | 0.41 | 0.43 U        | 0.43 | 0.39 U        | 0.39 | 0.44 U        | 0.44 | 0.4 U         | 0.4  |
| 2,2'-oxybis(1-Chloropropane) |          | 0.44 U        | 0.44 | 0.41 U        | 0.41 | 0.43 U        | 0.43 | 0.39 U        | 0.39 | 0.44 U        | 0.44 | 0.4 U         | 0.4  |
| 4-Methylphenol               | 2800     | 0.44 U        | 0.44 | 0.41 U        | 0.41 | 0.43 U        | 0.43 | 0.39 U        | 0.39 | 0.44 U        | 0.44 | 0.4 U         | 0.4  |
| N-Nitroso-di-n-propylamine   | 0.66     | 0.44 U        | 0.44 | 0.41 U        | 0.41 | 0.43 U        | 0.43 | 0.39 U        | 0.39 | 0.44 U        | 0.44 | 0.4 U         | 0.4  |
| Hexachloroethane             | 6        | 0.44 U        | 0.44 | 0.41 U        | 0.41 | 0.43 U        | 0.43 | 0.39 U        | 0.39 | 0.44 U        | 0.44 | 0.4 U         | 0.4  |
| Nitrobenzene                 | 28       | 0.44 U        | 0.44 | 0.41 U        | 0.41 | 0.43 U        | 0.43 | 0.39 U        | 0.39 | 0.44 U        | 0.44 | 0.4 U         | 0.4  |
| Isophorone                   | 1100     | 0.44 U        | 0.44 | 0.41 U        | 0.41 | 0.43 U        | 0.43 | 0.39 U        | 0.39 | 0.44 U        | 0.44 | 0.4 U         | 0.4  |
| 2-Nitrophenol                |          | 0.44 U        | 0.44 | 0.41 U        | 0.41 | 0.43 U        | 0.43 | 0.39 U        | 0.39 | 0.44 U        | 0.44 | 0.4 U         | 0.4  |
| 2,4-Dimethylphenol           | 1100     | 0.44 U        | 0.44 | 0.41 U        | 0.41 | 0.43 U        | 0.43 | 0.39 U        | 0.39 | 0.44 U        | 0.44 | 0.4 U         | 0.4  |
| bis(2-Chloroethoxy) methane  |          | 0.44 U        | 0.44 | 0.41 U        | 0.41 | 0.43 U        | 0.43 | 0.39 U        | 0.39 | 0.44 U        | 0.44 | 0.4 U         | 0.4  |
| 2,4-Dichlorophenol           | 170      | 0.44 U        | 0.44 | 0.41 U        | 0.41 | 0.43 U        | 0.43 | 0.39 U        | 0.39 | 0.44 U        | 0.44 | 0.4 U         | 0.4  |
| 1,2,4-Trichlorobenzene       | 68       | 0.44 U        | 0.44 | 0.41 U        | 0.41 | 0.43 U        | 0.43 | 0.39 U        | 0.39 | 0.44 U        | 0.44 | 0.4 U         | 0.4  |
| Naphthalene                  | 230      | 0.44 U        | 0.44 | 0.41 U        | 0.41 | 0.43 U        | 0.43 | 0.15 J        | 0.39 | 0.44 U        | 0.44 | 0.4 U         | 0.4  |
| 4-Chloroaniline              | 230      | 0.44 U        | 0.44 | 0.41 U        | 0.41 | 0.43 U        | 0.43 | 0.39 U        | 0.39 | 0.44 U        | 0.44 | 0.4 U         | 0.4  |
| Hexachlorobutadiene          | 1        | 0.44 U        | 0.44 | 0.41 U        | 0.41 | 0.43 U        | 0.43 | 0.39 U        | 0.39 | 0.44 U        | 0.44 | 0.4 U         | 0.4  |
| 4-Chloro-3-methylphenol      | 10000    | 0.44 U        | 0.44 | 0.41 U        | 0.41 | 0.43 U        | 0.43 | 0.39 U        | 0.39 | 0.44 U        | 0.44 | 0.4 U         | 0.4  |
| 2-Methylnaphthalene          |          | 0.44 U        | 0.44 | 0.41 U        | 0.41 | 0.43 U        | 0.43 | 0.1 J         | 0.39 | 0.44 U        | 0.44 | 0.4 U         | 0.4  |
| Hexachlorocyclopentadiene    | 400      | 0.44 U        | 0.44 | 0.41 U        | 0.41 | 0.43 U        | 0.43 | 0.39 U        | 0.39 | 0.44 U        | 0.44 | 0.4 U         | 0.4  |
| 2,4,6-Trichlorophenol        | 62       | 0.44 U        | 0.44 | 0.41 U        | 0.41 | 0.43 U        | 0.43 | 0.39 U        | 0.39 | 0.44 U        | 0.44 | 0.4 U         | 0.4  |
| 2,4,5-Trichlorophenol        | 5600     | 1.1 U         | 1.1  | 1 U           | 1    | 1.1 U         | 1.1  | 0.98 U        | 0.98 | 1.1 U         | 1.1  | 1 U           | 1    |
| 2-Chloronaphthalene          |          | 0.44 U        | 0.44 | 0.41 U        | 0.41 | 0.43 U        | 0.43 | 0.39 U        | 0.39 | 0.44 U        | 0.44 | 0.4 U         | 0.4  |
| 2-Nitroaniline               |          | 1.1 U         | 1.1  | 1 U           | 1    | 1.1 U         | 1.1  | 0.98 U        | 0.98 | 1.1 U         | 1.1  | 1 U           | 1    |
| Dimethylphthalate            | 10000    | 0.44 U        | 0.44 | 0.41 U        | 0.41 | 0.43 U        | 0.43 | 0.39 U        | 0.39 | 0.44 U        | 0.44 | 0.4 U         | 0.4  |
| Acenaphthylene               |          | 0.44 U        | 0.44 | 0.41 U        | 0.41 | 0.43 U        | 0.43 | 0.39 U        | 0.39 | 0.44 U        | 0.44 | 0.4 U         | 0.4  |
| 2,6-Dinitrotoluene           | 1        | 0.44 U        | 0.44 | 0.41 U        | 0.41 | 0.43 U        | 0.43 | 0.98 U        | 0.39 | 0.44 U        | 0.44 | 0.4 U         | 0.4  |
| 3-Nitroaniline               |          | 1.1 U         | 1.1  | 1 U           | 1    | 1.1 U         | 1.1  | 0.98 U        | 0.98 | 1.1 U         | 1.1  | 1 U           | 1    |
| Acenaphthene                 | 3400     | 0.44 U        | 0.44 | 0.41 U        | 0.41 | 0.43 U        | 0.43 | 0.17 J        | 0.39 | 0.44 U        | 0.44 | 0.4 U         | 0.4  |
| 2,4-Dinitrophenol            | 110      | 1.1 U         | 1.1  | 1 U           | 1    | 1.1 U         | 1.1  | 0.98 U        | 0.98 | 1.1 U         | 1.1  | 1 U           | 1    |
| 4-Nitrophenol                |          | 1.1 U         | 1.1  | 1 U           | 1    | 1.1 U         | 1.1  | 0.98 U        | 0.98 | 1.1 U         | 1.1  | 1 U           | 1    |

**CHARLES WOOD  
SOIL BORING SEMIVOLATILES**

| Geographical Location      |          | CW1           |      | CW1           |      | CW1           |      | CW2           |      | CW2           |      | CW2           |      |
|----------------------------|----------|---------------|------|---------------|------|---------------|------|---------------|------|---------------|------|---------------|------|
| Sample                     |          | CW01-SB27-A02 |      | CW01-SB28-A02 |      | CW01-SB29-A02 |      | CW02-SB30-A02 |      | CW02-SB31-A02 |      | CW02-SB32-A02 |      |
| Sample Type                |          |               |      |               |      |               |      |               |      |               |      |               |      |
| Batch#                     |          | 9412G216      |      | 9412G216      |      | 9412G216      |      | 9412G182      |      | 9412G182      |      | 9412G182      |      |
| Prep#                      |          | 94GB0835      |      | 94GB0835      |      | 94GB0835      |      | 94GB0835      |      | 94GB0835      |      | 94GB0835      |      |
| RFW#                       |          | 002           |      | 003           |      | 001           |      | 002           |      | 003           |      | 001           |      |
| Sample Depth (bgs)         |          |               |      |               |      |               |      |               |      |               |      |               |      |
| Dilution Factor            |          | 1.00          |      | 1.00          |      | 1.00          |      | 1.00          |      | 1.00          |      | 1.00          |      |
| Matrix                     |          | soil          |      | soil          |      | soil          |      | soil          |      | soil          |      | soil          |      |
| Units                      | mg/kg    | mg/kg         |      | mg/kg         |      | mg/kg         |      | mg/kg         |      | mg/kg         |      | mg/kg         |      |
| Sampling Date              |          | 12/19/94      |      | 12/19/94      |      | 12/19/94      |      | 12/16/94      |      | 12/16/94      |      | 12/16/94      |      |
| Analysis Date              |          | 1/5/95        |      | 1/5/95        |      | 1/5/95        |      | 12/28/94      |      | 12/28/94      |      | 12/28/94      |      |
| Analysis                   | Standard | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL |
|                            |          | Result        |      | Result        |      | Result        |      | Result        |      | Result        |      | Result        |      |
| Dibenzofuran               |          | 0.44 U        | 0.44 | 0.41 U        | 0.41 | 0.43 U        | 0.43 | 0.093 J       | 0.39 | 0.44 U        | 0.44 | 0.4 U         | 0.4  |
| 2,4-Dinitrotoluene         | 1        | 0.44 U        | 0.44 | 0.41 U        | 0.41 | 0.43 U        | 0.43 | 0.39 U        | 0.39 | 0.44 U        | 0.44 | 0.4 U         | 0.4  |
| Diethylphthalate           | 10000    | 0.44 U        | 0.44 | 0.41 U        | 0.41 | 0.43 U        | 0.43 | 0.39 U        | 0.39 | 0.44 U        | 0.44 | 0.4 U         | 0.4  |
| 4-Chlorophenyl-phenylether |          | 0.44 U        | 0.44 | 0.41 U        | 0.41 | 0.43 U        | 0.43 | 0.39 U        | 0.39 | 0.44 U        | 0.44 | 0.4 U         | 0.4  |
| Fluorene                   | 2300     | 0.44 U        | 0.44 | 0.41 U        | 0.41 | 0.43 U        | 0.43 | 0.21 J        | 0.39 | 0.44 U        | 0.44 | 0.4 U         | 0.4  |
| 4-Nitroaniline             |          | 1.1 U         | 1.1  | 1 U           | 1    | 1.1 U         | 1.1  | 0.98 U        | 0.98 | 1.1 U         | 1.1  | 1 U           | 1    |
| 4,6-Dinitro-2-methylphenol |          | 1.1 U         | 1.1  | 1 U           | 1    | 1.1 U         | 1.1  | 0.98 U        | 0.98 | 1.1 U         | 1.1  | 1 U           | 1    |
| N-Nitrosodiphenylamine (1) | 140      | 0.44 U        | 0.44 | 0.41 U        | 0.41 | 0.43 U        | 0.43 | 0.39 U        | 0.39 | 0.44 U        | 0.44 | 0.4 U         | 0.4  |
| 4-Bromophenyl-phenylether  |          | 0.44 U        | 0.44 | 0.41 U        | 0.41 | 0.43 U        | 0.43 | 0.39 U        | 0.39 | 0.44 U        | 0.44 | 0.4 U         | 0.4  |
| Hexachlorobenzene          | 0.66     | 0.44 U        | 0.44 | 0.41 U        | 0.41 | 0.43 U        | 0.43 | 0.39 U        | 0.39 | 0.44 U        | 0.44 | 0.4 U         | 0.4  |
| Pentachlorophenol          | 6        | 1.1 U         | 1.1  | 1 U           | 1    | 1.1 U         | 1.1  | 0.98 U        | 0.98 | 1.1 U         | 1.1  | 1 U           | 1    |
| Phenanthrene               |          | 0.44 U        | 0.44 | 0.41 U        | 0.41 | 0.43 U        | 0.43 | 1.3           | 0.39 | 0.44 U        | 0.44 | 0.4 U         | 0.4  |
| Anthracene                 | 10000    | 0.44 U        | 0.44 | 0.41 U        | 0.41 | 0.43 U        | 0.43 | 0.33 J        | 0.39 | 0.44 U        | 0.44 | 0.4 U         | 0.4  |
| Carbazole                  |          | 0.44 U        | 0.44 | 0.41 U        | 0.41 | 0.43 U        | 0.43 | 0.18 J        | 0.39 | 0.44 U        | 0.44 | 0.4 U         | 0.4  |
| Di-n-butylphthalate        | 5700     | 0.086         | 0.44 | 0.077         | 0.41 | 0.13 JB       | 0.43 | 0.081         | 0.39 | 0.12 JB       | 0.44 | 0.079         | 0.4  |
| Fluoranthene               | 2300     | 0.44 U        | 0.44 | 0.41 U        | 0.41 | 0.43 U        | 0.43 | 1.5           | 0.39 | 0.44 U        | 0.44 | 0.4 U         | 0.4  |
| Pyrene                     | 1700     | 0.44 U        | 0.44 | 0.41 U        | 0.41 | 0.43 U        | 0.43 | 1.1           | 0.39 | 0.44 U        | 0.44 | 0.4 U         | 0.4  |
| Butylbenzylphthalate       | 1100     | 0.44 U        | 0.44 | 0.41 U        | 0.41 | 0.43 U        | 0.43 | 0.39 U        | 0.39 | 0.44 U        | 0.44 | 0.4 U         | 0.4  |
| 3,3'-Dichlorobenzidine     | 2        | 0.44 U        | 0.44 | 0.41 U        | 0.41 | 0.43 U        | 0.43 | 0.39 U        | 0.39 | 0.44 U        | 0.44 | 0.4 U         | 0.4  |
| Benzo(a)anthracene         | 0.9      | 0.44 U        | 0.44 | 0.41 U        | 0.41 | 0.43 U        | 0.43 | 0.69          | 0.39 | 0.44 U        | 0.44 | 0.4 U         | 0.4  |
| Chrysene                   | 9        | 0.44 U        | 0.44 | 0.41 U        | 0.41 | 0.43 U        | 0.43 | 0.71          | 0.39 | 0.44 U        | 0.44 | 0.4 U         | 0.4  |
| bis(2-Ethylhexyl)phthalate | 49       | 0.09 J        | 0.44 | 0.41 U        | 0.41 | 0.43 U        | 0.43 | 0.16 J        | 0.39 | 0.1 J         | 0.44 | 0.059 J       | 0.4  |
| Di-n-octyl phthalate       | 1100     | 0.44 U        | 0.44 | 0.41 U        | 0.41 | 0.43 U        | 0.43 | 0.39 U        | 0.39 | 0.44 U        | 0.44 | 0.4 U         | 0.4  |
| Benzo(b)fluoranthene       | 0.9      | 0.44 U        | 0.44 | 0.41 U        | 0.41 | 0.07 J        | 0.43 | 0.79          | 0.39 | 0.44 U        | 0.44 | 0.4 U         | 0.4  |
| Benzo(k)fluoranthene       | 0.9      | 0.44 U        | 0.44 | 0.41 U        | 0.41 | 0.43 U        | 0.43 | 0.28 J        | 0.39 | 0.44 U        | 0.44 | 0.4 U         | 0.4  |
| Benzo(a)pyrene             | 0.66     | 0.44 U        | 0.44 | 0.41 U        | 0.41 | 0.073 J       | 0.43 | 0.62          | 0.39 | 0.13 J        | 0.44 | 0.053 J       | 0.4  |
| Indeno(1,2,3-cd)pyrene     | 0.9      | 0.44 U        | 0.44 | 0.41 U        | 0.41 | 0.43 U        | 0.43 | 0.37 J        | 0.39 | 0.44 U        | 0.44 | 0.4 U         | 0.4  |
| Dibenzo(a,h)anthracene     | 0.66     | 0.44 U        | 0.44 | 0.41 U        | 0.41 | 0.43 U        | 0.43 | 0.089 J       | 0.39 | 0.44 U        | 0.44 | 0.4 U         | 0.4  |
| Benzo(g,h,i)perylene       |          | 0.44 U        | 0.44 | 0.41 U        | 0.41 | 0.43 U        | 0.43 | 0.35 J        | 0.39 | 0.44 U        | 0.44 | 0.4 U         | 0.4  |
| Petroleum hydrocarbons     |          |               |      |               |      |               |      |               |      |               |      |               |      |
| Total Est. Conc. of TIC    |          | 6.7           |      | 6.19          |      | 9.19          |      | 11.4          |      | 22.8          |      | 18.1          |      |
| Method: TCL Semivolatiles  |          |               |      |               |      |               |      |               |      |               |      |               |      |

**CHARLES WOOD  
SOIL BORING SEMIVOLATILES**

| Geographical Location        |          | CW2           |      | CW4           |      | CW4           |      | CW5           |      | CW5             |      | CW5           |      |
|------------------------------|----------|---------------|------|---------------|------|---------------|------|---------------|------|-----------------|------|---------------|------|
| Sample                       |          | CW02-SB33-A02 |      | CW04-SB01-A02 |      | CW04-SB04-A02 |      | CW05-SB01-A02 |      | CW05-SB01-A02RE |      | CW05-SB02-A02 |      |
| Sample Type                  |          |               |      |               |      |               |      |               |      |                 |      |               |      |
| Batch#                       |          | 9412G154      |      | 9412G264      |      | 9412G264      |      | 9412G245      |      | 9412G245        |      | 9412G245      |      |
| Prep#                        |          | 94GBS0835     |      | 94GB0847      |      | 95GIR002      |      | 94GB0847      |      | 94GB0847        |      | 94GB0847      |      |
| RFW#                         |          | 002           |      | 008           |      |               |      | 001           |      | 001             |      | 001           |      |
| Sample Depth (bgs)           |          | 7-9'          |      |               |      |               |      |               |      |                 |      |               |      |
| Dilution Factor              |          | 1.00          |      | 1.00          |      |               |      | 1.00          |      | 1.00            |      | 1.00          |      |
| Matrix                       |          | soil          |      | soil          |      | water         |      | soil          |      | soil            |      | soil          |      |
| Units                        | mg/kg    | mg/kg         |      | mg/kg         |      | mg/l          |      | mg/kg         |      | mg/kg           |      | mg/kg         |      |
| Sampling Date                |          | 12/15/94      |      | 12/21/94      |      | NA            |      | 12/20/94      |      | 12/20/94        |      | 12/20/94      |      |
| Analysis Date                |          | 12/27/94      |      | 1/3/95        |      | 1/5/95        |      | 1/3/95        |      | 1/3/95          |      | 1/3/95        |      |
| Analysis                     | Standard | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical      | CRQL | Analytical    | CRQL |
|                              |          | Result        |      | Result        |      | Result        |      | Result        |      | Result          |      | Result        |      |
| Phenol                       | 10000    | 0.41 U        | 0.41 | 0.39 U        | 0.39 |               |      | 0.38 U        | 0.38 | 0.38 U          | 0.38 | 0.39 U        | 0.39 |
| bis(2-Chloroethyl) ether     | 0.66     | 0.41 U        | 0.41 | 0.39 U        | 0.39 |               |      | 0.38 U        | 0.38 | 0.38 U          | 0.38 | 0.39 U        | 0.39 |
| 2-Chlorophenol               | 280      | 0.41 U        | 0.41 | 0.39 U        | 0.39 |               |      | 0.38 U        | 0.38 | 0.38 U          | 0.38 | 0.39 U        | 0.39 |
| 1,3-Dichlorobenzene          | 5100     | 0.41 U        | 0.41 | 0.39 U        | 0.39 |               |      | 0.38 U        | 0.38 | 0.38 U          | 0.38 | 0.39 U        | 0.39 |
| 1,4-Dichlorobenzene          | 570      | 0.41 U        | 0.41 | 0.39 U        | 0.39 |               |      | 0.38 U        | 0.38 | 0.38 U          | 0.38 | 0.39 U        | 0.39 |
| 1,2-Dichlorobenzene          | 5100     | 0.41 U        | 0.41 | 0.39 U        | 0.39 |               |      | 0.38 U        | 0.38 | 0.38 U          | 0.38 | 0.39 U        | 0.39 |
| 2-Methylphenol               | 2800     | 0.41 U        | 0.41 | 0.39 U        | 0.39 |               |      | 0.38 U        | 0.38 | 0.38 U          | 0.38 | 0.39 U        | 0.39 |
| 2,2'-oxybis(1-Chloropropane) |          | 0.41 U        | 0.41 | 0.39 U        | 0.39 |               |      | 0.38 U        | 0.38 | 0.38 U          | 0.38 | 0.39 U        | 0.39 |
| 4-Methylphenol               | 2800     | 0.41 U        | 0.41 | 0.39 U        | 0.39 |               |      | 0.38 U        | 0.38 | 0.38 U          | 0.38 | 0.39 U        | 0.39 |
| N-Nitroso-di-n-propylamine   | 0.66     | 0.41 U        | 0.41 | 0.39 U        | 0.39 |               |      | 0.38 U        | 0.38 | 0.38 U          | 0.38 | 0.39 U        | 0.39 |
| Hexachloroethane             | 6        | 0.41 U        | 0.41 | 0.39 U        | 0.39 |               |      | 0.38 U        | 0.38 | 0.38 U          | 0.38 | 0.39 U        | 0.39 |
| Nitrobenzene                 | 28       | 0.41 U        | 0.41 | 0.39 U        | 0.39 |               |      | 0.38 U        | 0.38 | 0.38 U          | 0.38 | 0.39 U        | 0.39 |
| Isophorone                   | 1100     | 0.41 U        | 0.41 | 0.39 U        | 0.39 |               |      | 0.38 U        | 0.38 | 0.38 U          | 0.38 | 0.39 U        | 0.39 |
| 2-Nitrophenol                |          | 0.41 U        | 0.41 | 0.39 U        | 0.39 |               |      | 0.38 U        | 0.38 | 0.38 U          | 0.38 | 0.39 U        | 0.39 |
| 2,4-Dimethylphenol           | 1100     | 0.41 U        | 0.41 | 0.39 U        | 0.39 |               |      | 0.38 U        | 0.38 | 0.38 U          | 0.38 | 0.39 U        | 0.39 |
| bis(2-Chloroethoxy) methane  |          | 0.41 U        | 0.41 | 0.39 U        | 0.39 |               |      | 0.38 U        | 0.38 | 0.38 U          | 0.38 | 0.39 U        | 0.39 |
| 2,4-Dichlorophenol           | 170      | 0.41 U        | 0.41 | 0.39 U        | 0.39 |               |      | 0.38 U        | 0.38 | 0.38 U          | 0.38 | 0.39 U        | 0.39 |
| 1,2,4-Trichlorobenzene       | 68       | 0.41 U        | 0.41 | 0.39 U        | 0.39 |               |      | 0.38 U        | 0.38 | 0.38 U          | 0.38 | 0.39 U        | 0.39 |
| Naphthalene                  | 230      | 0.41 U        | 0.41 | 0.39 U        | 0.39 |               |      | 0.38 U        | 0.38 | 0.38 U          | 0.38 | 0.39 U        | 0.39 |
| 4-Chloroaniline              | 230      | 0.41 U        | 0.41 | 0.39 U        | 0.39 |               |      | 0.38 U        | 0.38 | 0.38 U          | 0.38 | 0.39 U        | 0.39 |
| Hexachlorobutadiene          | 1        | 0.41 U        | 0.41 | 0.39 U        | 0.39 |               |      | 0.38 U        | 0.38 | 0.38 U          | 0.38 | 0.39 U        | 0.39 |
| 4-Chloro-3-methylphenol      | 10000    | 0.41 U        | 0.41 | 0.39 U        | 0.39 |               |      | 0.38 U        | 0.38 | 0.38 U          | 0.38 | 0.39 U        | 0.39 |
| 2-Methylnaphthalene          |          | 0.41 U        | 0.41 | 0.39 U        | 0.39 |               |      | 0.38 U        | 0.38 | 0.38 U          | 0.38 | 0.39 U        | 0.39 |
| Hexachlorocyclopentadiene    | 400      | 0.41 U        | 0.41 | 0.39 U        | 0.39 |               |      | 0.38 U        | 0.38 | 0.38 U          | 0.38 | 0.39 U        | 0.39 |
| 2,4,6-Trichlorophenol        | 62       | 0.41 U        | 0.41 | 0.39 U        | 0.39 |               |      | 0.38 U        | 0.38 | 0.38 U          | 0.38 | 0.39 U        | 0.39 |
| 2,4,5-Trichlorophenol        | 5600     | 1 U           | 1    | 0.98 U        | 0.98 |               |      | 0.95 U        | 0.95 | 0.95 U          | 0.95 | 0.98 U        | 0.98 |
| 2-Chloronaphthalene          |          | 0.41 U        | 0.41 | 0.39 U        | 0.39 |               |      | 0.38 U        | 0.38 | 0.38 U          | 0.38 | 0.39 U        | 0.39 |
| 2-Nitroaniline               |          | 1 U           | 1    | 0.98 U        | 0.98 |               |      | 0.95 U        | 0.95 | 0.95 U          | 0.95 | 0.98 U        | 0.98 |
| Dimethylphthalate            | 10000    | 0.41 U        | 0.41 | 0.39 U        | 0.39 |               |      | 0.38 U        | 0.38 | 0.38 U          | 0.38 | 0.39 U        | 0.39 |
| Acenaphthylene               |          | 0.41 U        | 0.41 | 0.39 U        | 0.39 |               |      | 0.38 U        | 0.38 | 0.38 U          | 0.38 | 0.39 U        | 0.39 |
| 2,6-Dinitrotoluene           | 1        | 0.41 U        | 0.41 | 0.39 U        | 0.39 |               |      | 0.38 U        | 0.38 | 0.38 U          | 0.38 | 0.39 U        | 0.39 |
| 3-Nitroaniline               |          | 1 U           | 1    | 0.98 U        | 0.98 |               |      | 0.95 U        | 0.95 | 0.95 U          | 0.95 | 0.98 U        | 0.98 |
| Acenaphthene                 | 3400     | 0.41 U        | 0.41 | 0.39 U        | 0.39 |               |      | 0.38 U        | 0.38 | 0.38 U          | 0.38 | 0.39 U        | 0.39 |
| 2,4-Dinitrophenol            | 110      | 1 U           | 1    | 0.98 U        | 0.98 |               |      | 0.95 U        | 0.95 | 0.95 U          | 0.95 | 0.98 U        | 0.98 |
| 4-Nitrophenol                |          | 1 U           | 1    | 0.98 U        | 0.98 |               |      | 0.95 U        | 0.95 | 0.95 U          | 0.95 | 0.98 U        | 0.98 |

**CHARLES WOOD  
SOIL BORING SEMIVOLATILES**

| Geographical Location      |          | CW2           |      | CW4           |      | CW4                   |      | CW5           |      | CW5             |      | CW5           |      |
|----------------------------|----------|---------------|------|---------------|------|-----------------------|------|---------------|------|-----------------|------|---------------|------|
| Sample                     |          | CW02-SB33-A02 |      | CW04-SB01-A02 |      | CW04-SB04-A02         |      | CW05-SB01-A02 |      | CW05-SB01-A02RE |      | CW05-SB02-A02 |      |
| Sample Type                |          |               |      |               |      |                       |      |               |      |                 |      |               |      |
| Batch#                     |          | 9412G154      |      | 9412G264      |      | 9412G264              |      | 9412G245      |      | 9412G245        |      | 9412G245      |      |
| Prep#                      |          | 94GBS0835     |      | 94GB0847      |      | 95GIR002              |      | 94GB0847      |      | 94GB0847        |      | 94GB0847      |      |
| RFW#                       |          | 002           |      | 008           |      |                       |      | 001           |      | 001             |      | 001           |      |
| Sample Depth (bgs)         |          | 7-9'          |      |               |      |                       |      |               |      |                 |      |               |      |
| Dilution Factor            |          | 1.00          |      | 1.00          |      |                       |      | 1.00          |      | 1.00            |      | 1.00          |      |
| Matrix                     |          | soil          |      | soil          |      | water                 |      | soil          |      | soil            |      | soil          |      |
| Units                      | mg/kg    | mg/kg         |      | mg/kg         |      | mg/l                  |      | mg/kg         |      | mg/kg           |      | mg/kg         |      |
| Sampling Date              |          | 12/15/94      |      | 12/21/94      |      | NA                    |      | 12/20/94      |      | 12/20/94        |      | 12/20/94      |      |
| Analysis Date              |          | 12/27/94      |      | 1/3/95        |      | 1/5/95                |      | 1/3/95        |      | 1/3/95          |      | 1/3/95        |      |
| Analysis                   | Standard | Analytical    | CRQL | Analytical    | CRQL | Analytical            | CRQL | Analytical    | CRQL | Analytical      | CRQL | Analytical    | CRQL |
|                            |          | Result        |      | Result        |      | Result                |      | Result        |      | Result          |      | Result        |      |
| Dibenzofuran               |          | 0.41 U        | 0.41 | 0.39 U        | 0.39 |                       |      | 0.38 U        | 0.38 | 0.38 U          | 0.38 | 0.39 U        | 0.39 |
| 2,4-Dinitrotoluene         | 1        | 0.41 U        | 0.41 | 0.39 U        | 0.39 |                       |      | 0.38 U        | 0.38 | 0.38 U          | 0.38 | 0.39 U        | 0.39 |
| Diethylphthalate           | 10000    | 0.41 U        | 0.41 | 0.39 U        | 0.39 |                       |      | 0.38 U        | 0.38 | 0.38 U          | 0.38 | 0.39 U        | 0.39 |
| 4-Chlorophenyl-phenylether |          | 0.41 U        | 0.41 | 0.39 U        | 0.39 |                       |      | 0.38 U        | 0.38 | 0.38 U          | 0.38 | 0.39 U        | 0.39 |
| Fluorene                   | 2300     | 0.41 U        | 0.41 | 0.39 U        | 0.39 |                       |      | 0.38 U        | 0.38 | 0.38 U          | 0.38 | 0.39 U        | 0.39 |
| 4-Nitroaniline             |          | 1 U           | 1    | 0.98 U        | 0.98 |                       |      | 0.95 U        | 0.95 | 0.95 U          | 0.95 | 0.98 U        | 0.98 |
| 4,6-Dinitro-2-methylphenol |          | 1 U           | 1    | 0.98 U        | 0.98 |                       |      | 0.95 U        | 0.95 | 0.95 U          | 0.95 | 0.98 U        | 0.98 |
| N-Nitrosodiphenylamine (1) | 140      | 0.41 U        | 0.41 | 0.39 U        | 0.39 |                       |      | 0.38 U        | 0.38 | 0.38 U          | 0.38 | 0.39 U        | 0.39 |
| 4-Bromophenyl-phenylether  |          | 0.41 U        | 0.41 | 0.39 U        | 0.39 |                       |      | 0.38 U        | 0.38 | 0.38 U          | 0.38 | 0.39 U        | 0.39 |
| Hexachlorobenzene          | 0.66     | 0.41 U        | 0.41 | 0.39 U        | 0.39 |                       |      | 0.38 U        | 0.38 | 0.38 U          | 0.38 | 0.39 U        | 0.39 |
| Pentachlorophenol          | 6        | 1 U           | 1    | 0.98 U        | 0.98 |                       |      | 0.95 U        | 0.95 | 0.95 U          | 0.95 | 0.98 U        | 0.98 |
| Phenanthrene               |          | 0.075 J       | 0.41 | 0.39 U        | 0.39 |                       |      | 0.085 J       | 0.38 | 0.086 J         | 0.38 | 0.39 U        | 0.39 |
| Anthracene                 | 10000    | 0.41 U        | 0.41 | 0.39 U        | 0.39 |                       |      | 0.38 U        | 0.38 | 0.38 U          | 0.38 | 0.39 U        | 0.39 |
| Carbazole                  |          | 0.41 U        | 0.41 | 0.39 U        | 0.39 |                       |      | 0.38 U        | 0.38 | 0.38 U          | 0.38 | 0.39 U        | 0.39 |
| Di-n-butylphthalate        | 5700     | 0.42 B        | 0.41 | 2.5 B         | 0.39 |                       |      | 0.16 JB       | 0.38 | 0.17 JB         | 0.38 | 0.18 JB       | 0.39 |
| Fluoranthene               | 2300     | 0.073 J       | 0.41 | 0.39 U        | 0.39 |                       |      | 0.21 J        | 0.38 | 0.22 J          | 0.38 | 0.39 U        | 0.39 |
| Pyrene                     | 1700     | 0.067 J       | 0.41 | 0.39 U        | 0.39 |                       |      | 0.25 J        | 0.38 | 0.24 J          | 0.38 | 0.39 U        | 0.39 |
| Butylbenzylphthalate       | 1100     | 0.41 U        | 0.41 | 0.23 J        | 0.39 |                       |      | 0.38 U        | 0.38 | 0.38 U          | 0.38 | 0.39 U        | 0.39 |
| 3,3'-Dichlorobenzidine     | 2        | 0.41 U        | 0.41 | 0.39 U        | 0.39 |                       |      | 0.38 U        | 0.38 | 0.38 U          | 0.38 | 0.39 U        | 0.39 |
| Benzo(a)anthracene         | 0.9      | 0.41 U        | 0.41 | 0.39 U        | 0.39 |                       |      | 0.14 J        | 0.38 | 0.13 J          | 0.38 | 0.39 U        | 0.39 |
| Chrysene                   | 9        | 0.043 J       | 0.41 | 0.39 U        | 0.39 |                       |      | 0.15 J        | 0.38 | 0.15 J          | 0.38 | 0.39 U        | 0.39 |
| bis(2-Ethylhexy)phthalate  | 49       | 0.41 U        | 0.41 | 0.39 U        | 0.39 |                       |      | 0.21 J        | 0.38 | 0.21 J          | 0.38 | 0.39 U        | 0.39 |
| Di-n-octyl phthalate       | 1100     | 0.41 U        | 0.41 | 0.39 U        | 0.39 |                       |      | 0.38 U        | 0.38 | 0.38 U          | 0.38 | 0.39 U        | 0.39 |
| Benzo(b)fluoranthene       | 0.9      | 0.41 U        | 0.41 | 0.39 U        | 0.39 |                       |      | 0.2 J         | 0.38 | 0.22 J          | 0.38 | 0.39 U        | 0.39 |
| Benzo(k)fluoranthene       | 0.9      | 0.41 U        | 0.41 | 0.39 U        | 0.39 |                       |      | 0.084 J       | 0.38 | 0.089 J         | 0.38 | 0.39 U        | 0.39 |
| Benzo(a)pyrene             | 0.66     | 0.094 J       | 0.41 | 0.39 U        | 0.39 |                       |      | 0.11 J        | 0.38 | 0.1 J           | 0.38 | 0.39 U        | 0.39 |
| Indeno(1,2,3-cd)pyrene     | 0.9      | 0.41 U        | 0.41 | 0.39 U        | 0.39 |                       |      | 0.066 J       | 0.38 | 0.38 U          | 0.38 | 0.39 U        | 0.39 |
| Dibenzo(a,h)anthracene     | 0.66     | 0.41 U        | 0.41 | 0.39 U        | 0.39 |                       |      | 0.38 U        | 0.38 | 0.38 U          | 0.38 | 0.39 U        | 0.39 |
| Benzo(g,h,i)perylene       |          | 0.41 U        | 0.41 | 0.39 U        | 0.39 |                       |      | 0.38 U        | 0.38 | 0.38 U          | 0.38 | 0.39 U        | 0.39 |
| Petroleum hydrocarbons     |          |               |      |               |      | 29 U                  | 29   |               |      |                 |      |               |      |
| Total Est. Conc. of TIC    |          |               |      | 5             |      |                       |      | 9.38          |      | 10.08           |      | 10.65         |      |
| Method:TCL Semivolatiles   |          |               |      |               |      | From inorganics list. |      |               |      |                 |      |               |      |

**CHARLES WOOD  
SOIL BORING SEMIVOLATILES**

| Geographical Location        |          | CW6                  |      | CW6                  |      | CW6                  |      | CW9                  |      | B6                   |      | B6                   |      |
|------------------------------|----------|----------------------|------|----------------------|------|----------------------|------|----------------------|------|----------------------|------|----------------------|------|
| Sample                       |          | CW06-SB02-A01        |      | CW06-SB34-A01        |      | CW06-SB34-A02        |      | CW09-SB01-A02        |      | B6-SB01-A01          |      | B6-SB01-A01RE        |      |
| Sample Type                  |          |                      |      |                      |      |                      |      |                      |      |                      |      |                      |      |
| Batch#                       |          | 9505G840             |      | 9501G423             |      | 9501G423             |      | 9501G450             |      | 9412G553             |      | 9412G553             |      |
| Prep#                        |          | 95GB0323             |      | 95GB0017             |      | 95GB0017             |      | 95GB0017             |      | 94GTS0035            |      | 94GTS0083            |      |
| RFW#                         |          | 001                  |      | 001                  |      | 002                  |      | 001                  |      | 008                  |      | 008                  |      |
| Sample Depth (bgs)           |          |                      |      |                      |      |                      |      |                      |      |                      |      |                      |      |
| Dilution Factor              |          | 1.00                 |      | 1.00                 |      | 1.00                 |      | 1.00                 |      | 1.00                 |      | 1.00                 |      |
| Matrix                       |          | soil                 |      | soil                 |      | soil                 |      | soil                 |      | soil                 |      | soil                 |      |
| Units                        | mg/kg    | mg/kg                |      | mg/kg                |      | mg/kg                |      | mg/kg                |      | mg/kg                |      | mg/kg                |      |
| Sampling Date                |          | 5/10/95              |      | 1/3/95               |      | 1/3/95               |      | 1/4/95               |      | 1/10/95              |      | 1/10/95              |      |
| Analysis Date                |          | 5/30/95              |      | 1/20/95              |      | 1/20/95              |      | 1/21/95              |      | 2/9/95               |      | 2/9/95               |      |
| Analysis                     | Standard | Analytical<br>Result | CRQL | Analytical<br>Result | CRQL | Analytical<br>Result | CRQL | Analytical<br>Result | CRQL | Analytical<br>Result | CRQL | Analytical<br>Result | CRQL |
| Phenol                       | 10000    | 0.47 U               | 0.47 | 0.4 U                | 0.4  | 0.38 U               | 0.38 | 0.38 U               | 0.38 | 0.38 U               | 0.38 | 0.38 U               | 0.38 |
| bis(2-Chloroethyl) ether     | 0.66     | 0.47 U               | 0.47 | 0.4 U                | 0.4  | 0.38 U               | 0.38 | 0.38 U               | 0.38 | 0.38 U               | 0.38 | 0.38 U               | 0.38 |
| 2-Chlorophenol               | 280      | 0.47 U               | 0.47 | 0.4 U                | 0.4  | 0.38 U               | 0.38 | 0.38 U               | 0.38 | 0.38 U               | 0.38 | 0.38 U               | 0.38 |
| 1,3-Dichlorobenzene          | 5100     | 0.47 U               | 0.47 | 0.4 U                | 0.4  | 0.38 U               | 0.38 | 0.38 U               | 0.38 | 0.38 U               | 0.38 | 0.38 U               | 0.38 |
| 1,4-Dichlorobenzene          | 570      | 0.47 U               | 0.47 | 0.4 U                | 0.4  | 0.38 U               | 0.38 | 0.38 U               | 0.38 | 0.38 U               | 0.38 | 0.38 U               | 0.38 |
| 1,2-Dichlorobenzene          | 5100     | 0.47 U               | 0.47 | 0.4 U                | 0.4  | 0.38 U               | 0.38 | 0.38 U               | 0.38 | 0.38 U               | 0.38 | 0.38 U               | 0.38 |
| 2-Methylphenol               | 2800     | 0.47 U               | 0.47 | 0.4 U                | 0.4  | 0.38 U               | 0.38 | 0.38 U               | 0.38 | 0.38 U               | 0.38 | 0.38 U               | 0.38 |
| 2,2'-oxybis(1-Chloropropane) |          | 0.47 U               | 0.47 | 0.4 U                | 0.4  | 0.38 U               | 0.38 | 0.38 U               | 0.38 | 0.38 U               | 0.38 | 0.38 U               | 0.38 |
| 4-Methylphenol               | 2800     | 0.47 U               | 0.47 | 0.4 U                | 0.4  | 0.38 U               | 0.38 | 0.38 U               | 0.38 | 0.38 U               | 0.38 | 0.38 U               | 0.38 |
| N-Nitroso-di-n-propylamine   | 0.66     | 0.47 U               | 0.47 | 0.4 U                | 0.4  | 0.38 U               | 0.38 | 0.38 U               | 0.38 | 0.38 U               | 0.38 | 0.38 U               | 0.38 |
| Hexachloroethane             | 6        | 0.47 U               | 0.47 | 0.4 U                | 0.4  | 0.38 U               | 0.38 | 0.38 U               | 0.38 | 0.38 U               | 0.38 | 0.38 U               | 0.38 |
| Nitrobenzene                 | 28       | 0.47 U               | 0.47 | 0.4 U                | 0.4  | 0.38 U               | 0.38 | 0.38 U               | 0.38 | 0.38 U               | 0.38 | 0.38 U               | 0.38 |
| Isophorone                   | 1100     | 0.47 U               | 0.47 | 0.4 U                | 0.4  | 0.38 U               | 0.38 | 0.38 U               | 0.38 | 0.38 U               | 0.38 | 0.38 U               | 0.38 |
| 2-Nitrophenol                |          | 0.47 U               | 0.47 | 0.4 U                | 0.4  | 0.38 U               | 0.38 | 0.38 U               | 0.38 | 0.38 U               | 0.38 | 0.38 U               | 0.38 |
| 2,4-Dimethylphenol           | 1100     | 0.47 U               | 0.47 | 0.4 U                | 0.4  | 0.38 U               | 0.38 | 0.38 U               | 0.38 | 0.38 U               | 0.38 | 0.38 U               | 0.38 |
| bis(2-Chloroethoxy) methane  |          | 0.47 U               | 0.47 | 0.4 U                | 0.4  | 0.38 U               | 0.38 | 0.38 U               | 0.38 | 0.38 U               | 0.38 | 0.38 U               | 0.38 |
| 2,4-Dichlorophenol           | 170      | 0.47 U               | 0.47 | 0.4 U                | 0.4  | 0.38 U               | 0.38 | 0.38 U               | 0.38 | 0.38 U               | 0.38 | 0.38 U               | 0.38 |
| 1,2,4-Trichlorobenzene       | 68       | 0.47 U               | 0.47 | 0.4 U                | 0.4  | 0.38 U               | 0.38 | 0.38 U               | 0.38 | 0.38 U               | 0.38 | 0.38 U               | 0.38 |
| Naphthalene                  | 230      | 0.47 U               | 0.47 | 0.4 U                | 0.4  | 0.38 U               | 0.38 | 0.38 U               | 0.38 | 0.38 U               | 0.38 | 0.38 U               | 0.38 |
| 4-Chloroaniline              | 230      | 0.47 U               | 0.47 | 0.4 U                | 0.4  | 0.38 U               | 0.38 | 0.38 U               | 0.38 | 0.38 U               | 0.38 | 0.38 U               | 0.38 |
| Hexachlorobutadiene          | 1        | 0.47 U               | 0.47 | 0.4 U                | 0.4  | 0.38 U               | 0.38 | 0.38 U               | 0.38 | 0.38 U               | 0.38 | 0.38 U               | 0.38 |
| 4-Chloro-3-methylphenol      | 10000    | 0.47 U               | 0.47 | 0.4 U                | 0.4  | 0.38 U               | 0.38 | 0.38 U               | 0.38 | 0.38 U               | 0.38 | 0.38 U               | 0.38 |
| 2-Methylnaphthalene          |          | 0.47 U               | 0.47 | 0.4 U                | 0.4  | 0.38 U               | 0.38 | 0.38 U               | 0.38 | 0.38 U               | 0.38 | 0.38 U               | 0.38 |
| Hexachlorocyclopentadiene    | 400      | 0.47 U               | 0.47 | 0.4 U                | 0.4  | 0.38 U               | 0.38 | 0.38 U               | 0.38 | 0.38 U               | 0.38 | 0.38 U               | 0.38 |
| 2,4,6-Trichlorophenol        | 62       | 0.47 U               | 0.47 | 0.4 U                | 0.4  | 0.38 U               | 0.38 | 0.38 U               | 0.38 | 0.38 U               | 0.38 | 0.38 U               | 0.38 |
| 2,4,5-Trichlorophenol        | 5600     | 1.2 U                | 1.2  | 1 U                  | 1    | 0.96 U               | 0.96 | 0.96 U               | 0.96 | 0.94 U               | 0.94 | 0.94 U               | 0.94 |
| 2-Chloronaphthalene          |          | 0.47 U               | 0.47 | 0.4 U                | 0.4  | 0.38 U               | 0.38 | 0.38 U               | 0.38 | 0.38 U               | 0.38 | 0.38 U               | 0.38 |
| 2-Nitroaniline               |          | 1.2 U                | 1.2  | 1 U                  | 1    | 0.96 U               | 0.96 | 0.96 U               | 0.96 | 0.94 U               | 0.94 | 0.94 U               | 0.94 |
| Dimethylphthalate            | 10000    | 0.47 U               | 0.47 | 0.4 U                | 0.4  | 0.38 U               | 0.38 | 0.38 U               | 0.38 | 0.38 U               | 0.38 | 0.38 U               | 0.38 |
| Acenaphthylene               |          | 0.47 U               | 0.47 | 0.4 U                | 0.4  | 0.38 U               | 0.38 | 0.38 U               | 0.38 | 0.38 U               | 0.38 | 0.38 U               | 0.38 |
| 2,6-Dinitrotoluene           | 1        | 0.47 U               | 0.47 | 0.4 U                | 0.4  | 0.38 U               | 0.38 | 0.38 U               | 0.38 | 0.38 U               | 0.38 | 0.38 U               | 0.38 |
| 3-Nitroaniline               |          | 1.2 U                | 1.2  | 1 U                  | 1    | 0.96 U               | 0.96 | 0.96 U               | 0.96 | 0.94 U               | 0.94 | 0.94 U               | 0.94 |
| Acenaphthene                 | 3400     | 0.47 U               | 0.47 | 0.4 U                | 0.4  | 0.38 U               | 0.38 | 0.38 U               | 0.38 | 0.38 U               | 0.38 | 0.38 U               | 0.38 |
| 2,4-Dinitrophenol            | 110      | 1.2 U                | 1.2  | 1 U                  | 1    | 0.96 U               | 0.96 | 0.96 U               | 0.96 | 0.94 U               | 0.94 | 0.94 U               | 0.94 |
| 4-Nitrophenol                |          | 1.2 U                | 1.2  | 1 U                  | 1    | 0.96 U               | 0.96 | 0.96 U               | 0.96 | 0.94 U               | 0.94 | 0.94 U               | 0.94 |

**CHARLES WOOD**  
**SOIL BORING SEMIVOLATILES**

| Geographical Location      |          | CW6           |      | CW6           |      | CW6           |      | CW9           |      | B6          |      | B6            |      |
|----------------------------|----------|---------------|------|---------------|------|---------------|------|---------------|------|-------------|------|---------------|------|
| Sample                     |          | CW06-SB02-A01 |      | CW06-SB34-A01 |      | CW06-SB34-A02 |      | CW09-SB01-A02 |      | B6-SB01-A01 |      | B6-SB01-A01RE |      |
| Sample Type                |          |               |      |               |      |               |      |               |      |             |      |               |      |
| Batch#                     |          | 9505G840      |      | 9501G423      |      | 9501G423      |      | 9501G450      |      | 9412G553    |      | 9412G553      |      |
| Prep#                      |          | 95GB0323      |      | 95GB0017      |      | 95GB0017      |      | 95GB0017      |      | 94GTS0035   |      | 94GTS0083     |      |
| RFW#                       |          | 001           |      | 001           |      | 002           |      | 001           |      | 008         |      | 008           |      |
| Sample Depth (bgs)         |          |               |      |               |      |               |      |               |      |             |      |               |      |
| Dilution Factor            |          | 1.00          |      | 1.00          |      | 1.00          |      | 1.00          |      | 1.00        |      | 1.00          |      |
| Matrix                     |          | soil          |      | soil          |      | soil          |      | soil          |      | soil        |      | soil          |      |
| Units                      | mg/kg    | mg/kg         |      | mg/kg         |      | mg/kg         |      | mg/kg         |      | mg/kg       |      | mg/kg         |      |
| Sampling Date              |          | 5/10/95       |      | 1/3/95        |      | 1/3/95        |      | 1/4/95        |      | 1/10/95     |      | 1/10/95       |      |
| Analysis Date              |          | 5/30/95       |      | 1/20/95       |      | 1/20/95       |      | 1/21/95       |      | 2/9/95      |      | 2/9/95        |      |
| Analysis                   | Standard | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical  | CRQL | Analytical    | CRQL |
|                            |          | Result        |      | Result        |      | Result        |      | Result        |      | Result      |      | Result        |      |
| Dibenzofuran               |          | 0.47 U        | 0.47 | 0.4 U         | 0.4  | 0.38 U        | 0.38 | 0.38 U        | 0.38 | 0.38 U      | 0.38 | 0.38 U        | 0.38 |
| 2,4-Dinitrotoluene         | 1        | 0.47 U        | 0.47 | 0.4 U         | 0.4  | 0.38 U        | 0.38 | 0.38 U        | 0.38 | 0.38 U      | 0.38 | 0.38 U        | 0.38 |
| Diethylphthalate           | 10000    | 0.47 U        | 0.47 | 0.4 U         | 0.4  | 0.38 U        | 0.38 | 0.38 U        | 0.38 | 0.38 U      | 0.38 | 0.38 U        | 0.38 |
| 4-Chlorophenyl-phenylether |          | 0.47 U        | 0.47 | 0.4 U         | 0.4  | 0.38 U        | 0.38 | 0.38 U        | 0.38 | 0.38 U      | 0.38 | 0.38 U        | 0.38 |
| Fluorene                   | 2300     | 0.47 U        | 0.47 | 0.4 U         | 0.4  | 0.38 U        | 0.38 | 0.38 U        | 0.38 | 0.38 U      | 0.38 | 0.38 U        | 0.38 |
| 4-Nitroaniline             |          | 1.2 U         | 1.2  | 1 U           | 1    | 0.96 U        | 0.96 | 0.96 U        | 0.96 | 0.94 U      | 0.94 | 0.94 U        | 0.94 |
| 4,6-Dinitro-2-methylphenol |          | 1.2 U         | 1.2  | 1 U           | 1    | 0.96 U        | 0.96 | 0.96 U        | 0.96 | 0.94 U      | 0.94 | 0.94 U        | 0.94 |
| N-Nitrosodiphenylamine (1) | 140      | 0.47 U        | 0.47 | 0.4 U         | 0.4  | 0.38 U        | 0.38 | 0.38 U        | 0.38 | 0.38 U      | 0.38 | 0.38 U        | 0.38 |
| 4-Bromophenyl-phenylether  |          | 0.47 U        | 0.47 | 0.4 U         | 0.4  | 0.38 U        | 0.38 | 0.38 U        | 0.38 | 0.38 U      | 0.38 | 0.38 U        | 0.38 |
| Hexachlorobenzene          | 0.66     | 0.47 U        | 0.47 | 0.4 U         | 0.4  | 0.38 U        | 0.38 | 0.38 U        | 0.38 | 0.38 U      | 0.38 | 0.38 U        | 0.38 |
| Pentachlorophenol          | 6        | 1.2 U         | 1.2  | 1 U           | 1    | 0.96 U        | 0.96 | 0.96 U        | 0.96 | 0.94 U      | 0.94 | 0.94 U        | 0.94 |
| Phenanthrene               |          | 0.47 U        | 0.47 | 0.4 U         | 0.4  | 0.24 J        | 0.38 | 0.38 U        | 0.38 | 0.38 U      | 0.38 | 0.38 U        | 0.38 |
| Anthracene                 | 10000    | 0.47 U        | 0.47 | 0.4 U         | 0.4  | 0.38 U        | 0.38 | 0.38 U        | 0.38 | 0.38 U      | 0.38 | 0.38 U        | 0.38 |
| Carbazole                  |          | 0.47 U        | 0.47 | 0.4 U         | 0.4  | 0.38 U        | 0.38 | 0.38 U        | 0.38 | 0.38 U      | 0.38 | 0.38 U        | 0.38 |
| Di-n-butylphthalate        | 5700     | 0.55 B        | 0.47 | 0.081         | 0.4  | 0.066         | 0.38 | 0.076         | 0.38 | 0.14 JB     | 0.38 | 1.2 B         | 0.38 |
| Fluoranthene               | 2300     | 0.47 U        | 0.47 | 0.049 J       | 0.4  | 0.18 J        | 0.38 | 0.38 U        | 0.38 | 0.38 U      | 0.38 | 0.38 U        | 0.38 |
| Pyrene                     | 1700     | 0.47 U        | 0.47 | 0.056 J       | 0.4  | 0.27 J        | 0.38 | 0.38 U        | 0.38 | 0.38 U      | 0.38 | 0.38 U        | 0.38 |
| Butylbenzylphthalate       | 1100     | 0.47 U        | 0.47 | 0.4 U         | 0.4  | 0.38 U        | 0.38 | 0.38 U        | 0.38 | 0.38 U      | 0.38 | 0.38 U        | 0.38 |
| 3,3'-Dichlorobenzidine     | 2        | 0.47 U        | 0.47 | 0.4 U         | 0.4  | 0.38 U        | 0.38 | 0.38 U        | 0.38 | 0.38 U      | 0.38 | 0.38 U        | 0.38 |
| Benzo(a)anthracene         | 0.9      | 0.47 U        | 0.47 | 0.4 U         | 0.4  | 0.16 J        | 0.38 | 0.38 U        | 0.38 | 0.38 U      | 0.38 | 0.38 U        | 0.38 |
| Chrysene                   | 9        | 0.47 U        | 0.47 | 0.4 U         | 0.4  | 0.15 J        | 0.38 | 0.38 U        | 0.38 | 0.38 U      | 0.38 | 0.38 U        | 0.38 |
| bis(2-Ethylhexy)phthalate  | 49       | 0.07 JB       | 0.47 | 0.21 J        | 0.4  | 0.38 U        | 0.38 | 0.38 U        | 0.38 | 0.38 U      | 0.38 | 0.042 J       | 0.38 |
| Di-n-octyl phthalate       | 1100     | 0.47 U        | 0.47 | 0.4 U         | 0.4  | 0.38 U        | 0.38 | 0.38 U        | 0.38 | 0.38 U      | 0.38 | 0.38 U        | 0.38 |
| Benzo(b)fluoranthene       | 0.9      | 0.47 U        | 0.47 | 0.4 U         | 0.4  | 0.11 J        | 0.38 | 0.38 U        | 0.38 | 0.38 U      | 0.38 | 0.38 U        | 0.38 |
| Benzo(k)fluoranthene       | 0.9      | 0.47 U        | 0.47 | 0.4 U         | 0.4  | 0.38 U        | 0.38 | 0.38 U        | 0.38 | 0.38 U      | 0.38 | 0.38 U        | 0.38 |
| Benzo(a)pyrene             | 0.66     | 0.47 U        | 0.47 | 0.4 U         | 0.4  | 0.087 J       | 0.38 | 0.38 U        | 0.38 | 0.38 U      | 0.38 | 0.38 U        | 0.38 |
| Indeno(1,2,3-cd)pyrene     | 0.9      | 0.47 U        | 0.47 | 0.4 U         | 0.4  | 0.054 J       | 0.38 | 0.38 U        | 0.38 | 0.38 U      | 0.38 | 0.38 U        | 0.38 |
| Dibenzo(a,h)anthracene     | 0.66     | 0.47 U        | 0.47 | 0.4 U         | 0.4  | 0.38 U        | 0.38 | 0.38 U        | 0.38 | 0.38 U      | 0.38 | 0.38 U        | 0.38 |
| Benzo(g,h,i)perylene       |          | 0.47 U        | 0.47 | 0.057         | 0.4  | 0.066         | 0.38 | 0.38 U        | 0.38 | 0.38 U      | 0.38 | 0.38 U        | 0.38 |
| Petroleum hydrocarbons     |          |               |      |               |      |               |      |               |      |             |      |               |      |
| Total Est. Conc. of TIC    |          | 35.9          |      | 12.2          |      | 10.3          |      | 9.58          |      | 7.02        |      | 6.03          |      |
| Method:TCL Semivolatiles   |          |               |      |               |      |               |      |               |      |             |      |               |      |

**CHARLES WOOD  
SOIL BORING SEMIVOLATILES**

| Geographical Location        |          | B6          |      | B6            |      | B7          |      | B7            |      | B7          |      | B7            |      |
|------------------------------|----------|-------------|------|---------------|------|-------------|------|---------------|------|-------------|------|---------------|------|
| Sample                       |          | B6-SB01-A02 |      | B6-SB01-A02RE |      | B7-SB01-A01 |      | B7-SB01-A01RE |      | B7-SB01-A02 |      | B7-SB01-A02RE |      |
| Sample Type                  |          |             |      |               |      |             |      |               |      |             |      |               |      |
| Batch#                       |          | 9412G553    |      | 9412G553      |      | 9412G553    |      | 9412G553      |      | 9412G553    |      | 9412G553      |      |
| Prep#                        |          | 94GTS0035   |      | 94GTS0083     |      | 94GTS0035   |      | 94GTS0083     |      | 94GTS0035   |      | 94GTS0083     |      |
| RFW#                         |          | 009         |      | 009           |      | 006         |      | 006           |      | 007         |      | 007           |      |
| Sample Depth (bgs)           |          |             |      |               |      |             |      |               |      |             |      |               |      |
| Dilution Factor              |          | 1.00        |      | 1.00          |      | 1.00        |      | 1.00          |      | 1.00        |      | 1.00          |      |
| Matrix                       |          | soil        |      | soil          |      | soil        |      | soil          |      | soil        |      | soil          |      |
| Units                        | mg/kg    | mg/kg       |      | mg/kg         |      | mg/kg       |      | mg/kg         |      | mg/kg       |      | mg/kg         |      |
| Sampling Date                |          | 1/10/95     |      | 1/10/95       |      | 1/10/95     |      | 1/10/95       |      | 1/10/95     |      | 1/10/95       |      |
| Analysis Date                |          | 2/9/95      |      | 2/9/95        |      | 2/9/95      |      | 2/9/95        |      | 2/9/95      |      | 2/9/95        |      |
| Analysis                     | Standard | Analytical  | CRQL | Analytical    | CRQL | Analytical  | CRQL | Analytical    | CRQL | Analytical  | CRQL | Analytical    | CRQL |
|                              |          | Result      |      | Result        |      | Result      |      | Result        |      | Result      |      | Result        |      |
| Phenol                       | 10000    | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.4 U       | 0.4  | 0.39 U        | 0.39 |
| bis(2-Chloroethyl) ether     | 0.66     | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.4 U       | 0.4  | 0.39 U        | 0.39 |
| 2-Chlorophenol               | 280      | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.4 U       | 0.4  | 0.39 U        | 0.39 |
| 1,3-Dichlorobenzene          | 5100     | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.4 U       | 0.4  | 0.39 U        | 0.39 |
| 1,4-Dichlorobenzene          | 570      | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.4 U       | 0.4  | 0.39 U        | 0.39 |
| 1,2-Dichlorobenzene          | 5100     | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.4 U       | 0.4  | 0.39 U        | 0.39 |
| 2-Methylphenol               | 2800     | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.4 U       | 0.4  | 0.39 U        | 0.39 |
| 2,2'-oxybis(1-Chloropropane) |          | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.4 U       | 0.4  | 0.39 U        | 0.39 |
| 4-Methylphenol               | 2800     | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.4 U       | 0.4  | 0.39 U        | 0.39 |
| N-Nitroso-di-n-propylamine   | 0.66     | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.4 U       | 0.4  | 0.39 U        | 0.39 |
| Hexachloroethane             | 6        | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.4 U       | 0.4  | 0.39 U        | 0.39 |
| Nitrobenzene                 | 28       | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.4 U       | 0.4  | 0.39 U        | 0.39 |
| Isophorone                   | 1100     | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.4 U       | 0.4  | 0.39 U        | 0.39 |
| 2-Nitrophenol                |          | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.4 U       | 0.4  | 0.39 U        | 0.39 |
| 2,4-Dimethylphenol           | 1100     | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.4 U       | 0.4  | 0.39 U        | 0.39 |
| bis(2-Chloroethoxy) methane  |          | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.4 U       | 0.4  | 0.39 U        | 0.39 |
| 2,4-Dichlorophenol           | 170      | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.4 U       | 0.4  | 0.39 U        | 0.39 |
| 1,2,4-Trichlorobenzene       | 68       | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.4 U       | 0.4  | 0.39 U        | 0.39 |
| Naphthalene                  | 230      | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.4 U       | 0.4  | 0.39 U        | 0.39 |
| 4-Chloroaniline              | 230      | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.4 U       | 0.4  | 0.39 U        | 0.39 |
| Hexachlorobutadiene          | 1        | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.4 U       | 0.4  | 0.39 U        | 0.39 |
| 4-Chloro-3-methylphenol      | 10000    | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.4 U       | 0.4  | 0.39 U        | 0.39 |
| 2-Methylnaphthalene          |          | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.4 U       | 0.4  | 0.39 U        | 0.39 |
| Hexachlorocyclopentadiene    | 400      | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.4 U       | 0.4  | 0.39 U        | 0.39 |
| 2,4,6-Trichlorophenol        | 62       | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.4 U       | 0.4  | 0.39 U        | 0.39 |
| 2,4,5-Trichlorophenol        | 5600     | 0.96 U      | 0.96 | 0.98 U        | 0.98 | 0.97 U      | 0.97 | 0.97 U        | 0.97 | 1 U         | 1    | 0.98 U        | 0.98 |
| 2-Chloronaphthalene          |          | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.4 U       | 0.4  | 0.39 U        | 0.39 |
| 2-Nitroaniline               |          | 0.96 U      | 0.96 | 0.98 U        | 0.98 | 0.97 U      | 0.97 | 0.97 U        | 0.97 | 1 U         | 1    | 0.98 U        | 0.98 |
| Dimethylphthalate            | 10000    | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.4 U       | 0.4  | 0.39 U        | 0.39 |
| Acenaphthylene               |          | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.4 U       | 0.4  | 0.39 U        | 0.39 |
| 2,6-Dinitrotoluene           | 1        | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.4 U       | 0.4  | 0.39 U        | 0.39 |
| 3-Nitroaniline               |          | 0.96 U      | 0.96 | 0.98 U        | 0.98 | 0.97 U      | 0.97 | 0.97 U        | 0.97 | 1 U         | 1    | 0.98 U        | 0.98 |
| Acenaphthene                 | 3400     | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.4 U       | 0.4  | 0.39 U        | 0.39 |
| 2,4-Dinitrophenol            | 110      | 0.96 U      | 0.96 | 0.98 U        | 0.98 | 0.97 U      | 0.97 | 0.97 U        | 0.97 | 1 U         | 1    | 0.98 U        | 0.98 |
| 4-Nitrophenol                |          | 0.96 U      | 0.96 | 0.98 U        | 0.98 | 0.97 U      | 0.97 | 0.97 U        | 0.97 | 1 U         | 1    | 0.98 U        | 0.98 |

**CHARLES WOOD**  
**SOIL BORING SEMIVOLATILES**

| Geographical Location      |          | B6          |      | B6            |      | B7          |      | B7            |      | B7          |      | B7            |      |
|----------------------------|----------|-------------|------|---------------|------|-------------|------|---------------|------|-------------|------|---------------|------|
| Sample                     |          | B6-SB01-A02 |      | B6-SB01-A02RE |      | B7-SB01-A01 |      | B7-SB01-A01RE |      | B7-SB01-A02 |      | B7-SB01-A02RE |      |
| Sample Type                |          |             |      |               |      |             |      |               |      |             |      |               |      |
| Batch#                     |          | 9412G553    |      | 9412G553      |      | 9412G553    |      | 9412G553      |      | 9412G553    |      | 9412G553      |      |
| Prep#                      |          | 94GTS0035   |      | 94GTS0083     |      | 94GTS0035   |      | 94GTS0083     |      | 94GTS0035   |      | 94GTS0083     |      |
| RFW#                       |          | 009         |      | 009           |      | 006         |      | 006           |      | 007         |      | 007           |      |
| Sample Depth (bgs)         |          |             |      |               |      |             |      |               |      |             |      |               |      |
| Dilution Factor            |          | 1.00        |      | 1.00          |      | 1.00        |      | 1.00          |      | 1.00        |      | 1.00          |      |
| Matrix                     |          | soil        |      | soil          |      | soil        |      | soil          |      | soil        |      | soil          |      |
| Units                      | mg/kg    | mg/kg       |      | mg/kg         |      | mg/kg       |      | mg/kg         |      | mg/kg       |      | mg/kg         |      |
| Sampling Date              |          | 1/10/95     |      | 1/10/95       |      | 1/10/95     |      | 1/10/95       |      | 1/10/95     |      | 1/10/95       |      |
| Analysis Date              |          | 2/9/95      |      | 2/9/95        |      | 2/9/95      |      | 2/9/95        |      | 2/9/95      |      | 2/9/95        |      |
| Analysis                   | Standard | Analytical  | CRQL | Analytical    | CRQL | Analytical  | CRQL | Analytical    | CRQL | Analytical  | CRQL | Analytical    | CRQL |
|                            |          | Result      |      | Result        |      | Result      |      | Result        |      | Result      |      | Result        |      |
| Dibenzofuran               |          | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.4 U       | 0.4  | 0.39 U        | 0.39 |
| 2,4-Dinitrotoluene         | 1        | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.4 U       | 0.4  | 0.39 U        | 0.39 |
| Diethylphthalate           | 10000    | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.4 U       | 0.4  | 0.39 U        | 0.39 |
| 4-Chlorophenyl-phenylether |          | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.4 U       | 0.4  | 0.39 U        | 0.39 |
| Fluorene                   | 2300     | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.4 U       | 0.4  | 0.39 U        | 0.39 |
| 4-Nitroaniline             |          | 0.96 U      | 0.96 | 0.98 U        | 0.98 | 0.97 U      | 0.97 | 0.97 U        | 0.97 | 1 U         | 1    | 0.98 U        | 0.98 |
| 4,6-Dinitro-2-methylphenol |          | 0.96 U      | 0.96 | 0.98 U        | 0.98 | 0.97 U      | 0.97 | 0.97 U        | 0.97 | 1 U         | 1    | 0.98 U        | 0.98 |
| N-Nitrosodiphenylamine (1) | 140      | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.4 U       | 0.4  | 0.39 U        | 0.39 |
| 4-Bromophenyl-phenylether  |          | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.4 U       | 0.4  | 0.39 U        | 0.39 |
| Hexachlorobenzene          | 0.66     | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.4 U       | 0.4  | 0.39 U        | 0.39 |
| Pentachlorophenol          | 6        | 0.96 U      | 0.96 | 0.98 U        | 0.98 | 0.97 U      | 0.97 | 0.97 U        | 0.97 | 1 U         | 1    | 0.98 U        | 0.98 |
| Phenanthrene               |          | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.4 U       | 0.4  | 0.39 U        | 0.39 |
| Anthracene                 | 10000    | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.4 U       | 0.4  | 0.39 U        | 0.39 |
| Carbazole                  |          | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.4 U       | 0.4  | 0.39 U        | 0.39 |
| Di-n-butylphthalate        | 5700     | 0.17 JB     | 0.39 | 1.7 B         | 0.39 | 0.37 JB     | 0.39 | 0.75 B        | 0.39 | 0.28 JB     | 0.4  | 1 B           | 0.39 |
| Fluoranthene               | 2300     | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.39 U      | 0.39 | 0.042 J       | 0.39 | 0.4 U       | 0.4  | 0.39 U        | 0.39 |
| Pyrene                     | 1700     | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.39 U      | 0.39 | 0.048 J       | 0.39 | 0.4 U       | 0.4  | 0.39 U        | 0.39 |
| Butylbenzylphthalate       | 1100     | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.4 U       | 0.4  | 0.39 U        | 0.39 |
| 3,3'-Dichlorobenzidine     | 2        | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.4 U       | 0.4  | 0.39 U        | 0.39 |
| Benzo(a)anthracene         | 0.9      | 0.39 U      | 0.39 | 0.046 J       | 0.39 | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.4 U       | 0.4  | 0.39 U        | 0.39 |
| Chrysene                   | 9        | 0.044 J     | 0.39 | 0.083 J       | 0.39 | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.4 U       | 0.4  | 0.39 U        | 0.39 |
| bis(2-Ethylhexy)phthalate  | 49       | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.076 J     | 0.4  | 0.39 U        | 0.39 |
| Di-n-octyl phthalate       | 1100     | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.4 U       | 0.4  | 0.39 U        | 0.39 |
| Benzo(b)fluoranthene       | 0.9      | 0.078 J     | 0.39 | 0.06 J        | 0.39 | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.4 U       | 0.4  | 0.39 U        | 0.39 |
| Benzo(k)fluoranthene       | 0.9      | 0.041 J     | 0.39 | 0.39 U        | 0.39 | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.4 U       | 0.4  | 0.39 U        | 0.39 |
| Benzo(a)pyrene             | 0.66     | 0.39 U      | 0.39 | 0.047 J       | 0.39 | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.4 U       | 0.4  | 0.39 U        | 0.39 |
| Indeno(1,2,3-cd)pyrene     | 0.9      | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.4 U       | 0.4  | 0.39 U        | 0.39 |
| Dibenzo(a,h)anthracene     | 0.66     | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.4 U       | 0.4  | 0.39 U        | 0.39 |
| Benzo(g,h,i)perylene       |          | 0.39 U      | 0.39 | 0.042 J       | 0.39 | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.4 U       | 0.4  | 0.39 U        | 0.39 |
| Petroleum hydrocarbons     |          |             |      |               |      |             |      |               |      |             |      |               |      |
| Total Est. Conc. of TIC    |          | 6.19        |      | 9.64          |      | 6.74        |      | 6.59          |      | 6.54        |      | 7.19          |      |
| Method: TCL Semivolatiles  |          |             |      |               |      |             |      |               |      |             |      |               |      |



**CHARLES WOOD  
SOIL BORING SEMIVOLATILES**

| Geographical Location        |          | B8                |      | B8                |      | B8                |      | B8                |      | B9                |      | B9                |      |
|------------------------------|----------|-------------------|------|-------------------|------|-------------------|------|-------------------|------|-------------------|------|-------------------|------|
| Sample                       |          | B8-SB01-A01       |      | B8-SB01-A01RE     |      | B8-SB01-A02       |      | B8-SB01-A02RE     |      | B9-SB01-A01       |      | B9-SB01-A02       |      |
| Sample Type                  |          |                   |      |                   |      |                   |      |                   |      |                   |      |                   |      |
| Batch#                       |          | 9412G553          |      | 9412G553          |      | 9412G553          |      | 9412G553          |      | 9501G831          |      | 9501G831          |      |
| Prep#                        |          | 94GTS0035         |      | 94GTS0083         |      | 94GTS0035         |      | 94GTS0083         |      | 95GB0064          |      | 95GB0064          |      |
| RFW#                         |          | 004               |      | 004               |      | 005               |      | 005               |      | 001               |      | 002               |      |
| Sample Depth (bgs)           |          |                   |      |                   |      |                   |      |                   |      |                   |      |                   |      |
| Dilution Factor              |          | 1.00              |      | 1.00              |      | 1.00              |      | 1.00              |      | 1.00              |      | 1.00              |      |
| Matrix                       |          | soil              |      | soil              |      | soil              |      | soil              |      | soil              |      | soil              |      |
| Units                        | mg/kg    | mg/kg             |      | mg/kg             |      | mg/kg             |      | mg/kg             |      | mg/kg             |      | mg/kg             |      |
| Sampling Date                |          | 1/10/95           |      | 1/10/95           |      | 1/10/95           |      | 1/10/95           |      | 1/23/95           |      | 1/23/95           |      |
| Analysis Date                |          | 2/9/95            |      | 2/9/95            |      | 2/9/95            |      | 2/9/95            |      | 2/11/95           |      | 2/22/95           |      |
| Analysis                     | Standard | Analytical Result | CRQL | Analytical Result | CRQL | Analytical Result | CRQL | Analytical Result | CRQL | Analytical Result | CRQL | Analytical Result | CRQL |
| Phenol                       | 10000    | 0.36 U            | 0.36 | 0.36 U            | 0.36 | 0.39 U            | 0.39 | 0.39 U            | 0.39 | 0.38 U            | 0.38 | 0.4 U             | 0.4  |
| bis(2-Chloroethyl) ether     | 0.66     | 0.36 U            | 0.36 | 0.36 U            | 0.36 | 0 U               | 0.39 | 0.39 U            | 0.39 | 0.38 U            | 0.38 | 0.4 U             | 0.4  |
| 2-Chlorophenol               | 280      | 0.36 U            | 0.36 | 0.36 U            | 0.36 | 0 U               | 0.39 | 0.39 U            | 0.39 | 0.38 U            | 0.38 | 0.4 U             | 0.4  |
| 1,3-Dichlorobenzene          | 5100     | 0.36 U            | 0.36 | 0.36 U            | 0.36 | 0 U               | 0.39 | 0.39 U            | 0.39 | 0.38 U            | 0.38 | 0.4 U             | 0.4  |
| 1,4-Dichlorobenzene          | 570      | 0.36 U            | 0.36 | 0.36 U            | 0.36 | 0 U               | 0.39 | 0.39 U            | 0.39 | 0.38 U            | 0.38 | 0.4 U             | 0.4  |
| 1,2-Dichlorobenzene          | 5100     | 0.36 U            | 0.36 | 0.36 U            | 0.36 | 0 U               | 0.39 | 0.39 U            | 0.39 | 0.38 U            | 0.38 | 0.4 U             | 0.4  |
| 2-Methylphenol               | 2800     | 0.36 U            | 0.36 | 0.36 U            | 0.36 | 0 U               | 0.39 | 0.39 U            | 0.39 | 0.38 U            | 0.38 | 0.4 U             | 0.4  |
| 2,2'-oxybis(1-Chloropropane) |          | 0.36 U            | 0.36 | 0.36 U            | 0.36 | 0 U               | 0.39 | 0.39 U            | 0.39 | 0.38 U            | 0.38 | 0.4 U             | 0.4  |
| 4-Methylphenol               | 2800     | 0.36 U            | 0.36 | 0.36 U            | 0.36 | 0 U               | 0.39 | 0.39 U            | 0.39 | 0.38 U            | 0.38 | 0.4 U             | 0.4  |
| N-Nitroso-di-n-propylamine   | 0.66     | 0.36 U            | 0.36 | 0.36 U            | 0.36 | 0 U               | 0.39 | 0.39 U            | 0.39 | 0.38 U            | 0.38 | 0.4 U             | 0.4  |
| Hexachloroethane             | 6        | 0.36 U            | 0.36 | 0.36 U            | 0.36 | 0 U               | 0.39 | 0.39 U            | 0.39 | 0.38 U            | 0.38 | 0.4 U             | 0.4  |
| Nitrobenzene                 | 28       | 0.36 U            | 0.36 | 0.36 U            | 0.36 | 0 U               | 0.39 | 0.39 U            | 0.39 | 0.38 U            | 0.38 | 0.4 U             | 0.4  |
| Isophorone                   | 1100     | 0.36 U            | 0.36 | 0.36 U            | 0.36 | 0 U               | 0.39 | 0.39 U            | 0.39 | 0.38 U            | 0.38 | 0.4 U             | 0.4  |
| 2-Nitrophenol                |          | 0.36 U            | 0.36 | 0.36 U            | 0.36 | 0 U               | 0.39 | 0.39 U            | 0.39 | 0.38 U            | 0.38 | 0.4 U             | 0.4  |
| 2,4-Dimethylphenol           | 1100     | 0.36 U            | 0.36 | 0.36 U            | 0.36 | 0 U               | 0.39 | 0.39 U            | 0.39 | 0.38 U            | 0.38 | 0.4 U             | 0.4  |
| bis(2-Chloroethoxy) methane  |          | 0.36 U            | 0.36 | 0.36 U            | 0.36 | 0 U               | 0.39 | 0.39 U            | 0.39 | 0.38 U            | 0.38 | 0.4 U             | 0.4  |
| 2,4-Dichlorophenol           | 170      | 0.36 U            | 0.36 | 0.36 U            | 0.36 | 0 U               | 0.39 | 0.39 U            | 0.39 | 0.38 U            | 0.38 | 0.4 U             | 0.4  |
| 1,2,4-Trichlorobenzene       | 68       | 0.36 U            | 0.36 | 0.36 U            | 0.36 | 0 U               | 0.39 | 0.39 U            | 0.39 | 0.38 U            | 0.38 | 0.4 U             | 0.4  |
| Naphthalene                  | 230      | 0.36 U            | 0.36 | 0.36 U            | 0.36 | 0 U               | 0.39 | 0.39 U            | 0.39 | 0.38 U            | 0.38 | 0.4 U             | 0.4  |
| 4-Chloroaniline              | 230      | 0.36 U            | 0.36 | 0.36 U            | 0.36 | 0 U               | 0.39 | 0.39 U            | 0.39 | 0.38 U            | 0.38 | 0.4 U             | 0.4  |
| Hexachlorobutadiene          | 1        | 0.36 U            | 0.36 | 0.36 U            | 0.36 | 0 U               | 0.39 | 0.39 U            | 0.39 | 0.38 U            | 0.38 | 0.4 U             | 0.4  |
| 4-Chloro-3-methylphenol      | 10000    | 0.36 U            | 0.36 | 0.36 U            | 0.36 | 0 U               | 0.39 | 0.39 U            | 0.39 | 0.38 U            | 0.38 | 0.4 U             | 0.4  |
| 2-Methylnaphthalene          |          | 0.36 U            | 0.36 | 0.36 U            | 0.36 | 0 U               | 0.39 | 0.39 U            | 0.39 | 0.38 U            | 0.38 | 0.4 U             | 0.4  |
| Hexachlorocyclopentadiene    | 400      | 0.36 U            | 0.36 | 0.36 U            | 0.36 | 0 U               | 0.39 | 0.39 U            | 0.39 | 0.38 U            | 0.38 | 0.4 U             | 0.4  |
| 2,4,6-Trichlorophenol        | 62       | 0.36 U            | 0.36 | 0.36 U            | 0.36 | 0 U               | 0.39 | 0.39 U            | 0.39 | 0.38 U            | 0.38 | 0.4 U             | 0.4  |
| 2,4,5-Trichlorophenol        | 5600     | 0.9 U             | 0.9  | 0.91 U            | 0.91 | 1 U               | 0.96 | 0.98 U            | 0.98 | 0.96 U            | 0.96 | 0.99 U            | 0.99 |
| 2-Chloronaphthalene          |          | 0.36 U            | 0.36 | 0.36 U            | 0.36 | 0 U               | 0.39 | 0.39 U            | 0.39 | 0.38 U            | 0.38 | 0.4 U             | 0.4  |
| 2-Nitroaniline               |          | 0.9 U             | 0.9  | 0.91 U            | 0.91 | 1 U               | 0.96 | 0.98 U            | 0.98 | 0.96 U            | 0.96 | 0.99 U            | 0.99 |
| Dimethylphthalate            | 10000    | 0.36 U            | 0.36 | 0.36 U            | 0.36 | 0 U               | 0.39 | 0.39 U            | 0.39 | 0.38 U            | 0.38 | 0.4 U             | 0.4  |
| Acenaphthylene               |          | 0.36 U            | 0.36 | 0.36 U            | 0.36 | 0 U               | 0.39 | 0.39 U            | 0.39 | 0.38 U            | 0.38 | 0.4 U             | 0.4  |
| 2,6-Dinitrotoluene           | 1        | 0.36 U            | 0.36 | 0.36 U            | 0.36 | 0 U               | 0.39 | 0.39 U            | 0.39 | 0.38 U            | 0.38 | 0.4 U             | 0.4  |
| 3-Nitroaniline               |          | 0.9 U             | 0.9  | 0.91 U            | 0.91 | 1 U               | 0.96 | 0.98 U            | 0.98 | 0.96 U            | 0.96 | 0.99 U            | 0.99 |
| Acenaphthene                 | 3400     | 0.36 U            | 0.36 | 0.36 U            | 0.36 | 0 U               | 0.39 | 0.39 U            | 0.39 | 0.38 U            | 0.38 | 0.4 U             | 0.4  |
| 2,4-Dinitrophenol            | 110      | 0.9 U             | 0.9  | 0.91 U            | 0.91 | 1 U               | 0.96 | 0.98 U            | 0.98 | 0.96 U            | 0.96 | 0.99 U            | 0.99 |
| 4-Nitrophenol                |          | 0.9 U             | 0.9  | 0.91 U            | 0.91 | 1 U               | 0.96 | 0.98 U            | 0.98 | 0.96 U            | 0.96 | 0.99 U            | 0.99 |

**CHARLES WOOD  
SOIL BORING SEMIVOLATILES**

| Geographical Location      |          | B8          |      | B8            |      | B8          |      | B8            |      | B9          |      | B9          |      |
|----------------------------|----------|-------------|------|---------------|------|-------------|------|---------------|------|-------------|------|-------------|------|
| Sample                     |          | B8-SB01-A01 |      | B8-SB01-A01RE |      | B8-SB01-A02 |      | B8-SB01-A02RE |      | B9-SB01-A01 |      | B9-SB01-A02 |      |
| Sample Type                |          |             |      |               |      |             |      |               |      |             |      |             |      |
| Batch#                     |          | 9412G553    |      | 9412G553      |      | 9412G553    |      | 9412G553      |      | 9501G831    |      | 9501G831    |      |
| Prep#                      |          | 94GTS0035   |      | 94GTS0083     |      | 94GTS0035   |      | 94GTS0083     |      | 95GB0064    |      | 95GB0064    |      |
| RFW#                       |          | 004         |      | 004           |      | 005         |      | 005           |      | 001         |      | 002         |      |
| Sample Depth (bgs)         |          |             |      |               |      |             |      |               |      |             |      |             |      |
| Dilution Factor            |          | 1.00        |      | 1.00          |      | 1.00        |      | 1.00          |      | 1.00        |      | 1.00        |      |
| Matrix                     |          | soil        |      | soil          |      | soil        |      | soil          |      | soil        |      | soil        |      |
| Units                      | mg/kg    | mg/kg       |      | mg/kg         |      | mg/kg       |      | mg/kg         |      | mg/kg       |      | mg/kg       |      |
| Sampling Date              |          | 1/10/95     |      | 1/10/95       |      | 1/10/95     |      | 1/10/95       |      | 1/23/95     |      | 1/23/95     |      |
| Analysis Date              |          | 2/9/95      |      | 2/9/95        |      | 2/9/95      |      | 2/9/95        |      | 2/11/95     |      | 2/22/95     |      |
| Analysis                   | Standard | Analytical  | CRQL | Analytical    | CRQL | Analytical  | CRQL | Analytical    | CRQL | Analytical  | CRQL | Analytical  | CRQL |
|                            |          | Result      |      | Result        |      | Result      |      | Result        |      | Result      |      | Result      |      |
| Dibenzofuran               |          | 0.36 U      | 0.36 | 0.36 U        | 0.36 | 0 U         | 0.39 | 0.39 U        | 0.39 | 0.38 U      | 0.38 | 0.4 U       | 0.4  |
| 2,4-Dinitrotoluene         | 1        | 0.36 U      | 0.36 | 0.36 U        | 0.36 | 0 U         | 0.39 | 0.39 U        | 0.39 | 0.38 U      | 0.38 | 0.4 U       | 0.4  |
| Diethylphthalate           | 10000    | 0.36 U      | 0.36 | 0.36 U        | 0.36 | 0 U         | 0.39 | 0.39 U        | 0.39 | 0.38 U      | 0.38 | 0.4 U       | 0.4  |
| 4-Chlorophenyl-phenylether |          | 0.36 U      | 0.36 | 0.36 U        | 0.36 | 0 U         | 0.39 | 0.39 U        | 0.39 | 0.38 U      | 0.38 | 0.4 U       | 0.4  |
| Fluorene                   | 2300     | 0.36 U      | 0.36 | 0.36 U        | 0.36 | 0 U         | 0.39 | 0.39 U        | 0.39 | 0.38 U      | 0.38 | 0.4 U       | 0.4  |
| 4-Nitroaniline             |          | 0.9 U       | 0.9  | 0.91 U        | 0.91 | 1 U         | 0.96 | 0.98 U        | 0.98 | 0.96 U      | 0.96 | 0.99 U      | 0.99 |
| 4,6-Dinitro-2-methylphenol |          | 0.9 U       | 0.9  | 0.91 U        | 0.91 | 1 U         | 0.96 | 0.98 U        | 0.98 | 0.96 U      | 0.96 | 0.99 U      | 0.99 |
| N-Nitrosodiphenylamine (1) | 140      | 0.36 U      | 0.36 | 0.36 U        | 0.36 | 0 U         | 0.39 | 0.39 U        | 0.39 | 0.38 U      | 0.38 | 0.4 U       | 0.4  |
| 4-Bromophenyl-phenylether  |          | 0.36 U      | 0.36 | 0.36 U        | 0.36 | 0 U         | 0.39 | 0.39 U        | 0.39 | 0.38 U      | 0.38 | 0.4 U       | 0.4  |
| Hexachlorobenzene          | 0.66     | 0.36 U      | 0.36 | 0.36 U        | 0.36 | 0 U         | 0.39 | 0.39 U        | 0.39 | 0.38 U      | 0.38 | 0.4 U       | 0.4  |
| Pentachlorophenol          | 6        | 0.9 U       | 0.9  | 0.91 U        | 0.91 | 1 U         | 0.96 | 0.98 U        | 0.98 | 0.96 U      | 0.96 | 0.99 U      | 0.99 |
| Phenanthrene               |          | 0.36 U      | 0.36 | 0.36 U        | 0.36 | 0 U         | 0.39 | 0.39 U        | 0.39 | 0.38 U      | 0.38 | 0.4 U       | 0.4  |
| Anthracene                 | 10000    | 0.36 U      | 0.36 | 0.36 U        | 0.36 | 0 U         | 0.39 | 0.39 U        | 0.39 | 0.38 U      | 0.38 | 0.4 U       | 0.4  |
| Carbazole                  |          | 0.36 U      | 0.36 | 0.36 U        | 0.36 | 0 U         | 0.39 | 0.39 U        | 0.39 | 0.38 U      | 0.38 | 0.4 U       | 0.4  |
| Di-n-butylphthalate        | 5700     | 0.72 B      | 0.36 | 0.14 JB       | 0.36 | 0.59 B      | 0.39 | 0 JB          | 0.39 | 0.12 JB     | 0.38 | 0.1 JB      | 0.4  |
| Fluoranthene               | 2300     | 0.36 U      | 0.36 | 0.36 U        | 0.36 | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.38 U      | 0.38 | 0.4 U       | 0.4  |
| Pyrene                     | 1700     | 0.36 U      | 0.36 | 0.36 U        | 0.36 | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.38 U      | 0.38 | 0.4 U       | 0.4  |
| Butylbenzylphthalate       | 1100     | 0.36 U      | 0.36 | 0.36 U        | 0.36 | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.38 U      | 0.38 | 0.4 U       | 0.4  |
| 3,3'-Dichlorobenzidine     | 2        | 0.36 U      | 0.36 | 0.36 U        | 0.36 | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.38 U      | 0.38 | 0.4 U       | 0.4  |
| Benzo(a)anthracene         | 0.9      | 0.36 U      | 0.36 | 0.36 U        | 0.36 | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.38 U      | 0.38 | 0.4 U       | 0.4  |
| Chrysene                   | 9        | 0.36 U      | 0.36 | 0.36 U        | 0.36 | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.38 U      | 0.38 | 0.4 U       | 0.4  |
| bis(2-Ethylhexyl)phthalate | 49       | 0.36 U      | 0.36 | 0.36 U        | 0.36 | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.11 J      | 0.38 | 0.073 J     | 0.4  |
| Di-n-octyl phthalate       | 1100     | 0.36 U      | 0.36 | 0.36 U        | 0.36 | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.38 U      | 0.38 | 0.4 U       | 0.4  |
| Benzo(b)fluoranthene       | 0.9      | 0.36 U      | 0.36 | 0.36 U        | 0.36 | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.38 U      | 0.38 | 0.4 U       | 0.4  |
| Benzo(k)fluoranthene       | 0.9      | 0.36 U      | 0.36 | 0.36 U        | 0.36 | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.38 U      | 0.38 | 0.4 U       | 0.4  |
| Benzo(a)pyrene             | 0.66     | 0.36 U      | 0.36 | 0.36 U        | 0.36 | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.38 U      | 0.38 | 0.4 U       | 0.4  |
| Indeno(1,2,3-cd)pyrene     | 0.9      | 0.36 U      | 0.36 | 0.36 U        | 0.36 | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.38 U      | 0.38 | 0.4 U       | 0.4  |
| Dibenzo(a,h)anthracene     | 0.66     | 0.36 U      | 0.36 | 0.36 U        | 0.36 | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.38 U      | 0.38 | 0.4 U       | 0.4  |
| Benzo(g,h,i)perylene       |          | 0.36 U      | 0.36 | 0.36 U        | 0.36 | 0.39 U      | 0.39 | 0.39 U        | 0.39 | 0.38 U      | 0.38 | 0.4 U       | 0.4  |
| Petroleum hydrocarbons     |          |             |      |               |      |             |      |               |      |             |      |             |      |
| Total Est. Conc. of TIC    |          | 5.08        |      | 11.26         |      | 7.06        |      | 7.27          |      | 0.56        |      | 10.09       |      |
| Method:TCL Semivolatiles   |          |             |      |               |      |             |      |               |      |             |      |             |      |

**CHARLES WOOD  
SOIL BORING SEMIVOLATILES**

| Geographical Location        |          | B9          |      | B10          |      | B10            |      | B10          |      | B10            |      |
|------------------------------|----------|-------------|------|--------------|------|----------------|------|--------------|------|----------------|------|
| Sample                       |          | B9-SB01-C02 |      | B10-SB01-A01 |      | B10-SB01-A01RE |      | B10-SB01-A02 |      | B10-SB01-A02RE |      |
| Sample Type                  |          | Duplicate   |      |              |      |                |      |              |      |                |      |
| Batch#                       |          | 9501G831    |      | 9412G553     |      | 9412G553       |      | 9412G553     |      | 9412G553       |      |
| Prep#                        |          | 95GB0064    |      | 94GTS0035    |      | 94GTS0083      |      | 94GTS0035    |      | 94GTS0083      |      |
| RFW#                         |          | 003         |      | 001          |      | 001            |      | 002          |      | 002            |      |
| Sample Depth (bgs)           |          |             |      |              |      |                |      |              |      |                |      |
| Dilution Factor              |          | 1.00        |      | 1.00         |      | 1.00           |      | 1.00         |      | 1.00           |      |
| Matrix                       |          | soil        |      | soil         |      | soil           |      | soil         |      | soil           |      |
| Units                        | mg/kg    | mg/kg       |      | mg/kg        |      | mg/kg          |      | mg/kg        |      | mg/kg          |      |
| Sampling Date                |          | 1/23/95     |      | 1/10/95      |      | 1/10/95        |      | 1/10/95      |      | 1/10/95        |      |
| Analysis Date                |          | 2/22/95     |      | 2/9/95       |      | 2/9/95         |      | 2/9/95       |      | 2/9/95         |      |
| Analysis                     | Standard | Analytical  | CRQL | Analytical   | CRQL | Analytical     | CRQL | Analytical   | CRQL | Analytical     | CRQL |
|                              |          | Result      |      | Result       |      | Result         |      | Result       |      | Result         |      |
| Phenol                       | 10000    | 0.4 U       | 0.4  | 0.39 U       | 0.39 | 0.4 U          | 0.4  | 0.39 U       | 0.39 | 0.39 U         | 0.39 |
| bis(2-Chloroethyl) ether     | 0.66     | 0.4 U       | 0.4  | 0.39 U       | 0.39 | 0.4 U          | 0.4  | 0.39 U       | 0.39 | 0.39 U         | 0.39 |
| 2-Chlorophenol               | 280      | 0.4 U       | 0.4  | 0.39 U       | 0.39 | 0.4 U          | 0.4  | 0.39 U       | 0.39 | 0.39 U         | 0.39 |
| 1,3-Dichlorobenzene          | 5100     | 0.4 U       | 0.4  | 0.39 U       | 0.39 | 0.4 U          | 0.4  | 0.39 U       | 0.39 | 0.39 U         | 0.39 |
| 1,4-Dichlorobenzene          | 570      | 0.4 U       | 0.4  | 0.39 U       | 0.39 | 0.4 U          | 0.4  | 0.39 U       | 0.39 | 0.39 U         | 0.39 |
| 1,2-Dichlorobenzene          | 5100     | 0.4 U       | 0.4  | 0.39 U       | 0.39 | 0.4 U          | 0.4  | 0.39 U       | 0.39 | 0.39 U         | 0.39 |
| 2-Methylphenol               | 2800     | 0.4 U       | 0.4  | 0.39 U       | 0.39 | 0.4 U          | 0.4  | 0.39 U       | 0.39 | 0.39 U         | 0.39 |
| 2,2'-oxybis(1-Chloropropane) |          | 0.4 U       | 0.4  | 0.39 U       | 0.39 | 0.4 U          | 0.4  | 0.39 U       | 0.39 | 0.39 U         | 0.39 |
| 4-Methylphenol               | 2800     | 0.4 U       | 0.4  | 0.39 U       | 0.39 | 0.4 U          | 0.4  | 0.39 U       | 0.39 | 0.39 U         | 0.39 |
| N-Nitroso-di-n-propylamine   | 0.66     | 0.4 U       | 0.4  | 0.39 U       | 0.39 | 0.4 U          | 0.4  | 0.39 U       | 0.39 | 0.39 U         | 0.39 |
| Hexachloroethane             | 6        | 0.4 U       | 0.4  | 0.39 U       | 0.39 | 0.4 U          | 0.4  | 0.39 U       | 0.39 | 0.39 U         | 0.39 |
| Nitrobenzene                 | 28       | 0.4 U       | 0.4  | 0.39 U       | 0.39 | 0.4 U          | 0.4  | 0.39 U       | 0.39 | 0.39 U         | 0.39 |
| Isophorone                   | 1100     | 0.4 U       | 0.4  | 0.39 U       | 0.39 | 0.4 U          | 0.4  | 0.39 U       | 0.39 | 0.39 U         | 0.39 |
| 2-Nitrophenol                |          | 0.4 U       | 0.4  | 0.39 U       | 0.39 | 0.4 U          | 0.4  | 0.39 U       | 0.39 | 0.39 U         | 0.39 |
| 2,4-Dimethylphenol           | 1100     | 0.4 U       | 0.4  | 0.39 U       | 0.39 | 0.4 U          | 0.4  | 0.39 U       | 0.39 | 0.39 U         | 0.39 |
| bis(2-Chloroethoxy) methane  |          | 0.4 U       | 0.4  | 0.39 U       | 0.39 | 0.4 U          | 0.4  | 0.39 U       | 0.39 | 0.39 U         | 0.39 |
| 2,4-Dichlorophenol           | 170      | 0.4 U       | 0.4  | 0.39 U       | 0.39 | 0.4 U          | 0.4  | 0.39 U       | 0.39 | 0.39 U         | 0.39 |
| 1,2,4-Trichlorobenzene       | 68       | 0.4 U       | 0.4  | 0.39 U       | 0.39 | 0.4 U          | 0.4  | 0.39 U       | 0.39 | 0.39 U         | 0.39 |
| Naphthalene                  | 230      | 0.4 U       | 0.4  | 0.39 U       | 0.39 | 0.4 U          | 0.4  | 0.39 U       | 0.39 | 0.39 U         | 0.39 |
| 4-Chloroaniline              | 230      | 0.4 U       | 0.4  | 0.39 U       | 0.39 | 0.4 U          | 0.4  | 0.39 U       | 0.39 | 0.39 U         | 0.39 |
| Hexachlorobutadiene          | 1        | 0.4 U       | 0.4  | 0.39 U       | 0.39 | 0.4 U          | 0.4  | 0.39 U       | 0.39 | 0.39 U         | 0.39 |
| 4-Chloro-3-methylphenol      | 10000    | 0.4 U       | 0.4  | 0.39 U       | 0.39 | 0.4 U          | 0.4  | 0.39 U       | 0.39 | 0.39 U         | 0.39 |
| 2-Methylnaphthalene          |          | 0.4 U       | 0.4  | 0.39 U       | 0.39 | 0.4 U          | 0.4  | 0.39 U       | 0.39 | 0.39 U         | 0.39 |
| Hexachlorocyclopentadiene    | 400      | 0.4 U       | 0.4  | 0.39 U       | 0.39 | 0.4 U          | 0.4  | 0.39 U       | 0.39 | 0.39 U         | 0.39 |
| 2,4,6-Trichlorophenol        | 62       | 0.4 U       | 0.4  | 0.39 U       | 0.39 | 0.4 U          | 0.4  | 0.39 U       | 0.39 | 0.39 U         | 0.39 |
| 2,4,5-Trichlorophenol        | 5600     | 1 U         | 1    | 0.98 U       | 0.98 | 0.99 U         | 0.99 | 0.97 U       | 0.97 | 0.98 U         | 0.98 |
| 2-Chloronaphthalene          |          | 0.4 U       | 0.4  | 0.39 U       | 0.39 | 0.4 U          | 0.4  | 0.39 U       | 0.39 | 0.39 U         | 0.39 |
| 2-Nitroaniline               |          | 1 U         | 1    | 0.98 U       | 0.98 | 0.99 U         | 0.99 | 0.97 U       | 0.97 | 0.98 U         | 0.98 |
| Dimethylphthalate            | 10000    | 0.4 U       | 0.4  | 0.39 U       | 0.39 | 0.4 U          | 0.4  | 0.39 U       | 0.39 | 0.39 U         | 0.39 |
| Acenaphthylene               |          | 0.4 U       | 0.4  | 0.39 U       | 0.39 | 0.4 U          | 0.4  | 0.39 U       | 0.39 | 0.39 U         | 0.39 |
| 2,6-Dinitrotoluene           | 1        | 0.4 U       | 0.4  | 0.39 U       | 0.39 | 0.4 U          | 0.4  | 0.39 U       | 0.39 | 0.39 U         | 0.39 |
| 3-Nitroaniline               |          | 1 U         | 1    | 0.98 U       | 0.98 | 0.99 U         | 0.99 | 0.97 U       | 0.97 | 0.98 U         | 0.98 |
| Acenaphthene                 | 3400     | 0.4 U       | 0.4  | 0.39 U       | 0.39 | 0.4 U          | 0.4  | 0.39 U       | 0.39 | 0.39 U         | 0.39 |
| 2,4-Dinitrophenol            | 110      | 1 U         | 1    | 0.98 U       | 0.98 | 0.99 U         | 0.99 | 0.97 U       | 0.97 | 0.98 U         | 0.98 |
| 4-Nitrophenol                |          | 1 U         | 1    | 0.98 U       | 0.98 | 0.99 U         | 0.99 | 0.97 U       | 0.97 | 0.98 U         | 0.98 |

**CHARLES WOOD  
SOIL BORING SEMIVOLATILES**

| Geographical Location      |          | B9          |      | B10          |      | B10            |      | B10          |      | B10            |      |
|----------------------------|----------|-------------|------|--------------|------|----------------|------|--------------|------|----------------|------|
| Sample                     |          | B9-SB01-C02 |      | B10-SB01-A01 |      | B10-SB01-A01RE |      | B10-SB01-A02 |      | B10-SB01-A02RE |      |
| Sample Type                |          | Duplicate   |      |              |      |                |      |              |      |                |      |
| Batch#                     |          | 9501G831    |      | 9412G553     |      | 9412G553       |      | 9412G553     |      | 9412G553       |      |
| Prep#                      |          | 95GB0064    |      | 94GTS0035    |      | 94GTS0083      |      | 94GTS0035    |      | 94GTS0083      |      |
| RFW#                       |          | 003         |      | 001          |      | 001            |      | 002          |      | 002            |      |
| Sample Depth (bgs)         |          |             |      |              |      |                |      |              |      |                |      |
| Dilution Factor            |          | 1.00        |      | 1.00         |      | 1.00           |      | 1.00         |      | 1.00           |      |
| Matrix                     |          | soil        |      | soil         |      | soil           |      | soil         |      | soil           |      |
| Units                      | mg/kg    | mg/kg       |      | mg/kg        |      | mg/kg          |      | mg/kg        |      | mg/kg          |      |
| Sampling Date              |          | 1/23/95     |      | 1/10/95      |      | 1/10/95        |      | 1/10/95      |      | 1/10/95        |      |
| Analysis Date              |          | 2/22/95     |      | 2/9/95       |      | 2/9/95         |      | 2/9/95       |      | 2/9/95         |      |
| Analysis                   | Standard | Analytical  | CRQL | Analytical   | CRQL | Analytical     | CRQL | Analytical   | CRQL | Analytical     | CRQL |
|                            |          | Result      |      | Result       |      | Result         |      | Result       |      | Result         |      |
| Dibenzofuran               |          | 0.4 U       | 0.4  | 0.39 U       | 0.39 | 0.4 U          | 0.4  | 0.39 U       | 0.39 | 0.39 U         | 0.39 |
| 2,4-Dinitrotoluene         | 1        | 0.4 U       | 0.4  | 0.39 U       | 0.39 | 0.4 U          | 0.4  | 0.39 U       | 0.39 | 0.39 U         | 0.39 |
| Diethylphthalate           | 10000    | 0.4 U       | 0.4  | 0.39 U       | 0.39 | 0.4 U          | 0.4  | 0.39 U       | 0.39 | 0.39 U         | 0.39 |
| 4-Chlorophenyl-phenylether |          | 0.4 U       | 0.4  | 0.39 U       | 0.39 | 0.4 U          | 0.4  | 0.39 U       | 0.39 | 0.39 U         | 0.39 |
| Fluorene                   | 2300     | 0.4 U       | 0.4  | 0.39 U       | 0.39 | 0.4 U          | 0.4  | 0.39 U       | 0.39 | 0.39 U         | 0.39 |
| 4-Nitroaniline             |          | 1 U         | 1    | 0.98 U       | 0.98 | 0.99 U         | 0.99 | 0.97 U       | 0.97 | 0.98 U         | 0.98 |
| 4,6-Dinitro-2-methylphenol |          | 1 U         | 1    | 0.98 U       | 0.98 | 0.99 U         | 0.99 | 0.97 U       | 0.97 | 0.98 U         | 0.98 |
| N-Nitrosodiphenylamine (1) | 140      | 0.4 U       | 0.4  | 0.39 U       | 0.39 | 0.4 U          | 0.4  | 0.39 U       | 0.39 | 0.39 U         | 0.39 |
| 4-Bromophenyl-phenylether  |          | 0.4 U       | 0.4  | 0.39 U       | 0.39 | 0.4 U          | 0.4  | 0.39 U       | 0.39 | 0.39 U         | 0.39 |
| Hexachlorobenzene          | 0.66     | 0.4 U       | 0.4  | 0.39 U       | 0.39 | 0.4 U          | 0.4  | 0.39 U       | 0.39 | 0.39 U         | 0.39 |
| Pentachlorophenol          | 6        | 1 U         | 1    | 0.98 U       | 0.98 | 0.99 U         | 0.99 | 0.97 U       | 0.97 | 0.98 U         | 0.98 |
| Phenanthrene               |          | 0.4 U       | 0.4  | 0.39 U       | 0.39 | 0.4 U          | 0.4  | 0.39 U       | 0.39 | 0.39 U         | 0.39 |
| Anthracene                 | 10000    | 0.4 U       | 0.4  | 0.39 U       | 0.39 | 0.4 U          | 0.4  | 0.39 U       | 0.39 | 0.39 U         | 0.39 |
| Carbazole                  |          | 0.4 U       | 0.4  | 0.39 U       | 0.39 | 0.4 U          | 0.4  | 0.39 U       | 0.39 | 0.39 U         | 0.39 |
| Di-n-butylphthalate        | 5700     | 0.088       | 0.4  | 2 B          | 0.39 | 0 JB           | 0.4  | 1.6 B        | 0.39 | 0.2 JB         | 0.39 |
| Fluoranthene               | 2300     | 0.4 U       | 0.4  | 0.39 U       | 0.39 | 0 U            | 0.4  | 0.39 U       | 0.39 | 0.39 U         | 0.39 |
| Pyrene                     | 1700     | 0.4 U       | 0.4  | 0.39 U       | 0.39 | 0 U            | 0.4  | 0.39 U       | 0.39 | 0.39 U         | 0.39 |
| Butylbenzylphthalate       | 1100     | 0.4 U       | 0.4  | 0.39 U       | 0.39 | 0 U            | 0.4  | 0.39 U       | 0.39 | 0.39 U         | 0.39 |
| 3,3'-Dichlorobenzidine     | 2        | 0.4 U       | 0.4  | 0.39 U       | 0.39 | 0 U            | 0.4  | 0.39 U       | 0.39 | 0.39 U         | 0.39 |
| Benzo(a)anthracene         | 0.9      | 0.4 U       | 0.4  | 0.39 U       | 0.39 | 0 U            | 0.4  | 0.39 U       | 0.39 | 0.39 U         | 0.39 |
| Chrysene                   | 9        | 0.4 U       | 0.4  | 0.39 U       | 0.39 | 0 U            | 0.4  | 0.39 U       | 0.39 | 0.39 U         | 0.39 |
| bis(2-Ethylhexy)phthalate  | 49       | 0.043 J     | 0.4  | 0.057 J      | 0.39 | 0 U            | 0.4  | 0.39 U       | 0.39 | 0.17 J         | 0.39 |
| Di-n-octyl phthalate       | 1100     | 0.4 U       | 0.4  | 0.39 U       | 0.39 | 0 U            | 0.4  | 0.39 U       | 0.39 | 0.39 U         | 0.39 |
| Benzo(b)fluoranthene       | 0.9      | 0.4 U       | 0.4  | 0.39 U       | 0.39 | 0 U            | 0.4  | 0.39 U       | 0.39 | 0.39 U         | 0.39 |
| Benzo(k)fluoranthene       | 0.9      | 0.4 U       | 0.4  | 0.39 U       | 0.39 | 0 U            | 0.4  | 0.39 U       | 0.39 | 0.39 U         | 0.39 |
| Benzo(a)pyrene             | 0.66     | 0.4 U       | 0.4  | 0.39 U       | 0.39 | 0 U            | 0.4  | 0.39 U       | 0.39 | 0.39 U         | 0.39 |
| Indeno(1,2,3-cd)pyrene     | 0.9      | 0.4 U       | 0.4  | 0.39 U       | 0.39 | 0 U            | 0.4  | 0.39 U       | 0.39 | 0.39 U         | 0.39 |
| Dibenzo(a,h)anthracene     | 0.66     | 0.4 U       | 0.4  | 0.39 U       | 0.39 | 0 U            | 0.4  | 0.39 U       | 0.39 | 0.39 U         | 0.39 |
| Benzo(g,h,i)perylene       |          | 0.4 U       | 0.4  | 0.39 U       | 0.39 | 0 U            | 0.4  | 0.39 U       | 0.39 | 0.39 U         | 0.39 |
| Petroleum hydrocarbons     |          |             |      |              |      |                |      |              |      |                |      |
| Total Est. Conc. of TIC    |          | 8.97        |      | 4.57         |      | 13.06          |      | 4.74         |      | 9.4            |      |
| Method: TCL Semivolatiles  |          |             |      |              |      |                |      |              |      |                |      |

**CHARLES WOOD  
SOIL BORING INORGANICS**

| Geographical Location |          | AOC7          |           | AOC7          |           | AOC7          |           | AOC7                |           | AOC7          |           | AOC7          |           |
|-----------------------|----------|---------------|-----------|---------------|-----------|---------------|-----------|---------------------|-----------|---------------|-----------|---------------|-----------|
| Sample                |          | CWA7-SB01-A02 |           | CWA7-SB02-A02 |           | CWA7-SB03-A02 |           | CWA7-SB04-A02       |           | CWA7-SB05-A02 |           | CWA7-SB06-A03 |           |
| Sample Type           |          |               |           |               |           |               |           |                     |           |               |           |               |           |
| Batch#                |          | 9412G264      |           | 9412G264      |           | 9412G264      |           | 9412G264            |           | 9412G264      |           | 9412G264      |           |
| Prep#                 |          | 94GI211       |           | 94GI211       |           | 94GI211       |           | 94GI211             |           | 94GI211       |           | 94GI211       |           |
| RFW#                  |          | 001           |           | 003           |           | 002           |           | 006                 |           | 004           |           | 005           |           |
| Sample Depth (bgs)    |          | 7-9'          |           |               |           |               |           |                     |           |               |           |               |           |
| Dilution Factor       |          | 1.00          |           | 1.00          |           | 1.00          |           | 1.00                |           | 1.00          |           | 1.00          |           |
| Matrix                |          | soil          |           | soil          |           | soil          |           | soil                |           | soil          |           | soil          |           |
| Units                 | mg/kg    | mg/kg         |           | mg/kg         |           | mg/kg         |           | mg/kg               |           | mg/kg         |           | mg/kg         |           |
| Sampling Date         |          | 12/21/94      |           | 12/21/94      |           | 12/21/94      |           | 12/21/94            |           | 12/21/94      |           | 12/21/94      |           |
| Analysis Date         |          | 1/4/95        |           | 1/4/95        |           | 1/4/95        |           | 1/4/95              |           | 1/4/95        |           | 1/4/95        |           |
| Analysis              | Standard | Analytical    | Reporting | Analytical    | Reporting | Analytical    | Reporting | Analytical          | Reporting | Analytical    | Reporting | Analytical    | Reporting |
|                       |          | Result        | Limit     | Result        | Limit     | Result        | Limit     | Result              | Limit     | Result        | Limit     | Result        | Limit     |
| % Solids              |          | 90.0          | 0.10      | 90.6          | 0.10      | 90.8          | 0.10      | 89.8                | 0.10      | 90.5          | 0.10      | 89.8          | 0.10      |
| Silver                | 110      | 0.49 U        | 0.49      | 0.50 U        | 0.50      | 0.46 U        | 0.46      | 0.51 U              | 0.51      | 0.47 U        | 0.47      | 0.48 U        | 0.48      |
| Aluminum              |          | 3650          | 2.1       | 4340          | 2.1       | 3820          | 1.9       | 5170                | 2.2       | 3490          | 2.0       | 3610          | 2.0       |
| Arsenic               | 20       | 8.6           | 1.5 *     | 1.7           | 0.29      | 8.4           | 0.34      | 12.7                | 1.0 *     | 2.8           | 0.28      | 5.9           | 0.32      |
| Barium                | 700      | 2.5           | 0.16      | 4.5           | 0.17      | 4.5           | 0.15      | 6.2                 | 0.17      | 3.6           | 0.16      | 2.4           | 0.16      |
| Beryllium             | 1        | 0.31          | 0.082     | 0.29          | 0.084     | 0.28          | 0.076     | 0.45                | 0.086     | 0.30          | 0.079     | 0.26          | 0.080     |
| Calcium               |          | 69            | 1.8       | 91.9          | 1.8       | 134           | 1.7       | 275                 | 1.9       | 63.9          | 1.7       | 43.7          | 1.7       |
| Cadmium               | 1        | 0.70 U        | 0.7       | 0.71 U        | 0.71      | 0.65 U        | 0.65      | 0.73 U              | 0.73      | 0.67 U        | 0.67      | 0.68 U        | 0.68      |
| Cobalt                |          | 0.58 U        | 0.58      | 0.94          | 0.59      | 0.68          | 0.53      | 0.60 U              | 0.6       | 0.55 U        | 0.55      | 0.56 U        | 0.56      |
| Chromium              |          | 61.1          | 1.3       | 61.6          | 1.3       | 73.6          | 1.2       | 83.4                | 1.4       | 64.7          | 1.3       | 61.1          | 1.3       |
| Copper                | 600      | 1.6           | 0.49      | 1.6           | 0.5       | 1.8           | 0.46      | 2.2                 | 0.51      | 1.4           | 0.47      | 1.3           | 0.48      |
| Iron                  |          | 10800         | 0.47      | 12400         | 0.48      | 11100         | 0.44      | 15900               | 0.49      | 11400         | 0.45      | 11000         | 0.46      |
| Mercury               | 14       | 0.10 U        | 0.10      | 0.085 U       | 0.085     | 0.09 U        | 0.09      | 0.10 U              | 0.10      | 0.10 U        | 0.10      | 0.09 U        | 0.09      |
| Potassium             |          | 2060          | 21.1      | 2360          | 21.5      | 1740          | 19.4      | 2570                | 21.9      | 2200          | 20.2      | 2280          | 20.5      |
| Magnesium             |          | 694           | 7.9       | 852           | 8         | 602           | 7.3       | 919                 | 8.2       | 720           | 7.5       | 766           | 7.7       |
| Manganese             |          | 3.6           | 0.12      | 8.2           | 0.13      | 12.7          | 0.11      | 11.3                | 0.13      | 2.8           | 0.12      | 1.8           | 0.12      |
| Sodium                |          | 18.8          | 2.7       | 12.0          | 2.8       | 11.7          | 2.5       | 13.8                | 2.8       | 14.7          | 2.6       | 11.5          | 2.6       |
| Nickel                | 250      | 1.8           | 0.66      | 2.6           | 0.67      | 1.9           | 0.61      | 2.1                 | 0.69      | 1.6           | 0.63      | 1.3           | 0.64      |
| Lead                  | 400      | 6.3           | 0.27      | 6.9           | 0.26      | 4.5           | 0.3       | 8.5                 | 1.5 **    | 6.3           | 1.2 *     | 4.9           | 0.28      |
| Antimony              | 14       | 2.3 U         | 2.3       | 2.4 U         | 2.4       | 2.2 U         | 2.2       | 2.4 U               | 2.4       | 2.2 U         | 2.2       | 2.3 U         | 2.3       |
| Selenium              | 63       | 0.26          | 0.17      | 0.18          | 0.17      | 0.19 U        | 0.19      | 0.3                 | 0.19      | 0.26          | 0.16      | 0.18 U        | 0.18      |
| Thallium              | 2        | 0.21 U        | 0.21      | 0.20 U        | 0.2       | 0.23 U        | 0.23      | 0.23 U              | 0.23      | 0.19 U        | 0.19      | 0.22 U        | 0.22      |
| Vanadium              | 370      | 93.5          | 0.43      | 79.8          | 0.44      | 78.4          | 0.4       | 95.1                | 0.45      | 92.8          | 0.41      | 81.7          | 0.42      |
| Zinc                  | 1500     | 8.9           | 0.43      | 12.0          | 0.44      | 10.5          | 0.4       | 15.8                | 0.45      | 9.0           | 0.41      | 9.1           | 0.42      |
| Cyanide               | 1100     |               |           |               |           |               |           |                     |           |               |           |               |           |
| Dilution Factor       |          | * = 5.00      |           |               |           |               |           | * = 3.00, ** = 5.00 |           | * = 5.00      |           |               |           |
| Method: TAL Metals    |          |               |           |               |           |               |           |                     |           |               |           |               |           |

**CHARLES WOOD  
SOIL BORING INORGANICS**

| Geographical Location |          | CW1           |           | CW1           |           | CW1           |           | CW1           |           | CW2           |           | CW2           |           |
|-----------------------|----------|---------------|-----------|---------------|-----------|---------------|-----------|---------------|-----------|---------------|-----------|---------------|-----------|
| Sample                |          | CW01-SB26-A02 |           | CW01-SB27-A02 |           | CW01-SB28-A02 |           | CW01-SB29-A02 |           | CW02-SB30-A02 |           | CW02-SB31-A02 |           |
| Sample Type           |          |               |           |               |           |               |           |               |           |               |           |               |           |
| Batch#                |          | 9412G216      |           | 9412G216      |           | 9412G216      |           | 9412G216      |           | 9412G182      |           | 9412G182      |           |
| Prep#                 |          | 94GTS484      |           | 94GTS484      |           | 94GTS484      |           | 94GTS484      |           | 94GTS484      |           | 94GTS484      |           |
| RFW#                  |          | 004           |           | 002           |           | 003           |           | 001           |           | 002           |           | 003           |           |
| Sample Depth (bgs)    |          |               |           |               |           |               |           |               |           |               |           |               |           |
| Dilution Factor       |          | 1.00          |           | 1.00          |           | 1.00          |           | 1.00          |           | 1.00          |           | 1.00          |           |
| Matrix                |          | soil          |           | soil          |           | soil          |           | soil          |           | soil          |           | soil          |           |
| Units                 | mg/kg    | mg/kg         |           | mg/kg         |           | mg/kg         |           | mg/kg         |           | mg/kg         |           | mg/kg         |           |
| Sampling Date         |          | 12/19/94      |           | 12/19/94      |           | 12/19/94      |           | 12/19/94      |           | 12/16/94      |           | 12/16/94      |           |
| Analysis Date         |          | 12/22/94      |           | 12/22/94      |           | 12/22/94      |           | 12/22/94      |           | 12/22/94      |           | 12/22/94      |           |
| Analysis              | Standard | Analytical    | Reporting | Analytical    | Reporting | Analytical    | Reporting | Analytical    | Reporting | Analytical    | Reporting | Analytical    | Reporting |
|                       |          | Result        | Limit     | Result        | Limit     | Result        | Limit     | Result        | Limit     | Result        | Limit     | Result        | Limit     |
| % Solids              |          | 77.9          | 0.10      | 75.5          | 0.10      | 81.2          | 0.1       | 76.7          | 0.10      | 83.1          | 0.1       | 74.2          | 0.10      |
| Silver                | 110      | 0.46 U        | 0.46      | 0.53 U        | 0.53      | 0.47 U        | 0.47      | 0.50 U        | 0.50      | 0.54 U        | 0.54      | 0.60 U        | 0.6       |
| Aluminum              |          | 4070          | 1.9       | 5120          | 2.3       | 4850          | 2.0       | 4010          | 2.1       | 6450          | 2.3       | 5430          | 2.6       |
| Arsenic               | 20       | 4.1           | 0.30      | 4.5           | 0.35      | 5.6           | 0.31      | 2.2           | 0.36      | 5.7           | 0.31      | 8.5           | 0.76 *    |
| Barium                | 700      | 3.4           | 0.15      | 4.4           | 0.18      | 4.2           | 0.16      | 2.7           | 0.17      | 36.2          | 0.18      | 58.6          | 0.20      |
| Beryllium             | 1        | 0.41          | 0.076     | 0.45          | 0.088     | 0.84          | 0.079     | 0.33          | 0.084     | 0.58          | 0.090     | 0.51          | 0.10      |
| Calcium               |          | 236           | 1.7       | 283           | 1.9       | 229           | 1.7       | 669           | 1.8       | 655           | 2.0       | 976           | 2.2       |
| Cadmium               | 1        | 0.65 U        | 0.65      | 0.75 U        | 0.75      | 0.67 U        | 0.67      | 0.71 U        | 0.71      | 0.76 U        | 0.76      | 0.86 U        | 0.86      |
| Cobalt                |          | 0.53 U        | 0.53      | 0.73          | 0.62      | 0.86          | 0.55      | 0.59 U        | 0.59      | 0.95          | 0.63      | 4.20          | 0.71      |
| Chromium              |          | 52.2          | 1.2       | 71.7          | 1.4       | 59.7          | 1.3       | 46.4          | 1.3       | 69.9          | 1.4       | 48.6          | 1.6       |
| Copper                | 600      | 1.8           | 0.46      | 2             | 0.53      | 1.1           | 0.47      | 1.2           | 0.50      | 2.7           | 0.54      | 2.9           | 0.60      |
| Iron                  |          | 10800         | 0.44      | 14500         | 0.51      | 12900         | 0.45      | 9440          | 0.48      | 20400         | 0.52      | 19200         | 0.58      |
| Mercury               | 14       | 0.10 U        | 0.10      | 0.11 U        | 0.11      | 0.21          | 0.091     | 0.10 U        | 0.10      | 0.10 U        | 0.10      | 0.11 U        | 0.11      |
| Potassium             |          | 2700          | 19.5      | 3540          | 22.6      | 3660          | 20.2      | 2700          | 21.5      | 4210          | 23.0      | 2610          | 25.8      |
| Magnesium             |          | 960           | 7.3       | 1310          | 8.4       | 1310          | 7.5       | 943           | 8.0       | 1720          | 8.6       | 1270          | 9.6       |
| Manganese             |          | 7.2           | 0.11      | 10.6          | 0.13      | 8.0           | 0.12      | 5.4           | 0.13      | 25.1          | 0.13      | 24.8          | 0.15      |
| Sodium                |          | 33.4          | 2.5       | 29.7          | 2.9       | 20.4          | 2.6       | 15.5          | 2.8       | 34.8          | 2.9       | 45.8          | 3.3       |
| Nickel                | 250      | 1.5           | 0.61      | 3.1           | 0.71      | 2.7           | 0.63      | 1.4           | 0.67      | 4.9           | 0.72      | 11.2          | 0.81      |
| Lead                  | 400      | 3.9           | 0.26      | 5.9           | 0.30      | 3.9           | 0.27      | 3.2           | 0.31      | 8.1           | 0.54 *    | 7.5           | 0.33      |
| Antimony              | 14       | 2.2 U         | 2.2       | 2.5 U         | 2.5       | 2.2 U         | 2.2       | 2.4 U         | 2.4       | 2.6 U         | 2.6       | 2.9 U         | 2.9       |
| Selenium              | 63       | 0.19          | 0.17      | 0.20 U        | 0.20      | 0.17 U        | 0.17      | 0.20 U        | 0.20      | 0.29          | 0.17      | 0.70          | 0.21      |
| Thallium              | 2        | 0.20 U        | 0.20      | 0.24 U        | 0.24      | 0.21 U        | 0.21      | 0.25 U        | 0.25      | 0.21 U        | 0.21      | 0.26 U        | 0.26      |
| Vanadium              | 370      | 28.8          | 0.40      | 42.4          | 0.46      | 31.8          | 0.41      | 26.7          | 0.44      | 36.6          | 0.47      | 29.1          | 0.53      |
| Zinc                  | 1500     | 12.8          | 0.40      | 16.2          | 0.46      | 15.2          | 0.41      | 11.7          | 0.44      | 27.8          | 0.47      | 44.2          | 0.53      |
| Cyanide               | 1100     |               |           |               |           |               |           |               |           |               |           |               |           |
| Dilution Factor       |          |               |           |               |           |               |           |               |           | * = 2.00      |           | * = 2.00      |           |
| Method: TAL Metals    |          |               |           |               |           |               |           |               |           |               |           |               |           |

**CHARLES WOOD  
SOIL BORING INORGANICS**

| Geographical Location |          | CW2           |           | CW2           |           | CW2           |           | CW4           |           | CW5           |           | CW5           |           |
|-----------------------|----------|---------------|-----------|---------------|-----------|---------------|-----------|---------------|-----------|---------------|-----------|---------------|-----------|
| Sample                |          | CW02-SB32-A02 |           | CW02-SB33-A02 |           | CW02-SB33-A02 |           | CW04-SB01-A02 |           | CW05-SB01-A02 |           | CW05-SB02-A02 |           |
| Sample Type           |          |               |           |               |           |               |           |               |           |               |           |               |           |
| Batch#                |          | 9412G182      |           | 9412G154      |           | 9412G154      |           | 9412G264      |           | 9412G245      |           | 9412G245      |           |
| Prep#                 |          | 94GTS484      |           | 95GTS001      |           | 95GTS001      |           | 94GI211       |           |               |           |               |           |
| RFW#                  |          | 001           |           | 001           |           | 002           |           | 008           |           | 001           |           | 002           |           |
| Sample Depth (bgs)    |          |               |           | 2-4'          |           | 7-9'          |           |               |           |               |           |               |           |
| Dilution Factor       |          | 1.00          |           | 1.00          |           | 1.00          |           | 1.00          |           | 1.00          |           | 1.00          |           |
| Matrix                |          | soil          |           | soil          |           | soil          |           | soil          |           | soil          |           | soil          |           |
| Units                 | mg/kg    | mg/kg         |           | mg/kg         |           | mg/kg         |           | mg/kg         |           | mg/kg         |           | mg/kg         |           |
| Sampling Date         |          | 12/16/94      |           | 12/15/94      |           | 12/15/94      |           | 12/21/94      |           |               |           |               |           |
| Analysis Date         |          | 12/22/94      |           | 1/3/95        |           | 1/3/95        |           | 1/4/95        |           |               |           |               |           |
| Analysis              | Standard | Analytical    | Reporting | Analytical    | Reporting | Analytical    | Reporting | Analytical    | Reporting | Analytical    | Reporting | Analytical    | Reporting |
|                       |          | Result        | Limit     | Result        | Limit     | Result        | Limit     | Result        | Limit     | Result        | Limit     | Result        | Limit     |
| % Solids              |          | 80.7          | 0.1       | 84.4          | 0.10      | 80.0          | 0.10      | 83.2          | 0.10      | 86.1          | 0.10      | 83.9          | 0.10      |
| Silver                | 110      | 0.52 U        | 0.52      |               |           | 0.5 U         | 0.5       | 0.52 U        | 0.52      | 7.4           | 0.47      | 0.40 U        | 0.40      |
| Aluminum              |          | 2920          | 2.2       |               |           | 7310          | 2.1       | 5030          | 2.2       | 3920          | 2.0       | 3400          | 1.7       |
| Arsenic               | 20       | 2.6           | 0.34      |               |           | 15.7          | 1.9 *     | 1.5           | 0.31      | 3.8           | 0.34      | 1.5           | 0.29      |
| Barium                | 700      | 23.6          | 0.17      |               |           | 326           | 0.17      | 2.7           | 0.17      | 36.2          | 0.16      | 21.0          | 0.13      |
| Beryllium             | 1        | 0.28          | 0.087     |               |           | 1.5           | 0.083     | 0.47          | 0.087     | 0.14          | 0.079     | 0.32          | < 0.067   |
| Calcium               |          | 502           | 1.9       |               |           | 1270          | 1.8       | 302           | 1.9       | 1000          | 1.7       | 851           | 1.5       |
| Cadmium               | 1        | 0.74 U        | 0.74      |               |           | 0.9           | 0.71      | 0.74 U        | 0.74      | 0.67 U        | 0.67      | 0.57 U        | 0.57      |
| Cobalt                |          | 0.91          | 0.61      |               |           | 5.9           | 0.58      | 0.61 U        | 0.61      | 1.0           | 0.55      | 0.47 U        | 0.47      |
| Chromium              |          | 32.2          | 1.4       |               |           | 56.5          | 1.3       | 63.5          | 1.4       | 42.2          | 1.3       | 38.3          | 1.1       |
| Copper                | 600      | 2.7           | 0.52      |               |           | 5.5           | 0.5       | 379           | 0.52      | 21.5          | 0.47      | 2.0           | 0.40      |
| Iron                  |          | 11100         | 0.50      |               |           | 17600         | 0.48      | 11500         | 0.50      | 8950          | 0.45      | 5930          | 0.39      |
| Mercury               | 14       | 0.083 U       | 0.083     |               |           | 0.12 U        | 0.12      | 0.09 U        | 0.09      | 0.63          | 0.12      | 0.09 U        | 0.09      |
| Potassium             |          | 1980          | 22.2      |               |           | 3350          | 21.3      | 3490          | 22.2      | 944           | 20.1      | 1880          | 17.2      |
| Magnesium             |          | 776           | 8.3       |               |           | 1880          | 8         | 1320          | 8.3       | 527           | 7.5       | 717           | 6.4       |
| Manganese             |          | 12.5          | 0.13      |               |           | 35.1          | 0.12      | 8.8           | 0.13      | 19.7          | 0.12      | 7.2           | 0.10      |
| Sodium                |          | 40.8          | 2.8       |               |           | 42.7          | 2.7       | 15.3          | 2.8       | 28.9          | 2.6       | 13.5          | 2.2       |
| Nickel                | 250      | 2.6           | 0.70      |               |           | 23.2          | 0.67      | 1.5           | 0.69      | 2.7           | 0.63      | 1.6           | 0.54      |
| Lead                  | 400      | 3.1           | 0.29      |               |           | 5.6           | 1.7 *     | 1440          | 5.8       | 20.7          | 3.0 *     | 3.3           | 0.25      |
| Antimony              | 14       | 2.5 U         | 2.5       |               |           | 2.4 U         | 2.4       | 2.5           | 2.5       | 2.2 U         | 2.2       | 1.9 U         | 1.9       |
| Selenium              | 63       | 0.20          | 0.19      |               |           | 4.2           | 0.44 *    | 0.17 U        | 0.17      | 0.40          | 0.19      | 0.35          | 0.16      |
| Thallium              | 2        | 0.23 U        | 0.23      |               |           | 0.27 U        | 0.27      | 0.21 U        | 0.21      | 0.24 U        | 0.24      | 0.33          | 0.20      |
| Vanadium              | 370      | 19.4          | 0.46      |               |           | 23.6          | 0.44      | 20.6          | 0.45      | 20.7          | 0.41      | 21.4          | 0.35      |
| Zinc                  | 1500     | 19.3          | 0.46      |               |           | 63.9          | 0.44      | 46.2          | 0.45      | 40.4          | 0.41      | 11.4          | 0.35      |
| Cyanide               | 1100     |               |           |               |           |               |           |               |           | 0.43 U        | 0.43      | 0.33 U        | 0.33      |
| Dilution Factor       |          | * = 10.0      |           |               |           | * = 5.00      |           |               |           | * = 10.0      |           |               |           |
| Method: TAL Metals    |          |               |           |               |           |               |           |               |           |               |           |               |           |

**CHARLES WOOD  
SOIL BORING INORGANICS**

| Geographical Location |          | CW6           |           | CW6           |           | CW6           |           | CW9           |           | B6          |           |
|-----------------------|----------|---------------|-----------|---------------|-----------|---------------|-----------|---------------|-----------|-------------|-----------|
| Sample                |          | CW06-SB34-A01 |           | CW06-SB34-A02 |           | CW06-SB34-A02 |           | CW09-SB01-A02 |           | B6-SB01-A01 |           |
| Sample Type           |          |               |           |               |           |               |           |               |           |             |           |
| Batch#                |          | 9501G423      |           | 9501G423      |           | 9505G840      |           | 9501G450      |           | 9501G553    |           |
| Prep#                 |          | 95GTS006      |           | 95GTS006      |           | 95GTS285      |           | 95GTS006      |           | 95GTS013    |           |
| RFW#                  |          | 001           |           | 002           |           | 001           |           | 003           |           | 008         |           |
| Sample Depth (bgs)    |          |               |           |               |           |               |           |               |           |             |           |
| Dilution Factor       |          | 1.00          |           | 1.00          |           | 1.00          |           | 1.00          |           | 1.00        |           |
| Matrix                |          | soil          |           | soil          |           | soil          |           | soil          |           | soil        |           |
| Units                 | mg/kg    | mg/kg         |           | mg/kg         |           | mg/kg         |           | mg/kg         |           | mg/kg       |           |
| Sampling Date         |          | 1/3/95        |           | 1/3/95        |           | 5/10/95       |           | 1/4/95        |           | 1/10/95     |           |
| Analysis Date         |          | 1/9/95        |           | 1/9/95        |           | 5/16/95       |           | 1/9/95        |           | 1/13/95     |           |
| Analysis              | Standard | Analytical    | Reporting | Analytical    | Reporting | Analytical    | Reporting | Analytical    | Reporting | Analytical  | Reporting |
|                       |          | Result        | Limit     | Result        | Limit     | Result        | Limit     | Result        | Limit     | Result      | Limit     |
| % Solids              |          | 83.8          | 0.10      | 86.6          | 0.10      | 70.9          | 0.10      | 86.9          | 0.10      | 88.0        | 0.1       |
| Silver                | 110      |               |           |               |           |               |           | 0.93          | 0.50      | 0.45 U      | 0.45      |
| Aluminum              |          |               |           |               |           |               |           | 3830          | 2.1       | 4220        | 3.1       |
| Arsenic               | 20       |               |           |               |           |               |           | 2.6           | 0.33      | 4.6         | 0.35      |
| Barium                | 700      |               |           |               |           |               |           | 6.6           | 0.17      | 6.3         | 0.15      |
| Beryllium             | 1        |               |           |               |           |               |           | 0.39          | 0.084     | 0.055 U     | 0.055     |
| Calcium               |          |               |           |               |           |               |           | 366           | 1.8       | 303         | 1.5       |
| Cadmium               | 1        |               |           |               |           |               |           | 0.71 U        | 0.71      | 0.53 U      | 0.53      |
| Cobalt                |          |               |           |               |           |               |           | 1.0           | 0.59      | 0.59        | 0.42      |
| Chromium              |          |               |           |               |           |               |           | 44.0          | 1.3       | 51.8        | 0.85      |
| Copper                | 600      |               |           |               |           |               |           | 2.3           | 0.50      | 1.4         | 0.73      |
| Iron                  |          |               |           |               |           |               |           | 9720          | 0.48      | 11000       | 0.45      |
| Mercury               | 14       |               |           |               |           |               |           | 0.12          | 0.11      | 0.095 U     | 0.095     |
| Potassium             |          |               |           |               |           |               |           | 1480          | 21.4      | 2570        | 12.3      |
| Magnesium             |          |               |           |               |           |               |           | 698           | 8.0       | 1040        | 6.2       |
| Manganese             |          |               |           |               |           |               |           | 11.9          | 0.13      | 5.6         | 0.16      |
| Sodium                |          |               |           |               |           |               |           | 21.4          | 2.7       | 24.2        | 3.5       |
| Nickel                | 250      |               |           |               |           |               |           | 2.8           | 0.67      | 1.9         | 0.76      |
| Lead                  | 400      |               |           |               |           |               |           | 3.9           | 0.29      | 1.9         | 0.18      |
| Antimony              | 14       |               |           |               |           |               |           | 2.4 U         | 2.4       | 2.0 U       | 2.0       |
| Selenium              | 63       |               |           |               |           |               |           | 0.19 U        | 0.19      | 0.4         | 0.27      |
| Thallium              | 2        |               |           |               |           |               |           | 0.36 U        | 0.36      | 0.13 U      | 0.13      |
| Vanadium              | 370      |               |           |               |           |               |           | 27.4          | 0.44      | 25.6        | 0.38      |
| Zinc                  | 1500     |               |           |               |           |               |           | 12.8          | 0.44      | 18.4        | 0.35      |
| Cyanide               | 1100     |               |           |               |           |               |           |               |           | 0.42 U      | 0.42      |
| Dilution Factor       |          |               |           |               |           |               |           |               |           |             |           |
| Method: TAL Metals    |          |               |           |               |           |               |           |               |           |             |           |



**CHARLES WOOD  
SOIL BORING INORGANICS**

| Geographical Location |          | B6          |           | B7                  |           | B7          |           | B8          |           | B8          |           | B9                  |           |
|-----------------------|----------|-------------|-----------|---------------------|-----------|-------------|-----------|-------------|-----------|-------------|-----------|---------------------|-----------|
| Sample                |          | B6-SB01-A02 |           | B7-SB01-A01         |           | B7-SB01-A02 |           | B8-SB01-A01 |           | B8-SB01-A02 |           | B9-SB01-A01         |           |
| Sample Type           |          |             |           |                     |           |             |           |             |           |             |           |                     |           |
| Batch#                |          | 9501G553    |           | 9501G553            |           | 9501G553    |           | 9501G553    |           | 9501G553    |           | 9501G831            |           |
| Prep#                 |          | 95GTS013    |           | 95GTS013            |           | 95GTS013    |           | 95GTS013    |           | 95GTS013    |           |                     |           |
| RFW#                  |          | 009         |           | 006                 |           | 007         |           | 004         |           | 005         |           | 001                 |           |
| Sample Depth (bgs)    |          |             |           |                     |           |             |           |             |           |             |           |                     |           |
| Dilution Factor       |          | 1.00        |           | 1.00                |           | 1.00        |           | 1.00        |           | 1.00        |           | 1.00                |           |
| Matrix                |          | soil        |           | soil                |           | soil        |           | soil        |           | soil        |           | soil                |           |
| Units                 | mg/kg    | mg/kg       |           | mg/kg               |           | mg/kg       |           | mg/kg       |           | mg/kg       |           | mg/kg               |           |
| Sampling Date         |          | 1/10/95     |           | 1/10/95             |           | 1/10/95     |           | 1/10/95     |           | 1/10/95     |           |                     |           |
| Analysis Date         |          | 1/13/95     |           | 1/13/95             |           | 1/13/95     |           | 1/13/95     |           | 1/13/95     |           |                     |           |
| Analysis              | Standard | Analytical  | Reporting | Analytical          | Reporting | Analytical  | Reporting | Analytical  | Reporting | Analytical  | Reporting | Analytical          | Reporting |
|                       |          | Result      | Limit     | Result              | Limit     | Result      | Limit     | Result      | Limit     | Result      | Limit     | Result              | Limit     |
| % Solids              |          | 84.6        | 0.1       | 85.5                | 0.1       | 83.4        | 0.10      | 91.2        | 0.1       | 84.8        | 0.10      | 84.7                | 0.10      |
| Silver                | 110      | 0.49 U      | 0.49      | 0.49 U              | 0.49      | 0.48 U      | 0.48      | 0.44 U      | 0.44      | 0.48 U      | 0.48      | 0.58 U              | 0.58      |
| Aluminum              |          | 6800        | 3.3       | 15700               | 3.3       | 2220        | 3.2       | 4510        | 3.0       | 5800        | 3.2       | 7800                | 3.9       |
| Arsenic               | 20       | 4.3         | 0.38      | 10.3                | 0.72 *    | 1.3         | 0.38      | 3.5         | 0.35      | 7.5         | 0.73 *    | 19.5                | 2.0 **    |
| Barium                | 700      | 5.0         | 0.16      | 25.9                | 0.16      | 2.3         | 0.15      | 3.3         | 0.14      | 8.8         | 0.15      | 40.1                | 0.19      |
| Beryllium             | 1        | 0.72        | 0.059     | 1.1                 | 0.059     | 0.06 U      | 0.06      | 0.053 U     | 0.053     | 0.76        | 0.058     | 0.85                | 0.070     |
| Calcium               |          | 235         | 1.7       | 653                 | 1.7       | 76.2        | 1.6       | 44.8        | 1.5       | 76          | 1.6       | 746                 | 2.0       |
| Cadmium               | 1        | 0.57 U      | 0.57      | 0.57 U              | 0.57      | 0.56 U      | 0.56      | 0.51 U      | 0.51      | 0.56 U      | 0.56      | 0.58 U              | 0.68      |
| Cobalt                |          | 1.1         | 0.45      | 4.5                 | 0.45      | 0.54        | 0.44      | 0.65        | 0.41      | 1.1         | 0.44      | 3.0                 | 0.54      |
| Chromium              |          | 77.5        | 0.93      | 66.1                | 0.92      | 33.6        | 0.90      | 48.0        | 0.83      | 64.7        | 0.91      | 76.5                | 1.1       |
| Copper                | 600      | 1.8         | 0.79      | 6.6                 | 0.79      | 0.77 U      | 0.77      | 1.2         | 0.71      | 1.7         | 0.77      | 5.1                 | 0.94      |
| Iron                  |          | 16700       | 0.49      | 32000               | 0.49      | 6100        | 0.48      | 11800       | 0.44      | 16000       | 0.48      | 28300               | 0.58      |
| Mercury               | 14       | 0.11 U      | 0.11      | 0.1 U               | 0.1       | 0.09 U      | 0.09      | 0.081 U     | 0.081     | 0.12 U      | 0.12      | 0.14                | 0.10      |
| Potassium             |          | 3900        | 13.4      | 2780                | 13.3      | 1710        | 13.0      | 2410        | 12.0      | 3740        | 13.1      | 4080                | 15.9      |
| Magnesium             |          | 1710        | 6.8       | 2390                | 6.7       | 622         | 6.6       | 932         | 6.1       | 1450        | 6.6       | 1890                | 8.0       |
| Manganese             |          | 9.4         | 0.18      | 122                 | 0.18      | 2.8         | 0.17      | 3.4         | 0.16      | 6.8         | 0.17      | 48.7                | 0.21      |
| Sodium                |          | 56.8        | 3.8       | 37.7                | 3.8       | 39.9        | 3.7       | 22.4        | 3.4       | 18.7        | 3.7       | 29.8                | 4.5       |
| Nickel                | 250      | 3.1         | 0.83      | 8.3                 | 0.83      | 1.4         | 0.81      | 2.2         | 0.74      | 3           | 0.81      | 5.6                 | 0.98      |
| Lead                  | 400      | 3.5         | 0.20      | 11.1                | 0.95 **   | 1.7         | 0.20      | 2.7         | 0.18      | 4.1         | 0.19      | 12.1                | 0.56 *    |
| Antimony              | 14       | 2.1 U       | 2.1       | 2.1 U               | 2.1       | 2.1 U       | 2.1       | 1.9 U       | 1.9       | 2.1 U       | 2.1       | 2.5 U               | 2.5       |
| Selenium              | 63       | 0.30 U      | 0.30      | 0.85                | 0.29      | 0.30 U      | 0.30      | 0.49        | 0.28      | 0.55        | 0.29      | 0.90                | 0.35      |
| Thallium              | 2        | 0.14 U      | 0.14      | 0.13 U              | 0.13      | 0.14 U      | 0.14      | 0.13 U      | 0.13      | 0.14 U      | 0.14      | 0.26 U              | 0.26      |
| Vanadium              | 370      | 35.0        | 0.41      | 59.6                | 0.41      | 17.3        | 0.40      | 25.0        | 0.37      | 35.1        | 0.41      | 23.5                | 0.49      |
| Zinc                  | 1500     | 20.3        | 0.37      | 34.3                | 0.37      | 6.9         | 0.36      | 11.6        | 0.34      | 17.5        | 0.37      | 47.7                | 0.44      |
| Cyanide               | 1100     | 0.51 U      | 0.51      | 0.41                | 0.41      | 0.39 U      | 0.39      | 0.38 U      | 0.38      | 0.55 U      | 0.55      | 0.47 U              | 0.47      |
| Dilution Factor       |          |             |           | * = 2.00, ** = 5.00 |           |             |           |             |           | * = 2.00    |           | * = 2.00, ** = 5.00 |           |
| Method: TAL Metals    |          |             |           |                     |           |             |           |             |           |             |           |                     |           |

**CHARLES WOOD  
SOIL BORING INORGANICS**

|                       |          |             |           |             |           |              |           |              |           |
|-----------------------|----------|-------------|-----------|-------------|-----------|--------------|-----------|--------------|-----------|
| Geographical Location |          | B9          |           | B9          |           | B10          |           | B10          |           |
| Sample                |          | B9-SB01-A02 |           | B9-SB01-C02 |           | B10-SB01-A01 |           | B10-SB01-A02 |           |
| Sample Type           |          |             |           |             |           |              |           |              |           |
| Batch#                |          | 9501G831    |           | 9501G831    |           | 9501G553     |           | 9501G553     |           |
| Prep#                 |          |             |           |             |           | 95GTS013     |           | 95GTS013     |           |
| RFW#                  |          | 002         |           | 003         |           | 001          |           | 002          |           |
| Sample Depth (bgs)    |          |             |           |             |           |              |           |              |           |
| Dilution Factor       |          | 1.00        |           | 1.00        |           | 1.00         |           | 1.00         |           |
| Matrix                |          | soil        |           | soil        |           | soil         |           | soil         |           |
| Units                 | mg/kg    | mg/kg       |           | mg/kg       |           | mg/kg        |           | mg/kg        |           |
| Sampling Date         |          |             |           |             |           | 1/10/95      |           | 1/10/95      |           |
| Analysis Date         |          |             |           |             |           | 1/13/95      |           | 1/13/95      |           |
| Analysis              | Standard | Analytical  | Reporting | Analytical  | Reporting | Analytical   | Reporting | Analytical   | Reporting |
|                       |          | Result      | Limit     | Result      | Limit     | Result       | Limit     | Result       | Limit     |
| % Solids              |          | 83.4        | 0.10      | 81.9        | 0.10      | 84.1         | 0.1       | 84.9         | 0.1       |
| Silver                | 110      | 0.58 U      | 0.58      | 0.47 U      | 0.47      | 0.49 U       | 0.49      | 0.48 U       | 0.48      |
| Aluminum              |          | 6250        | 3.9       | 6520        | 3.1       | 9790         | 3.3       | 10200        | 3.2       |
| Arsenic               | 20       | 22.7        | 2.6 *     | 20.4        | 1.6 *     | 31.6         | 3.8 *     | 24.9         | 3.7 *     |
| Barium                | 700      | 39.2        | 0.18      | 35.3        | 0.15      | 22.3         | 0.16      | 26.0         | 0.15      |
| Beryllium             | 1        | 0.68        | 0.069     | 0.74        | 0.056     | 1.7          | 0.058     | 1.6          | 0.058     |
| Calcium               |          | 297         | 1.9       | 244         | 1.6       | 517          | 1.6       | 501          | 1.6       |
| Cadmium               | 1        | 0.67 U      | 0.67      | 0.54 U      | 0.54      | 0.57 U       | 0.57      | 0.56 U       | 0.56      |
| Cobalt                |          | 2.9         | 0.53      | 2.8         | 0.43      | 3.3          | 0.45      | 3.4          | 0.44      |
| Chromium              |          | 69.2        | 1.1       | 70.0        | 0.88      | 126          | 0.92      | 128          | 0.91      |
| Copper                | 600      | 3.5         | 0.92      | 3.4         | 0.75      | 3.3          | 0.78      | 3.1          | 0.77      |
| Iron                  |          | 25200       | 0.58      | 23800       | 0.47      | 45500        | 0.49      | 43200        | 0.48      |
| Mercury               | 14       | 0.32        | 0.092     | 0.12 U      | 0.12      | 0.10 U       | 0.10      | 0.10 U       | 0.10      |
| Potassium             |          | 3300        | 15.7      | 4080        | 12.7      | 10600        | 13.2      | 10400        | 13.1      |
| Magnesium             |          | 1490        | 7.9       | 1830        | 6.4       | 3920         | 6.7       | 3960         | 6.6       |
| Manganese             |          | 25.1        | 0.21      | 25.9        | 0.17      | 31.0         | 0.18      | 23.6         | 0.17      |
| Sodium                |          | 19.8        | 4.4       | 20.3        | 3.6       | 55.2         | 3.7       | 44.6         | 3.7       |
| Nickel                | 250      | 5.6         | 0.97      | 6.0         | 0.78      | 7.1          | 0.82      | 7.4          | 0.81      |
| Lead                  | 400      | 6.1         | 0.19      | 5.6         | 0.23      | 5.1          | 0.20      | 4.5          | 0.19      |
| Antimony              | 14       | 2.5 U       | 2.5       | 2.0 U       | 2.0       | 2.1 U        | 2.1       | 2.1 U        | 2.1       |
| Selenium              | 63       | 0.49        | 0.23      | 0.50        | 0.29      | 0.56         | 0.30      | 0.61         | 0.29      |
| Thallium              | 2        | 0.17 U      | 0.17      | 0.21 U      | 0.21      | 0.14 U       | 0.14      | 0.14 U       | 0.14      |
| Vanadium              | 370      | 25.6        | 0.48      | 20.6        | 0.39      | 42.9         | 0.41      | 40.9         | 0.41      |
| Zinc                  | 1500     | 49.4        | 0.44      | 49.8        | 0.35      | 55.6         | 0.37      | 53.6         | 0.37      |
| Cyanide               | 1100     | 0.42 U      | 0.42      | 0.40 U      | 0.40      | 0.56 U       | 0.56      | 0.49 U       | 0.49      |
| Dilution Factor       |          | * = 10.00   |           | * = 5.00    |           | * = 10.0     |           | * = 10.0     |           |
| Method: TAL Metals    |          |             |           |             |           |              |           |              |           |

**CHARLES WOOD**  
**SOIL BORING PESTICIDES/PCBS**

| Geographical Location      |          | AOC7          |           | AOC7          |           | AOC7          |           | AOC7          |           | AOC7          |           | AOC7          |           |
|----------------------------|----------|---------------|-----------|---------------|-----------|---------------|-----------|---------------|-----------|---------------|-----------|---------------|-----------|
| Sample                     |          | CWA7-SB01-A02 |           | CWA7-SB02-A02 |           | CWA7-SB03-A02 |           | CWA7-SB04-A02 |           | CWA7-SB05-A02 |           | CWA7-SB06-A03 |           |
| Sample Type                |          |               |           |               |           |               |           |               |           |               |           |               |           |
| Batch#                     |          | 9412G264      |           | 9412G264      |           | 9412G264      |           | 9412G264      |           | 9412G264      |           | 9412G264      |           |
| Prep#                      |          | 94GP1108      |           | 94GP1108      |           | 94GP1108      |           | 94GP1108      |           | 94GP1108      |           | 94GP1108      |           |
| RFW#                       |          | 001           |           | 003           |           | 002           |           | 006           |           | 004           |           | 005           |           |
| Sample Depth (bgs)         |          |               |           |               |           |               |           |               |           |               |           |               |           |
| Dilution Factor            |          | 1.00          |           | 1.00          |           | 1.00          |           | 1.00          |           | 1.00          |           | 1.00          |           |
| Matrix                     |          | soil          |           | soil          |           | soil          |           | soil          |           | soil          |           | soil          |           |
| Units                      | mg/kg    | mg/kg         |           | mg/kg         |           | mg/kg         |           | mg/kg         |           | mg/kg         |           | mg/kg         |           |
| Sampling Date              |          | 12/21/94      |           | 12/21/94      |           | 12/21/94      |           | 12/21/94      |           | 12/21/94      |           | 12/21/94      |           |
| Analysis Date              |          | 1/4/95        |           | 1/4/95        |           | 1/4/95        |           | 1/4/95        |           | 1/4/95        |           | 1/4/95        |           |
| Analysis                   | Standard | Analytical    | Reporting | Analytical    | Reporting | Analytical    | Reporting | Analytical    | Reporting | Analytical    | Reporting | Analytical    | Reporting |
|                            |          | Result        | Limit     | Result        | Limit     | Result        | Limit     | Result        | Limit     | Result        | Limit     | Result        | Limit     |
| alpha-BHC                  |          | 0.0018 U      | 0.0018    | 0.0018 U      | 0.0018    | 0.0018 U      | 0.0018    | 0.0018 U      | 0.0018    | 0.0018 U      | 0.0018    | 0.0018 U      | 0.0018    |
| beta-BHC                   |          | 0.0018 U      | 0.0018    | 0.0018 U      | 0.0018    | 0.0018 U      | 0.0018    | 0.0018 U      | 0.0018    | 0.0018 U      | 0.0018    | 0.0018 U      | 0.0018    |
| delta-BHC                  |          | 0.0018 U      | 0.0018    | 0.0018 U      | 0.0018    | 0.0018 U      | 0.0018    | 0.0018 U      | 0.0018    | 0.0018 U      | 0.0018    | 0.0018 U      | 0.0018    |
| gamma-BHC (Lindane)        | 0.52     | 0.0018 U      | 0.0018    | 0.0018 U      | 0.0018    | 0.0018 U      | 0.0018    | 0.0018 U      | 0.0018    | 0.0018 U      | 0.0018    | 0.0018 U      | 0.0018    |
| Heptachlor                 | 0.15     | 0.0018 U      | 0.0018    | 0.0018 U      | 0.0018    | 0.0018 U      | 0.0018    | 0.0018 U      | 0.0018    | 0.0018 U      | 0.0018    | 0.0018 U      | 0.0018    |
| Aldrin                     | 0.04     | 0.0018 U      | 0.0018    | 0.0018 U      | 0.0018    | 0.0018 U      | 0.0018    | 0.0018 U      | 0.0018    | 0.0018 U      | 0.0018    | 0.0018 U      | 0.0018    |
| Heptachlor epoxide         |          | 0.0018 U      | 0.0018    | 0.0018 U      | 0.0018    | 0.0018 U      | 0.0018    | 0.0018 U      | 0.0018    | 0.0018 U      | 0.0018    | 0.0018 U      | 0.0018    |
| Endosulfan I               | 340      | 0.0018 U      | 0.0018    | 0.0018 U      | 0.0018    | 0.0018 U      | 0.0018    | 0.0018 U      | 0.0018    | 0.0018 U      | 0.0018    | 0.0018 U      | 0.0018    |
| Dieldrin                   | 0.042    | 0.0037 U      | 0.0037    | 0.0036 U      | 0.0036    | 0.0036 U      | 0.0036    | 0.0037 U      | 0.0037    | 0.0036 U      | 0.0036    | 0.0036 U      | 0.0036    |
| 4,4'-DDE                   | 2        | 0.0037 U      | 0.0037    | 0.0036 U      | 0.0036    | 0.0036 U      | 0.0036    | 0.0037 U      | 0.0037    | 0.0036 U      | 0.0036    | 0.0036 U      | 0.0036    |
| Endrin                     | 17       | 0.0037 U      | 0.0037    | 0.0036 U      | 0.0036    | 0.0036 U      | 0.0036    | 0.0037 U      | 0.0037    | 0.0036 U      | 0.0036    | 0.0036 U      | 0.0036    |
| Endosulfan II              | 340      | 0.0037 U      | 0.0037    | 0.0036 U      | 0.0036    | 0.0036 U      | 0.0036    | 0.0037 U      | 0.0037    | 0.0036 U      | 0.0036    | 0.0036 U      | 0.0036    |
| 4,4'-DDD                   | 3        | 0.0037 U      | 0.0037    | 0.0036 U      | 0.0036    | 0.0036 U      | 0.0036    | 0.0037 U      | 0.0037    | 0.0036 U      | 0.0036    | 0.0036 U      | 0.0036    |
| Endosulfan sulfate         |          | 0.0037 U      | 0.0037    | 0.0036 U      | 0.0036    | 0.0036 U      | 0.0036    | 0.0037 U      | 0.0037    | 0.0036 U      | 0.0036    | 0.0036 U      | 0.0036    |
| 4,4'-DDT                   | 2        | 0.0037 U      | 0.0037    | 0.0036 U      | 0.0036    | 0.004         | 0.0036    | 0.0037 U      | 0.0037    | 0.0036 U      | 0.0036    | 0.0036 U      | 0.0036    |
| Methoxychlor               | 280      | 0.018 U       | 0.018     | 0.018 U       | 0.018     | 0.018 U       | 0.018     | 0.018 U       | 0.018     | 0.018 U       | 0.018     | 0.018 U       | 0.018     |
| Endrin ketone              |          | 0.0037 U      | 0.0037    | 0.0036 U      | 0.0036    | 0.0036 U      | 0.0036    | 0.0037 U      | 0.0037    | 0.0036 U      | 0.0036    | 0.0036 U      | 0.0036    |
| Endrin aldehyde            |          | 0.0037 U      | 0.0037    | 0.0036 U      | 0.0036    | 0.0036 U      | 0.0036    | 0.0037 U      | 0.0037    | 0.0036 U      | 0.0036    | 0.0036 U      | 0.0036    |
| alpha-Chlordane            |          | 0.0018 U      | 0.0018    | 0.0018 U      | 0.0018    | 0.0018 U      | 0.0018    | 0.0018 U      | 0.0018    | 0.0018 U      | 0.0018    | 0.0018 U      | 0.0018    |
| gamma-Chlordane            |          | 0.0018 U      | 0.0018    | 0.0018 U      | 0.0018    | 0.0018 U      | 0.0018    | 0.0018 U      | 0.0018    | 0.0018 U      | 0.0018    | 0.0018 U      | 0.0018    |
| Toxaphene                  | 0.1      | 0.18 U        | 0.18      | 0.18 U        | 0.18      | 0.18 U        | 0.18      | 0.18 U        | 0.18      | 0.18 U        | 0.18      | 0.18 U        | 0.18      |
| Aroclor-1016               | 0.49     | 0.037 U       | 0.037     | 0.036 U       | 0.036     | 0.036 U       | 0.036     | 0.037 U       | 0.037     | 0.036 U       | 0.036     | 0.036 U       | 0.036     |
| Aroclor-1221               | 0.49     | 0.073 U       | 0.073     | 0.073 U       | 0.073     | 0.072 U       | 0.072     | 0.073 U       | 0.073     | 0.073 U       | 0.073     | 0.073 U       | 0.073     |
| Aroclor-1232               | 0.49     | 0.037 U       | 0.037     | 0.036 U       | 0.036     | 0.036 U       | 0.036     | 0.037 U       | 0.037     | 0.036 U       | 0.036     | 0.036 U       | 0.036     |
| Aroclor-1242               | 0.49     | 0.037 U       | 0.037     | 0.036 U       | 0.036     | 0.036 U       | 0.036     | 0.037 U       | 0.037     | 0.036 U       | 0.036     | 0.036 U       | 0.036     |
| Aroclor-1248               | 0.49     | 0.037 U       | 0.037     | 0.036 U       | 0.036     | 0.036 U       | 0.036     | 0.037 U       | 0.037     | 0.036 U       | 0.036     | 0.036 U       | 0.036     |
| Aroclor-1254               | 0.49     | 0.037 U       | 0.037     | 0.036 U       | 0.036     | 0.036 U       | 0.036     | 0.037 U       | 0.037     | 0.036 U       | 0.036     | 0.036 U       | 0.036     |
| Aroclor-1260               | 0.49     | 0.037 U       | 0.037     | 0.036 U       | 0.036     | 0.036 U       | 0.036     | 0.037 U       | 0.037     | 0.036 U       | 0.036     | 0.036 U       | 0.036     |
| Method:TCL Pesticides/PCBs |          |               |           |               |           |               |           |               |           |               |           |               |           |

**CHARLES WOOD  
SOIL BORING PESTICIDES/PCBS**

| Geographical Location       |          | CW1                  |                    | CW1                  |                    | CW1                  |                    | CW1                  |                    | CW2                  |                    | CW2                  |                    |
|-----------------------------|----------|----------------------|--------------------|----------------------|--------------------|----------------------|--------------------|----------------------|--------------------|----------------------|--------------------|----------------------|--------------------|
| Sample                      |          | CW01-SB26-A02        |                    | CW01-SB27-A02        |                    | CW01-SB28-A02        |                    | CW01-SB29-A02        |                    | CW02-SB30-A02        |                    | CW02-SB30-A02DL      |                    |
| Sample Type                 |          |                      |                    |                      |                    |                      |                    |                      |                    |                      |                    |                      |                    |
| Batch#                      |          | 9412G216             |                    | 9412G216             |                    | 9412G216             |                    | 9412G216             |                    | 9412G182             |                    | 9412G182             |                    |
| Prep#                       |          | 94GP1108             |                    | 94GP1108             |                    | 94GP1108             |                    | 94GP1108             |                    | 94GP1090             |                    | 94GP1090             |                    |
| RFW#                        |          | 004                  |                    | 002                  |                    | 003                  |                    | 001                  |                    | 002                  |                    | 002DL                |                    |
| Sample Depth (bgs)          |          |                      |                    |                      |                    |                      |                    |                      |                    |                      |                    |                      |                    |
| Dilution Factor             |          | 1.00                 |                    | 1.00                 |                    | 1.00                 |                    | 1.00                 |                    | 1.00                 |                    | 5.0                  |                    |
| Matrix                      |          | soil                 |                    | soil                 |                    | soil                 |                    | soil                 |                    | soil                 |                    | soil                 |                    |
| Units                       | mg/kg    | mg/kg                |                    | mg/kg                |                    | mg/kg                |                    | mg/kg                |                    | mg/kg                |                    | mg/kg                |                    |
| Sampling Date               |          | 12/19/94             |                    | 12/19/94             |                    | 12/19/94             |                    | 12/19/94             |                    | 12/16/94             |                    | 12/16/94             |                    |
| Analysis Date               |          | 1/4/95               |                    | 1/4/95               |                    | 1/4/95               |                    | 1/4/95               |                    | 1/3/95               |                    | 1/3/95               |                    |
| Analysis                    | Standard | Analytical<br>Result | Reporting<br>Limit | Analytical<br>Result | Reporting<br>Limit | Analytical<br>Result | Reporting<br>Limit | Analytical<br>Result | Reporting<br>Limit | Analytical<br>Result | Reporting<br>Limit | Analytical<br>Result | Reporting<br>Limit |
| alpha-BHC                   |          | 0.0021 U             | 0.0021             | 0.0022 U             | 0.0022             | 0.002 U              | 0.002              | 0.0022 U             | 0.0022             | 0.0019 U             | 0.0019             | 0.0097 U             | 0.0097             |
| beta-BHC                    |          | 0.0021 U             | 0.0021             | 0.0022 U             | 0.0022             | 0.002 U              | 0.002              | 0.0022 U             | 0.0022             | 0.0019 U             | 0.0019             | 0.0097 U             | 0.0097             |
| delta-BHC                   |          | 0.0021 U             | 0.0021             | 0.0022 U             | 0.0022             | 0.002 U              | 0.002              | 0.0022 U             | 0.0022             | 0.0019 U             | 0.0019             | 0.0097 U             | 0.0097             |
| gamma-BHC (Lindane)         | 0.52     | 0.0021 U             | 0.0021             | 0.0022 U             | 0.0022             | 0.002 U              | 0.002              | 0.0022 U             | 0.0022             | 0.0019 U             | 0.0019             | 0.0097 U             | 0.0097             |
| Heptachlor                  | 0.15     | 0.0021 U             | 0.0021             | 0.0022 U             | 0.0022             | 0.002 U              | 0.002              | 0.0022 U             | 0.0022             | 0.0019 U             | 0.0019             | 0.0097 U             | 0.0097             |
| Aldrin                      | 0.04     | 0.0021 U             | 0.0021             | 0.0022 U             | 0.0022             | 0.002 U              | 0.002              | 0.0022 U             | 0.0022             | 0.0019 U             | 0.0019             | 0.0097 U             | 0.0097             |
| Heptachlor epoxide          |          | 0.0021 U             | 0.0021             | 0.0022 U             | 0.0022             | 0.002 U              | 0.002              | 0.0022 U             | 0.0022             | 0.0019 U             | 0.0019             | 0.0097 U             | 0.0097             |
| Endosulfan I                | 340      | 0.0021 U             | 0.0021             | 0.0022 U             | 0.0022             | 0.002 U              | 0.002              | 0.0022 U             | 0.0022             | 0.0019 U             | 0.0019             | 0.0097 U             | 0.0097             |
| Dieldrin                    | 0.042    | 0.0042 U             | 0.0042             | 0.0043 U             | 0.0043             | 0.0041 U             | 0.0041             | 0.0043 U             | 0.0043             | 0.0039 U             | 0.0039             | 0.019 U              | 0.019              |
| 4,4'-DDE                    | 2        | 0.0038 J             | 0.0042             | 0.0043 U             | 0.0043             | 0.0041 U             | 0.0041             | 0.0043 U             | 0.0043             | 0.0035 JP            | 0.0039             | 0.019 U              | 0.019              |
| Endrin                      | 17       | 0.0042 U             | 0.0042             | 0.0043 U             | 0.0043             | 0.0041 U             | 0.0041             | 0.0043 U             | 0.0043             | 0.0039 U             | 0.0039             | 0.019 U              | 0.019              |
| Endosulfan II               | 340      | 0.0042 U             | 0.0042             | 0.0043 U             | 0.0043             | 0.0041 U             | 0.0041             | 0.0043 U             | 0.0043             | 0.0039 U             | 0.0039             | 0.019 U              | 0.019              |
| 4,4'-DDD                    | 3        | 0.0042 U             | 0.0042             | 0.0043 U             | 0.0043             | 0.0041 U             | 0.0041             | 0.0043 U             | 0.0043             | 0.012 P              | 0.0039             | 0.014 JD             | 0.019              |
| Endosulfan sulfate          |          | 0.0042 U             | 0.0042             | 0.0043 U             | 0.0043             | 0.0041 U             | 0.0041             | 0.0043 U             | 0.0043             | 0.0039 U             | 0.0039             | 0.019 U              | 0.019              |
| 4,4'-DDT                    | 2        | 0.0042 U             | 0.0042             | 0.0043 U             | 0.0043             | 0.0041 U             | 0.0041             | 0.0043 U             | 0.0043             | 0.062 P              | 0.0039             | 0.053 DP             | 0.019              |
| Methoxychlor                | 280      | 0.021 U              | 0.021              | 0.022 U              | 0.022              | 0.02 U               | 0.02               | 0.022 U              | 0.022              | 0.019 U              | 0.019              | 0.097 U              | 0.097              |
| Endrin ketone               |          | 0.0042 U             | 0.0042             | 0.0043 U             | 0.0043             | 0.0041 U             | 0.0041             | 0.0043 U             | 0.0043             | 0.0039 U             | 0.0039             | 0.019 U              | 0.019              |
| Endrin aldehyde             |          | 0.0042 U             | 0.0042             | 0.0043 U             | 0.0043             | 0.0041 U             | 0.0041             | 0.0043 U             | 0.0043             | 0.0039 U             | 0.0039             | 0.019 U              | 0.019              |
| alpha-Chlordane             |          | 0.0021 U             | 0.0021             | 0.0022 U             | 0.0022             | 0.002 U              | 0.002              | 0.0022 U             | 0.0022             | 0.0019 U             | 0.0019             | 0.0097 U             | 0.0097             |
| gamma-Chlordane             |          | 0.0021 U             | 0.0021             | 0.0022 U             | 0.0022             | 0.002 U              | 0.002              | 0.0022 U             | 0.0022             | 0.0019 U             | 0.0019             | 0.0097 U             | 0.0097             |
| Toxaphene                   | 0.1      | 0.21 U               | 0.21               | 0.22 U               | 0.22               | 0.2 U                | 0.2                | 0.22 U               | 0.22               | 0.19 U               | 0.19               | 0.97 U               | 0.97               |
| Aroclor-1016                | 0.49     | 0.042 U              | 0.042              | 0.043 U              | 0.043              | 0.041 U              | 0.041              | 0.043 U              | 0.043              | 0.039 U              | 0.039              | 0.19 U               | 0.19               |
| Aroclor-1221                | 0.49     | 0.085 U              | 0.085              | 0.087 U              | 0.087              | 0.082 U              | 0.082              | 0.086 U              | 0.086              | 0.078 U              | 0.078              | 0.39 U               | 0.39               |
| Aroclor-1232                | 0.49     | 0.042 U              | 0.042              | 0.043 U              | 0.043              | 0.041 U              | 0.041              | 0.043 U              | 0.043              | 0.039 U              | 0.039              | 0.19 U               | 0.19               |
| Aroclor-1242                | 0.49     | 0.042 U              | 0.042              | 0.043 U              | 0.043              | 0.041 U              | 0.041              | 0.043 U              | 0.043              | 0.039 U              | 0.039              | 0.19 U               | 0.19               |
| Aroclor-1248                | 0.49     | 0.042 U              | 0.042              | 0.043 U              | 0.043              | 0.041 U              | 0.041              | 0.043 U              | 0.043              | 0.039 U              | 0.039              | 0.19 U               | 0.19               |
| Aroclor-1254                | 0.49     | 0.042 U              | 0.042              | 0.043 U              | 0.043              | 0.041 U              | 0.041              | 0.043 U              | 0.043              | 0.61                 | 0.039              | 0.75 D               | 0.19               |
| Aroclor-1260                | 0.49     | 0.042 U              | 0.042              | 0.043 U              | 0.043              | 0.041 U              | 0.041              | 0.043 U              | 0.043              | 0.039 U              | 0.039              | 0.19 U               | 0.19               |
| Method: TCL Pesticides/PCBs |          |                      |                    |                      |                    |                      |                    |                      |                    |                      |                    |                      |                    |

**CHARLES WOOD**  
**SOIL BORING PESTICIDES/PCBS**

| Geographical Location      |          | CW2                  |                    | CW2                  |                    | CW2                  |                    | CW2                  |                    | CW4                  |                    | CW5                  |                    |
|----------------------------|----------|----------------------|--------------------|----------------------|--------------------|----------------------|--------------------|----------------------|--------------------|----------------------|--------------------|----------------------|--------------------|
| Sample                     |          | CW02-SB31-A02        |                    | CW02-SB32-A02        |                    | CW02-SB33-A02        |                    | CW02-SB33-A02DL      |                    | CW04-SB01-A02        |                    | CW05-SB01-A02        |                    |
| Sample Type                |          |                      |                    |                      |                    |                      |                    |                      |                    |                      |                    |                      |                    |
| Batch#                     |          | 9412G182             |                    | 9412G182             |                    | 9412G154             |                    | 9412G154             |                    | 9412G264             |                    | 9412G245             |                    |
| Prep#                      |          | 94GP1090             |                    | 94GP1090             |                    | 94GP1090             |                    | 94GP1090             |                    | 94GP1108             |                    | 94GP1108             |                    |
| RFV#                       |          | 003                  |                    | 001                  |                    | 002                  |                    | 002DL                |                    | 008                  |                    | 001                  |                    |
| Sample Depth (bgs)         |          |                      |                    |                      |                    | 7-9'                 |                    | 7-9'                 |                    |                      |                    |                      |                    |
| Dilution Factor            |          | 1.00                 |                    | 1.00                 |                    | 1.00                 |                    | 10.0                 |                    | 1.00                 |                    | 1.00                 |                    |
| Matrix                     |          | soil                 |                    | soil                 |                    | soil                 |                    | soil                 |                    | soil                 |                    | soil                 |                    |
| Units                      | mg/kg    | mg/kg                |                    | mg/kg                |                    | mg/kg                |                    | mg/kg                |                    | mg/kg                |                    | mg/kg                |                    |
| Sampling Date              |          | 12/16/94             |                    | 12/16/94             |                    | 12/15/94             |                    | NA                   |                    | 12/21/94             |                    | 12/20/94             |                    |
| Analysis Date              |          | 1/3/95               |                    | 1/3/95               |                    | 1/3/95               |                    | 1/3/95               |                    | 1/4/95               |                    | 1/4/95               |                    |
| Analysis                   | Standard | Analytical<br>Result | Reporting<br>Limit | Analytical<br>Result | Reporting<br>Limit | Analytical<br>Result | Reporting<br>Limit | Analytical<br>Result | Reporting<br>Limit | Analytical<br>Result | Reporting<br>Limit | Analytical<br>Result | Reporting<br>Limit |
| alpha-BHC                  |          | 0.0022 U             | 0.0022             | 0.002 U              | 0.002              | 0.0021 U             | 0.0021             | 0.021 U              | 0.021              | 0.002 U              | 0.002              | 0.0019 U             | 0.0019             |
| beta-BHC                   |          | 0.0022 U             | 0.0022             | 0.002 U              | 0.002              | 0.0021 U             | 0.0021             | 0.021 U              | 0.021              | 0.002 U              | 0.002              | 0.0019 U             | 0.0019             |
| delta-BHC                  |          | 0.0022 U             | 0.0022             | 0.002 U              | 0.002              | 0.0021 U             | 0.0021             | 0.021 U              | 0.021              | 0.002 U              | 0.002              | 0.0019 U             | 0.0019             |
| gamma-BHC (Lindane)        | 0.52     | 0.0022 U             | 0.0022             | 0.002 U              | 0.002              | 0.0021 U             | 0.0021             | 0.021 U              | 0.021              | 0.002 U              | 0.002              | 0.0019 U             | 0.0019             |
| Heptachlor                 | 0.15     | 0.0022 U             | 0.0022             | 0.002 U              | 0.002              | 0.0021 U             | 0.0021             | 0.021 U              | 0.021              | 0.002 U              | 0.002              | 0.0019 U             | 0.0019             |
| Aldrin                     | 0.04     | 0.0022 U             | 0.0022             | 0.002 U              | 0.002              | 0.0021 U             | 0.0021             | 0.021 U              | 0.021              | 0.002 U              | 0.002              | 0.0019 U             | 0.0019             |
| Heptachlor epoxide         |          | 0.0022 U             | 0.0022             | 0.002 U              | 0.002              | 0.0021 U             | 0.0021             | 0.021 U              | 0.021              | 0.002 U              | 0.002              | 0.0019 U             | 0.0019             |
| Endosulfan I               | 340      | 0.0022 U             | 0.0022             | 0.002 U              | 0.002              | 0.0021 U             | 0.0021             | 0.021 U              | 0.021              | 0.002 U              | 0.002              | 0.0019 U             | 0.0019             |
| Dieldrin                   | 0.042    | 0.0044 U             | 0.0044             | 0.0041 U             | 0.0041             | 0.0041 U             | 0.0041             | 0.041 U              | 0.041              | 0.004 U              | 0.004              | 0.0038 U             | 0.0038             |
| 4,4'-DDE                   | 2        | 0.0044 U             | 0.0044             | 0.0041 U             | 0.0041             | 0.0083 P             | 0.0041             | 0.041 U              | 0.041              | 0.004 U              | 0.004              | 0.21 P               | 0.0038             |
| Endrin                     | 17       | 0.0044 U             | 0.0044             | 0.0041 U             | 0.0041             | 0.0041 U             | 0.0041             | 0.041 U              | 0.041              | 0.004 U              | 0.004              | 0.0038 U             | 0.0038             |
| Endosulfan II              | 340      | 0.0044 U             | 0.0044             | 0.0041 U             | 0.0041             | 0.0041 U             | 0.0041             | 0.041 U              | 0.041              | 0.004 U              | 0.004              | 0.0038 U             | 0.0038             |
| 4,4'-DDD                   | 3        | 0.0098               | 0.0044             | 0.0073               | 0.0041             | 0.26                 | 0.0041             | .2 D                 | 0.041              | 0.004 U              | 0.004              | 0.087                | 0.0038             |
| Endosulfan sulfate         |          | 0.0044 U             | 0.0044             | 0.0041 U             | 0.0041             | 0.0041 U             | 0.0041             | 0.041 U              | 0.041              | 0.004 U              | 0.004              | 0.0038 U             | 0.0038             |
| 4,4'-DDT                   | 2        | 0.0058               | 0.0044             | 0.0041 U             | 0.0041             | 0.046                | 0.0041             | .043 D               | 0.041              | 0.004 U              | 0.004              | 0.087                | 0.0038             |
| Methoxychlor               | 280      | 0.022 U              | 0.022              | 0.02 U               | 0.02               | 0.021 U              | 0.021              | 0.21 U               | 0.21               | 0.02 U               | 0.02               | 0.0038 U             | 0.0038             |
| Endrin ketone              |          | 0.0044 U             | 0.0044             | 0.0041 U             | 0.0041             | 0.0041 U             | 0.0041             | 0.041 U              | 0.041              | 0.004 U              | 0.004              | 0.0038 U             | 0.0038             |
| Endrin aldehyde            |          | 0.0044 U             | 0.0044             | 0.0041 U             | 0.0041             | 0.0041 U             | 0.0041             | 0.041 U              | 0.041              | 0.004 U              | 0.004              | 0.0038 U             | 0.0038             |
| alpha-Chlordane            |          | 0.0022 U             | 0.0022             | 0.002 U              | 0.002              | 0.0021 U             | 0.0021             | 0.021 U              | 0.021              | 0.002 U              | 0.002              | 0.0084 P             | 0.0019             |
| gamma-Chlordane            |          | 0.0022 U             | 0.0022             | 0.002 U              | 0.002              | 0.0021 U             | 0.0021             | 0.021 U              | 0.021              | 0.002 U              | 0.002              | 0.0092               | 0.0019             |
| Toxaphene                  | 0.1      | 0.22 U               | 0.22               | 0.2 U                | 0.2                | 0.21 U               | 0.21               | 2.1 U                | 2.1                | 0.2 U                | 0.2                | 0.19 U               | 0.19               |
| Aroclor-1016               | 0.49     | 0.044 U              | 0.044              | 0.041 U              | 0.041              | 0.041 U              | 0.041              | 0.41 U               | 0.41               | 0.04 U               | 0.04               | 0.038 U              | 0.038              |
| Aroclor-1221               | 0.49     | 0.089 U              | 0.089              | 0.082 U              | 0.082              | 0.083 U              | 0.083              | 0.83 U               | 0.83               | 0.079 U              | 0.079              | 0.077 U              | 0.077              |
| Aroclor-1232               | 0.49     | 0.044 U              | 0.044              | 0.041 U              | 0.041              | 0.041 U              | 0.041              | 0.41 U               | 0.41               | 0.04 U               | 0.04               | 0.038 U              | 0.038              |
| Aroclor-1242               | 0.49     | 0.044 U              | 0.044              | 0.041 U              | 0.041              | 0.041 U              | 0.041              | 0.41 U               | 0.41               | 0.04 U               | 0.04               | 0.038 U              | 0.038              |
| Aroclor-1248               | 0.49     | 0.044 U              | 0.044              | 0.041 U              | 0.041              | 0.041 U              | 0.041              | 0.41 U               | 0.41               | 0.04 U               | 0.04               | 0.038 U              | 0.038              |
| Aroclor-1254               | 0.49     | 0.044 U              | 0.044              | 0.041 U              | 0.041              | 0.041 U              | 0.041              | 0.41 U               | 0.41               | 0.04 U               | 0.04               | 0.17                 | 0.038              |
| Aroclor-1260               | 0.49     | 0.044 U              | 0.044              | 0.041 U              | 0.041              | 0.041 U              | 0.041              | 0.41 U               | 0.41               | 0.04 U               | 0.04               | 0.15                 | 0.038              |
| Method:TCL Pesticides/PCBs |          |                      |                    |                      |                    |                      |                    |                      |                    |                      |                    |                      |                    |

**CHARLES WOOD**  
**SOIL BORING PESTICIDES/PCBS**

| Geographical Location      |          | CW5             |           | CW5           |           | CW6           |           | CW6             |           | CW6           |           | CW6             |           |
|----------------------------|----------|-----------------|-----------|---------------|-----------|---------------|-----------|-----------------|-----------|---------------|-----------|-----------------|-----------|
| Sample                     |          | CW05-SB01-A02DL |           | CW05-SB02-A02 |           | CW06-SB02-A01 |           | CW06-SB02-A01DL |           | CW06-SB34-A01 |           | CW06-SB34-A01DL |           |
| Sample Type                |          |                 |           |               |           |               |           |                 |           |               |           |                 |           |
| Batch#                     |          | 9412G245        |           | 9412G245      |           | 9505G840      |           | 9505G840        |           | 9501G423      |           | 9501G423        |           |
| Prep#                      |          | 94GP1108        |           | 94GP1108      |           | 95GP0512      |           | 95GP0512        |           | 95GP0028      |           | 95GP0028        |           |
| RFW#                       |          | 001DL           |           | 002           |           | 001           |           | 001 DL          |           | 001           |           | 001DL           |           |
| Sample Depth (bgs)         |          |                 |           |               |           |               |           |                 |           |               |           |                 |           |
| Dilution Factor            |          | 10.0            |           | 1.00          |           | 1.00          |           | 1.00            |           | 1.00          |           | 10.0            |           |
| Matrix                     |          | soil            |           | soil          |           | soil          |           | soil            |           | soil          |           | soil            |           |
| Units                      | mg/kg    | mg/kg           |           | mg/kg         |           | mg/kg         |           | mg/kg           |           | mg/kg         |           | mg/kg           |           |
| Sampling Date              |          | 12/20/94        |           | 12/20/94      |           | 5/10/95       |           | 5/10/95         |           | 1/3/95        |           | 1/3/95          |           |
| Analysis Date              |          | 1/5/95          |           | 1/4/95        |           | 5/29/95       |           | 5/29/95         |           | 1/17/95       |           | 1/18/95         |           |
| Analysis                   | Standard | Analytical      | Reporting | Analytical    | Reporting | Analytical    | Reporting | Analytical      | Reporting | Analytical    | Reporting | Analytical      | Reporting |
|                            |          | Result          | Limit     | Result        | Limit     | Result        | Limit     | Result          | Limit     | Result        | Limit     | Result          | Limit     |
| alpha-BHC                  |          | 0.019 U         | 0.019     | 0.0019 U      | 0.0019    | 0.0023 U      | 0.0023    | 0.23 U          | 0.23      | 0.002 U       | 0.002     | 0.02 U          | 0.02      |
| beta-BHC                   |          | 0.019 U         | 0.019     | 0.0019 U      | 0.0019    | 0.0023 U      | 0.0023    | 0.23 U          | 0.23      | 0.002 U       | 0.002     | 0.02 U          | 0.02      |
| delta-BHC                  |          | 0.019 U         | 0.019     | 0.0019 U      | 0.0019    | 0.0023 U      | 0.0023    | 0.23 U          | 0.23      | 0.002 U       | 0.002     | 0.02 U          | 0.02      |
| gamma-BHC (Lindane)        | 0.52     | 0.019 U         | 0.019     | 0.0019 U      | 0.0019    | 0.0023 U      | 0.0023    | 0.23 U          | 0.23      | 0.002 U       | 0.002     | 0.02 U          | 0.02      |
| Heptachlor                 | 0.15     | 0.019 U         | 0.019     | 0.0019 U      | 0.0019    | 0.0023 U      | 0.0023    | 0.23 U          | 0.23      | 0.002 U       | 0.002     | 0.02 U          | 0.02      |
| Aldrin                     | 0.04     | 0.019 U         | 0.019     | 0.0019 U      | 0.0019    | 0.0023 U      | 0.0023    | 0.23 U          | 0.23      | 0.002 U       | 0.002     | 0.02 U          | 0.02      |
| Heptachlor epoxide         |          | 0.019 U         | 0.019     | 0.0019 U      | 0.0019    | 0.0078 P      | 0.0023    | 0.23 U          | 0.23      | 0.018 P       | 0.002     | 0.02 U          | 0.02      |
| Endosulfan I               | 340      | 0.019 U         | 0.019     | 0.0019 U      | 0.0019    | 0.0023 U      | 0.0023    | 0.23 U          | 0.23      | 0.002 U       | 0.002     | 0.039 U         | 0.039     |
| Dieldrin                   | 0.042    | 0.038 U         | 0.038     | 0.0039 U      | 0.0039    | 0.0046 U      | 0.0046    | 0.46 U          | 0.46      | 0.0047 P      | 0.0039    | .061 DP         | 0.039     |
| 4,4'-DDE                   | 2        | .18 D           | 0.038     | 0.0058        | 0.0039    | 0.11 CP       | 0.0046    | .34 JCD         | 0.46      | 0.074 P       | 0.0039    | 0.039 U         | 0.039     |
| Endrin                     | 17       | 0.038 U         | 0.038     | 0.0039 U      | 0.0039    | 0.0046 U      | 0.0046    | 0.46 U          | 0.46      | 0.0039 U      | 0.0039    | 0.039 U         | 0.039     |
| Endosulfan II              | 340      | 0.038 U         | 0.038     | 0.0039 U      | 0.0039    | 0.0046 U      | 0.0046    | 0.46 U          | 0.46      | 0.0039 U      | 0.0039    | 0.039 U         | 0.039     |
| 4,4'-DDD                   | 3        | .069 D          | 0.038     | 0.0035 J      | 0.0039    | 0.21 CP       | 0.0046    | 2.9 CD          | 0.46      | 0.0095 P      | 0.0039    | 0.039 U         | 0.039     |
| Endosulfan sulfate         |          | 0.038 U         | 0.038     | 0.0039 U      | 0.0039    | 0.0046 U      | 0.0046    | 0.46 U          | 0.46      | 0.0039 U      | 0.0039    | 0.039 U         | 0.039     |
| 4,4'-DDT                   | 2        | .067 D          | 0.038     | 0.0039 U      | 0.0039    | 0.46 UZ       | 0.0046    | 0.46 UZ         | 0.46      | 0.16 P        | 0.0039    | .18 DP          | 0.039     |
| Methoxychlor               | 280      | 0.19 U          | 0.19      | 0.019 U       | 0.019     | 0.023 U       | 0.023     | 2.3 U           | 2.3       | 0.02 U        | 0.02      | 0.2 U           | 0.2       |
| Endrin ketone              |          | 0.038 U         | 0.038     | 0.0039 U      | 0.0039    | 0.0046 U      | 0.0046    | 0.46 U          | 0.46      | 0.0039 U      | 0.0039    | 0.039 U         | 0.039     |
| Endrin aldehyde            |          | 0.038 U         | 0.038     | 0.0039 U      | 0.0039    | 0.0046 U      | 0.0046    | 0.46 U          | 0.46      | 0.0039 U      | 0.0039    | 0.039 U         | 0.039     |
| alpha-Chlordane            |          | 0.019 U         | 0.019     | 0.0019 U      | 0.0019    | 0.043         | 0.0023    | .07 JD          | 0.23      | 0.14 P        | 0.002     | .14 DP          | 0.02      |
| gamma-Chlordane            |          | 0.019 U         | 0.019     | 0.0019 U      | 0.0019    | 0.047         | 0.0023    | .068 JD         | 0.23      | 0.11 P        | 0.002     | .11 DP          | 0.02      |
| Toxaphene                  | 0.1      | 1.9 U           | 1.9       | 0.19 U        | 0.19      | 0.23 U        | 0.23      | 23 U            | 23        | 0.2 U         | 0.2       | 2 U             | 2         |
| Aroclor-1016               | 0.49     | 0.38 U          | 0.38      | 0.039 U       | 0.039     | 0.046 U       | 0.046     | 4.6 U           | 4.6       | 0.039 U       | 0.039     | 0.39 U          | 0.39      |
| Aroclor-1221               | 0.49     | 0.77 U          | 0.77      | 0.077 U       | 0.077     | 0.092 U       | 0.092     | 9.2 U           | 9.2       | 0.079 U       | 0.079     | 0.79 U          | 0.79      |
| Aroclor-1232               | 0.49     | 0.38 U          | 0.38      | 0.039 U       | 0.039     | 0.046 U       | 0.046     | 4.6 U           | 4.6       | 0.039 U       | 0.039     | 0.39 U          | 0.39      |
| Aroclor-1242               | 0.49     | 0.38 U          | 0.38      | 0.039 U       | 0.039     | 0.046 U       | 0.046     | 4.6 U           | 4.6       | 0.039 U       | 0.039     | 0.39 U          | 0.39      |
| Aroclor-1248               | 0.49     | 0.38 U          | 0.38      | 0.039 U       | 0.039     | 0.046 U       | 0.046     | 4.6 U           | 4.6       | 0.039 U       | 0.039     | 0.39 U          | 0.39      |
| Aroclor-1254               | 0.49     | .2 JD           | 0.38      | 0.039 U       | 0.039     | 0.046 U       | 0.046     | 4.6 U           | 4.6       | 0.039 U       | 0.039     | 0.39 U          | 0.39      |
| Aroclor-1260               | 0.49     | .18 JD          | 0.38      | 0.039 U       | 0.039     | 0.046 U       | 0.046     | 4.6 U           | 4.6       | 0.039 U       | 0.039     | 0.39 U          | 0.39      |
| Method:TCL Pesticides/PCBs |          |                 |           |               |           |               |           |                 |           |               |           |                 |           |

**CHARLES WOOD**  
**SOIL BORING PESTICIDES/PCBS**

| Geographical Location       |          | CW6           |           | CW9           |           | B6          |           | B6          |           | B6            |           | B7          |           |
|-----------------------------|----------|---------------|-----------|---------------|-----------|-------------|-----------|-------------|-----------|---------------|-----------|-------------|-----------|
| Sample                      |          | CW06-SB34-A02 |           | CW09-SB01-A02 |           | B6-SB01-A01 |           | B6-SB01-A02 |           | B6-SB01-A02DL |           | B7-SB01-A01 |           |
| Sample Type                 |          |               |           |               |           |             |           |             |           |               |           |             |           |
| Batch#                      |          | 9501G423      |           | 9501G450      |           | 9501G553    |           | 9501G553    |           | 9501G553      |           | 9501G553    |           |
| Prep#                       |          | 95GP0028      |           | 95GP0028      |           | 95GP0050    |           | 95GP0050    |           | 95GP0050      |           | 95GP0050    |           |
| RFW#                        |          | 002           |           | 001           |           | 008         |           | 009         |           | 009DL         |           | 006         |           |
| Sample Depth (bgs)          |          |               |           |               |           |             |           |             |           |               |           |             |           |
| Dilution Factor             |          | 1.00          |           | 1.00          |           | 1.00        |           | 1.00        |           | 5.00          |           | 1.00        |           |
| Matrix                      |          | soil          |           | soil          |           | soil        |           | soil        |           | soil          |           | soil        |           |
| Units                       | mg/kg    | mg/kg         |           | mg/kg         |           | mg/kg       |           | mg/kg       |           | mg/kg         |           | mg/kg       |           |
| Sampling Date               |          | 1/3/95        |           | 1/4/95        |           | 1/10/95     |           | 1/10/95     |           | 1/10/95       |           | 1/10/95     |           |
| Analysis Date               |          | 1/17/95       |           | 1/17/95       |           | 1/26/95     |           | 1/26/95     |           | 2/6/95        |           | 1/26/95     |           |
| Analysis                    | Standard | Analytical    | Reporting | Analytical    | Reporting | Analytical  | Reporting | Analytical  | Reporting | Analytical    | Reporting | Analytical  | Reporting |
|                             |          | Result        | Limit     | Result        | Limit     | Result      | Limit     | Result      | Limit     | Result        | Limit     | Result      | Limit     |
| alpha-BHC                   |          | 0.0019 U      | 0.0019    | 0.0019 U      | 0.0019    | 0.0018 U    | 0.0018    | 0.002 U     | 0.002     | 0.0098 U      | 0.0098    | 0.0019 U    | 0.0019    |
| beta-BHC                    |          | 0.0019 U      | 0.0019    | 0.0019 U      | 0.0019    | 0.0018 U    | 0.0018    | 0.002 U     | 0.002     | 0.0098 U      | 0.0098    | 0.0019 U    | 0.0019    |
| delta-BHC                   |          | 0.0019 U      | 0.0019    | 0.0019 U      | 0.0019    | 0.0018 U    | 0.0018    | 0.002 U     | 0.002     | 0.0098 U      | 0.0098    | 0.0019 U    | 0.0019    |
| gamma-BHC (Lindane)         | 0.52     | 0.0019 U      | 0.0019    | 0.0019 U      | 0.0019    | 0.0018 U    | 0.0018    | 0.002 U     | 0.002     | 0.0098 U      | 0.0098    | 0.0019 U    | 0.0019    |
| Heptachlor                  | 0.15     | 0.0019 U      | 0.0019    | 0.0019 U      | 0.0019    | 0.0018 U    | 0.0018    | 0.002 U     | 0.002     | 0.0098 U      | 0.0098    | 0.0019 U    | 0.0019    |
| Aldrin                      | 0.04     | 0.0019 U      | 0.0019    | 0.0019 U      | 0.0019    | 0.0018 U    | 0.0018    | 0.002 U     | 0.002     | 0.0098 U      | 0.0098    | 0.0019 U    | 0.0019    |
| Heptachlor epoxide          |          | 0.0019 U      | 0.0019    | 0.0019 U      | 0.0019    | 0.0018 U    | 0.0018    | 0.002 U     | 0.002     | 0.0098 U      | 0.0098    | 0.0019 U    | 0.0019    |
| Endosulfan I                | 340      | 0.0019 U      | 0.0019    | 0.0019 U      | 0.0019    | 0.0018 U    | 0.0018    | 0.002 U     | 0.002     | 0.0098 U      | 0.0098    | 0.0019 U    | 0.0019    |
| Dieldrin                    | 0.042    | 0.0038 U      | 0.0038    | 0.0038 U      | 0.0038    | 0.0037 U    | 0.0037    | 0.0039 U    | 0.0039    | 0.02 U        | 0.02      | 0.0038 U    | 0.0038    |
| 4,4'-DDE                    | 2        | 0.0038 U      | 0.0038    | 0.0076 P      | 0.0038    | 0.028       | 0.0037    | 0.071       | 0.0039    | 0.066 D       | 0.02      | 0.023       | 0.0038    |
| Endrin                      | 17       | 0.0038 U      | 0.0038    | 0.0038 U      | 0.0038    | 0.0037 U    | 0.0037    | 0.0039 U    | 0.0039    | 0.02 U        | 0.02      | 0.0038 U    | 0.0038    |
| Endosulfan II               | 340      | 0.0038 U      | 0.0038    | 0.0038 U      | 0.0038    | 0.0037 U    | 0.0037    | 0.0039 U    | 0.0039    | 0.02 U        | 0.02      | 0.0038 U    | 0.0038    |
| 4,4'-DDD                    | 3        | 0.0038 U      | 0.0038    | 0.0038 U      | 0.0038    | 0.0037 U    | 0.0037    | 0.0039 U    | 0.0039    | 0.02 U        | 0.02      | 0.0038 U    | 0.0038    |
| Endosulfan sulfate          |          | 0.0038 U      | 0.0038    | 0.0038 U      | 0.0038    | 0.0037 U    | 0.0037    | 0.0039 U    | 0.0039    | 0.02 U        | 0.02      | 0.0038 U    | 0.0038    |
| 4,4'-DDT                    | 2        | 0.011 P       | 0.0038    | 0.008 P       | 0.0038    | 0.032       | 0.0037    | 0.053       | 0.0039    | 0.047 D       | 0.02      | 0.013       | 0.0038    |
| Methoxychlor                | 280      | 0.019 U       | 0.019     | 0.019 U       | 0.019     | 0.018 U     | 0.018     | 0.02 U      | 0.02      | 0.098 U       | 0.098     | 0.019 U     | 0.019     |
| Endrin ketone               |          | 0.0038 U      | 0.0038    | 0.0038 U      | 0.0038    | 0.0037 U    | 0.0037    | 0.0039 U    | 0.0039    | 0.02 U        | 0.02      | 0.0038 U    | 0.0038    |
| Endrin aldehyde             |          | 0.0038 U      | 0.0038    | 0.0038 U      | 0.0038    | 0.0037 U    | 0.0037    | 0.0039 U    | 0.0039    | 0.02 U        | 0.02      | 0.0038 U    | 0.0038    |
| alpha-Chlordane             |          | 0.0034 P      | 0.0019    | 0.0019 U      | 0.0019    | 0.0018 U    | 0.0018    | 0.002 U     | 0.002     | 0.0098 U      | 0.0098    | 0.0019 U    | 0.0019    |
| gamma-Chlordane             |          | 0.0027 P      | 0.0019    | 0.0019 U      | 0.0019    | 0.0018 U    | 0.0018    | 0.002 U     | 0.002     | 0.0098 U      | 0.0098    | 0.0019 U    | 0.0019    |
| Toxaphene                   | 0.1      | 0.19 U        | 0.19      | 0.19 U        | 0.19      | 0.18 U      | 0.18      | 0.2 U       | 0.2       | 0.98 U        | 0.98      | 0.19 U      | 0.19      |
| Aroclor-1016                | 0.49     | 0.038 U       | 0.038     | 0.038 U       | 0.038     | 0.037 U     | 0.037     | 0.039 U     | 0.039     | 0.2 U         | 0.2       | 0.038 U     | 0.038     |
| Aroclor-1221                | 0.49     | 0.076 U       | 0.076     | 0.076 U       | 0.076     | 0.074 U     | 0.074     | 0.078 U     | 0.078     | 0.39 U        | 0.39      | 0.077 U     | 0.077     |
| Aroclor-1232                | 0.49     | 0.038 U       | 0.038     | 0.038 U       | 0.038     | 0.037 U     | 0.037     | 0.039 U     | 0.039     | 0.2 U         | 0.2       | 0.038 U     | 0.038     |
| Aroclor-1242                | 0.49     | 0.038 U       | 0.038     | 0.038 U       | 0.038     | 0.037 U     | 0.037     | 0.039 U     | 0.039     | 0.2 U         | 0.2       | 0.038 U     | 0.038     |
| Aroclor-1248                | 0.49     | 0.038 U       | 0.038     | 0.038 U       | 0.038     | 0.037 U     | 0.037     | 0.039 U     | 0.039     | 0.2 U         | 0.2       | 0.038 U     | 0.038     |
| Aroclor-1254                | 0.49     | 0.038 U       | 0.038     | 0.038 U       | 0.038     | 0.037 U     | 0.037     | 0.039 U     | 0.039     | 0.2 U         | 0.2       | 0.038 U     | 0.038     |
| Aroclor-1260                | 0.49     | 0.038 U       | 0.038     | 0.038 U       | 0.038     | 0.037 U     | 0.037     | 0.039 U     | 0.039     | 0.2 U         | 0.2       | 0.038 U     | 0.038     |
| Method: TCL Pesticides/PCBs |          |               |           |               |           |             |           |             |           |               |           |             |           |

**CHARLES WOOD**  
**SOIL BORING PESTICIDES/PCBS**

| Geographical Location      |          | B7          |           | B8          |           | B8          |           | B9          |           | B9          |           | B9          |           |
|----------------------------|----------|-------------|-----------|-------------|-----------|-------------|-----------|-------------|-----------|-------------|-----------|-------------|-----------|
| Sample                     |          | B7-SB01-A02 |           | B8-SB01-A01 |           | B8-SB01-A02 |           | B9-SB01-A01 |           | B9-SB01-A02 |           | B9-SB01-C02 |           |
| Sample Type                |          |             |           |             |           |             |           |             |           |             |           | Duplicate   |           |
| Batch#                     |          | 9501G553    |           | 9501G553    |           | 9501G553    |           | 9501G831    |           | 9501G831    |           | 9501G831    |           |
| Prep#                      |          | 95GP0050    |           | 95GP0050    |           | 95GP0050    |           | 95GP0079    |           | 95GP0079    |           | 95GP0079    |           |
| RFW#                       |          | 007         |           | 004         |           | 005         |           | 001         |           | 002         |           | 003         |           |
| Sample Depth (bgs)         |          |             |           |             |           |             |           |             |           |             |           |             |           |
| Dilution Factor            |          | 1.00        |           | 1.00        |           | 1.00        |           | 1.00        |           | 1.00        |           | 1.00        |           |
| Matrix                     |          | soil        |           | soil        |           | soil        |           | soil        |           | soil        |           | soil        |           |
| Units                      | mg/kg    | mg/kg       |           | mg/kg       |           | mg/kg       |           | mg/kg       |           | mg/kg       |           | mg/kg       |           |
| Sampling Date              |          | 1/10/95     |           | 1/10/95     |           | 1/10/95     |           | 1/23/95     |           | 1/23/95     |           | 1/23/95     |           |
| Analysis Date              |          | 1/26/95     |           | 1/26/95     |           | 1/26/95     |           | 2/3/95      |           | 2/3/95      |           | 2/3/95      |           |
| Analysis                   | Standard | Analytical  | Reporting | Analytical  | Reporting | Analytical  | Reporting | Analytical  | Reporting | Analytical  | Reporting | Analytical  | Reporting |
|                            |          | Result      | Limit     | Result      | Limit     | Result      | Limit     | Result      | Limit     | Result      | Limit     | Result      | Limit     |
| alpha-BHC                  |          | 0.0019 U    | 0.0019    | 0.0018 U    | 0.0018    | 0.0019 U    | 0.0019    | 0.0019 U    | 0.0019    | 0.002 U     | 0.002     | 0.002 U     | 0.002     |
| beta-BHC                   |          | 0.0019 U    | 0.0019    | 0.0018 U    | 0.0018    | 0.0019 U    | 0.0019    | 0.0019 U    | 0.0019    | 0.002 U     | 0.002     | 0.002 U     | 0.002     |
| delta-BHC                  |          | 0.0019 U    | 0.0019    | 0.0018 U    | 0.0018    | 0.0019 U    | 0.0019    | 0.0019 U    | 0.0019    | 0.002 U     | 0.002     | 0.002 U     | 0.002     |
| gamma-BHC (Lindane)        | 0.52     | 0.0019 U    | 0.0019    | 0.0018 U    | 0.0018    | 0.0019 U    | 0.0019    | 0.0019 U    | 0.0019    | 0.002 U     | 0.002     | 0.002 U     | 0.002     |
| Heptachlor                 | 0.15     | 0.0019 U    | 0.0019    | 0.0018 U    | 0.0018    | 0.0019 U    | 0.0019    | 0.0019 U    | 0.0019    | 0.002 U     | 0.002     | 0.002 U     | 0.002     |
| Aldrin                     | 0.04     | 0.0019 U    | 0.0019    | 0.0018 U    | 0.0018    | 0.0019 U    | 0.0019    | 0.0019 U    | 0.0019    | 0.002 U     | 0.002     | 0.002 U     | 0.002     |
| Heptachlor epoxide         |          | 0.0019 U    | 0.0019    | 0.0018 U    | 0.0018    | 0.0019 U    | 0.0019    | 0.0019 U    | 0.0019    | 0.002 U     | 0.002     | 0.002 U     | 0.002     |
| Endosulfan I               | 340      | 0.0019 U    | 0.0019    | 0.0018 U    | 0.0018    | 0.0019 U    | 0.0019    | 0.0019 U    | 0.0019    | 0.002 U     | 0.002     | 0.002 U     | 0.002     |
| Dieldrin                   | 0.042    | 0.0039 U    | 0.0039    | 0.0036 U    | 0.0036    | 0.0038 U    | 0.0038    | 0.0039 U    | 0.0039    | 0.004 U     | 0.004     | 0.004 U     | 0.004     |
| 4,4'-DDE                   | 2        | 0.0039 U    | 0.0039    | 0.0036 U    | 0.0036    | 0.0038 U    | 0.0038    | 0.011       | 0.0039    | 0.004 U     | 0.004     | 0.0044      | 0.004     |
| Endrin                     | 17       | 0.0039 U    | 0.0039    | 0.0036 U    | 0.0036    | 0.0038 U    | 0.0038    | 0.0039 U    | 0.0039    | 0.004 U     | 0.004     | 0.004 U     | 0.004     |
| Endosulfan II              | 340      | 0.0039 U    | 0.0039    | 0.0036 U    | 0.0036    | 0.0038 U    | 0.0038    | 0.0039 U    | 0.0039    | 0.004 U     | 0.004     | 0.004 U     | 0.004     |
| 4,4'-DDD                   | 3        | 0.0039 U    | 0.0039    | 0.0036 U    | 0.0036    | 0.0038 U    | 0.0038    | 0.0039 U    | 0.0039    | 0.004 U     | 0.004     | 0.004 U     | 0.004     |
| Endosulfan sulfate         |          | 0.0039 U    | 0.0039    | 0.0036 U    | 0.0036    | 0.0038 U    | 0.0038    | 0.0039 U    | 0.0039    | 0.004 U     | 0.004     | 0.004 U     | 0.004     |
| 4,4'-DDT                   | 2        | 0.0039 U    | 0.0039    | 0.0036 U    | 0.0036    | 0.0038 U    | 0.0038    | 0.02        | 0.0039    | 0.0024 U    | 0.004     | 0.0053      | 0.004     |
| Methoxychlor               | 280      | 0.019 U     | 0.019     | 0.018 U     | 0.018     | 0.019 U     | 0.019     | 0.019 U     | 0.019     | 0.02 U      | 0.02      | 0.02 U      | 0.02      |
| Endrin ketone              |          | 0.0039 U    | 0.0039    | 0.0036 U    | 0.0036    | 0.0038 U    | 0.0038    | 0.0039 U    | 0.0039    | 0.004 U     | 0.004     | 0.004 U     | 0.004     |
| Endrin aldehyde            |          | 0.0039 U    | 0.0039    | 0.0036 U    | 0.0036    | 0.0038 U    | 0.0038    | 0.0039 U    | 0.0039    | 0.004 U     | 0.004     | 0.004 U     | 0.004     |
| alpha-Chlordane            |          | 0.0019 U    | 0.0019    | 0.0018 U    | 0.0018    | 0.0019 U    | 0.0019    | 0.0019 U    | 0.0019    | 0.002 U     | 0.002     | 0.002 U     | 0.002     |
| gamma-Chlordane            |          | 0.0019 U    | 0.0019    | 0.0018 U    | 0.0018    | 0.0019 U    | 0.0019    | 0.0019 U    | 0.0019    | 0.002 U     | 0.002     | 0.002 U     | 0.002     |
| Toxaphene                  | 0.1      | 0.19 U      | 0.19      | 0.18 U      | 0.18      | 0.19 U      | 0.19      | 0.19 U      | 0.19      | 0.2 U       | 0.2       | 0.2 U       | 0.2       |
| Aroclor-1016               | 0.49     | 0.039 U     | 0.039     | 0.036 U     | 0.036     | 0.038 U     | 0.038     | 0.039 U     | 0.039     | 0.04 U      | 0.04      | 0.04 U      | 0.04      |
| Aroclor-1221               | 0.49     | 0.078 U     | 0.078     | 0.072 U     | 0.072     | 0.077 U     | 0.077     | 0.078 U     | 0.078     | 0.079 U     | 0.079     | 0.081 U     | 0.081     |
| Aroclor-1232               | 0.49     | 0.039 U     | 0.039     | 0.036 U     | 0.036     | 0.038 U     | 0.038     | 0.039 U     | 0.039     | 0.04 U      | 0.04      | 0.04 U      | 0.04      |
| Aroclor-1242               | 0.49     | 0.039 U     | 0.039     | 0.036 U     | 0.036     | 0.038 U     | 0.038     | 0.039 U     | 0.039     | 0.04 U      | 0.04      | 0.04 U      | 0.04      |
| Aroclor-1248               | 0.49     | 0.039 U     | 0.039     | 0.036 U     | 0.036     | 0.038 U     | 0.038     | 0.039 U     | 0.039     | 0.04 U      | 0.04      | 0.04 U      | 0.04      |
| Aroclor-1254               | 0.49     | 0.039 U     | 0.039     | 0.036 U     | 0.036     | 0.038 U     | 0.038     | 0.039 U     | 0.039     | 0.04 U      | 0.04      | 0.04 U      | 0.04      |
| Aroclor-1260               | 0.49     | 0.039 U     | 0.039     | 0.036 U     | 0.036     | 0.038 U     | 0.038     | 0.039 U     | 0.039     | 0.04 U      | 0.04      | 0.04 U      | 0.04      |
| Method:TCL Pesticides/PCBs |          |             |           |             |           |             |           |             |           |             |           |             |           |



**CHARLES WOOD**  
**SOIL BORING PESTICIDES/PCBS**

| Geographical Location      |          | B10          |           | B10          |           | B10            |           |
|----------------------------|----------|--------------|-----------|--------------|-----------|----------------|-----------|
| Sample                     |          | B10-SB01-A01 |           | B10-SB01-A02 |           | B10-SB01-A02RE |           |
| Sample Type                |          |              |           |              |           |                |           |
| Batch#                     |          | 9501G553     |           | 9501G553     |           | 9501G553       |           |
| Prep#                      |          | 95GP0050     |           | 95GP0050     |           | 95GP0079       |           |
| RFW#                       |          | 001          |           | 002          |           | 002RE          |           |
| Sample Depth (bgs)         |          |              |           |              |           |                |           |
| Dilution Factor            |          | 1.00         |           | 1.00         |           | 1.00           |           |
| Matrix                     |          | soil         |           | soil         |           | soil           |           |
| Units                      | mg/kg    | mg/kg        |           | mg/kg        |           | mg/kg          |           |
| Sampling Date              |          | 1/10/94      |           | 1/10/95      |           | 1/10/95        |           |
| Analysis Date              |          | 1/26/95      |           | 1/26/95      |           | 2/3/95         |           |
| Analysis                   | Standard | Analytical   | Reporting | Analytical   | Reporting | Analytical     | Reporting |
|                            |          | Result       | Limit     | Result       | Limit     | Result         | Limit     |
| alpha-BHC                  |          | 0.002 U      | 0.002     | 0.0019 U     | 0.0019    | 0.0019 U       | 0.0019    |
| beta-BHC                   |          | 0.002 U      | 0.002     | 0.0019 U     | 0.0019    | 0.0019 U       | 0.0019    |
| delta-BHC                  |          | 0.002 U      | 0.002     | 0.0019 U     | 0.0019    | 0.0019 U       | 0.0019    |
| gamma-BHC (Lindane)        | 0.52     | 0.002 U      | 0.002     | 0.0019 U     | 0.0019    | 0.0019 U       | 0.0019    |
| Heptachlor                 | 0.15     | 0.002 U      | 0.002     | 0.0019 U     | 0.0019    | 0.0019 U       | 0.0019    |
| Aldrin                     | 0.04     | 0.002 U      | 0.002     | 0.0019 U     | 0.0019    | 0.0019 U       | 0.0019    |
| Heptachlor epoxide         |          | 0.002 U      | 0.002     | 0.0019 U     | 0.0019    | 0.0019 U       | 0.0019    |
| Endosulfan I               | 340      | 0.002 U      | 0.002     | 0.0019 U     | 0.0019    | 0.0019 U       | 0.0019    |
| Dieldrin                   | 0.042    | 0.0039 U     | 0.0039    | 0.0039 U     | 0.0039    | 0.0039 U       | 0.0039    |
| 4,4'-DDE                   | 2        | 0.0035 J     | 0.0039    | 0.0039 U     | 0.0039    | 0.0039 U       | 0.0039    |
| Endrin                     | 17       | 0.0039 U     | 0.0039    | 0.0039 U     | 0.0039    | 0.0039 U       | 0.0039    |
| Endosulfan II              | 340      | 0.0039 U     | 0.0039    | 0.0039 U     | 0.0039    | 0.0039 U       | 0.0039    |
| 4,4'-DDD                   | 3        | 0.0039 U     | 0.0039    | 0.0039 U     | 0.0039    | 0.0039 U       | 0.0039    |
| Endosulfan sulfate         |          | 0.0039 U     | 0.0039    | 0.0039 U     | 0.0039    | 0.0039 U       | 0.0039    |
| 4,4'-DDT                   | 2        | 0.0024 J     | 0.0039    | 0.0039 U     | 0.0039    | 0.0039 U       | 0.0039    |
| Methoxychlor               | 280      | 0.02 U       | 0.02      | 0.019 U      | 0.019     | 0.019 U        | 0.019     |
| Endrin ketone              |          | 0.0039 U     | 0.0039    | 0.0039 U     | 0.0039    | 0.0039 U       | 0.0039    |
| Endrin aldehyde            |          | 0.0039 U     | 0.0039    | 0.0039 U     | 0.0039    | 0.0039 U       | 0.0039    |
| alpha-Chlordane            |          | 0.002 U      | 0.002     | 0.0019 U     | 0.0019    | 0.0019 U       | 0.0019    |
| gamma-Chlordane            |          | 0.002 U      | 0.002     | 0.0019 U     | 0.0019    | 0.0019 U       | 0.0019    |
| Toxaphene                  | 0.1      | 0.2 U        | 0.2       | 0.19 U       | 0.19      | 0.19 U         | 0.19      |
| Aroclor-1016               | 0.49     | 0.039 U      | 0.039     | 0.039 U      | 0.039     | 0.039 U        | 0.039     |
| Aroclor-1221               | 0.49     | 0.079 U      | 0.079     | 0.078 U      | 0.078     | 0.077 U        | 0.077     |
| Aroclor-1232               | 0.49     | 0.039 U      | 0.039     | 0.039 U      | 0.039     | 0.039 U        | 0.039     |
| Aroclor-1242               | 0.49     | 0.039 U      | 0.039     | 0.039 U      | 0.039     | 0.039 U        | 0.039     |
| Aroclor-1248               | 0.49     | 0.039 U      | 0.039     | 0.039 U      | 0.039     | 0.039 U        | 0.039     |
| Aroclor-1254               | 0.49     | 0.039 U      | 0.039     | 0.039 U      | 0.039     | 0.039 U        | 0.039     |
| Aroclor-1260               | 0.49     | 0.039 U      | 0.039     | 0.039 U      | 0.039     | 0.039 U        | 0.039     |
| Method:TCL Pesticides/PCBs |          |              |           |              |           |                |           |

**CHARLES WOOD  
GROUNDWATER VOLATILES**

| Geographical Location      |          |      | CW1           |      | CW1           |      | CW1           |      | CW1                 |      | CW1           |           | CW1           |           | CW1           |           |
|----------------------------|----------|------|---------------|------|---------------|------|---------------|------|---------------------|------|---------------|-----------|---------------|-----------|---------------|-----------|
| Sample                     |          |      | CW01-MW26-A01 |      | CW01-MW26-A02 |      | CW01-MW26-D02 |      | CW01-MW26-E02       |      | CW01-MW27-A01 |           | CW01-MW27-A02 |           | CW01-MW28-A01 |           |
| Sample Type                |          |      |               |      |               |      | Trip Blank    |      | Field Rinsate Blank |      |               |           |               |           |               |           |
| Batch#                     |          |      | 9502G358      |      | 9503G739      |      | 9503G739      |      | 9503G739            |      | 9502G358      |           | 9503G739      |           | 9502G358      |           |
| Prep#                      |          |      | 95GVC041      |      | 95GVE071      |      | 95GVE071      |      | 95GVE071            |      | 95GVC039      |           | 95GVE071      |           | 95GVC039      |           |
| RFW#                       |          |      | 001           |      | 003           |      | 005           |      | 006                 |      | 003           |           | 001           |           | 005           |           |
| Dilution Factor            |          |      | 1.00          |      | 1.00          |      | 1.00          |      | 1.00                |      | 1.00          |           | 1.00          |           | 1.00          |           |
| Matrix                     |          |      | water         |      | water         |      | water         |      | water               |      | water         |           | water         |           | water         |           |
| Units                      | ug/l     | ug/l | ug/l          |      | ug/l          |      | ug/l          |      | ug/l                |      | ug/l          |           | ug/l          |           | ug/l          |           |
| Sampling Date              |          |      | 2/21/95       |      | 3/14/95       |      | 3/14/95       |      | 3/14/95             |      | 2/21/95       |           | 3/14/95       |           | 2/21/95       |           |
| Analysis Date              |          |      | 3/1/95        |      | 3/19/95       |      | 3/19/95       |      | 3/19/95             |      | 2/27/95       |           | 3/19/95       |           | 2/27/95       |           |
| Analysis                   | Standard | MDL  | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical          | CRQL | Analytical    | Reporting | Analytical    | Reporting | Analytical    | Reporting |
|                            |          |      | Result        |      | Result        |      | Result        |      | Result              |      | Result        | Limit     | Result        | Limit     | Result        | Limit     |
| Chloromethane              |          | 7.3  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        |
| Bromomethane               |          | 6.7  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        |
| Vinyl Chloride             | 5        | 7.9  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        |
| Chloroethane               |          | 9.1  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        |
| Methylene Chloride         | 2        | 2.7  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        |
| Acetone                    | 700      | 6.9  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        |
| Carbon Disulfide           |          | 4.4  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        |
| 1,1-Dichloroethene         |          | 4.9  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        |
| 1,1-Dichloroethane         | 70       | 3.0  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        |
| 1,2-Dichloroethene (total) |          | 4.4  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        |
| Chloroform                 | 6        | 2.9  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        |
| 1,2-Dichloroethane         | 2        | 2.4  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        |
| 2-Butanone                 |          | 4.1  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        |
| 1,1,1-Trichloroethane      | 30       | 1.7  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        |
| Carbon Tetrachloride       | 2        | 1.5  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        |
| Bromodichloromethane       | 1        | 2.0  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        |
| 1,2-Dichloropropane        | 1        | 1.7  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        |
| cis-1,3-Dichloropropene    | 0.2      | 3.0  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        |
| Trichloroethene            | 1        | 2.0  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 10 U          | 10        | 10 U          | 10        | 23            | 10        |
| Dibromochloromethane       | 10       | 2.4  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        |
| 1,1,2-Trichloroethane      | 3        | 4.3  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        |
| Benzene                    | 1        | 3.3  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        |
| trans-1,3-Dichloropropene  | 0.2      | 2.4  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        |
| Bromoform                  | 4        | 3.1  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        |
| 4-Methyl-2-pentanone       | 400      | 5.5  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        |
| 2-Hexanone                 |          | 3.9  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        |
| Tetrachloroethene          | 1        | 4.0  | 10 U          | 10   | 4 J           | 10   | 10 U          | 10   | 10 U                | 10   | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        |
| 1,1,2,2-Tetrachloroethane  | 2        | 4.2  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        |
| Toluene                    | 1000     | 2.7  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        |
| Chlorobenzene              | 4        | 2.7  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        |
| Ethylbenzene               | 700      | 3.1  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        |
| Styrene                    | 100      | 3.8  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        |
| Xylene (total)             | 40       | 3.8  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        |
| Dilution Factor            |          |      |               |      |               |      |               |      |                     |      |               |           |               |           |               |           |
| Method:TCL Volatiles       |          |      |               |      |               |      |               |      |                     |      |               |           |               |           |               |           |

**CHARLES WOOD  
GROUNDWATER VOLATILES**

| Geographical Location      |          |      | CW1               |                 | CW1               |                 | CW1               |                 | CW1               |                 | CW1                 |                 | CW2               |                 | CW2               |                 |
|----------------------------|----------|------|-------------------|-----------------|-------------------|-----------------|-------------------|-----------------|-------------------|-----------------|---------------------|-----------------|-------------------|-----------------|-------------------|-----------------|
| Sample                     |          |      | CW01-MW28-A02     |                 | CW01-MW29-A01     |                 | CW01-MW29-A02     |                 | CW01-MW29-D01     |                 | CW01-MW29-E01       |                 | CW02-MW30-A01     |                 | CW02-MW30-A02     |                 |
| Sample Type                |          |      |                   |                 |                   |                 |                   |                 | Trip Blank        |                 | Field Rinsate Blank |                 |                   |                 |                   |                 |
| Batch#                     |          |      | 9503G739          |                 | 9502G358          |                 | 9503G739          |                 | 9502G358          |                 | 9502G358            |                 | 9502G358          |                 | 9503G739          |                 |
| Prep#                      |          |      | 95GVE071          |                 | 95GVC039          |                 | 95GVE071 & 62     |                 | 95GVC039          |                 | 95GVC039            |                 | 95GVC041          |                 | 95GVE071          |                 |
| RFW#                       |          |      | 008               |                 | 007               |                 | 010               |                 | 009               |                 | 010                 |                 | 012               |                 | 012               |                 |
| Dilution Factor            |          |      | 1.00              |                 | 1.00              |                 | 1.00              |                 | 1.00              |                 | 1.00                |                 | 1.00              |                 | 1.00              |                 |
| Matrix                     |          |      | water             |                 | water             |                 | water             |                 | water             |                 | water               |                 | water             |                 | water             |                 |
| Units                      | ug/l     | ug/l | ug/l              |                 | ug/l              |                 | ug/l              |                 | ug/l              |                 | ug/l                |                 | ug/l              |                 | ug/l              |                 |
| Sampling Date              |          |      | 3/14/95           |                 | 2/21/95           |                 | 3/14/95           |                 | 2/21/95           |                 | 2/21/95             |                 | 2/21/95           |                 | 3/14/95           |                 |
| Analysis Date              |          |      | 3/19/95           |                 | 2/27/95           |                 | 3/19/95           |                 | 2/27/95           |                 | 2/27/95             |                 | 3/1/95            |                 | 3/19/95           |                 |
| Analysis                   | Standard | MDL  | Analytical Result | Reporting Limit | Analytical Result | Reporting Limit | Analytical Result | Reporting Limit | Analytical Result | Reporting Limit | Analytical Result   | Reporting Limit | Analytical Result | Reporting Limit | Analytical Result | Reporting Limit |
| Chloromethane              |          | 7.3  | 10 U              | 10              | 10 U              | 10              | 10 U              | 10              | 10 U              | 10              | 10 U                | 10              | 10 U              | 10              | 10 U              | 10              |
| Bromomethane               |          | 6.7  | 10 U              | 10              | 10 U              | 10              | 10 U              | 10              | 10 U              | 10              | 10 U                | 10              | 10 U              | 10              | 10 U              | 10              |
| Vinyl Chloride             | 5        | 7.9  | 10 U              | 10              | 10 U              | 10              | 10 U              | 10              | 10 U              | 10              | 10 U                | 10              | 10 U              | 10              | 10 U              | 10              |
| Chloroethane               |          | 9.1  | 10 U              | 10              | 10 U              | 10              | 10 U              | 10              | 10 U              | 10              | 10 U                | 10              | 10 U              | 10              | 10 U              | 10              |
| Methylene Chloride         | 2        | 2.7  | 10 U              | 10              | 10 U              | 10              | 10 U              | 10              | 10 U              | 10              | 10 U                | 10              | 10 U              | 10              | 10 U              | 10              |
| Acetone                    | 700      | 6.9  | 10 U              | 10              | 10 U              | 10              | 10 U              | 10              | 20                | 10              | 10 U                | 10              | 10 U              | 10              | 10 U              | 10              |
| Carbon Disulfide           |          | 4.4  | 10 U              | 10              | 10 U              | 10              | 10 U              | 10              | 10 U              | 10              | 10 U                | 10              | 10 U              | 10              | 10 U              | 10              |
| 1,1-Dichloroethene         |          | 4.9  | 10 U              | 10              | 10 U              | 10              | 4 J               | 10              | 10 U              | 10              | 10 U                | 10              | 10 U              | 10              | 10 U              | 10              |
| 1,1-Dichloroethane         | 70       | 3.0  | 10 U              | 10              | 10 U              | 10              | 10 U              | 10              | 10 U              | 10              | 10 U                | 10              | 10 U              | 10              | 10 U              | 10              |
| 1,2-Dichloroethene (total) |          | 4.4  | 10 U              | 10              | 110               | 10              | 360               | 50 *            | 10 U              | 10              | 10 U                | 10              | 10 U              | 10              | 10 U              | 10              |
| Chloroform                 | 6        | 2.9  | 10 U              | 10              | 10 U              | 10              | 10 U              | 10              | 10 U              | 10              | 10 U                | 10              | 10 U              | 10              | 10 U              | 10              |
| 1,2-Dichloroethane         | 2        | 2.4  | 10 U              | 10              | 10 U              | 10              | 10 U              | 10              | 10 U              | 10              | 10 U                | 10              | 10 U              | 10              | 10 U              | 10              |
| 2-Butanone                 |          | 4.1  | 10 U              | 10              | 10 U              | 10              | 10 U              | 10              | 36                | 10              | 10 U                | 10              | 10 U              | 10              | 10 U              | 10              |
| 1,1,1-Trichloroethane      | 30       | 1.7  | 10 U              | 10              | 10 U              | 10              | 10 U              | 10              | 10 U              | 10              | 10 U                | 10              | 10 U              | 10              | 10 U              | 10              |
| Carbon Tetrachloride       | 2        | 1.5  | 10 U              | 10              | 10 U              | 10              | 10 U              | 10              | 10 U              | 10              | 10 U                | 10              | 10 U              | 10              | 10 U              | 10              |
| Bromodichloromethane       | 1        | 2.0  | 10 U              | 10              | 10 U              | 10              | 10 U              | 10              | 10 U              | 10              | 10 U                | 10              | 10 U              | 10              | 10 U              | 10              |
| 1,2-Dichloropropane        | 1        | 1.7  | 10 U              | 10              | 10 U              | 10              | 10 U              | 10              | 10 U              | 10              | 10 U                | 10              | 10 U              | 10              | 10 U              | 10              |
| cis-1,3-Dichloropropene    | 0.2      | 3.0  | 10 U              | 10              | 10 U              | 10              | 10 U              | 10              | 10 U              | 10              | 10 U                | 10              | 10 U              | 10              | 10 U              | 10              |
| Trichloroethene            | 1        | 2.0  | 48                | 10              | 780               | 100 *           | 990               | 50 *            | 10 U              | 10              | 10 U                | 10              | 10 U              | 10              | 10 U              | 10              |
| Dibromochloromethane       | 10       | 2.4  | 10 U              | 10              | 10 U              | 10              | 10 U              | 10              | 10 U              | 10              | 10 U                | 10              | 10 U              | 10              | 10 U              | 10              |
| 1,1,2-Trichloroethane      | 3        | 4.3  | 10 U              | 10              | 10 U              | 10              | 10 U              | 10              | 10 U              | 10              | 10 U                | 10              | 10 U              | 10              | 10 U              | 10              |
| Benzene                    | 1        | 3.3  | 10 U              | 10              | 10 U              | 10              | 10 U              | 10              | 10 U              | 10              | 10 U                | 10              | 10 U              | 10              | 10 U              | 10              |
| trans-1,3-Dichloropropene  | 0.2      | 2.4  | 10 U              | 10              | 10 U              | 10              | 10 U              | 10              | 10 U              | 10              | 10 U                | 10              | 10 U              | 10              | 10 U              | 10              |
| Bromoform                  | 4        | 3.1  | 10 U              | 10              | 10 U              | 10              | 10 U              | 10              | 10 U              | 10              | 10 U                | 10              | 10 U              | 10              | 10 U              | 10              |
| 4-Methyl-2-pentanone       | 400      | 5.5  | 10 U              | 10              | 10 U              | 10              | 10 U              | 10              | 10 U              | 10              | 10 U                | 10              | 10 U              | 10              | 10 U              | 10              |
| 2-Hexanone                 |          | 3.9  | 10 U              | 10              | 10 U              | 10              | 10 U              | 10              | 10 U              | 10              | 10 U                | 10              | 10 U              | 10              | 10 U              | 10              |
| Tetrachloroethene          | 1        | 4.0  | 10 U              | 10              | 10 U              | 10              | 10 U              | 10              | 10 U              | 10              | 10 U                | 10              | 10 U              | 10              | 10 U              | 10              |
| 1,1,2,2-Tetrachloroethane  | 2        | 4.2  | 10 U              | 10              | 10 U              | 10              | 10 U              | 10              | 10 U              | 10              | 10 U                | 10              | 10 U              | 10              | 10 U              | 10              |
| Toluene                    | 1000     | 2.7  | 10 U              | 10              | 10 U              | 10              | 10 U              | 10              | 10 U              | 10              | 10 U                | 10              | 10 U              | 10              | 10 U              | 10              |
| Chlorobenzene              | 4        | 2.7  | 10 U              | 10              | 10 U              | 10              | 10 U              | 10              | 10 U              | 10              | 10 U                | 10              | 10 U              | 10              | 10 U              | 10              |
| Ethylbenzene               | 700      | 3.1  | 10 U              | 10              | 10 U              | 10              | 10 U              | 10              | 10 U              | 10              | 10 U                | 10              | 10 U              | 10              | 10 U              | 10              |
| Styrene                    | 100      | 3.8  | 10 U              | 10              | 10 U              | 10              | 10 U              | 10              | 10 U              | 10              | 10 U                | 10              | 10 U              | 10              | 10 U              | 10              |
| Xylene (total)             | 40       | 3.8  | 10 U              | 10              | 10 U              | 10              | 10 U              | 10              | 10 U              | 10              | 10 U                | 10              | 10 U              | 10              | 10 U              | 10              |
| Dilution Factor            |          |      |                   |                 | * = 10            |                 | * = 5             |                 |                   |                 |                     |                 |                   |                 |                   |                 |
| Method: TCL Volatiles      |          |      |                   |                 |                   |                 |                   |                 |                   |                 |                     |                 |                   |                 |                   |                 |

**CHARLES WOOD  
GROUNDWATER VOLATILES**

| Geographical Location      |          |      | CW2           |           | CW2           |           | CW2           |           | CW2           |           | CW2           |           | CW2           |           | CW6           |           |
|----------------------------|----------|------|---------------|-----------|---------------|-----------|---------------|-----------|---------------|-----------|---------------|-----------|---------------|-----------|---------------|-----------|
| Sample                     |          |      | CW02-MW31-A01 |           | CW02-MW31-A02 |           | CW02-MW32-A01 |           | CW02-MW32-A02 |           | CW02-MW33-A01 |           | CW02-MW33-A02 |           | CW06-MW01-A01 |           |
| Sample Type                |          |      |               |           |               |           |               |           |               |           |               |           |               |           |               |           |
| Batch#                     |          |      | 9502G358      |           | 9503G739      |           | 9502G358      |           | 9503G739      |           | 9502G358      |           | 9503G739      |           | 9505G840      |           |
| Prep#                      |          |      | 95GVC041      |           | 95GVE072      |           | 95GVC041      |           | 95GVE072      |           | 95GVC041      |           | 95GVE072      |           | 95GVC129      |           |
| RFW#                       |          |      | 014           |           | 014           |           | 016           |           | 016           |           | 018           |           | 018           |           | 002           |           |
| Dilution Factor            |          |      | 1.00          |           | 1.00          |           | 1.00          |           | 1.00          |           | 1.00          |           | 1.00          |           | 1.00          |           |
| Matrix                     |          |      | water         |           | water         |           | water         |           | water         |           | water         |           | water         |           | water         |           |
| Units                      | ug/l     | ug/l | ug/l          |           | ug/l          |           | ug/l          |           | ug/l          |           | ug/l          |           | ug/l          |           | ug/l          |           |
| Sampling Date              |          |      | 2/21/95       |           | 3/14/95       |           | 2/21/95       |           | 3/14/95       |           | 2/21/95       |           | 3/14/95       |           | 5/10/95       |           |
| Analysis Date              |          |      | 3/1/95        |           | 3/20/95       |           | 3/1/95        |           | 3/20/95       |           | 3/1/95        |           | 3/20/95       |           | 5/16/95       |           |
| Analysis                   | Standard | MDL  | Analytical    | Reporting | Analytical    | Reporting | Analytical    | Reporting | Analytical    | Reporting | Analytical    | Reporting | Analytical    | Reporting | Analytical    | Reporting |
|                            |          |      | Result        | Limit     | Result        | Limit     | Result        | Limit     | Result        | Limit     | Result        | Limit     | Result        | Limit     | Result        | Limit     |
| Chloromethane              |          | 7.3  | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        |
| Bromomethane               |          | 6.7  | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        |
| Vinyl Chloride             | 5        | 7.9  | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        |
| Chloroethane               |          | 9.1  | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        |
| Methylene Chloride         | 2        | 2.7  | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        |
| Acetone                    | 700      | 6.9  | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        |
| Carbon Disulfide           |          | 4.4  | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        |
| 1,1-Dichloroethene         |          | 4.9  | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        |
| 1,1-Dichloroethane         | 70       | 3.0  | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        |
| 1,2-Dichloroethene (total) |          | 4.4  | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        |
| Chloroform                 | 6        | 2.9  | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        |
| 1,2-Dichloroethane         | 2        | 2.4  | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        |
| 2-Butanone                 |          | 4.1  | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        |
| 1,1,1-Trichloroethane      | 30       | 1.7  | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        |
| Carbon Tetrachloride       | 2        | 1.5  | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        |
| Bromodichloromethane       | 1        | 2.0  | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        |
| 1,2-Dichloropropane        | 1        | 1.7  | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        |
| cis-1,3-Dichloropropene    | 0.2      | 3.0  | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        |
| Trichloroethene            | 1        | 2.0  | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        |
| Dibromochloromethane       | 10       | 2.4  | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        |
| 1,1,2-Trichloroethane      | 3        | 4.3  | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        |
| Benzene                    | 1        | 3.3  | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 11            | 10        |
| trans-1,3-Dichloropropene  | 0.2      | 2.4  | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        |
| Bromoform                  | 4        | 3.1  | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        |
| 4-Methyl-2-pentanone       | 400      | 5.5  | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        |
| 2-Hexanone                 |          | 3.9  | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        |
| Tetrachloroethene          | 1        | 4.0  | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 3 J           | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        |
| 1,1,2,2-Tetrachloroethane  | 2        | 4.2  | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        |
| Toluene                    | 1000     | 2.7  | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        |
| Chlorobenzene              | 4        | 2.7  | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        |
| Ethylbenzene               | 700      | 3.1  | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 2 J           | 10        |
| Styrene                    | 100      | 3.8  | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        |
| Xylene (total)             | 40       | 3.8  | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 4 J           | 10        |
| Dilution Factor            |          |      |               |           |               |           |               |           |               |           |               |           |               |           |               |           |
| Method: TCL Volatiles      |          |      |               |           |               |           |               |           |               |           |               |           |               |           |               |           |

**CHARLES WOOD  
GROUNDWATER VOLATILES**

| Geographical Location      |          |      | CW6           |           | CW6                 |           | CW6           |           | CW6           |           | CW6           |           | CW6           |           |
|----------------------------|----------|------|---------------|-----------|---------------------|-----------|---------------|-----------|---------------|-----------|---------------|-----------|---------------|-----------|
| Sample                     |          |      | CW06-MW01-A02 |           | CW06-MW01-E02       |           | CW06-MW01-D02 |           | CW06-MW34-A01 |           | CW06-MW34-A02 |           | CW06-MW34-D01 |           |
| Sample Type                |          |      |               |           | Field Rinsate Blank |           | Trip Blank    |           |               |           |               |           | Trip Blank    |           |
| Batch#                     |          |      | 9505G138      |           | 9505G138            |           | 9505G138      |           | 9502G300      |           | 9503G723      |           | 9502G300      |           |
| Prep#                      |          |      | 95GVB148      |           | 95GVB148            |           | 95GVB148      |           | 95GVC034      |           | 95GVE071      |           | 95GVC034      |           |
| RFW#                       |          |      | 002           |           | 003                 |           | 004           |           | 001           |           | 001           |           | 002           |           |
| Dilution Factor            |          |      | 1.00          |           | 1.00                |           | 1.00          |           | 1.00          |           | 1.00          |           | 1.00          |           |
| Matrix                     |          |      | water         |           | water               |           | water         |           | water         |           | water         |           | water         |           |
| Units                      | ug/l     | ug/l | ug/l          |           | ug/l                |           | ug/l          |           | ug/l          |           | ug/l          |           | ug/l          |           |
| Sampling Date              |          |      | 5/25/95       |           | 5/25/95             |           | 5/25/95       |           | 2/20/95       |           | 3/13/95       |           | 2/20/95       |           |
| Analysis Date              |          |      | 6/1/95        |           | 6/1/95              |           | 6/1/95        |           | 2/23/95       |           | 3/19/95       |           | 2/23/95       |           |
| Analysis                   | Standard | MDL  | Analytical    | Reporting | Analytical          | Reporting | Analytical    | Reporting | Analytical    | Reporting | Analytical    | Reporting | Analytical    | Reporting |
|                            |          |      | Result        | Limit     | Result              | Limit     | Result        | Limit     | Result        | Limit     | Result        | Limit     | Result        | Limit     |
| Chloromethane              |          | 7.3  | 10 U          | 10        | 10 U                | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        |
| Bromomethane               |          | 6.7  | 10 U          | 10        | 10 U                | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        |
| Vinyl Chloride             | 5        | 7.9  | 10 U          | 10        | 10 U                | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        |
| Chloroethane               |          | 9.1  | 10 U          | 10        | 10 U                | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        |
| Methylene Chloride         | 2        | 2.7  | 10 U          | 10        | 10 U                | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        |
| Acetone                    | 700      | 6.9  | 10 U          | 10        | 10 U                | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        |
| Carbon Disulfide           |          | 4.4  | 10 U          | 10        | 10 U                | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        |
| 1,1-Dichloroethene         |          | 4.9  | 10 U          | 10        | 10 U                | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        |
| 1,1-Dichloroethane         | 70       | 3.0  | 10 U          | 10        | 10 U                | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        |
| 1,2-Dichloroethene (total) |          | 4.4  | 10 U          | 10        | 10 U                | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        |
| Chloroform                 | 6        | 2.9  | 10 U          | 10        | 10 U                | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        |
| 1,2-Dichloroethane         | 2        | 2.4  | 10 U          | 10        | 10 U                | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        |
| 2-Butanone                 |          | 4.1  | 10 U          | 10        | 10 U                | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 30            | 10        |
| 1,1,1-Trichloroethane      | 30       | 1.7  | 10 U          | 10        | 10 U                | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        |
| Carbon Tetrachloride       | 2        | 1.5  | 10 U          | 10        | 10 U                | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        |
| Bromodichloromethane       | 1        | 2.0  | 10 U          | 10        | 10 U                | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        |
| 1,2-Dichloropropane        | 1        | 1.7  | 10 U          | 10        | 10 U                | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        |
| cis-1,3-Dichloropropene    | 0.2      | 3.0  | 10 U          | 10        | 10 U                | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        |
| Trichloroethene            | 1        | 2.0  | 10 U          | 10        | 10 U                | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        |
| Dibromochloromethane       | 10       | 2.4  | 10 U          | 10        | 10 U                | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        |
| 1,1,2-Trichloroethane      | 3        | 4.3  | 10 U          | 10        | 10 U                | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        |
| Benzene                    | 1        | 3.3  | 10 U          | 10        | 10 U                | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        |
| trans-1,3-Dichloropropene  | 0.2      | 2.4  | 10 U          | 10        | 10 U                | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        |
| Bromoform                  | 4        | 3.1  | 10 U          | 10        | 10 U                | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        |
| 4-Methyl-2-pentanone       | 400      | 5.5  | 10 U          | 10        | 10 U                | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        |
| 2-Hexanone                 |          | 3.9  | 10 U          | 10        | 10 U                | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        |
| Tetrachloroethene          | 1        | 4.0  | 10 U          | 10        | 10 U                | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        |
| 1,1,2,2-Tetrachloroethane  | 2        | 4.2  | 10 U          | 10        | 10 U                | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        |
| Toluene                    | 1000     | 2.7  | 10 U          | 10        | 10 U                | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        |
| Chlorobenzene              | 4        | 2.7  | 10 U          | 10        | 10 U                | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        |
| Ethylbenzene               | 700      | 3.1  | 10 U          | 10        | 10 U                | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        |
| Styrene                    | 100      | 3.8  | 10 U          | 10        | 10 U                | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        |
| Xylene (total)             | 40       | 3.8  | 10 U          | 10        | 10 U                | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        |
| Dilution Factor            |          |      |               |           |                     |           |               |           |               |           |               |           |               |           |
| Method: TCL Volatiles      |          |      |               |           |                     |           |               |           |               |           |               |           |               |           |

**CHARLES WOOD  
GROUNDWATER VOLATILES**

| Geographical Location      |          |      | CW9           |           | CW9           |           | CW9                 |           | CW9           |           | CW9           |           | B6           |           |
|----------------------------|----------|------|---------------|-----------|---------------|-----------|---------------------|-----------|---------------|-----------|---------------|-----------|--------------|-----------|
| Sample                     |          |      | CW09-MW35-A01 |           | CW09-MW35-A02 |           | CW09-MW35-E01       |           | CW09-MW36-A01 |           | CW09-MW36-A02 |           | B6-MW06B-A01 |           |
| Sample Type                |          |      |               |           |               |           | Field Rinsate Blank |           |               |           |               |           |              |           |
| Batch#                     |          |      | 9502G300      |           | 9503G723      |           | 9502G300            |           | 9502G300      |           | 9503G723      |           | 9502G198     |           |
| Prep#                      |          |      | 95GVC034      |           | 95GVE071      |           | 95GVC036            |           | 95GVC036      |           | 95GVE071      |           | 95GVC029     |           |
| RFW#                       |          |      | 003           |           | 002           |           | 007                 |           | 005           |           | 004           |           | 003          |           |
| Dilution Factor            |          |      | 1.00          |           | 1.00          |           | 1.00                |           | 1.00          |           | 1.00          |           | 1.00         |           |
| Matrix                     |          |      | water         |           | water         |           | water               |           | water         |           | water         |           | water        |           |
| Units                      | ug/l     | ug/l | ug/l          |           | ug/l          |           | ug/l                |           | ug/l          |           | ug/l          |           | ug/l         |           |
| Sampling Date              |          |      | 2/20/95       |           | 3/13/95       |           | 2/20/95             |           | 2/20/95       |           | 3/13/95       |           | 2/15/95      |           |
| Analysis Date              |          |      | 2/23/95       |           | 3/19/95       |           | 2/24/95             |           | 2/24/95       |           | 3/19/95       |           | 2/20/95      |           |
| Analysis                   | Standard | MDL  | Analytical    | Reporting | Analytical    | Reporting | Analytical          | Reporting | Analytical    | Reporting | Analytical    | Reporting | Analytical   | Reporting |
|                            |          |      | Result        | Limit     | Result        | Limit     | Result              | Limit     | Result        | Limit     | Result        | Limit     | Result       | Limit     |
| Chloromethane              |          | 7.3  | 10 U          | 10        | 10 U          | 10        | 10 U                | 10        | 10 U          | 10        | 10 U          | 10        | 10 U         | 10        |
| Bromomethane               |          | 6.7  | 10 U          | 10        | 10 U          | 10        | 10 U                | 10        | 10 U          | 10        | 10 U          | 10        | 10 U         | 10        |
| Vinyl Chloride             | 5        | 7.9  | 10 U          | 10        | 10 U          | 10        | 10 U                | 10        | 10 U          | 10        | 10 U          | 10        | 10 U         | 10        |
| Chloroethane               |          | 9.1  | 10 U          | 10        | 10 U          | 10        | 10 U                | 10        | 10 U          | 10        | 10 U          | 10        | 10 U         | 10        |
| Methylene Chloride         | 2        | 2.7  | 10 U          | 10        | 10 U          | 10        | 10 U                | 10        | 10 U          | 10        | 10 U          | 10        | 10 U         | 10        |
| Acetone                    | 700      | 6.9  | 10 U          | 10        | 10 U          | 10        | 12                  | 10        | 10 U          | 10        | 10 U          | 10        | 10 U         | 10        |
| Carbon Disulfide           |          | 4.4  | 10 U          | 10        | 10 U          | 10        | 10 U                | 10        | 10 U          | 10        | 10 U          | 10        | 10 U         | 10        |
| 1,1-Dichloroethene         |          | 4.9  | 10 U          | 10        | 10 U          | 10        | 10 U                | 10        | 10 U          | 10        | 10 U          | 10        | 10 U         | 10        |
| 1,1-Dichloroethane         | 70       | 3.0  | 10 U          | 10        | 10 U          | 10        | 10 U                | 10        | 10 U          | 10        | 10 U          | 10        | 10 U         | 10        |
| 1,2-Dichloroethene (total) |          | 4.4  | 10 U          | 10        | 10 U          | 10        | 10 U                | 10        | 10 U          | 10        | 10 U          | 10        | 10 U         | 10        |
| Chloroform                 | 6        | 2.9  | 10 U          | 10        | 10 U          | 10        | 10 U                | 10        | 10 U          | 10        | 10 U          | 10        | 10 U         | 10        |
| 1,2-Dichloroethane         | 2        | 2.4  | 10 U          | 10        | 10 U          | 10        | 10 U                | 10        | 10 U          | 10        | 10 U          | 10        | 10 U         | 10        |
| 2-Butanone                 |          | 4.1  | 10 U          | 10        | 10 U          | 10        | 25                  | 10        | 10 U          | 10        | 10 U          | 10        | 10 U         | 10        |
| 1,1,1-Trichloroethane      | 30       | 1.7  | 10 U          | 10        | 10 U          | 10        | 10 U                | 10        | 10 U          | 10        | 10 U          | 10        | 10 U         | 10        |
| Carbon Tetrachloride       | 2        | 1.5  | 10 U          | 10        | 10 U          | 10        | 10 U                | 10        | 10 U          | 10        | 10 U          | 10        | 10 U         | 10        |
| Bromodichloromethane       | 1        | 2.0  | 10 U          | 10        | 10 U          | 10        | 10 U                | 10        | 10 U          | 10        | 10 U          | 10        | 10 U         | 10        |
| 1,2-Dichloropropane        | 1        | 1.7  | 10 U          | 10        | 10 U          | 10        | 10 U                | 10        | 10 U          | 10        | 10 U          | 10        | 10 U         | 10        |
| cis-1,3-Dichloropropene    | 0.2      | 3.0  | 10 U          | 10        | 10 U          | 10        | 10 U                | 10        | 10 U          | 10        | 10 U          | 10        | 10 U         | 10        |
| Trichloroethene            | 1        | 2.0  | 10 U          | 10        | 10 U          | 10        | 10 U                | 10        | 10 U          | 10        | 10 U          | 10        | 10 U         | 10        |
| Dibromochloromethane       | 10       | 2.4  | 10 U          | 10        | 10 U          | 10        | 10 U                | 10        | 10 U          | 10        | 10 U          | 10        | 10 U         | 10        |
| 1,1,2-Trichloroethane      | 3        | 4.3  | 10 U          | 10        | 10 U          | 10        | 10 U                | 10        | 10 U          | 10        | 10 U          | 10        | 10 U         | 10        |
| Benzene                    | 1        | 3.3  | 10 U          | 10        | 10 U          | 10        | 10 U                | 10        | 10 U          | 10        | 10 U          | 10        | 10 U         | 10        |
| trans-1,3-Dichloropropene  | 0.2      | 2.4  | 10 U          | 10        | 10 U          | 10        | 10 U                | 10        | 10 U          | 10        | 10 U          | 10        | 10 U         | 10        |
| Bromoform                  | 4        | 3.1  | 10 U          | 10        | 10 U          | 10        | 10 U                | 10        | 10 U          | 10        | 10 U          | 10        | 10 U         | 10        |
| 4-Methyl-2-pentanone       | 400      | 5.5  | 10 U          | 10        | 10 U          | 10        | 10 U                | 10        | 10 U          | 10        | 10 U          | 10        | 10 U         | 10        |
| 2-Hexanone                 |          | 3.9  | 10 U          | 10        | 10 U          | 10        | 10 U                | 10        | 10 U          | 10        | 10 U          | 10        | 10 U         | 10        |
| Tetrachloroethene          | 1        | 4.0  | 10 U          | 10        | 10 U          | 10        | 10 U                | 10        | 10 U          | 10        | 10 U          | 10        | 10 U         | 10        |
| 1,1,2,2-Tetrachloroethane  | 2        | 4.2  | 10 U          | 10        | 10 U          | 10        | 10 U                | 10        | 10 U          | 10        | 10 U          | 10        | 10 U         | 10        |
| Toluene                    | 1000     | 2.7  | 10 U          | 10        | 10 U          | 10        | 10 U                | 10        | 10 U          | 10        | 10 U          | 10        | 10 U         | 10        |
| Chlorobenzene              | 4        | 2.7  | 10 U          | 10        | 10 U          | 10        | 10 U                | 10        | 10 U          | 10        | 10 U          | 10        | 10 U         | 10        |
| Ethylbenzene               | 700      | 3.1  | 10 U          | 10        | 10 U          | 10        | 10 U                | 10        | 10 U          | 10        | 10 U          | 10        | 10 U         | 10        |
| Styrene                    | 100      | 3.8  | 10 U          | 10        | 10 U          | 10        | 10 U                | 10        | 10 U          | 10        | 10 U          | 10        | 10 U         | 10        |
| Xylene (total)             | 40       | 3.8  | 10 U          | 10        | 10 U          | 10        | 10 U                | 10        | 10 U          | 10        | 10 U          | 10        | 10 U         | 10        |
| Dilution Factor            |          |      |               |           |               |           |                     |           |               |           |               |           |              |           |
| Method: TCL Volatiles      |          |      |               |           |               |           |                     |           |               |           |               |           |              |           |

**CHARLES WOOD  
GROUNDWATER VOLATILES**

| Geographical Location      |          |      | B6           |           | B7           |           | B7           |           | B8           |           | B8           |           | B9           |           | B9           |           |
|----------------------------|----------|------|--------------|-----------|--------------|-----------|--------------|-----------|--------------|-----------|--------------|-----------|--------------|-----------|--------------|-----------|
| Sample                     |          |      | B6-MW06B-A02 |           | B7-MW07B-A01 |           | B7-MW07B-A02 |           | B8-MW08B-A01 |           | B8-MW08B-A02 |           | B9-MW09B-A01 |           | B9-MW09B-A02 |           |
| Sample Type                |          |      |              |           |              |           |              |           |              |           |              |           |              |           |              |           |
| Batch#                     |          |      | 9503G641     |           | 9502G198     |           | 9503G617     |           | 9502G198     |           | 9503G641     |           | 9502G198     |           | 9503G617     |           |
| Prep#                      |          |      | 95GVC053     |           | 95GVC029     |           | 95GVC052     |           | 95GVC029     |           | 95GVC053     |           | 95GVC029     |           | 95GVC052     |           |
| RFV#                       |          |      | 001          |           | 005          |           | 003          |           | 007          |           | 003          |           | 001          |           | 001          |           |
| Dilution Factor            |          |      | 1.00         |           | 1.00         |           | 1.00         |           | 1.00         |           | 1.00         |           | 1.00         |           | 1.00         |           |
| Matrix                     |          |      | water        |           | water        |           | water        |           | water        |           | water        |           | water        |           | water        |           |
| Units                      |          | ug/l | ug/l         | ug/l      | ug/l         | ug/l      | ug/l         | ug/l      | ug/l         | ug/l      | ug/l         | ug/l      | ug/l         | ug/l      | ug/l         | ug/l      |
| Sampling Date              |          |      | 3/8/95       |           | 2/15/95      |           | 3/7/95       |           | 2/15/95      |           | 3/8/95       |           | 2/15/95      |           | 3/7/95       |           |
| Analysis Date              |          |      | 3/10/95      |           | 2/20/95      |           | 3/9/95       |           | 2/20/95      |           | 3/10/95      |           | 2/20/95      |           | 3/9/95       |           |
| Analysis                   | Standard | MDL  | Analytical   | Reporting | Analytical   | Reporting | Analytical   | Reporting | Analytical   | Reporting | Analytical   | Reporting | Analytical   | Reporting | Analytical   | Reporting |
|                            |          |      | Result       | Limit     | Result       | Limit     | Result       | Limit     | Result       | Limit     | Result       | Limit     | Result       | Limit     | Result       | Limit     |
| Chloromethane              |          | 7.3  | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        |
| Bromomethane               |          | 6.7  | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        |
| Vinyl Chloride             | 5        | 7.9  | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        |
| Chloroethane               |          | 9.1  | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        |
| Methylene Chloride         | 2        | 2.7  | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        |
| Acetone                    | 700      | 6.9  | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        |
| Carbon Disulfide           |          | 4.4  | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        |
| 1,1-Dichloroethene         |          | 4.9  | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        |
| 1,1-Dichloroethane         | 70       | 3.0  | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        |
| 1,2-Dichloroethene (total) |          | 4.4  | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        |
| Chloroform                 | 6        | 2.9  | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 2 J          | 10        | 10 U         | 10        | 10 U         | 10        |
| 1,2-Dichloroethane         | 2        | 2.4  | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        |
| 2-Butanone                 |          | 4.1  | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        |
| 1,1,1-Trichloroethane      | 30       | 1.7  | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        |
| Carbon Tetrachloride       | 2        | 1.5  | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        |
| Bromodichloromethane       | 1        | 2.0  | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        |
| 1,2-Dichloropropane        | 1        | 1.7  | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        |
| cis-1,3-Dichloropropene    | 0.2      | 3.0  | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        |
| Trichloroethene            | 1        | 2.0  | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        |
| Dibromochloromethane       | 10       | 2.4  | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        |
| 1,1,2-Trichloroethane      | 3        | 4.3  | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        |
| Benzene                    | 1        | 3.3  | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        |
| trans-1,3-Dichloropropene  | 0.2      | 2.4  | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        |
| Bromoform                  | 4        | 3.1  | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        |
| 4-Methyl-2-pentanone       | 400      | 5.5  | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        |
| 2-Hexanone                 |          | 3.9  | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        |
| Tetrachloroethene          | 1        | 4.0  | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        |
| 1,1,2,2-Tetrachloroethane  | 2        | 4.2  | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        |
| Toluene                    | 1000     | 2.7  | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        |
| Chlorobenzene              | 4        | 2.7  | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        |
| Ethylbenzene               | 700      | 3.1  | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        |
| Styrene                    | 100      | 3.8  | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        |
| Xylene (total)             | 40       | 3.8  | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        | 10 U         | 10        |
| Dilution Factor            |          |      |              |           |              |           |              |           |              |           |              |           |              |           |              |           |
| Method: TCL Volatiles      |          |      |              |           |              |           |              |           |              |           |              |           |              |           |              |           |

**CHARLES WOOD  
GROUNDWATER VOLATILES**

| Geographical Location      |          |      | B10           |           | B10           |           | B10           |           | B10           |           | B10                 |           | B10                 |           |
|----------------------------|----------|------|---------------|-----------|---------------|-----------|---------------|-----------|---------------|-----------|---------------------|-----------|---------------------|-----------|
| Sample                     |          |      | B10-MW10B-A01 |           | B10-MW10B-A02 |           | B10-MW10B-D01 |           | B10-MW10B-D02 |           | B10-MW10B-E01       |           | B10-MW10B-E02       |           |
| Sample Type                |          |      |               |           |               |           | Trip Blank    |           | Trip Blank    |           | Field Rinsate Blank |           | Field Rinsate Blank |           |
| Batch#                     |          |      | 9502G198      |           | 9503G641      |           | 9502G198      |           | 9503G641      |           | 9502G198            |           | 9503G641            |           |
| Prep#                      |          |      | 95GVC030      |           | 95GVC053      |           | 95GVC030      |           | 95GVC053      |           | 95GVC030            |           | 95GVC053            |           |
| RFW#                       |          |      | 009           |           | 005           |           | 011           |           | 007           |           | 012                 |           | 008                 |           |
| Dilution Factor            |          |      | 1.00          |           | 1.00          |           | 1.00          |           | 1.00          |           | 1.00                |           | 1.00                |           |
| Matrix                     |          |      | water         |           | water         |           | water         |           | water         |           | water               |           | water               |           |
| Units                      | ug/l     | ug/l | ug/l          |           | ug/l          |           | ug/l          |           | ug/l          |           | ug/l                |           | ug/l                |           |
| Sampling Date              |          |      | 2/15/95       |           | 3/8/95        |           | 2/13/95       |           | 3/8/95        |           | 2/13/95             |           | 3/8/95              |           |
| Analysis Date              |          |      | 2/21/95       |           | 3/10/95       |           | 2/21/95       |           | 3/10/95       |           | 2/21/95             |           | 3/10/95             |           |
| Analysis                   | Standard | MDL  | Analytical    | Reporting | Analytical    | Reporting | Analytical    | Reporting | Analytical    | Reporting | Analytical          | Reporting | Analytical          | Reporting |
|                            |          |      | Result        | Limit     | Result        | Limit     | Result        | Limit     | Result        | Limit     | Result              | Limit     | Result              | Limit     |
| Chloromethane              |          | 7.3  | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U                | 10        | 10 U                | 10        |
| Bromomethane               |          | 6.7  | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U                | 10        | 10 U                | 10        |
| Vinyl Chloride             | 5        | 7.9  | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U                | 10        | 10 U                | 10        |
| Chloroethane               |          | 9.1  | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U                | 10        | 10 U                | 10        |
| Methylene Chloride         | 2        | 2.7  | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U                | 10        | 10 U                | 10        |
| Acetone                    | 700      | 6.9  | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U                | 10        | 10 U                | 10        |
| Carbon Disulfide           |          | 4.4  | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U                | 10        | 10 U                | 10        |
| 1,1-Dichloroethene         |          | 4.9  | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U                | 10        | 10 U                | 10        |
| 1,1-Dichloroethane         | 70       | 3.0  | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U                | 10        | 10 U                | 10        |
| 1,2-Dichloroethene (total) |          | 4.4  | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U                | 10        | 10 U                | 10        |
| Chloroform                 | 6        | 2.9  | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U                | 10        | 10 U                | 10        |
| 1,2-Dichloroethane         | 2        | 2.4  | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U                | 10        | 10 U                | 10        |
| 2-Butanone                 |          | 4.1  | 10 U          | 10        | 10 U          | 10        | 14            | 10        | 10 U          | 10        | 15                  | 10        | 10 U                | 10        |
| 1,1,1-Trichloroethane      | 30       | 1.7  | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U                | 10        | 10 U                | 10        |
| Carbon Tetrachloride       | 2        | 1.5  | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U                | 10        | 10 U                | 10        |
| Bromodichloromethane       | 1        | 2.0  | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U                | 10        | 10 U                | 10        |
| 1,2-Dichloropropane        | 1        | 1.7  | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U                | 10        | 10 U                | 10        |
| cis-1,3-Dichloropropene    | 0.2      | 3.0  | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U                | 10        | 10 U                | 10        |
| Trichloroethene            | 1        | 2.0  | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U                | 10        | 10 U                | 10        |
| Dibromochloromethane       | 10       | 2.4  | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U                | 10        | 10 U                | 10        |
| 1,1,2-Trichloroethane      | 3        | 4.3  | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U                | 10        | 10 U                | 10        |
| Benzene                    | 1        | 3.3  | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U                | 10        | 10 U                | 10        |
| trans-1,3-Dichloropropene  | 0.2      | 2.4  | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U                | 10        | 10 U                | 10        |
| Bromoform                  | 4        | 3.1  | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U                | 10        | 10 U                | 10        |
| 4-Methyl-2-pentanone       | 400      | 5.5  | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U                | 10        | 10 U                | 10        |
| 2-Hexanone                 |          | 3.9  | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U                | 10        | 10 U                | 10        |
| Tetrachloroethene          | 1        | 4.0  | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U                | 10        | 10 U                | 10        |
| 1,1,2,2-Tetrachloroethane  | 2        | 4.2  | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U                | 10        | 10 U                | 10        |
| Toluene                    | 1000     | 2.7  | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U                | 10        | 10 U                | 10        |
| Chlorobenzene              | 4        | 2.7  | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U                | 10        | 10 U                | 10        |
| Ethylbenzene               | 700      | 3.1  | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U                | 10        | 10 U                | 10        |
| Styrene                    | 100      | 3.8  | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U                | 10        | 10 U                | 10        |
| Xylene (total)             | 40       | 3.8  | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U          | 10        | 10 U                | 10        | 10 U                | 10        |
| Dilution Factor            |          |      |               |           |               |           |               |           |               |           |                     |           |                     |           |
| Method: TCL Volatiles      |          |      |               |           |               |           |               |           |               |           |                     |           |                     |           |



**CHARLES WOOD  
GROUNDWATER SEMIVOLATILES**

| Geographical Location        |          |      | CW1           |      | CW1           |      | CW1                 |      | CW1           |      | CW1           |      | CW1           |      |
|------------------------------|----------|------|---------------|------|---------------|------|---------------------|------|---------------|------|---------------|------|---------------|------|
| Sample                       |          |      | CW01-MW26-A01 |      | CW01-MW26-A02 |      | CW01-MW26-E02       |      | CW01-MW27-A01 |      | CW01-MW27-A02 |      | CW01-MW28-A01 |      |
| Sample Type                  |          |      |               |      |               |      | Field Rinsate Blank |      |               |      |               |      |               |      |
| Batch#                       |          |      | 9502G358      |      | 9503G739      |      | 9503G739            |      | 9502G358      |      | 9503G739      |      | 9502G358      |      |
| Prep#                        |          |      | 95GB0123      |      | 95GB0181      |      | 95GB0181            |      | 95GB0123      |      | 95GB0181      |      | 95GB0123      |      |
| RFW#                         |          |      | 001           |      | 003           |      | 006                 |      | 003           |      | 001           |      | 005           |      |
| Dilution Factor              |          |      | 1.00          |      | 1.00          |      | 1.00                |      | 1.00          |      | 1.00          |      | 1.00          |      |
| Matrix                       |          |      | water         |      | water         |      | water               |      | water         |      | water         |      | water         |      |
| Units                        | ug/l     | ug/l | ug/l          |      | ug/l          |      | ug/l                |      | ug/l          |      | ug/l          |      | ug/l          |      |
| Sampling Date                |          |      | 2/21/95       |      | 3/14/95       |      | 3/14/95             |      | 2/21/95       |      | 3/14/95       |      | 2/21/95       |      |
| Analysis Date                |          |      | 3/12/95       |      | 3/30/95       |      | 3/29/95             |      | 3/13/95       |      | 3/29/95       |      | 3/15/95       |      |
| Analysis                     | Standard | MDL  | Analytical    | CRQL | Analytical    | CRQL | Analytical          | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL |
|                              |          |      | Result        |      | Result        |      | Result              |      | Result        |      | Result        |      | Result        |      |
| Phenol                       | 4000     | 7.1  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| bis(2-Chloroethyl) ether     | 10       | 9.7  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| 2-Chlorophenol               | 40       | 7.3  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| 1,3-Dichlorobenzene          | 600      | 5.3  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| 1,4-Dichlorobenzene          | 75       | 4.8  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| 1,2-Dichlorobenzene          | 600      | 5.7  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| 2-Methylphenol               |          | 6.7  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| 2,2'-oxybis(1-Chloropropane) |          | 7.0  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| 4-Methylphenol               |          | 12.9 | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| N-Nitroso-di-n-propylamine   | 20       | 8.0  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| Hexachloroethane             | 10       | 5.3  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| Nitrobenzene                 | 10       | 7.4  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| Isophorone                   | 100      | 3.9  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| 2-Nitrophenol                |          | 7.0  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| 2,4-Dimethylphenol           | 100      | 4.8  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| bis(2-Chloroethoxy) methane  |          | 6.1  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| 2,4-Dichlorophenol           | 20       | 4.4  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| 1,2,4-Trichlorobenzene       | 9        | 9.6  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| Naphthalene                  |          | 8.4  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| 4-Chloroaniline              |          | 2.9  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| Hexachlorobutadiene          | 1        | 4.6  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| 4-Chloro-3-methylphenol      | 20       | 3.1  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| 2-Methylnaphthalene          |          | 8.7  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| Hexachlorocyclopentadiene    | 50       | 3.6  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| 2,4,6-Trichlorophenol        |          | 5.6  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| 2,4,5-Trichlorophenol        | 700      | 4.7  | 26 U          | 26   | 25 U          | 25   | 28 U                | 28   | 26 U          | 26   | 26 U          | 26   | 27 U          | 27   |
| 2-Chloronaphthalene          |          | 8.2  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| 2-Nitroaniline               |          | 6.1  | 26 U          | 26   | 25 U          | 25   | 28 U                | 28   | 26 U          | 26   | 26 U          | 26   | 27 U          | 27   |
| Dimethylphthalate            | 7000     | 4.4  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| Acenaphthylene               | 10       | 6.0  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| 2,6-Dinitrotoluene           | 10       | 5.2  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| 3-Nitroaniline               |          | 5.2  | 26 U          | 26   | 25 U          | 25   | 28 U                | 28   | 26 U          | 26   | 26 U          | 26   | 27 U          | 27   |
| Acenaphthene                 | 400      | 6.7  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| 2,4-Dinitrophenol            | 40       | 4.6  | 26 U          | 26   | 25 U          | 25   | 28 U                | 28   | 26 U          | 26   | 26 U          | 26   | 27 U          | 27   |

**CHARLES WOOD  
GROUNDWATER SEMIVOLATILES**

| Geographical Location      |          |      | CW1           |      | CW1           |      | CW1                 |      | CW1           |      | CW1           |      | CW1           |      |
|----------------------------|----------|------|---------------|------|---------------|------|---------------------|------|---------------|------|---------------|------|---------------|------|
| Sample                     |          |      | CW01-MW26-A01 |      | CW01-MW26-A02 |      | CW01-MW26-E02       |      | CW01-MW27-A01 |      | CW01-MW27-A02 |      | CW01-MW28-A01 |      |
| Sample Type                |          |      |               |      |               |      | Field Rinsate Blank |      |               |      |               |      |               |      |
| Batch#                     |          |      | 9502G358      |      | 9503G739      |      | 9503G739            |      | 9502G358      |      | 9503G739      |      | 9502G358      |      |
| Prep#                      |          |      | 95GB0123      |      | 95GB0181      |      | 95GB0181            |      | 95GB0123      |      | 95GB0181      |      | 95GB0123      |      |
| RFW#                       |          |      | 001           |      | 003           |      | 006                 |      | 003           |      | 001           |      | 005           |      |
| Dilution Factor            |          |      | 1.00          |      | 1.00          |      | 1.00                |      | 1.00          |      | 1.00          |      | 1.00          |      |
| Matrix                     |          |      | water         |      | water         |      | water               |      | water         |      | water         |      | water         |      |
| Units                      | ug/l     | ug/l | ug/l          |      | ug/l          |      | ug/l                |      | ug/l          |      | ug/l          |      | ug/l          |      |
| Sampling Date              |          |      | 2/21/95       |      | 3/14/95       |      | 3/14/95             |      | 2/21/95       |      | 3/14/95       |      | 2/21/95       |      |
| Analysis Date              |          |      | 3/12/95       |      | 3/30/95       |      | 3/29/95             |      | 3/13/95       |      | 3/29/95       |      | 3/15/95       |      |
| Analysis                   | Standard | MDL  | Analytical    | CRQL | Analytical    | CRQL | Analytical          | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL |
|                            |          |      | Result        |      | Result        |      | Result              |      | Result        |      | Result        |      | Result        |      |
| 4-Nitrophenol              |          | 7.5  | 26 U          | 26   | 25 U          | 25   | 28 U                | 28   | 26 U          | 26   | 26 U          | 26   | 27 U          | 27   |
| Dibenzofuran               |          | 6.5  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| 2,4-Dinitrotoluene         | 10       | 5.8  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| Diethylphthalate           | 5000     | 5.4  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| 4-Chlorophenyl-phenylether |          | 7.0  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| Fluorene                   | 300      | 6.3  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| 4-Nitroaniline             |          | 6.4  | 26 U          | 26   | 25 U          | 25   | 28 U                | 28   | 26 U          | 26   | 26 U          | 26   | 27 U          | 27   |
| 4,6-Dinitro-2-methylphenol |          | 5.3  | 26 U          | 26   | 25 U          | 25   | 28 U                | 28   | 26 U          | 26   | 26 U          | 26   | 27 U          | 27   |
| N-Nitrosodiphenylamine (1) | 20       | 4.2  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| 4-Bromophenyl-phenylether  |          | 5.3  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| Hexachlorobenzene          | 10       | 5.5  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| Pentachlorophenol          | 1        | 4.0  | 26 U          | 26   | 25 U          | 25   | 28 U                | 28   | 26 U          | 26   | 26 U          | 26   | 27 U          | 27   |
| Phenanthrene               | 10       | 5.0  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| Anthracene                 | 2000     | 4.6  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| Carbazole                  |          | 4.4  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| Di-n-butylphthalate        | 900      | 6.5  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 11 U          | 11   | 5 J           | 11   | 11 U          | 11   |
| Fluoranthene               | 300      | 6.0  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| Pyrene                     | 200      | 5.4  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| Butylbenzylphthalate       | 100      | 5.3  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| 3,3'-Dichlorobenzidine     | 60       | 2.8  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| Benzo(a)anthracene         | 10       | 4.9  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| Chrysene                   | 20       | 4.4  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| bis(2-Ethylhexy)phthalate  | 30       | 9.7  | 2 J           | 11   | 10 U          | 10   | 11 U                | 11   | 2 J           | 11   | 2 J           | 11   | 2 J           | 11   |
| Di-n-octyl phthalate       | 100      | 5.6  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| Benzo(b)fluoranthene       | 2        | 5.7  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| Benzo(k)fluoranthene       | 2        | 6.2  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| Benzo(a)pyrene             | 20       | 4.9  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| Indeno(1,2,3-cd)pyrene     | 20       | 7.1  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| Dibenzo(a,h)anthracene     | 20       | 6.0  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| Benzo(g,h,i)perylene       | 20       | 6.8  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 11 U          | 11   | 11 U          | 11   | 11 U          | 11   |
| Total Est. Conc. of TIC    |          |      | 8 JB          |      | 5 J           |      | 5 J                 |      | 5 J           |      |               |      | 40 J          |      |
| Dilution Factor            |          |      |               |      |               |      |                     |      |               |      |               |      |               |      |
| Method:TCL Semivolatiles   |          |      |               |      |               |      |                     |      | 6 JB          |      |               |      | 5 JB          |      |

**CHARLES WOOD  
GROUNDWATER SEMIVOLATILES**

| Geographical Location        |          |      | CW1           |      | CW1           |      | CW1           |      | CW1                 |      | CW2           |      | CW2           |      |
|------------------------------|----------|------|---------------|------|---------------|------|---------------|------|---------------------|------|---------------|------|---------------|------|
| Sample                       |          |      | CW01-MW28-A02 |      | CW01-MW29-A01 |      | CW01-MW29-A02 |      | CW01-MW29-E01       |      | CW02-MW30-A01 |      | CW02-MW30-A02 |      |
| Sample Type                  |          |      |               |      |               |      |               |      | Field Rinsate Blank |      |               |      |               |      |
| Batch#                       |          |      | 9503G739      |      | 9502G358      |      | 9503G739      |      | 9502G358            |      | 9502G358      |      | 9503G739      |      |
| Prep#                        |          |      | 95GB0181      |      | 95GB0123      |      | 95GB0181      |      | 95GB0123            |      | 95GB0123      |      | 95GB0181      |      |
| RFW#                         |          |      | 008           |      | 007           |      | 010           |      | 010                 |      | 012           |      | 012           |      |
| Dilution Factor              |          |      | 1.00          |      | 1.00          |      | 1.00          |      | 1.00                |      | 1.00          |      | 1.00          |      |
| Matrix                       |          |      | water         |      | water         |      | water         |      | water               |      | water         |      | water         |      |
| Units                        | ug/l     | ug/l | ug/l          |      | ug/l          |      | ug/l          |      | ug/l                |      | ug/l          |      | ug/l          |      |
| Sampling Date                |          |      | 3/14/95       |      | 2/21/95       |      | 3/14/95       |      | 2/21/95             |      | 2/21/95       |      | 3/14/95       |      |
| Analysis Date                |          |      | 3/29/95       |      | 3/15/95       |      | 3/29/95       |      | 3/15/95             |      | 3/15/95       |      | 3/29/95       |      |
| Analysis                     | Standard | MDL  | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical          | CRQL | Analytical    | CRQL | Analytical    | CRQL |
|                              |          |      | Result        |      | Result        |      | Result        |      | Result              |      | Result        |      | Result        |      |
| Phenol                       | 4000     | 7.1  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 12 U          | 12   | 12 U          | 12   |
| bis(2-Chloroethyl) ether     | 10       | 9.7  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 12 U          | 12   | 12 U          | 12   |
| 2-Chlorophenol               | 40       | 7.3  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 12 U          | 12   | 12 U          | 12   |
| 1,3-Dichlorobenzene          | 600      | 5.3  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 12 U          | 12   | 12 U          | 12   |
| 1,4-Dichlorobenzene          | 75       | 4.8  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 12 U          | 12   | 12 U          | 12   |
| 1,2-Dichlorobenzene          | 600      | 5.7  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 12 U          | 12   | 12 U          | 12   |
| 2-Methylphenol               |          | 6.7  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 12 U          | 12   | 12 U          | 12   |
| 2,2'-oxybis(1-Chloropropane) |          | 7.0  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 12 U          | 12   | 12 U          | 12   |
| 4-Methylphenol               |          | 12.9 | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 12 U          | 12   | 12 U          | 12   |
| N-Nitroso-di-n-propylamine   | 20       | 8.0  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 12 U          | 12   | 12 U          | 12   |
| Hexachloroethane             | 10       | 5.3  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 12 U          | 12   | 12 U          | 12   |
| Nitrobenzene                 | 10       | 7.4  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 12 U          | 12   | 12 U          | 12   |
| Isophorone                   | 100      | 3.9  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 12 U          | 12   | 12 U          | 12   |
| 2-Nitrophenol                |          | 7.0  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 12 U          | 12   | 12 U          | 12   |
| 2,4-Dimethylphenol           | 100      | 4.8  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 12 U          | 12   | 12 U          | 12   |
| bis(2-Chloroethoxy) methane  |          | 6.1  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 12 U          | 12   | 12 U          | 12   |
| 2,4-Dichlorophenol           | 20       | 4.4  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 12 U          | 12   | 12 U          | 12   |
| 1,2,4-Trichlorobenzene       | 9        | 9.6  | 10 U          | 10   | 3 J           | 10   | 5 J           | 10   | 10 U                | 10   | 12 U          | 12   | 12 U          | 12   |
| Naphthalene                  |          | 8.4  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 12 U          | 12   | 12 U          | 12   |
| 4-Chloroaniline              |          | 2.9  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 12 U          | 12   | 12 U          | 12   |
| Hexachlorobutadiene          | 1        | 4.6  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 12 U          | 12   | 12 U          | 12   |
| 4-Chloro-3-methylphenol      | 20       | 3.1  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 12 U          | 12   | 12 U          | 12   |
| 2-Methylnaphthalene          |          | 8.7  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 12 U          | 12   | 12 U          | 12   |
| Hexachlorocyclopentadiene    | 50       | 3.6  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 12 U          | 12   | 12 U          | 12   |
| 2,4,6-Trichlorophenol        |          | 5.6  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 12 U          | 12   | 12 U          | 12   |
| 2,4,5-Trichlorophenol        | 700      | 4.7  | 26 U          | 26   | 24 U          | 24   | 26 U          | 26   | 24 U                | 24   | 31 U          | 31   | 30 U          | 30   |
| 2-Chloronaphthalene          |          | 8.2  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 12 U          | 12   | 12 U          | 12   |
| 2-Nitroaniline               |          | 6.1  | 26 U          | 26   | 24 U          | 24   | 26 U          | 26   | 24 U                | 24   | 31 U          | 31   | 30 U          | 30   |
| Dimethylphthalate            | 7000     | 4.4  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 12 U          | 12   | 12 U          | 12   |
| Acenaphthylene               | 10       | 6.0  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 12 U          | 12   | 12 U          | 12   |
| 2,6-Dinitrotoluene           | 10       | 5.2  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 12 U          | 12   | 12 U          | 12   |
| 3-Nitroaniline               |          | 5.2  | 26 U          | 26   | 24 U          | 24   | 26 U          | 26   | 24 U                | 24   | 31 U          | 31   | 30 U          | 30   |
| Acenaphthene                 | 400      | 6.7  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 12 U          | 12   | 12 U          | 12   |
| 2,4-Dinitrophenol            | 40       | 4.6  | 26 U          | 26   | 24 U          | 24   | 26 U          | 26   | 24 U                | 24   | 31 U          | 31   | 30 U          | 30   |

**CHARLES WOOD  
GROUNDWATER SEMIVOLATILES**

| Geographical Location      |          |      | CW1           |      | CW1           |      | CW1           |      | CW1                 |      | CW2           |      | CW2           |      |
|----------------------------|----------|------|---------------|------|---------------|------|---------------|------|---------------------|------|---------------|------|---------------|------|
| Sample                     |          |      | CW01-MW28-A02 |      | CW01-MW29-A01 |      | CW01-MW29-A02 |      | CW01-MW29-E01       |      | CW02-MW30-A01 |      | CW02-MW30-A02 |      |
| Sample Type                |          |      |               |      |               |      |               |      | Field Rinsate Blank |      |               |      |               |      |
| Batch#                     |          |      | 9503G739      |      | 9502G358      |      | 9503G739      |      | 9502G358            |      | 9502G358      |      | 9503G739      |      |
| Prep#                      |          |      | 95GB0181      |      | 95GB0123      |      | 95GB0181      |      | 95GB0123            |      | 95GB0123      |      | 95GB0181      |      |
| RFW#                       |          |      | 008           |      | 007           |      | 010           |      | 010                 |      | 012           |      | 012           |      |
| Dilution Factor            |          |      | 1.00          |      | 1.00          |      | 1.00          |      | 1.00                |      | 1.00          |      | 1.00          |      |
| Matrix                     |          |      | water         |      | water         |      | water         |      | water               |      | water         |      | water         |      |
| Units                      | ug/l     | ug/l | ug/l          |      | ug/l          |      | ug/l          |      | ug/l                |      | ug/l          |      | ug/l          |      |
| Sampling Date              |          |      | 3/14/95       |      | 2/21/95       |      | 3/14/95       |      | 2/21/95             |      | 2/21/95       |      | 3/14/95       |      |
| Analysis Date              |          |      | 3/29/95       |      | 3/15/95       |      | 3/29/95       |      | 3/15/95             |      | 3/15/95       |      | 3/29/95       |      |
| Analysis                   | Standard | MDL  | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical          | CRQL | Analytical    | CRQL | Analytical    | CRQL |
|                            |          |      | Result        |      | Result        |      | Result        |      | Result              |      | Result        |      | Result        |      |
| 4-Nitrophenol              |          | 7.5  | 26 U          | 26   | 24 U          | 24   | 26 U          | 26   | 24 U                | 24   | 31 U          | 31   | 30 U          | 30   |
| Dibenzofuran               |          | 6.5  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 12 U          | 12   | 12 U          | 12   |
| 2,4-Dinitrotoluene         | 10       | 5.8  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 12 U          | 12   | 12 U          | 12   |
| Diethylphthalate           | 5000     | 5.4  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 12 U          | 12   | 12 U          | 12   |
| 4-Chlorophenyl-phenylether |          | 7.0  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 12 U          | 12   | 12 U          | 12   |
| Fluorene                   | 300      | 6.3  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 12 U          | 12   | 12 U          | 12   |
| 4-Nitroaniline             |          | 6.4  | 26 U          | 26   | 24 U          | 24   | 26 U          | 26   | 24 U                | 24   | 31 U          | 31   | 30 U          | 30   |
| 4,6-Dinitro-2-methylphenol |          | 5.3  | 26 U          | 26   | 24 U          | 24   | 26 U          | 26   | 24 U                | 24   | 31 U          | 31   | 30 U          | 30   |
| N-Nitrosodiphenylamine (1) | 20       | 4.2  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 12 U          | 12   | 12 U          | 12   |
| 4-Bromophenyl-phenylether  |          | 5.3  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 12 U          | 12   | 12 U          | 12   |
| Hexachlorobenzene          | 10       | 5.5  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 12 U          | 12   | 12 U          | 12   |
| Pentachlorophenol          | 1        | 4.0  | 26 U          | 26   | 24 U          | 24   | 26 U          | 26   | 24 U                | 24   | 31 U          | 31   | 30 U          | 30   |
| Phenanthrene               | 10       | 5.0  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 12 U          | 12   | 12 U          | 12   |
| Anthracene                 | 2000     | 4.6  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 12 U          | 12   | 12 U          | 12   |
| Carbazole                  |          | 4.4  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 12 U          | 12   | 12 U          | 12   |
| Di-n-butylphthalate        | 900      | 6.5  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 12 U          | 12   | 2 J           | 12   |
| Fluoranthene               | 300      | 6.0  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 12 U          | 12   | 12 U          | 12   |
| Pyrene                     | 200      | 5.4  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 12 U          | 12   | 12 U          | 12   |
| Butylbenzylphthalate       | 100      | 5.3  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 12 U          | 12   | 12 U          | 12   |
| 3,3'-Dichlorobenzidine     | 60       | 2.8  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 12 U          | 12   | 12 U          | 12   |
| Benzo(a)anthracene         | 10       | 4.9  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 12 U          | 12   | 12 U          | 12   |
| Chrysene                   | 20       | 4.4  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 12 U          | 12   | 12 U          | 12   |
| bis(2-Ethylhexyl)phthalate | 30       | 9.7  | 1 J           | 10   | 1 J           | 10   | 10 U          | 10   | 10 U                | 10   | 2 J           | 12   | 2 J           | 12   |
| Di-n-octyl phthalate       | 100      | 5.6  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 12 U          | 12   | 12 U          | 12   |
| Benzo(b)fluoranthene       | 2        | 5.7  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 12 U          | 12   | 12 U          | 12   |
| Benzo(k)fluoranthene       | 2        | 6.2  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 12 U          | 12   | 12 U          | 12   |
| Benzo(a)pyrene             | 20       | 4.9  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 12 U          | 12   | 12 U          | 12   |
| Indeno(1,2,3-cd)pyrene     | 20       | 7.1  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 12 U          | 12   | 12 U          | 12   |
| Dibenzo(a,h)anthracene     | 20       | 6.0  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 12 U          | 12   | 12 U          | 12   |
| Benzo(g,h,i)perylene       | 20       | 6.8  | 10 U          | 10   | 10 U          | 10   | 10 U          | 10   | 10 U                | 10   | 12 U          | 12   | 12 U          | 12   |
| Total Est. Conc. of TIC    |          |      |               |      | 2 J           |      | 2 J           |      | 99 J                |      | 78 J          |      | 3 J           |      |
| Dilution Factor            |          |      |               |      |               |      |               |      |                     |      |               |      |               |      |
| Method: TCL Semivolatiles  |          |      |               |      | 5 JB          |      |               |      | 5 JB                |      | 6 JB          |      |               |      |

**CHARLES WOOD  
GROUNDWATER SEMIVOLATILES**

| Geographical Location        |          |      | CW2           |      | CW2           |      | CW2           |      | CW2           |      | CW2           |      | CW2           |      |
|------------------------------|----------|------|---------------|------|---------------|------|---------------|------|---------------|------|---------------|------|---------------|------|
| Sample                       |          |      | CW02-MW31-A01 |      | CW02-MW31-A02 |      | CW02-MW32-A01 |      | CW02-MW32-A02 |      | CW02-MW33-A01 |      | CW02-MW33-A02 |      |
| Sample Type                  |          |      |               |      |               |      |               |      |               |      |               |      |               |      |
| Batch#                       |          |      | 9502G358      |      | 9503G739      |      | 9502G358      |      | 9503G739      |      | 9502G358      |      | 9503G739      |      |
| Prep#                        |          |      | 95GB0123      |      | 95GB0181      |      | 95GB0123      |      | 95GB0181      |      | 95GB0123      |      | 95GB0181      |      |
| RFW#                         |          |      | 014           |      | 014           |      | 016           |      | 016           |      | 018           |      | 018           |      |
| Dilution Factor              |          |      | 1.00          |      | 1.00          |      | 1.00          |      | 1.00          |      | 1.00          |      | 1.00          |      |
| Matrix                       |          |      | water         |      | water         |      | water         |      | water         |      | water         |      | water         |      |
| Units                        | ug/l     | ug/l | ug/l          |      | ug/l          |      | ug/l          |      | ug/l          |      | ug/l          |      | ug/l          |      |
| Sampling Date                |          |      | 2/21/95       |      | 3/14/95       |      | 2/21/95       |      | 3/14/95       |      | 2/21/95       |      | 3/14/95       |      |
| Analysis Date                |          |      | 3/15/95       |      | 3/29/95       |      | 3/15/95       |      | 3/29/95       |      | 3/15/95       |      | 3/29/95       |      |
| Analysis                     | Standard | MDL  | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL |
|                              |          |      | Result        |      | Result        |      | Result        |      | Result        |      | Result        |      | Result        |      |
| Phenol                       | 4000     | 7.1  | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   | 12 U          | 12   | 11 U          | 11   | 12 U          | 12   |
| bis(2-Chloroethyl) ether     | 10       | 9.7  | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   | 12 U          | 12   | 11 U          | 11   | 12 U          | 12   |
| 2-Chlorophenol               | 40       | 7.3  | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   | 12 U          | 12   | 11 U          | 11   | 12 U          | 12   |
| 1,3-Dichlorobenzene          | 600      | 5.3  | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   | 12 U          | 12   | 11 U          | 11   | 12 U          | 12   |
| 1,4-Dichlorobenzene          | 75       | 4.8  | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   | 12 U          | 12   | 11 U          | 11   | 12 U          | 12   |
| 1,2-Dichlorobenzene          | 600      | 5.7  | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   | 12 U          | 12   | 11 U          | 11   | 12 U          | 12   |
| 2-Methylphenol               |          | 6.7  | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   | 12 U          | 12   | 11 U          | 11   | 12 U          | 12   |
| 2,2'-oxybis(1-Chloropropane) |          | 7.0  | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   | 12 U          | 12   | 11 U          | 11   | 12 U          | 12   |
| 4-Methylphenol               |          | 12.9 | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   | 12 U          | 12   | 11 U          | 11   | 12 U          | 12   |
| N-Nitroso-di-n-propylamine   | 20       | 8.0  | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   | 12 U          | 12   | 11 U          | 11   | 12 U          | 12   |
| Hexachloroethane             | 10       | 5.3  | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   | 12 U          | 12   | 11 U          | 11   | 12 U          | 12   |
| Nitrobenzene                 | 10       | 7.4  | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   | 12 U          | 12   | 11 U          | 11   | 12 U          | 12   |
| Isophorone                   | 100      | 3.9  | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   | 12 U          | 12   | 11 U          | 11   | 12 U          | 12   |
| 2-Nitrophenol                |          | 7.0  | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   | 12 U          | 12   | 11 U          | 11   | 12 U          | 12   |
| 2,4-Dimethylphenol           | 100      | 4.8  | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   | 12 U          | 12   | 11 U          | 11   | 12 U          | 12   |
| bis(2-Chloroethoxy) methane  |          | 6.1  | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   | 12 U          | 12   | 11 U          | 11   | 12 U          | 12   |
| 2,4-Dichlorophenol           | 20       | 4.4  | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   | 12 U          | 12   | 11 U          | 11   | 12 U          | 12   |
| 1,2,4-Trichlorobenzene       | 9        | 9.6  | 10 U          | 10   | 5 J           | 10   | 11 U          | 11   | 12 U          | 12   | 11 U          | 11   | 12 U          | 12   |
| Naphthalene                  |          | 8.4  | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   | 12 U          | 12   | 11 U          | 11   | 12 U          | 12   |
| 4-Chloroaniline              |          | 2.9  | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   | 12 U          | 12   | 11 U          | 11   | 12 U          | 12   |
| Hexachlorobutadiene          | 1        | 4.6  | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   | 12 U          | 12   | 11 U          | 11   | 12 U          | 12   |
| 4-Chloro-3-methylphenol      | 20       | 3.1  | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   | 12 U          | 12   | 11 U          | 11   | 12 U          | 12   |
| 2-Methylnaphthalene          |          | 8.7  | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   | 12 U          | 12   | 11 U          | 11   | 12 U          | 12   |
| Hexachlorocyclopentadiene    | 50       | 3.6  | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   | 12 U          | 12   | 11 U          | 11   | 12 U          | 12   |
| 2,4,6-Trichlorophenol        |          | 5.6  | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   | 12 U          | 12   | 11 U          | 11   | 12 U          | 12   |
| 2,4,5-Trichlorophenol        | 700      | 4.7  | 25 U          | 25   | 26 U          | 26   | 26 U          | 26   | 30 U          | 30   | 26 U          | 26   | 30 U          | 30   |
| 2-Chloronaphthalene          |          | 8.2  | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   | 12 U          | 12   | 11 U          | 11   | 12 U          | 12   |
| 2-Nitroaniline               |          | 6.1  | 25 U          | 25   | 26 U          | 26   | 26 U          | 26   | 30 U          | 30   | 26 U          | 26   | 30 U          | 30   |
| Dimethylphthalate            | 7000     | 4.4  | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   | 12 U          | 12   | 11 U          | 11   | 12 U          | 12   |
| Acenaphthylene               | 10       | 6.0  | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   | 12 U          | 12   | 11 U          | 11   | 12 U          | 12   |
| 2,6-Dinitrotoluene           | 10       | 5.2  | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   | 12 U          | 12   | 11 U          | 11   | 12 U          | 12   |
| 3-Nitroaniline               |          | 5.2  | 25 U          | 25   | 26 U          | 26   | 26 U          | 26   | 30 U          | 30   | 26 U          | 26   | 30 U          | 30   |
| Acenaphthene                 | 400      | 6.7  | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   | 12 U          | 12   | 11 U          | 11   | 12 U          | 12   |
| 2,4-Dinitrophenol            | 40       | 4.6  | 25 U          | 25   | 26 U          | 26   | 26 U          | 26   | 30 U          | 30   | 26 U          | 26   | 30 U          | 30   |

**CHARLES WOOD  
GROUNDWATER SEMIVOLATILES**

| Geographical Location      |          |      | CW2           |      | CW2           |      | CW2           |      | CW2           |      | CW2           |      | CW2           |      |
|----------------------------|----------|------|---------------|------|---------------|------|---------------|------|---------------|------|---------------|------|---------------|------|
| Sample                     |          |      | CW02-MW31-A01 |      | CW02-MW31-A02 |      | CW02-MW32-A01 |      | CW02-MW32-A02 |      | CW02-MW33-A01 |      | CW02-MW33-A02 |      |
| Sample Type                |          |      |               |      |               |      |               |      |               |      |               |      |               |      |
| Batch#                     |          |      | 9502G358      |      | 9503G739      |      | 9502G358      |      | 9503G739      |      | 9502G358      |      | 9503G739      |      |
| Prep#                      |          |      | 95GB0123      |      | 95GB0181      |      | 95GB0123      |      | 95GB0181      |      | 95GB0123      |      | 95GB0181      |      |
| RFW#                       |          |      | 014           |      | 014           |      | 016           |      | 016           |      | 018           |      | 018           |      |
| Dilution Factor            |          |      | 1.00          |      | 1.00          |      | 1.00          |      | 1.00          |      | 1.00          |      | 1.00          |      |
| Matrix                     |          |      | water         |      | water         |      | water         |      | water         |      | water         |      | water         |      |
| Units                      | ug/l     | ug/l | ug/l          |      | ug/l          |      | ug/l          |      | ug/l          |      | ug/l          |      | ug/l          |      |
| Sampling Date              |          |      | 2/21/95       |      | 3/14/95       |      | 2/21/95       |      | 3/14/95       |      | 2/21/95       |      | 3/14/95       |      |
| Analysis Date              |          |      | 3/15/95       |      | 3/29/95       |      | 3/15/95       |      | 3/29/95       |      | 3/15/95       |      | 3/29/95       |      |
| Analysis                   | Standard | MDL  | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL |
|                            |          |      | Result        |      | Result        |      | Result        |      | Result        |      | Result        |      | Result        |      |
| 4-Nitrophenol              |          | 7.5  | 25 U          | 25   | 26 U          | 26   | 26 U          | 26   | 30 U          | 30   | 26 U          | 26   | 30 U          | 30   |
| Dibenzofuran               |          | 6.5  | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   | 12 U          | 12   | 11 U          | 11   | 12 U          | 12   |
| 2,4-Dinitrotoluene         | 10       | 5.8  | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   | 12 U          | 12   | 11 U          | 11   | 12 U          | 12   |
| Diethylphthalate           | 5000     | 5.4  | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   | 12 U          | 12   | 11 U          | 11   | 12 U          | 12   |
| 4-Chlorophenyl-phenylether |          | 7.0  | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   | 12 U          | 12   | 11 U          | 11   | 12 U          | 12   |
| Fluorene                   | 300      | 6.3  | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   | 12 U          | 12   | 11 U          | 11   | 12 U          | 12   |
| 4-Nitroaniline             |          | 6.4  | 25 U          | 25   | 26 U          | 26   | 26 U          | 26   | 30 U          | 30   | 26 U          | 26   | 30 U          | 30   |
| 4,6-Dinitro-2-methylphenol |          | 5.3  | 25 U          | 25   | 26 U          | 26   | 26 U          | 26   | 30 U          | 30   | 26 U          | 26   | 30 U          | 30   |
| N-Nitrosodiphenylamine (1) | 20       | 4.2  | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   | 12 U          | 12   | 11 U          | 11   | 12 U          | 12   |
| 4-Bromophenyl-phenylether  |          | 5.3  | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   | 12 U          | 12   | 11 U          | 11   | 12 U          | 12   |
| Hexachlorobenzene          | 10       | 5.5  | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   | 12 U          | 12   | 11 U          | 11   | 12 U          | 12   |
| Pentachlorophenol          | 1        | 4.0  | 25 U          | 25   | 26 U          | 26   | 26 U          | 26   | 30 U          | 30   | 26 U          | 26   | 30 U          | 30   |
| Phenanthrene               | 10       | 5.0  | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   | 12 U          | 12   | 11 U          | 11   | 12 U          | 12   |
| Anthracene                 | 2000     | 4.6  | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   | 12 U          | 12   | 11 U          | 11   | 12 U          | 12   |
| Carbazole                  |          | 4.4  | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   | 12 U          | 12   | 11 U          | 11   | 12 U          | 12   |
| Di-n-butylphthalate        | 900      | 6.5  | 10 U          | 10   | 11            | 10   | 11 U          | 11   | 2 J           | 12   | 11 U          | 11   | 2 J           | 12   |
| Fluoranthene               | 300      | 6.0  | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   | 12 U          | 12   | 11 U          | 11   | 12 U          | 12   |
| Pyrene                     | 200      | 5.4  | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   | 12 U          | 12   | 11 U          | 11   | 12 U          | 12   |
| Butylbenzylphthalate       | 100      | 5.3  | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   | 12 U          | 12   | 11 U          | 11   | 12 U          | 12   |
| 3,3'-Dichlorobenzidine     | 60       | 2.8  | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   | 12 U          | 12   | 11 U          | 11   | 12 U          | 12   |
| Benzo(a)anthracene         | 10       | 4.9  | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   | 12 U          | 12   | 11 U          | 11   | 12 U          | 12   |
| Chrysene                   | 20       | 4.4  | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   | 12 U          | 12   | 11 U          | 11   | 12 U          | 12   |
| bis(2-Ethylhexy)phthalate  | 30       | 9.7  | 10 U          | 10   | 10 U          | 10   | 1 J           | 11   | 2 J           | 12   | 1 J           | 11   | 2 J           | 12   |
| Di-n-octyl phthalate       | 100      | 5.6  | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   | 12 U          | 12   | 11 U          | 11   | 12 U          | 12   |
| Benzo(b)fluoranthene       | 2        | 5.7  | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   | 12 U          | 12   | 11 U          | 11   | 12 U          | 12   |
| Benzo(k)fluoranthene       | 2        | 6.2  | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   | 12 U          | 12   | 11 U          | 11   | 12 U          | 12   |
| Benzo(a)pyrene             | 20       | 4.9  | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   | 12 U          | 12   | 11 U          | 11   | 12 U          | 12   |
| Indeno(1,2,3-cd)pyrene     | 20       | 7.1  | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   | 12 U          | 12   | 11 U          | 11   | 12 U          | 12   |
| Dibenzo(a,h)anthracene     | 20       | 6.0  | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   | 12 U          | 12   | 11 U          | 11   | 12 U          | 12   |
| Benzo(g,h,i)perylene       | 20       | 6.8  | 10 U          | 10   | 10 U          | 10   | 11 U          | 11   | 12 U          | 12   | 11 U          | 11   | 12 U          | 12   |
| Total Est. Conc. of TIC    |          |      | 4 JB          |      |               |      | 5 JB          |      |               |      | 3 J           |      |               |      |
| Dilution Factor            |          |      |               |      |               |      |               |      |               |      |               |      |               |      |
| Method:TCL Semivolatiles   |          |      |               |      |               |      |               |      |               |      | 5 JB          |      |               |      |

**CHARLES WOOD  
GROUNDWATER SEMIVOLATILES**

| Geographical Location        |          |      | CW6           |      | CW6           |      | CW6                 |      | CW6           |      | CW6           |      | CW9           |      |
|------------------------------|----------|------|---------------|------|---------------|------|---------------------|------|---------------|------|---------------|------|---------------|------|
| Sample                       |          |      | CW06-MW01-A01 |      | CW06-MW01-A02 |      | CW06-MW01-E02       |      | CW06-MW34-A01 |      | CW06-MW34-A02 |      | CW09-MW35-A01 |      |
| Sample Type                  |          |      |               |      |               |      | Field Rinsate Blank |      |               |      |               |      |               |      |
| Batch#                       |          |      | 9505G840      |      | 9505G138      |      | 9505G138            |      | 9502G300      |      | 9503G723      |      | 9502G300      |      |
| Prep#                        |          |      | 95GB0319      |      | 95GB0350      |      | 95GB0350            |      | 95GB0118      |      | 95GB0181      |      | 95GB0118      |      |
| RFW#                         |          |      | 002           |      | 002           |      | 003                 |      | 001           |      | 001           |      | 003           |      |
| Dilution Factor              |          |      | 1.00          |      | 1.00          |      | 1.00                |      | 1.00          |      | 1.00          |      | 1.00          |      |
| Matrix                       |          |      | water         |      | water         |      | water               |      | water         |      | water         |      | water         |      |
| Units                        | ug/l     | ug/l | ug/l          |      | ug/l          |      | ug/l                |      | ug/l          |      | ug/l          |      | ug/l          |      |
| Sampling Date                |          |      | 5/10/95       |      | 5/25/95       |      | 5/25/95             |      | 2/20/95       |      | 3/13/95       |      | 2/20/95       |      |
| Analysis Date                |          |      | 5/29/95       |      | 6/2/95        |      | 6/2/95              |      | 3/15/95       |      | 3/27/95       |      | 3/15/95       |      |
| Analysis                     | Standard | MDL  | Analytical    | CRQL | Analytical    | CRQL | Analytical          | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL |
|                              |          |      | Result        |      | Result        |      | Result              |      | Result        |      | Result        |      | Result        |      |
| Phenol                       | 4000     | 7.1  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 10 U          | 10   | 11 U          | 11   | 10 U          | 10   |
| bis(2-Chloroethyl) ether     | 10       | 9.7  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 10 U          | 10   | 11 U          | 11   | 10 U          | 10   |
| 2-Chlorophenol               | 40       | 7.3  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 10 U          | 10   | 11 U          | 11   | 10 U          | 10   |
| 1,3-Dichlorobenzene          | 600      | 5.3  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 10 U          | 10   | 11 U          | 11   | 10 U          | 10   |
| 1,4-Dichlorobenzene          | 75       | 4.8  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 10 U          | 10   | 11 U          | 11   | 10 U          | 10   |
| 1,2-Dichlorobenzene          | 600      | 5.7  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 10 U          | 10   | 11 U          | 11   | 10 U          | 10   |
| 2-Methylphenol               |          | 6.7  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 10 U          | 10   | 11 U          | 11   | 10 U          | 10   |
| 2,2'-oxybis(1-Chloropropane) |          | 7.0  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 10 U          | 10   | 11 U          | 11   | 10 U          | 10   |
| 4-Methylphenol               |          | 12.9 | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 10 U          | 10   | 11 U          | 11   | 10 U          | 10   |
| N-Nitroso-di-n-propylamine   | 20       | 8.0  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 10 U          | 10   | 11 U          | 11   | 10 U          | 10   |
| Hexachloroethane             | 10       | 5.3  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 10 U          | 10   | 11 U          | 11   | 10 U          | 10   |
| Nitrobenzene                 | 10       | 7.4  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 10 U          | 10   | 11 U          | 11   | 10 U          | 10   |
| Isophorone                   | 100      | 3.9  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 10 U          | 10   | 11 U          | 11   | 10 U          | 10   |
| 2-Nitrophenol                |          | 7.0  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 10 U          | 10   | 11 U          | 11   | 10 U          | 10   |
| 2,4-Dimethylphenol           | 100      | 4.8  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 10 U          | 10   | 11 U          | 11   | 10 U          | 10   |
| bis(2-Chloroethoxy) methane  |          | 6.1  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 10 U          | 10   | 11 U          | 11   | 10 U          | 10   |
| 2,4-Dichlorophenol           | 20       | 4.4  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 10 U          | 10   | 11 U          | 11   | 10 U          | 10   |
| 1,2,4-Trichlorobenzene       | 9        | 9.6  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 10 U          | 10   | 11 U          | 11   | 10 U          | 10   |
| Naphthalene                  |          | 8.4  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 10 U          | 10   | 11 U          | 11   | 10 U          | 10   |
| 4-Chloroaniline              |          | 2.9  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 10 U          | 10   | 11 U          | 11   | 10 U          | 10   |
| Hexachlorobutadiene          | 1        | 4.6  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 10 U          | 10   | 11 U          | 11   | 10 U          | 10   |
| 4-Chloro-3-methylphenol      | 20       | 3.1  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 10 U          | 10   | 11 U          | 11   | 10 U          | 10   |
| 2-Methylnaphthalene          |          | 8.7  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 10 U          | 10   | 11 U          | 11   | 10 U          | 10   |
| Hexachlorocyclopentadiene    | 50       | 3.6  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 10 U          | 10   | 11 U          | 11   | 10 U          | 10   |
| 2,4,6-Trichlorophenol        |          | 5.6  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 10 U          | 10   | 11 U          | 11   | 10 U          | 10   |
| 2,4,5-Trichlorophenol        | 700      | 4.7  | 28 U          | 28   | 24 U          | 24   | 27 U                | 27   | 24 U          | 24   | 26 U          | 26   | 24 U          | 24   |
| 2-Chloronaphthalene          |          | 8.2  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 10 U          | 10   | 11 U          | 11   | 10 U          | 10   |
| 2-Nitroaniline               |          | 6.1  | 28 U          | 28   | 24 U          | 24   | 27 U                | 27   | 24 U          | 24   | 26 U          | 26   | 24 U          | 24   |
| Dimethylphthalate            | 7000     | 4.4  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 10 U          | 10   | 11 U          | 11   | 10 U          | 10   |
| Acenaphthylene               | 10       | 6.0  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 10 U          | 10   | 11 U          | 11   | 10 U          | 10   |
| 2,6-Dinitrotoluene           | 10       | 5.2  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 10 U          | 10   | 11 U          | 11   | 10 U          | 10   |
| 3-Nitroaniline               |          | 5.2  | 28 U          | 28   | 24 U          | 24   | 27 U                | 27   | 24 U          | 24   | 26 U          | 26   | 24 U          | 24   |
| Acenaphthene                 | 400      | 6.7  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 10 U          | 10   | 11 U          | 11   | 10 U          | 10   |
| 2,4-Dinitrophenol            | 40       | 4.6  | 28 U          | 28   | 24 U          | 24   | 27 U                | 27   | 24 U          | 24   | 26 U          | 26   | 24 U          | 24   |

**CHARLES WOOD  
GROUNDWATER SEMIVOLATILES**

| Geographical Location      |          |      | CW6           |      | CW6           |      | CW6                 |      | CW6           |      | CW6           |      | CW9           |      |
|----------------------------|----------|------|---------------|------|---------------|------|---------------------|------|---------------|------|---------------|------|---------------|------|
| Sample                     |          |      | CW06-MW01-A01 |      | CW06-MW01-A02 |      | CW06-MW01-E02       |      | CW06-MW34-A01 |      | CW06-MW34-A02 |      | CW09-MW35-A01 |      |
| Sample Type                |          |      |               |      |               |      | Field Rinsate Blank |      |               |      |               |      |               |      |
| Batch#                     |          |      | 9505G840      |      | 9505G138      |      | 9505G138            |      | 9502G300      |      | 9503G723      |      | 9502G300      |      |
| Prep#                      |          |      | 95GB0319      |      | 95GB0350      |      | 95GB0350            |      | 95GB0118      |      | 95GB0181      |      | 95GB0118      |      |
| RFW#                       |          |      | 002           |      | 002           |      | 003                 |      | 001           |      | 001           |      | 003           |      |
| Dilution Factor            |          |      | 1.00          |      | 1.00          |      | 1.00                |      | 1.00          |      | 1.00          |      | 1.00          |      |
| Matrix                     |          |      | water         |      | water         |      | water               |      | water         |      | water         |      | water         |      |
| Units                      | ug/l     | ug/l | ug/l          |      | ug/l          |      | ug/l                |      | ug/l          |      | ug/l          |      | ug/l          |      |
| Sampling Date              |          |      | 5/10/95       |      | 5/25/95       |      | 5/25/95             |      | 2/20/95       |      | 3/13/95       |      | 2/20/95       |      |
| Analysis Date              |          |      | 5/29/95       |      | 6/2/95        |      | 6/2/95              |      | 3/15/95       |      | 3/27/95       |      | 3/15/95       |      |
| Analysis                   | Standard | MDL  | Analytical    | CRQL | Analytical    | CRQL | Analytical          | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical    | CRQL |
|                            |          |      | Result        |      | Result        |      | Result              |      | Result        |      | Result        |      | Result        |      |
| 4-Nitrophenol              |          | 7.5  | 28 U          | 28   | 24 U          | 24   | 27 U                | 27   | 24 U          | 24   | 26 U          | 26   | 24 U          | 24   |
| Dibenzofuran               |          | 6.5  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 10 U          | 10   | 11 U          | 11   | 10 U          | 10   |
| 2,4-Dinitrotoluene         | 10       | 5.8  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 10 U          | 10   | 11 U          | 11   | 10 U          | 10   |
| Diethylphthalate           | 5000     | 5.4  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 10 U          | 10   | 11 U          | 11   | 10 U          | 10   |
| 4-Chlorophenyl-phenylether |          | 7.0  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 10 U          | 10   | 11 U          | 11   | 10 U          | 10   |
| Fluorene                   | 300      | 6.3  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 10 U          | 10   | 11 U          | 11   | 10 U          | 10   |
| 4-Nitroaniline             |          | 6.4  | 28 U          | 28   | 24 U          | 24   | 27 U                | 27   | 24 U          | 24   | 26 U          | 26   | 24 U          | 24   |
| 4,6-Dinitro-2-methylphenol |          | 5.3  | 28 U          | 28   | 24 U          | 24   | 27 U                | 27   | 24 U          | 24   | 26 U          | 26   | 24 U          | 24   |
| N-Nitrosodiphenylamine (1) | 20       | 4.2  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 10 U          | 10   | 11 U          | 11   | 10 U          | 10   |
| 4-Bromophenyl-phenylether  |          | 5.3  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 10 U          | 10   | 11 U          | 11   | 10 U          | 10   |
| Hexachlorobenzene          | 10       | 5.5  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 10 U          | 10   | 11 U          | 11   | 10 U          | 10   |
| Pentachlorophenol          | 1        | 4.0  | 28 U          | 28   | 24 U          | 24   | 27 U                | 27   | 24 U          | 24   | 26 U          | 26   | 24 U          | 24   |
| Phenanthrene               | 10       | 5.0  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 10 U          | 10   | 11 U          | 11   | 10 U          | 10   |
| Anthracene                 | 2000     | 4.6  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 10 U          | 10   | 11 U          | 11   | 10 U          | 10   |
| Carbazole                  |          | 4.4  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 10 U          | 10   | 11 U          | 11   | 10 U          | 10   |
| Di-n-butylphthalate        | 900      | 6.5  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 10 U          | 10   | 11 U          | 11   | 10 U          | 10   |
| Fluoranthene               | 300      | 6.0  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 10 U          | 10   | 11 U          | 11   | 10 U          | 10   |
| Pyrene                     | 200      | 5.4  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 10 U          | 10   | 11 U          | 11   | 10 U          | 10   |
| Butylbenzylphthalate       | 100      | 5.3  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 10 U          | 10   | 11 U          | 11   | 10 U          | 10   |
| 3,3'-Dichlorobenzidine     | 60       | 2.8  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 10 U          | 10   | 11 U          | 11   | 10 U          | 10   |
| Benzo(a)anthracene         | 10       | 4.9  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 10 U          | 10   | 11 U          | 11   | 10 U          | 10   |
| Chrysene                   | 20       | 4.4  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 10 U          | 10   | 11 U          | 11   | 10 U          | 10   |
| bis(2-Ethylhexy)phthalate  | 30       | 9.7  | 11 U          | 11   | 21 B          | 10   | 11 B                | 11   | 2 J           | 10   | 11 U          | 11   | 10 U          | 10   |
| Di-n-octyl phthalate       | 100      | 5.6  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 10 U          | 10   | 11 U          | 11   | 10 U          | 10   |
| Benzo(b)fluoranthene       | 2        | 5.7  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 10 U          | 10   | 11 U          | 11   | 10 U          | 10   |
| Benzo(k)fluoranthene       | 2        | 6.2  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 10 U          | 10   | 11 U          | 11   | 10 U          | 10   |
| Benzo(a)pyrene             | 20       | 4.9  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 10 U          | 10   | 11 U          | 11   | 10 U          | 10   |
| Indeno(1,2,3-cd)pyrene     | 20       | 7.1  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 10 U          | 10   | 11 U          | 11   | 10 U          | 10   |
| Dibenzo(a,h)anthracene     | 20       | 6.0  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 10 U          | 10   | 11 U          | 11   | 10 U          | 10   |
| Benzo(g,h,i)perylene       | 20       | 6.8  | 11 U          | 11   | 10 U          | 10   | 11 U                | 11   | 10 U          | 10   | 11 U          | 11   | 10 U          | 10   |
| Total Est. Conc. of TIC    |          |      |               |      | 29 J          |      | 42 J                |      | 6 J           |      | 300 J         |      |               |      |
| Dilution Factor            |          |      |               |      |               |      |                     |      |               |      |               |      |               |      |
| Method: TCL Semivolatiles  |          |      |               |      |               |      |                     |      |               |      |               |      |               |      |



**CHARLES WOOD  
GROUNDWATER SEMIVOLATILES**

| Geographical Location        |          |      | CW9           |      | CW9                 |      | CW9           |      | CW9           |      | B6           |      | B6           |      |
|------------------------------|----------|------|---------------|------|---------------------|------|---------------|------|---------------|------|--------------|------|--------------|------|
| Sample                       |          |      | CW09-MW35-A02 |      | CW09-MW35-E01       |      | CW09-MW36-A01 |      | CW09-MW36-A02 |      | B6-MW06B-A01 |      | B6-MW06B-A02 |      |
| Sample Type                  |          |      |               |      | Field Rinsate Blank |      |               |      |               |      |              |      |              |      |
| Batch#                       |          |      | 9503G723      |      | 9502G300            |      | 9502G300      |      | 9503G723      |      | 9502G198     |      | 9503G641     |      |
| Prep#                        |          |      | 95GB0181      |      | 95GB0118            |      | 95GB0118      |      | 95GB0181      |      | 95GB0108     |      | 95GB0172     |      |
| RFW#                         |          |      | 002           |      | 007                 |      | 005           |      | 004           |      | 003          |      | 001          |      |
| Dilution Factor              |          |      | 1.00          |      | 1.00                |      | 1.00          |      | 1.00          |      | 1.00         |      | 1.00         |      |
| Matrix                       |          |      | water         |      | water               |      | water         |      | water         |      | water        |      | water        |      |
| Units                        | ug/l     | ug/l | ug/l          |      | ug/l                |      | ug/l          |      | ug/l          |      | ug/l         |      | ug/l         |      |
| Sampling Date                |          |      | 3/13/95       |      | 2/20/95             |      | 2/20/95       |      | 3/13/95       |      | 2/15/95      |      | 3/8/95       |      |
| Analysis Date                |          |      | 3/27/95       |      | 3/15/95             |      | 3/15/95       |      | 3/27/95       |      | 3/7/95       |      | 3/25/95      |      |
| Analysis                     | Standard | MDL  | Analytical    | CRQL | Analytical          | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical   | CRQL | Analytical   | CRQL |
|                              |          |      | Result        |      | Result              |      | Result        |      | Result        |      | Result       |      | Result       |      |
| Phenol                       | 4000     | 7.1  | 10 U          | 10   | 10 U                | 10   | 10 U          | 10   | 11 U          | 11   | 10 U         | 10   | 10 U         | 10   |
| bis(2-Chloroethyl) ether     | 10       | 9.7  | 10 U          | 10   | 10 U                | 10   | 10 U          | 10   | 11 U          | 11   | 10 U         | 10   | 10 U         | 10   |
| 2-Chlorophenol               | 40       | 7.3  | 10 U          | 10   | 10 U                | 10   | 10 U          | 10   | 11 U          | 11   | 10 U         | 10   | 10 U         | 10   |
| 1,3-Dichlorobenzene          | 600      | 5.3  | 10 U          | 10   | 10 U                | 10   | 10 U          | 10   | 11 U          | 11   | 10 U         | 10   | 10 U         | 10   |
| 1,4-Dichlorobenzene          | 75       | 4.8  | 10 U          | 10   | 10 U                | 10   | 10 U          | 10   | 11 U          | 11   | 10 U         | 10   | 10 U         | 10   |
| 1,2-Dichlorobenzene          | 600      | 5.7  | 10 U          | 10   | 10 U                | 10   | 10 U          | 10   | 11 U          | 11   | 10 U         | 10   | 10 U         | 10   |
| 2-Methylphenol               |          | 6.7  | 10 U          | 10   | 10 U                | 10   | 10 U          | 10   | 11 U          | 11   | 10 U         | 10   | 10 U         | 10   |
| 2,2'-oxybis(1-Chloropropane) |          | 7.0  | 10 U          | 10   | 10 U                | 10   | 10 U          | 10   | 11 U          | 11   | 10 U         | 10   | 10 U         | 10   |
| 4-Methylphenol               |          | 12.9 | 10 U          | 10   | 10 U                | 10   | 10 U          | 10   | 11 U          | 11   | 10 U         | 10   | 10 U         | 10   |
| N-Nitroso-di-n-propylamine   | 20       | 8.0  | 10 U          | 10   | 10 U                | 10   | 10 U          | 10   | 11 U          | 11   | 10 U         | 10   | 10 U         | 10   |
| Hexachloroethane             | 10       | 5.3  | 10 U          | 10   | 10 U                | 10   | 10 U          | 10   | 11 U          | 11   | 10 U         | 10   | 10 U         | 10   |
| Nitrobenzene                 | 10       | 7.4  | 10 U          | 10   | 10 U                | 10   | 10 U          | 10   | 11 U          | 11   | 10 U         | 10   | 10 U         | 10   |
| Isophorone                   | 100      | 3.9  | 10 U          | 10   | 10 U                | 10   | 10 U          | 10   | 11 U          | 11   | 10 U         | 10   | 10 U         | 10   |
| 2-Nitrophenol                |          | 7.0  | 10 U          | 10   | 10 U                | 10   | 10 U          | 10   | 11 U          | 11   | 10 U         | 10   | 10 U         | 10   |
| 2,4-Dimethylphenol           | 100      | 4.8  | 10 U          | 10   | 10 U                | 10   | 10 U          | 10   | 11 U          | 11   | 10 U         | 10   | 10 U         | 10   |
| bis(2-Chloroethoxy) methane  |          | 6.1  | 10 U          | 10   | 10 U                | 10   | 10 U          | 10   | 11 U          | 11   | 10 U         | 10   | 10 U         | 10   |
| 2,4-Dichlorophenol           | 20       | 4.4  | 10 U          | 10   | 10 U                | 10   | 10 U          | 10   | 11 U          | 11   | 10 U         | 10   | 10 U         | 10   |
| 1,2,4-Trichlorobenzene       | 9        | 9.6  | 10 U          | 10   | 10 U                | 10   | 10 U          | 10   | 11 U          | 11   | 10 U         | 10   | 10 U         | 10   |
| Naphthalene                  |          | 8.4  | 10 U          | 10   | 10 U                | 10   | 10 U          | 10   | 11 U          | 11   | 10 U         | 10   | 10 U         | 10   |
| 4-Chloroaniline              |          | 2.9  | 10 U          | 10   | 10 U                | 10   | 10 U          | 10   | 11 U          | 11   | 10 U         | 10   | 10 U         | 10   |
| Hexachlorobutadiene          | 1        | 4.6  | 10 U          | 10   | 10 U                | 10   | 10 U          | 10   | 11 U          | 11   | 10 U         | 10   | 10 U         | 10   |
| 4-Chloro-3-methylphenol      | 20       | 3.1  | 10 U          | 10   | 10 U                | 10   | 10 U          | 10   | 11 U          | 11   | 10 U         | 10   | 10 U         | 10   |
| 2-Methylnaphthalene          |          | 8.7  | 10 U          | 10   | 10 U                | 10   | 10 U          | 10   | 11 U          | 11   | 10 U         | 10   | 10 U         | 10   |
| Hexachlorocyclopentadiene    | 50       | 3.6  | 10 U          | 10   | 10 U                | 10   | 10 U          | 10   | 11 U          | 11   | 10 U         | 10   | 10 U         | 10   |
| 2,4,6-Trichlorophenol        |          | 5.6  | 10 U          | 10   | 10 U                | 10   | 10 U          | 10   | 11 U          | 11   | 10 U         | 10   | 10 U         | 10   |
| 2,4,5-Trichlorophenol        | 700      | 4.7  | 24 U          | 24   | 26 U                | 26   | 24 U          | 24   | 28 U          | 28   | 25 U         | 25   | 24 U         | 24   |
| 2-Chloronaphthalene          |          | 8.2  | 10 U          | 10   | 10 U                | 10   | 10 U          | 10   | 11 U          | 11   | 10 U         | 10   | 10 U         | 10   |
| 2-Nitroaniline               |          | 6.1  | 24 U          | 24   | 26 U                | 26   | 24 U          | 24   | 28 U          | 28   | 25 U         | 25   | 24 U         | 24   |
| Dimethylphthalate            | 7000     | 4.4  | 10 U          | 10   | 10 U                | 10   | 10 U          | 10   | 11 U          | 11   | 10 U         | 10   | 10 U         | 10   |
| Acenaphthylene               | 10       | 6.0  | 10 U          | 10   | 10 U                | 10   | 10 U          | 10   | 11 U          | 11   | 10 U         | 10   | 10 U         | 10   |
| 2,6-Dinitrotoluene           | 10       | 5.2  | 10 U          | 10   | 10 U                | 10   | 10 U          | 10   | 11 U          | 11   | 10 U         | 10   | 10 U         | 10   |
| 3-Nitroaniline               |          | 5.2  | 24 U          | 24   | 26 U                | 26   | 24 U          | 24   | 28 U          | 28   | 25 U         | 25   | 24 U         | 24   |
| Acenaphthene                 | 400      | 6.7  | 10 U          | 10   | 10 U                | 10   | 10 U          | 10   | 11 U          | 11   | 10 U         | 10   | 10 U         | 10   |
| 2,4-Dinitrophenol            | 40       | 4.6  | 24 U          | 24   | 26 U                | 26   | 24 U          | 24   | 28 U          | 28   | 25 U         | 25   | 24 U         | 24   |

**CHARLES WOOD  
GROUNDWATER SEMIVOLATILES**

| Geographical Location      |          |      | CW9           |      | CW9                 |      | CW9           |      | CW9           |      | B6           |      | B6           |      |
|----------------------------|----------|------|---------------|------|---------------------|------|---------------|------|---------------|------|--------------|------|--------------|------|
| Sample                     |          |      | CW09-MW35-A02 |      | CW09-MW35-E01       |      | CW09-MW36-A01 |      | CW09-MW36-A02 |      | B6-MW06B-A01 |      | B6-MW06B-A02 |      |
| Sample Type                |          |      |               |      | Field Rinsate Blank |      |               |      |               |      |              |      |              |      |
| Batch#                     |          |      | 9503G723      |      | 9502G300            |      | 9502G300      |      | 9503G723      |      | 9502G198     |      | 9503G641     |      |
| Prep#                      |          |      | 95GB0181      |      | 95GB0118            |      | 95GB0118      |      | 95GB0181      |      | 95GB0108     |      | 95GB0172     |      |
| RFW#                       |          |      | 002           |      | 007                 |      | 005           |      | 004           |      | 003          |      | 001          |      |
| Dilution Factor            |          |      | 1.00          |      | 1.00                |      | 1.00          |      | 1.00          |      | 1.00         |      | 1.00         |      |
| Matrix                     |          |      | water         |      | water               |      | water         |      | water         |      | water        |      | water        |      |
| Units                      |          | ug/l | ug/l          | ug/l | ug/l                | ug/l | ug/l          | ug/l | ug/l          | ug/l | ug/l         | ug/l | ug/l         | ug/l |
| Sampling Date              |          |      | 3/13/95       |      | 2/20/95             |      | 2/20/95       |      | 3/13/95       |      | 2/15/95      |      | 3/8/95       |      |
| Analysis Date              |          |      | 3/27/95       |      | 3/15/95             |      | 3/15/95       |      | 3/27/95       |      | 3/7/95       |      | 3/25/95      |      |
| Analysis                   | Standard | MDL  | Analytical    | CRQL | Analytical          | CRQL | Analytical    | CRQL | Analytical    | CRQL | Analytical   | CRQL | Analytical   | CRQL |
|                            |          |      | Result        |      | Result              |      | Result        |      | Result        |      | Result       |      | Result       |      |
| 4-Nitrophenol              |          | 7.5  | 24 U          | 24   | 26 U                | 26   | 24 U          | 24   | 28 U          | 28   | 25 U         | 25   | 24 U         | 24   |
| Dibenzofuran               |          | 6.5  | 10 U          | 10   | 10 U                | 10   | 10 U          | 10   | 11 U          | 11   | 10 U         | 10   | 10 U         | 10   |
| 2,4-Dinitrotoluene         | 10       | 5.8  | 10 U          | 10   | 10 U                | 10   | 10 U          | 10   | 11 U          | 11   | 10 U         | 10   | 10 U         | 10   |
| Diethylphthalate           | 5000     | 5.4  | 10 U          | 10   | 10 U                | 10   | 10 U          | 10   | 11 U          | 11   | 1 J          | 10   | 1 JB         | 10   |
| 4-Chlorophenyl-phenylether |          | 7.0  | 10 U          | 10   | 10 U                | 10   | 10 U          | 10   | 11 U          | 11   | 10 U         | 10   | 10 U         | 10   |
| Fluorene                   | 300      | 6.3  | 10 U          | 10   | 10 U                | 10   | 10 U          | 10   | 11 U          | 11   | 10 U         | 10   | 10 U         | 10   |
| 4-Nitroaniline             |          | 6.4  | 24 U          | 24   | 26 U                | 26   | 24 U          | 24   | 28 U          | 28   | 25 U         | 25   | 24 U         | 24   |
| 4,6-Dinitro-2-methylphenol |          | 5.3  | 24 U          | 24   | 26 U                | 26   | 24 U          | 24   | 28 U          | 28   | 25 U         | 25   | 24 U         | 24   |
| N-Nitrosodiphenylamine (1) | 20       | 4.2  | 10 U          | 10   | 10 U                | 10   | 10 U          | 10   | 11 U          | 11   | 10 U         | 10   | 10 U         | 10   |
| 4-Bromophenyl-phenylether  |          | 5.3  | 10 U          | 10   | 10 U                | 10   | 10 U          | 10   | 11 U          | 11   | 10 U         | 10   | 10 U         | 10   |
| Hexachlorobenzene          | 10       | 5.5  | 10 U          | 10   | 10 U                | 10   | 10 U          | 10   | 11 U          | 11   | 10 U         | 10   | 10 U         | 10   |
| Pentachlorophenol          | 1        | 4.0  | 24 U          | 24   | 26 U                | 26   | 24 U          | 24   | 28 U          | 28   | 25 U         | 25   | 24 U         | 24   |
| Phenanthrene               | 10       | 5.0  | 10 U          | 10   | 10 U                | 10   | 10 U          | 10   | 11 U          | 11   | 10 U         | 10   | 10 U         | 10   |
| Anthracene                 | 2000     | 4.6  | 10 U          | 10   | 10 U                | 10   | 10 U          | 10   | 11 U          | 11   | 10 U         | 10   | 10 U         | 10   |
| Carbazole                  |          | 4.4  | 10 U          | 10   | 10 U                | 10   | 10 U          | 10   | 11 U          | 11   | 10 U         | 10   | 10 U         | 10   |
| Di-n-butylphthalate        | 900      | 6.5  | 10 U          | 10   | 10 U                | 10   | 10 U          | 10   | 11 U          | 11   | 10 U         | 10   | 10 U         | 10   |
| Fluoranthene               | 300      | 6.0  | 10 U          | 10   | 10 U                | 10   | 10 U          | 10   | 11 U          | 11   | 10 U         | 10   | 10 U         | 10   |
| Pyrene                     | 200      | 5.4  | 10 U          | 10   | 10 U                | 10   | 10 U          | 10   | 11 U          | 11   | 10 U         | 10   | 10 U         | 10   |
| Butylbenzylphthalate       | 100      | 5.3  | 10 U          | 10   | 10 U                | 10   | 10 U          | 10   | 11 U          | 11   | 10 U         | 10   | 10 U         | 10   |
| 3,3'-Dichlorobenzidine     | 60       | 2.8  | 10 U          | 10   | 10 U                | 10   | 10 U          | 10   | 11 U          | 11   | 10 U         | 10   | 10 U         | 10   |
| Benzo(a)anthracene         | 10       | 4.9  | 10 U          | 10   | 10 U                | 10   | 10 U          | 10   | 11 U          | 11   | 10 U         | 10   | 10 U         | 10   |
| Chrysene                   | 20       | 4.4  | 10 U          | 10   | 10 U                | 10   | 10 U          | 10   | 11 U          | 11   | 10 U         | 10   | 10 U         | 10   |
| bis(2-Ethylhexy)phthalate  | 30       | 9.7  | 10 U          | 10   | 10 U                | 10   | 2 J           | 10   | 6 J           | 11   | 10 U         | 10   | 10 U         | 10   |
| Di-n-octyl phthalate       | 100      | 5.6  | 10 U          | 10   | 10 U                | 10   | 10 U          | 10   | 11 U          | 11   | 10 U         | 10   | 10 U         | 10   |
| Benzo(b)fluoranthene       | 2        | 5.7  | 10 U          | 10   | 10 U                | 10   | 10 U          | 10   | 11 U          | 11   | 10 U         | 10   | 10 U         | 10   |
| Benzo(k)fluoranthene       | 2        | 6.2  | 10 U          | 10   | 10 U                | 10   | 10 U          | 10   | 11 U          | 11   | 10 U         | 10   | 10 U         | 10   |
| Benzo(a)pyrene             | 20       | 4.9  | 10 U          | 10   | 10 U                | 10   | 10 U          | 10   | 11 U          | 11   | 10 U         | 10   | 10 U         | 10   |
| Indeno(1,2,3-cd)pyrene     | 20       | 7.1  | 10 U          | 10   | 10 U                | 10   | 10 U          | 10   | 11 U          | 11   | 10 U         | 10   | 10 U         | 10   |
| Dibenzo(a,h)anthracene     | 20       | 6.0  | 10 U          | 10   | 10 U                | 10   | 10 U          | 10   | 11 U          | 11   | 10 U         | 10   | 10 U         | 10   |
| Benzo(g,h,i)perylene       | 20       | 6.8  | 10 U          | 10   | 10 U                | 10   | 10 U          | 10   | 11 U          | 11   | 10 U         | 10   | 10 U         | 10   |
| Total Est. Conc. of TIC    |          |      | 600 J         |      | 13 J                |      | 4 J           |      | 430 J         |      | 11 JB        |      |              |      |
| Dilution Factor            |          |      |               |      |                     |      |               |      |               |      |              |      |              |      |
| Method: TCL Semivolatiles  |          |      |               |      |                     |      |               |      |               |      |              |      |              |      |

**CHARLES WOOD  
GROUNDWATER SEMIVOLATILES**

| Geographical Location        |          |      | B7           |      | B7           |      | B8           |      | B8           |      | B9           |      | B9           |      |
|------------------------------|----------|------|--------------|------|--------------|------|--------------|------|--------------|------|--------------|------|--------------|------|
| Sample                       |          |      | B7-MW07B-A01 |      | B7-MW07B-A02 |      | B8-MW08B-A01 |      | B8-MW08B-A02 |      | B9-MW09B-A01 |      | B9-MW09B-A02 |      |
| Sample Type                  |          |      |              |      |              |      |              |      |              |      |              |      |              |      |
| Batch#                       |          |      | 9502G198     |      | 9503G617     |      | 9502G198     |      | 9503G641     |      | 9502G198     |      | 9503G617     |      |
| Prep#                        |          |      | 95GB0108     |      | 95GB0166     |      | 95GB0108     |      | 95GB0172     |      | 95GB0108     |      | 95GB0166     |      |
| RFW#                         |          |      | 005          |      | 003          |      | 007          |      | 003          |      | 001          |      | 001          |      |
| Dilution Factor              |          |      | 1.00         |      | 1.00         |      | 1.00         |      | 1.00         |      | 1.00         |      | 1.00         |      |
| Matrix                       |          |      | water        |      | water        |      | water        |      | water        |      | water        |      | water        |      |
| Units                        | ug/l     | ug/l | ug/l         |      | ug/l         |      | ug/l         |      | ug/l         |      | ug/l         |      | ug/l         |      |
| Sampling Date                |          |      | 2/15/95      |      | 3/7/95       |      | 2/15/95      |      | 3/8/95       |      | 2/15/95      |      | 3/7/95       |      |
| Analysis Date                |          |      | 3/7/95       |      | 3/26/95      |      | 3/7/95       |      | 3/26/95      |      | 3/7/95       |      | 3/26/95      |      |
| Analysis                     | Standard | MDL  | Analytical   | CRQL | Analytical   | CRQL | Analytical   | CRQL | Analytical   | CRQL | Analytical   | CRQL | Analytical   | CRQL |
|                              |          |      | Result       |      | Result       |      | Result       |      | Result       |      | Result       |      | Result       |      |
| Phenol                       | 4000     | 7.1  | 10 U         | 10   | 10 U         | 10   | 11 U         | 11   | 11 U         | 11   | 10 U         | 10   | 10 U         | 10   |
| bis(2-Chloroethyl) ether     | 10       | 9.7  | 10 U         | 10   | 10 U         | 10   | 11 U         | 11   | 11 U         | 11   | 10 U         | 10   | 10 U         | 10   |
| 2-Chlorophenol               | 40       | 7.3  | 10 U         | 10   | 10 U         | 10   | 11 U         | 11   | 11 U         | 11   | 10 U         | 10   | 10 U         | 10   |
| 1,3-Dichlorobenzene          | 600      | 5.3  | 10 U         | 10   | 10 U         | 10   | 11 U         | 11   | 11 U         | 11   | 10 U         | 10   | 10 U         | 10   |
| 1,4-Dichlorobenzene          | 75       | 4.8  | 10 U         | 10   | 10 U         | 10   | 11 U         | 11   | 11 U         | 11   | 10 U         | 10   | 10 U         | 10   |
| 1,2-Dichlorobenzene          | 600      | 5.7  | 10 U         | 10   | 10 U         | 10   | 11 U         | 11   | 11 U         | 11   | 10 U         | 10   | 10 U         | 10   |
| 2-Methylphenol               |          | 6.7  | 10 U         | 10   | 10 U         | 10   | 11 U         | 11   | 11 U         | 11   | 10 U         | 10   | 10 U         | 10   |
| 2,2'-oxybis(1-Chloropropane) |          | 7.0  | 10 U         | 10   | 10 U         | 10   | 11 U         | 11   | 11 U         | 11   | 10 U         | 10   | 10 U         | 10   |
| 4-Methylphenol               |          | 12.9 | 10 U         | 10   | 10 U         | 10   | 11 U         | 11   | 11 U         | 11   | 10 U         | 10   | 10 U         | 10   |
| N-Nitroso-di-n-propylamine   | 20       | 8.0  | 10 U         | 10   | 10 U         | 10   | 11 U         | 11   | 11 U         | 11   | 10 U         | 10   | 10 U         | 10   |
| Hexachloroethane             | 10       | 5.3  | 10 U         | 10   | 10 U         | 10   | 11 U         | 11   | 11 U         | 11   | 10 U         | 10   | 10 U         | 10   |
| Nitrobenzene                 | 10       | 7.4  | 10 U         | 10   | 10 U         | 10   | 11 U         | 11   | 11 U         | 11   | 10 U         | 10   | 10 U         | 10   |
| Isophorone                   | 100      | 3.9  | 10 U         | 10   | 10 U         | 10   | 11 U         | 11   | 11 U         | 11   | 10 U         | 10   | 10 U         | 10   |
| 2-Nitrophenol                |          | 7.0  | 10 U         | 10   | 10 U         | 10   | 11 U         | 11   | 11 U         | 11   | 10 U         | 10   | 10 U         | 10   |
| 2,4-Dimethylphenol           | 100      | 4.8  | 10 U         | 10   | 10 U         | 10   | 11 U         | 11   | 11 U         | 11   | 10 U         | 10   | 10 U         | 10   |
| bis(2-Chloroethoxy) methane  |          | 6.1  | 10 U         | 10   | 10 U         | 10   | 11 U         | 11   | 11 U         | 11   | 10 U         | 10   | 10 U         | 10   |
| 2,4-Dichlorophenol           | 20       | 4.4  | 10 U         | 10   | 10 U         | 10   | 11 U         | 11   | 11 U         | 11   | 10 U         | 10   | 10 U         | 10   |
| 1,2,4-Trichlorobenzene       | 9        | 9.6  | 10 U         | 10   | 10 U         | 10   | 11 U         | 11   | 11 U         | 11   | 10 U         | 10   | 10 U         | 10   |
| Naphthalene                  |          | 8.4  | 10 U         | 10   | 10 U         | 10   | 11 U         | 11   | 11 U         | 11   | 10 U         | 10   | 10 U         | 10   |
| 4-Chloroaniline              |          | 2.9  | 10 U         | 10   | 10 U         | 10   | 11 U         | 11   | 11 U         | 11   | 10 U         | 10   | 10 U         | 10   |
| Hexachlorobutadiene          | 1        | 4.6  | 10 U         | 10   | 10 U         | 10   | 11 U         | 11   | 11 U         | 11   | 10 U         | 10   | 10 U         | 10   |
| 4-Chloro-3-methylphenol      | 20       | 3.1  | 10 U         | 10   | 10 U         | 10   | 11 U         | 11   | 11 U         | 11   | 10 U         | 10   | 10 U         | 10   |
| 2-Methylnaphthalene          |          | 8.7  | 10 U         | 10   | 10 U         | 10   | 11 U         | 11   | 11 U         | 11   | 10 U         | 10   | 10 U         | 10   |
| Hexachlorocyclopentadiene    | 50       | 3.6  | 10 U         | 10   | 10 U         | 10   | 11 U         | 11   | 11 U         | 11   | 10 U         | 10   | 10 U         | 10   |
| 2,4,6-Trichlorophenol        |          | 5.6  | 10 U         | 10   | 10 U         | 10   | 11 U         | 11   | 11 U         | 11   | 10 U         | 10   | 10 U         | 10   |
| 2,4,5-Trichlorophenol        | 700      | 4.7  | 26 U         | 26   | 26 U         | 26   | 26 U         | 26   | 26 U         | 26   | 24 U         | 24   | 24 U         | 24   |
| 2-Chloronaphthalene          |          | 8.2  | 10 U         | 10   | 10 U         | 10   | 11 U         | 11   | 11 U         | 11   | 10 U         | 10   | 10 U         | 10   |
| 2-Nitroaniline               |          | 6.1  | 26 U         | 26   | 26 U         | 26   | 26 U         | 26   | 26 U         | 26   | 24 U         | 24   | 24 U         | 24   |
| Dimethylphthalate            | 7000     | 4.4  | 10 U         | 10   | 10 U         | 10   | 11 U         | 11   | 11 U         | 11   | 10 U         | 10   | 10 U         | 10   |
| Acenaphthylene               | 10       | 6.0  | 10 U         | 10   | 10 U         | 10   | 11 U         | 11   | 11 U         | 11   | 10 U         | 10   | 10 U         | 10   |
| 2,6-Dinitrotoluene           | 10       | 5.2  | 10 U         | 10   | 10 U         | 10   | 11 U         | 11   | 11 U         | 11   | 10 U         | 10   | 10 U         | 10   |
| 3-Nitroaniline               |          | 5.2  | 26 U         | 26   | 26 U         | 26   | 26 U         | 26   | 26 U         | 26   | 24 U         | 24   | 24 U         | 24   |
| Acenaphthene                 | 400      | 6.7  | 10 U         | 10   | 10 U         | 10   | 11 U         | 11   | 11 U         | 11   | 10 U         | 10   | 10 U         | 10   |
| 2,4-Dinitrophenol            | 40       | 4.6  | 26 U         | 26   | 26 U         | 26   | 26 U         | 26   | 26 U         | 26   | 24 U         | 24   | 24 U         | 24   |

**CHARLES WOOD  
GROUNDWATER SEMIVOLATILES**

| Geographical Location      |  |  | B7           |     | B7           |      | B8           |      | B8           |      | B9           |      | B9           |      |
|----------------------------|--|--|--------------|-----|--------------|------|--------------|------|--------------|------|--------------|------|--------------|------|
| Sample                     |  |  | B7-MW07B-A01 |     | B7-MW07B-A02 |      | B8-MW08B-A01 |      | B8-MW08B-A02 |      | B9-MW09B-A01 |      | B9-MW09B-A02 |      |
| Sample Type                |  |  |              |     |              |      |              |      |              |      |              |      |              |      |
| Batch#                     |  |  | 9502G198     |     | 9503G617     |      | 9502G198     |      | 9503G641     |      | 9502G198     |      | 9503G617     |      |
| Prep#                      |  |  | 95GB0108     |     | 95GB0166     |      | 95GB0108     |      | 95GB0172     |      | 95GB0108     |      | 95GB0166     |      |
| RFW#                       |  |  | 005          |     | 003          |      | 007          |      | 003          |      | 001          |      | 001          |      |
| Dilution Factor            |  |  | 1.00         |     | 1.00         |      | 1.00         |      | 1.00         |      | 1.00         |      | 1.00         |      |
| Matrix                     |  |  | water        |     | water        |      | water        |      | water        |      | water        |      | water        |      |
| Units                      |  |  | ug/l         |     | ug/l         |      | ug/l         |      | ug/l         |      | ug/l         |      | ug/l         |      |
| Sampling Date              |  |  | 2/15/95      |     | 3/7/95       |      | 2/15/95      |      | 3/8/95       |      | 2/15/95      |      | 3/7/95       |      |
| Analysis Date              |  |  | 3/7/95       |     | 3/26/95      |      | 3/7/95       |      | 3/26/95      |      | 3/7/95       |      | 3/26/95      |      |
| Analysis                   |  |  | Standard     | MDL | Analytical   | CRQL | Analytical   | CRQL | Analytical   | CRQL | Analytical   | CRQL | Analytical   | CRQL |
|                            |  |  |              |     | Result       |      | Result       |      | Result       |      | Result       |      | Result       |      |
| 4-Nitrophenol              |  |  |              | 7.5 | 26 U         | 26   | 26 U         | 26   | 26 U         | 26   | 24 U         | 24   | 24 U         | 24   |
| Dibenzofuran               |  |  |              | 6.5 | 10 U         | 10   | 10 U         | 10   | 11 U         | 11   | 10 U         | 10   | 10 U         | 10   |
| 2,4-Dinitrotoluene         |  |  | 10           | 5.8 | 10 U         | 10   | 10 U         | 10   | 11 U         | 11   | 10 U         | 10   | 10 U         | 10   |
| Diethylphthalate           |  |  | 5000         | 5.4 | 1 J          | 10   | 10 U         | 10   | 11 U         | 11   | 1 J          | 10   | 10 U         | 10   |
| 4-Chlorophenyl-phenylether |  |  |              | 7.0 | 10 U         | 10   | 10 U         | 10   | 11 U         | 11   | 10 U         | 10   | 10 U         | 10   |
| Fluorene                   |  |  | 300          | 6.3 | 10 U         | 10   | 10 U         | 10   | 11 U         | 11   | 10 U         | 10   | 10 U         | 10   |
| 4-Nitroaniline             |  |  |              | 6.4 | 26 U         | 26   | 26 U         | 26   | 26 U         | 26   | 24 U         | 24   | 24 U         | 24   |
| 4,6-Dinitro-2-methylphenol |  |  |              | 5.3 | 26 U         | 26   | 26 U         | 26   | 26 U         | 26   | 24 U         | 24   | 24 U         | 24   |
| N-Nitrosodiphenylamine (1) |  |  | 20           | 4.2 | 10 U         | 10   | 10 U         | 10   | 11 U         | 11   | 10 U         | 10   | 10 U         | 10   |
| 4-Bromophenyl-phenylether  |  |  |              | 5.3 | 10 U         | 10   | 10 U         | 10   | 11 U         | 11   | 10 U         | 10   | 10 U         | 10   |
| Hexachlorobenzene          |  |  | 10           | 5.5 | 10 U         | 10   | 10 U         | 10   | 11 U         | 11   | 10 U         | 10   | 10 U         | 10   |
| Pentachlorophenol          |  |  | 1            | 4.0 | 26 U         | 26   | 26 U         | 26   | 26 U         | 26   | 24 U         | 24   | 24 U         | 24   |
| Phenanthrene               |  |  | 10           | 5.0 | 10 U         | 10   | 10 U         | 10   | 11 U         | 11   | 10 U         | 10   | 10 U         | 10   |
| Anthracene                 |  |  | 2000         | 4.6 | 10 U         | 10   | 10 U         | 10   | 11 U         | 11   | 10 U         | 10   | 10 U         | 10   |
| Carbazole                  |  |  |              | 4.4 | 10 U         | 10   | 10 U         | 10   | 11 U         | 11   | 10 U         | 10   | 10 U         | 10   |
| Di-n-butylphthalate        |  |  | 900          | 6.5 | 10 U         | 10   | 10 U         | 10   | 11 U         | 11   | 10 U         | 10   | 10 U         | 10   |
| Fluoranthene               |  |  | 300          | 6.0 | 10 U         | 10   | 10 U         | 10   | 11 U         | 11   | 10 U         | 10   | 10 U         | 10   |
| Pyrene                     |  |  | 200          | 5.4 | 10 U         | 10   | 10 U         | 10   | 11 U         | 11   | 10 U         | 10   | 10 U         | 10   |
| Butylbenzylphthalate       |  |  | 100          | 5.3 | 10 U         | 10   | 10 U         | 10   | 11 U         | 11   | 10 U         | 10   | 10 U         | 10   |
| 3,3'-Dichlorobenzidine     |  |  | 60           | 2.8 | 10 U         | 10   | 10 U         | 10   | 11 U         | 11   | 10 U         | 10   | 10 U         | 10   |
| Benzo(a)anthracene         |  |  | 10           | 4.9 | 10 U         | 10   | 10 U         | 10   | 11 U         | 11   | 10 U         | 10   | 10 U         | 10   |
| Chrysene                   |  |  | 20           | 4.4 | 10 U         | 10   | 10 U         | 10   | 11 U         | 11   | 10 U         | 10   | 10 U         | 10   |
| bis(2-Ethylhexy)phthalate  |  |  | 30           | 9.7 | 10 U         | 10   | 1 J          | 10   | 11 U         | 11   | 10 U         | 10   | 10 U         | 10   |
| Di-n-octyl phthalate       |  |  | 100          | 5.6 | 10 U         | 10   | 10 U         | 10   | 11 U         | 11   | 10 U         | 10   | 10 U         | 10   |
| Benzo(b)fluoranthene       |  |  | 2            | 5.7 | 10 U         | 10   | 10 U         | 10   | 11 U         | 11   | 10 U         | 10   | 10 U         | 10   |
| Benzo(k)fluoranthene       |  |  | 2            | 6.2 | 10 U         | 10   | 10 U         | 10   | 11 U         | 11   | 10 U         | 10   | 10 U         | 10   |
| Benzo(a)pyrene             |  |  | 20           | 4.9 | 10 U         | 10   | 10 U         | 10   | 11 U         | 11   | 10 U         | 10   | 10 U         | 10   |
| Indeno(1,2,3-cd)pyrene     |  |  | 20           | 7.1 | 10 U         | 10   | 10 U         | 10   | 11 U         | 11   | 10 U         | 10   | 10 U         | 10   |
| Dibenzo(a,h)anthracene     |  |  | 20           | 6.0 | 10 U         | 10   | 10 U         | 10   | 11 U         | 11   | 10 U         | 10   | 10 U         | 10   |
| Benzo(g,h,i)perylene       |  |  | 20           | 6.8 | 10 U         | 10   | 10 U         | 10   | 11 U         | 11   | 10 U         | 10   | 10 U         | 10   |
| Total Est. Conc. of TIC    |  |  |              |     | 6 JB         |      | 2 J          |      | 5 JB         |      | 3 J          |      | 8 JB         |      |
| Dilution Factor            |  |  |              |     |              |      |              |      |              |      |              |      |              |      |
| Method: TCL Semivolatiles  |  |  |              |     |              |      |              |      |              |      |              |      |              |      |

**CHARLES WOOD**  
**GROUNDWATER SEMIVOLATILES**

| Geographical Location        |          |      | B10           |      | B10           |      | B10                 |      | B10                 |      |
|------------------------------|----------|------|---------------|------|---------------|------|---------------------|------|---------------------|------|
| Sample                       |          |      | B10-MW10B-A01 |      | B10-MW10B-A02 |      | B10-MW10B-E01       |      | B10-MW10B-E02       |      |
| Sample Type                  |          |      |               |      |               |      | Field Rinsate Blank |      | Field Rinsate Blank |      |
| Batch#                       |          |      | 9502G198      |      | 9503G641      |      | 9502G198            |      | 9503G641            |      |
| Prep#                        |          |      | 95GB0108      |      | 95GB0172      |      | 95GB0108            |      | 95GB0172            |      |
| RFW#                         |          |      | 009           |      | 005           |      | 012                 |      | 008                 |      |
| Dilution Factor              |          |      | 1.00          |      | 1.00          |      | 1.00                |      | 1.00                |      |
| Matrix                       |          |      | water         |      | water         |      | water               |      | water               |      |
| Units                        | ug/l     | ug/l | ug/l          |      | ug/l          |      | ug/l                |      | ug/l                |      |
| Sampling Date                |          |      | 2/15/95       |      | 3/8/95        |      | 2/13/95             |      | 3/8/95              |      |
| Analysis Date                |          |      | 3/7/95        |      | 3/25/95       |      | 3/7/95              |      | 3/25/95             |      |
| Analysis                     | Standard | MDL  | Analytical    | CRQL | Analytical    | CRQL | Analytical          | CRQL | Analytical          | CRQL |
|                              |          |      | Result        |      | Result        |      | Result              |      | Result              |      |
| Phenol                       | 4000     | 7.1  | 12 U          | 12   | 11 U          | 11   | 11 U                | 11   | 11 U                | 11   |
| bis(2-Chloroethyl) ether     | 10       | 9.7  | 12 U          | 12   | 11 U          | 11   | 11 U                | 11   | 11 U                | 11   |
| 2-Chlorophenol               | 40       | 7.3  | 12 U          | 12   | 11 U          | 11   | 11 U                | 11   | 11 U                | 11   |
| 1,3-Dichlorobenzene          | 600      | 5.3  | 12 U          | 12   | 11 U          | 11   | 11 U                | 11   | 11 U                | 11   |
| 1,4-Dichlorobenzene          | 75       | 4.8  | 12 U          | 12   | 11 U          | 11   | 11 U                | 11   | 11 U                | 11   |
| 1,2-Dichlorobenzene          | 600      | 5.7  | 12 U          | 12   | 11 U          | 11   | 11 U                | 11   | 11 U                | 11   |
| 2-Methylphenol               |          | 6.7  | 12 U          | 12   | 11 U          | 11   | 11 U                | 11   | 11 U                | 11   |
| 2,2'-oxybis(1-Chloropropane) |          | 7.0  | 12 U          | 12   | 11 U          | 11   | 11 U                | 11   | 11 U                | 11   |
| 4-Methylphenol               |          | 12.9 | 12 U          | 12   | 11 U          | 11   | 11 U                | 11   | 11 U                | 11   |
| N-Nitroso-di-n-propylamine   | 20       | 8.0  | 12 U          | 12   | 11 U          | 11   | 11 U                | 11   | 11 U                | 11   |
| Hexachloroethane             | 10       | 5.3  | 12 U          | 12   | 11 U          | 11   | 11 U                | 11   | 11 U                | 11   |
| Nitrobenzene                 | 10       | 7.4  | 12 U          | 12   | 11 U          | 11   | 11 U                | 11   | 11 U                | 11   |
| Isophorone                   | 100      | 3.9  | 12 U          | 12   | 11 U          | 11   | 11 U                | 11   | 11 U                | 11   |
| 2-Nitrophenol                |          | 7.0  | 12 U          | 12   | 11 U          | 11   | 11 U                | 11   | 11 U                | 11   |
| 2,4-Dimethylphenol           | 100      | 4.8  | 12 U          | 12   | 11 U          | 11   | 11 U                | 11   | 11 U                | 11   |
| bis(2-Chloroethoxy) methane  |          | 6.1  | 12 U          | 12   | 11 U          | 11   | 11 U                | 11   | 11 U                | 11   |
| 2,4-Dichlorophenol           | 20       | 4.4  | 12 U          | 12   | 11 U          | 11   | 11 U                | 11   | 11 U                | 11   |
| 1,2,4-Trichlorobenzene       | 9        | 9.6  | 12 U          | 12   | 11 U          | 11   | 11 U                | 11   | 11 U                | 11   |
| Naphthalene                  |          | 8.4  | 12 U          | 12   | 11 U          | 11   | 11 U                | 11   | 11 U                | 11   |
| 4-Chloroaniline              |          | 2.9  | 12 U          | 12   | 11 U          | 11   | 11 U                | 11   | 11 U                | 11   |
| Hexachlorobutadiene          | 1        | 4.6  | 12 U          | 12   | 11 U          | 11   | 11 U                | 11   | 11 U                | 11   |
| 4-Chloro-3-methylphenol      | 20       | 3.1  | 12 U          | 12   | 11 U          | 11   | 11 U                | 11   | 11 U                | 11   |
| 2-Methylnaphthalene          |          | 8.7  | 12 U          | 12   | 11 U          | 11   | 11 U                | 11   | 11 U                | 11   |
| Hexachlorocyclopentadiene    | 50       | 3.6  | 12 U          | 12   | 11 U          | 11   | 11 U                | 11   | 11 U                | 11   |
| 2,4,6-Trichlorophenol        |          | 5.6  | 12 U          | 12   | 11 U          | 11   | 11 U                | 11   | 11 U                | 11   |
| 2,4,5-Trichlorophenol        | 700      | 4.7  | 30 U          | 30   | 26 U          | 26   | 28 U                | 28   | 28 U                | 28   |
| 2-Chloronaphthalene          |          | 8.2  | 12 U          | 12   | 11 U          | 11   | 11 U                | 11   | 11 U                | 11   |
| 2-Nitroaniline               |          | 6.1  | 30 U          | 30   | 26 U          | 26   | 28 U                | 28   | 28 U                | 28   |
| Dimethylphthalate            | 7000     | 4.4  | 12 U          | 12   | 11 U          | 11   | 11 U                | 11   | 11 U                | 11   |
| Acenaphthylene               | 10       | 6.0  | 12 U          | 12   | 11 U          | 11   | 11 U                | 11   | 11 U                | 11   |
| 2,6-Dinitrotoluene           | 10       | 5.2  | 12 U          | 12   | 11 U          | 11   | 11 U                | 11   | 11 U                | 11   |
| 3-Nitroaniline               |          | 5.2  | 30 U          | 30   | 26 U          | 26   | 28 U                | 28   | 28 U                | 28   |
| Acenaphthene                 | 400      | 6.7  | 12 U          | 12   | 11 U          | 11   | 11 U                | 11   | 11 U                | 11   |
| 2,4-Dinitrophenol            | 40       | 4.6  | 30 U          | 30   | 26 U          | 26   | 28 U                | 28   | 28 U                | 28   |

**CHARLES WOOD  
GROUNDWATER SEMIVOLATILES**

| Geographical Location      |          |      | B10           |      | B10           |       | B10                 |      | B10                 |      |
|----------------------------|----------|------|---------------|------|---------------|-------|---------------------|------|---------------------|------|
| Sample                     |          |      | B10-MW10B-A01 |      | B10-MW10B-A02 |       | B10-MW10B-E01       |      | B10-MW10B-E02       |      |
| Sample Type                |          |      |               |      |               |       | Field Rinsate Blank |      | Field Rinsate Blank |      |
| Batch#                     |          |      | 9502G198      |      | 9503G641      |       | 9502G198            |      | 9503G641            |      |
| Prep#                      |          |      | 95GB0108      |      | 95GB0172      |       | 95GB0108            |      | 95GB0172            |      |
| RFW#                       |          |      | 009           |      | 005           |       | 012                 |      | 008                 |      |
| Dilution Factor            |          |      | 1.00          |      | 1.00          |       | 1.00                |      | 1.00                |      |
| Matrix                     |          |      | water         |      | water         |       | water               |      | water               |      |
| Units                      | ug/l     | ug/l | ug/l          |      | ug/l          |       | ug/l                |      | ug/l                |      |
| Sampling Date              |          |      | 2/15/95       |      | 3/8/95        |       | 2/13/95             |      | 3/8/95              |      |
| Analysis Date              |          |      | 3/7/95        |      | 3/25/95       |       | 3/7/95              |      | 3/25/95             |      |
| Analysis                   | Standard | MDL  | Analytical    | CRQL | Analytical    | CRQL  | Analytical          | CRQL | Analytical          | CRQL |
|                            |          |      | Result        |      | Result        |       | Result              |      | Result              |      |
| 4-Nitrophenol              |          | 7.5  | 30 U          | 30   | 26 U          | 26    | 28 U                | 28   | 28 U                | 28   |
| Dibenzofuran               |          | 6.5  | 12 U          | 12   | 11 U          | 11    | 11 U                | 11   | 11 U                | 11   |
| 2,4-Dinitrotoluene         | 10       | 5.8  | 12 U          | 12   | 11 U          | 11    | 11 U                | 11   | 11 U                | 11   |
| Diethylphthalate           | 5000     | 5.4  | 12 U          | 12   | 1 JB          | 11    | 11 U                | 11   | 2 JB                | 11   |
| 4-Chlorophenyl-phenylether |          | 7.0  | 12 U          | 12   | 11 U          | 11    | 11 U                | 11   | 11 U                | 11   |
| Fluorene                   | 300      | 6.3  | 12 U          | 12   | 11 U          | 11    | 11 U                | 11   | 11 U                | 11   |
| 4-Nitroaniline             |          | 6.4  | 30 U          | 30   | 26 U          | 26    | 28 U                | 28   | 28 U                | 28   |
| 4,6-Dinitro-2-methylphenol |          | 5.3  | 30 U          | 30   | 26 U          | 26    | 28 U                | 28   | 28 U                | 28   |
| N-Nitrosodiphenylamine (1) | 20       | 4.2  | 12 U          | 12   | 11 U          | 11    | 11 U                | 11   | 11 U                | 11   |
| 4-Bromophenyl-phenylether  |          | 5.3  | 12 U          | 12   | 11 U          | 11    | 11 U                | 11   | 11 U                | 11   |
| Hexachlorobenzene          | 10       | 5.5  | 12 U          | 12   | 11 U          | 11    | 11 U                | 11   | 11 U                | 11   |
| Pentachlorophenol          | 1        | 4.0  | 30 U          | 30   | 26 U          | 26    | 28 U                | 28   | 28 U                | 28   |
| Phenanthrene               | 10       | 5.0  | 12 U          | 12   | 11 U          | 11    | 11 U                | 11   | 11 U                | 11   |
| Anthracene                 | 2000     | 4.6  | 12 U          | 12   | 11 U          | 11    | 11 U                | 11   | 11 U                | 11   |
| Carbazole                  |          | 4.4  | 12 U          | 12   | 11 U          | 11    | 11 U                | 11   | 11 U                | 11   |
| Di-n-butylphthalate        | 900      | 6.5  | 12 U          | 12   | 11 U          | 11    | 11 U                | 11   | 11 U                | 11   |
| Fluoranthene               | 300      | 6.0  | 12 U          | 12   | 11 U          | 11    | 11 U                | 11   | 11 U                | 11   |
| Pyrene                     | 200      | 5.4  | 12 U          | 12   | 11 U          | 11    | 11 U                | 11   | 11 U                | 11   |
| Butylbenzylphthalate       | 100      | 5.3  | 12 U          | 12   | 11 U          | 11    | 11 U                | 11   | 11 U                | 11   |
| 3,3'-Dichlorobenzidine     | 60       | 2.8  | 12 U          | 12   | 11 U          | 11    | 11 U                | 11   | 11 U                | 11   |
| Benzo(a)anthracene         | 10       | 4.9  | 12 U          | 12   | 11 U          | 11    | 11 U                | 11   | 11 U                | 11   |
| Chrysene                   | 20       | 4.4  | 12 U          | 12   | 11 U          | 11    | 11 U                | 11   | 11 U                | 11   |
| bis(2-Ethylhexy)phthalate  | 30       | 9.7  | 12 U          | 12   | 600           | 110 * | 11 U                | 11   | 11 U                | 11   |
| Di-n-octyl phthalate       | 100      | 5.6  | 12 U          | 12   | 11 U          | 11    | 11 U                | 11   | 11 U                | 11   |
| Benzo(b)fluoranthene       | 2        | 5.7  | 12 U          | 12   | 11 U          | 11    | 11 U                | 11   | 11 U                | 11   |
| Benzo(k)fluoranthene       | 2        | 6.2  | 12 U          | 12   | 11 U          | 11    | 11 U                | 11   | 11 U                | 11   |
| Benzo(a)pyrene             | 20       | 4.9  | 12 U          | 12   | 11 U          | 11    | 11 U                | 11   | 11 U                | 11   |
| Indeno(1,2,3-cd)pyrene     | 20       | 7.1  | 12 U          | 12   | 11 U          | 11    | 11 U                | 11   | 11 U                | 11   |
| Dibenzo(a,h)anthracene     | 20       | 6.0  | 12 U          | 12   | 11 U          | 11    | 11 U                | 11   | 11 U                | 11   |
| Benzo(g,h,i)perylene       | 20       | 6.8  | 12 U          | 12   | 11 U          | 11    | 11 U                | 11   | 11 U                | 11   |
| Total Est. Conc. of TIC    |          |      | 9 JB          |      |               |       | 15 JB               |      |                     |      |
| Dilution Factor            |          |      |               |      |               |       | * = 10              |      |                     |      |
| Method: TCL Semivolatiles  |          |      |               |      |               |       |                     |      |                     |      |

**CHARLES WOOD  
GROUNDWATER INORGANICS**

| Geographical Location       |          | CW1           |      | CW1               |      | CW1           |      | CW1           |      | CW1               |      |
|-----------------------------|----------|---------------|------|-------------------|------|---------------|------|---------------|------|-------------------|------|
| Sample                      |          | CW01-MW26-A01 |      | CW01-MW26-A01 SOL |      | CW01-MW26-A02 |      | CW01-MW26-A02 |      | CW01-MW26-A02 SOL |      |
| Sample Type                 |          | Total         |      | Soluble           |      | Total         |      | Total         |      | Soluble           |      |
| Batch#                      |          | 9502G358      |      | 9502G358          |      | 9502G739      |      | 9502G739      |      | 9502G739          |      |
| Prep#                       |          | 95GI454       |      | 95GI454           |      | 95GI508       |      | 95GI508       |      | 95GI508           |      |
| RFW#                        |          | 001           |      | 002               |      | 002           |      | 003           |      | 004               |      |
| Dilution Factor             |          | 1.00          |      | 1.00              |      | 1.00          |      | 1.00          |      | 1.00              |      |
| Matrix                      |          | water         |      | water             |      | water         |      | water         |      | water             |      |
| Units                       | ug/l     | ug/l          |      | ug/l              |      | ug/l          |      | ug/l          |      | ug/l              |      |
| Sampling Date               |          | 2/21/95       |      | 2/21/95           |      | 3/14/95       |      | 3/14/95       |      | 3/14/95           |      |
| Analysis Date               |          | 3/8/95        |      | 3/8/95            |      | 3/8/95        |      | 3/8/95        |      | 3/8/95            |      |
| Analysis                    | Standard | Analytical    | MDL  | Analytical        | MDL  | Analytical    | MDL  | Analytical    | MDL  | Analytical        | MDL  |
|                             |          | Result        |      | Result            |      | Result        |      | Result        |      | Result            |      |
| Silver                      | 20       | 3.0 U         | 3.0  | 3.0 U             | 3.0  | 2.5 U         | 2.5  | 2.5 U         | 2.5  | 2.5 U             | 2.5  |
| Aluminum                    | 200      | 6830          | 24.0 | 279               | 24.0 | 885           | 16.8 | 4990          | 16.8 | 375               | 16.8 |
| Arsenic                     | 8        | 7.8           | 1.9  | 1.9 U             | 1.9  | 1.9 U         | 1.9  | 3.8           | 1.9  | 1.9 U             | 1.9  |
| Barium                      | 2000     | 81.4          | 1.7  | 62.9              | 1.7  | 116           | 0.80 | 99.3          | 0.80 | 86.7              | 0.80 |
| Beryllium                   | 20       | 0.90 U        | 0.90 | 0.90 U            | 0.90 | 0.30 U        | 0.30 | 0.56          | 0.30 | 0.30 U            | 0.30 |
| Calcium                     |          | 25800         | 10.4 | 24500             | 10.4 | 24900         | 8.4  | 32700         | 8.4  | 31300             | 8.4  |
| Cadmium                     | 4        | 2.8 U         | 2.8  | 2.8 U             | 2.8  | 2.9 U         | 2.9  | 2.9 U         | 2.9  | 2.9 U             | 2.9  |
| Cobalt                      |          | 6.0           | 3.0  | 5.1               | 3.0  | 13.2          | 2.3  | 8.0           | 2.3  | 4.2               | 2.3  |
| Chromium                    | 100      | 79.7          | 2.9  | 2.9 U             | 2.9  | 4.7 U         | 4.7  | 54.0          | 4.7  | 4.7 U             | 4.7  |
| Copper                      | 1000     | 1.9 U         | 1.9  | 1.9 U             | 1.9  | 8.1           | 4.0  | 8.9           | 4.0  | 5.7               | 4.0  |
| Iron                        | 300      | 15500         | 6.4  | 25.0              | 6.4  | 93.3          | 2.5  | 10700         | 2.5  | 18.6              | 2.5  |
| Mercury                     | 2        | 0.20 U        | 0.20 | 0.20 U            | 0.20 | 0.20 U        | 0.20 | 0.20 U        | 0.20 | 0.20 U            | 0.20 |
| Potassium                   |          | 13100         | 685  | 9970              | 685  | 11800         | 67.9 | 14500         | 67.9 | 12300             | 67.9 |
| Magnesium                   |          | 4810          | 18.3 | 3390              | 18.3 | 13500         | 34.3 | 5340          | 34.3 | 4240              | 34.3 |
| Manganese                   | 50       | 68.3          | 1.8  | 45.2              | 1.8  | 114           | 0.90 | 71.8          | 0.90 | 54.6              | 0.90 |
| Sodium                      | 50000    | 55300         | 30.5 | 53100             | 30.5 | 73800         | 19.1 | 58600         | 19.1 | 56800             | 19.1 |
| Nickel                      | 100      | 24.6          | 10.8 | 10.8 U            | 10.8 | 15.0          | 4.2  | 7.9           | 4.2  | 8.7               | 4.2  |
| Lead                        | 10       | 5.6           | 1.6  | 1.6 U             | 1.6  | 2.2           | 1.2  | 4.1           | 1.2  | 1.2               | 1.2  |
| Antimony                    | 20       | 20.7 U        | 20.7 | 20.7 U            | 20.7 | 10.9 U        | 10.9 | 10.9 U        | 10.9 | 10.9 U            | 10.9 |
| Selenium                    | 50       | 1.8 U         | 1.8  | 1.8 U             | 1.8  | 1.8 U         | 1.8  | 1.8 U         | 1.8  | 1.8 U             | 1.8  |
| Thallium                    | 10       | 0.70 U        | 0.70 | 0.70 U            | 0.70 | 1.1 U         | 1.1  | 1.1 U         | 1.1  | 1.1 U             | 1.1  |
| Vanadium                    |          | 57.7          | 2.3  | 2.3 U             | 2.3  | 2.1 U         | 2.1  | 39.7          | 2.1  | 2.1 U             | 2.1  |
| Zinc                        | 5000     | 39.0          | 3.8  | 14.4              | 3.8  | 32.5          | 1.9  | 35.6          | 1.9  | 17.2              | 1.9  |
| Cyanide                     | 200      |               |      |                   |      |               |      |               |      |                   |      |
| Method: TAL Metals, Cyanide |          |               |      |                   |      |               |      |               |      |                   |      |

**CHARLES WOOD  
GROUNDWATER INORGANICS**

| Geographical Location      |          | CW1                 |      | CW1                   |      | CW1           |      | CW1               |      | CW1           |      |
|----------------------------|----------|---------------------|------|-----------------------|------|---------------|------|-------------------|------|---------------|------|
| Sample                     |          | CW01-MW26-E02       |      | CW01-MW26-E02 SOL     |      | CW01-MW27-A01 |      | CW01-MW27-A01 SOL |      | CW01-MW27-A02 |      |
| Sample Type                |          | Field Rinse - Total |      | Field Rinse - Soluble |      | Total         |      | Soluble           |      | Total         |      |
| Batch#                     |          | 9502G739            |      | 9502G739              |      | 9502G358      |      | 9502G358          |      | 9502G739      |      |
| Prep#                      |          | 95GI508             |      | 95GI508               |      | 95GI454       |      | 95GI454           |      | 95GI508       |      |
| RFW#                       |          | 004                 |      | 007                   |      | 003           |      | 004               |      | 001           |      |
| Dilution Factor            |          | 1.00                |      | 1.00                  |      | 1.00          |      | 1.00              |      | 1.00          |      |
| Matrix                     |          | water               |      | water                 |      | water         |      | water             |      | water         |      |
| Units                      | ug/l     | ug/l                |      | ug/l                  |      | ug/l          |      | ug/l              |      | ug/l          |      |
| Sampling Date              |          | 3/14/95             |      | 3/14/95               |      | 2/21/95       |      | 2/21/95           |      | 3/14/95       |      |
| Analysis Date              |          | 3/8/95              |      | 3/8/95                |      | 3/8/95        |      | 3/8/95            |      | 3/8/95        |      |
| Analysis                   | Standard | Analytical          | MDL  | Analytical            | MDL  | Analytical    | MDL  | Analytical        | MDL  | Analytical    | MDL  |
|                            |          | Result              |      | Result                |      | Result        |      | Result            |      | Result        |      |
| Silver                     | 20       | 2.5 U               | 2.5  | 2.5 U                 | 2.5  | 3.0 U         | 3.0  | 3.0 U             | 3.0  | 2.5 U         | 2.5  |
| Aluminum                   | 200      | 20.2                | 16.8 | 18.4                  | 16.8 | 3770          | 24.0 | 653               | 24.0 | 7620          | 16.8 |
| Arsenic                    | 8        | 1.9 U               | 1.9  | 1.9 U                 | 1.9  | 5.0           | 1.9  | 1.9 U             | 1.9  | 4.4           | 1.9  |
| Barium                     | 2000     | 0.80 U              | 0.80 | 0.80 U                | 0.80 | 112           | 1.7  | 95.6              | 1.7  | 142           | 0.80 |
| Beryllium                  | 20       | 0.30 U              | 0.30 | 0.30 U                | 0.30 | 0.90 U        | 0.90 | 0.90 U            | 0.90 | 0.99          | 0.30 |
| Calcium                    |          | 105                 | 8.4  | 115                   | 8.4  | 22000         | 10.4 | 21500             | 10.4 | 26200         | 8.4  |
| Cadmium                    | 4        | 2.9 U               | 2.9  | 2.9 U                 | 2.9  | 2.8 U         | 2.8  | 2.8 U             | 2.8  | 2.9 U         | 2.9  |
| Cobalt                     |          | 2.3 U               | 2.3  | 2.3 U                 | 2.3  | 12.4          | 3.0  | 12.2              | 3.0  | 16.6          | 2.3  |
| Chromium                   | 100      | 4.7 U               | 4.7  | 4.7 U                 | 4.7  | 34.5          | 2.9  | 2.9 U             | 2.9  | 76.6          | 4.7  |
| Copper                     | 1000     | 4.0 U               | 4.0  | 4.0 U                 | 4.0  | 1.9 U         | 1.9  | 1.9 U             | 1.9  | 10.4          | 4.0  |
| Iron                       | 300      | 12.0                | 2.5  | 16.8                  | 2.5  | 7190          | 6.4  | 122               | 6.4  | 15400         | 2.5  |
| Mercury                    | 2        | 0.20 U              | 0.20 | 0.20 U                | 0.20 | 0.20 U        | 0.20 | 0.20 U            | 0.20 | 0.20 U        | 0.20 |
| Potassium                  |          | 67.9                | 67.9 | 119                   | 67.9 | 11400         | 685  | 10500             | 685  | 14500         | 67.9 |
| Magnesium                  |          | 34.3                | 34.3 | 47.6                  | 34.3 | 11700         | 18.3 | 10900             | 18.3 | 15600         | 34.3 |
| Manganese                  | 50       | 0.90 U              | 0.90 | 0.90 U                | 0.90 | 110           | 1.8  | 98.4              | 1.8  | 140           | 0.90 |
| Sodium                     | 50000    | 132                 | 19.1 | 156                   | 19.1 | 64300         | 30.5 | 62700             | 30.5 | 79100         | 19.1 |
| Nickel                     | 100      | 4.2 U               | 4.2  | 4.2 U                 | 4.2  | 11.9          | 10.8 | 20.4              | 10.8 | 30.0          | 4.2  |
| Lead                       | 10       | 2.6                 | 1.2  | 1.5                   | 1.2  | 5.6           | 1.6  | 1.6 U             | 1.6  | 11.0          | 1.2  |
| Antimony                   | 20       | 10.9 U              | 10.9 | 13.2                  | 10.9 | 20.7 U        | 20.7 | 20.7 U            | 20.7 | 10.9 U        | 10.9 |
| Selenium                   | 50       | 1.8 U               | 1.8  | 1.8 U                 | 1.8  | 1.8 U         | 1.8  | 1.8 U             | 1.8  | 1.8 U         | 1.8  |
| Thallium                   | 10       | 1.1 U               | 1.1  | 1.1 U                 | 1.1  | 0.70 U        | 0.70 | 0.70 U            | 0.70 | 1.1 U         | 1.1  |
| Vanadium                   |          | 2.1 U               | 2.1  | 2.1 U                 | 2.1  | 34.4          | 2.3  | 2.3 U             | 2.3  | 71.5          | 2.1  |
| Zinc                       | 5000     | 1.9 U               | 1.9  | 1.9 U                 | 1.9  | 41.9          | 3.8  | 33.4              | 3.8  | 56.6          | 1.9  |
| Cyanide                    | 200      |                     |      |                       |      |               |      |                   |      |               |      |
| Method:TAL Metals, Cyanide |          |                     |      |                       |      |               |      |                   |      |               |      |



**CHARLES WOOD  
GROUNDWATER INORGANICS**

| Geographical Location       |          | CW1               |      | CW1           |      | CW1               |      | CW1           |      | CW1               |      |
|-----------------------------|----------|-------------------|------|---------------|------|-------------------|------|---------------|------|-------------------|------|
| Sample                      |          | CW01-MW27-A02 SOL |      | CW01-MW28-A01 |      | CW01-MW28-A01 SOL |      | CW01-MW28-A02 |      | CW01-MW28-A02 SOL |      |
| Sample Type                 |          | Soluble           |      | Total         |      | Soluble           |      | Total         |      | Soluble           |      |
| Batch#                      |          | 9503G739          |      | 9502G358      |      | 9502G358          |      | 9502G739      |      | 9502G739          |      |
| Prep#                       |          | 95GI508           |      | 95GI454       |      | 95GI454           |      | 95GI508       |      | 95GI508           |      |
| RFW#                        |          | 002               |      | 005           |      | 006               |      | 008           |      | 009               |      |
| Dilution Factor             |          | 1.00              |      | 1.00          |      | 1.00              |      | 1.00          |      | 1.00              |      |
| Matrix                      |          | water             |      | water         |      | water             |      | water         |      | water             |      |
| Units                       | ug/l     | ug/l              |      | ug/l          |      | ug/l              |      | ug/l          |      | ug/l              |      |
| Sampling Date               |          | 3/14/95           |      | 2/21/95       |      | 2/21/95           |      | 3/14/95       |      | 3/14/95           |      |
| Analysis Date               |          | 3/8/95            |      | 3/8/95        |      | 3/8/95            |      | 3/8/95        |      | 3/8/95            |      |
| Analysis                    | Standard | Analytical        | MDL  | Analytical    | MDL  | Analytical        | MDL  | Analytical    | MDL  | Analytical        | MDL  |
|                             |          | Result            |      | Result        |      | Result            |      | Result        |      | Result            |      |
| Silver                      | 20       | 2.5 U             | 2.5  | 3.0 U         | 3.0  | 3.0 U             | 3.0  | 2.5 U         | 2.5  | 2.5 U             | 2.5  |
| Aluminum                    | 200      | 885               | 16.8 | 3480          | 24.0 | 510               | 24.0 | 4150          | 16.8 | 498               | 16.8 |
| Arsenic                     | 8        | 1.9 U             | 1.9  | 4.3           | 1.9  | 1.9 U             | 1.9  | 3.7           | 1.9  | 1.9 U             | 1.9  |
| Barium                      | 2000     | 116               | 0.80 | 54.3          | 1.7  | 49.3              | 1.7  | 51.8          | 0.80 | 39.7              | 0.80 |
| Beryllium                   | 20       | 0.30 U            | 0.30 | 0.90 U        | 0.90 | 0.90 U            | 0.90 | 0.30 U        | 0.30 | 0.33              | 0.30 |
| Calcium                     |          | 24900             | 8.4  | 15300         | 10.4 | 15100             | 10.4 | 14800         | 8.4  | 14500             | 8.4  |
| Cadmium                     | 4        | 2.9 U             | 2.9  | 2.8 U         | 2.8  | 2.8 U             | 2.8  | 2.9 U         | 2.9  | 2.9 U             | 2.9  |
| Cobalt                      |          | 13.2              | 2.3  | 7.5           | 3.0  | 4.7               | 3.0  | 6.4           | 2.3  | 4.4               | 2.3  |
| Chromium                    | 100      | 4.7 U             | 4.7  | 27.1          | 2.9  | 2.9 U             | 2.9  | 29.2          | 4.7  | 4.7 U             | 4.7  |
| Copper                      | 1000     | 8.1               | 4.0  | 1.9 U         | 1.9  | 1.9 U             | 1.9  | 4.4           | 4.0  | 4.0 U             | 4.0  |
| Iron                        | 300      | 93.3              | 2.5  | 5760          | 6.4  | 8.4               | 6.4  | 6610          | 2.5  | 28.6              | 2.5  |
| Mercury                     | 2        | 0.20 U            | 0.20 | 0.20 U        | 0.20 | 0.20 U            | 0.20 | 0.20 U        | 0.20 | 0.20 U            | 0.20 |
| Potassium                   |          | 11800             | 67.9 | 12900         | 685  | 12100             | 685  | 12900         | 67.9 | 11600             | 67.9 |
| Magnesium                   |          | 13500             | 34.3 | 3890          | 18.3 | 3380              | 18.3 | 4270          | 34.3 | 3580              | 34.3 |
| Manganese                   | 50       | 114               | 0.90 | 44.0          | 1.8  | 36.3              | 1.8  | 48.7          | 0.90 | 39.5              | 0.90 |
| Sodium                      | 50000    | 73800             | 19.1 | 17000         | 30.5 | 17100             | 30.5 | 19200         | 19.1 | 19000             | 19.1 |
| Nickel                      | 100      | 15.0              | 4.2  | 11.5          | 10.8 | 17.2              | 10.8 | 6.0           | 4.2  | 7.2               | 4.2  |
| Lead                        | 10       | 2.2               | 1.2  | 2.7           | 1.6  | 1.6 U             | 1.6  | 3.6           | 1.2  | 1.5               | 1.2  |
| Antimony                    | 20       | 10.9 U            | 10.9 | 20.7 U        | 20.7 | 20.7 U            | 20.7 | 10.9 U        | 10.9 | 10.9 U            | 10.9 |
| Selenium                    | 50       | 1.8 U             | 1.8  | 1.8 U         | 1.8  | 1.8 U             | 1.8  | 1.8 U         | 1.8  | 1.8 U             | 1.8  |
| Thallium                    | 10       | 1.1 U             | 1.1  | 0.70 U        | 0.70 | 0.70 U            | 0.70 | 1.1 U         | 1.1  | 1.1 U             | 1.1  |
| Vanadium                    |          | 2.1 U             | 2.1  | 23.4          | 2.3  | 2.3 U             | 2.3  | 24.4          | 2.1  | 2.1 U             | 2.1  |
| Zinc                        | 5000     | 32.5              | 1.9  | 21.9          | 3.8  | 13.1              | 3.8  | 27.8          | 1.9  | 14.4              | 1.9  |
| Cyanide                     | 200      |                   |      |               |      |                   |      |               |      |                   |      |
| Method: TAL Metals, Cyanide |          |                   |      |               |      |                   |      |               |      |                   |      |

**CHARLES WOOD  
GROUNDWATER INORGANICS**

| Geographical Location       |          | CW1           |      | CW1               |      | CW1           |      | CW1               |      | CW1                   |      |
|-----------------------------|----------|---------------|------|-------------------|------|---------------|------|-------------------|------|-----------------------|------|
| Sample                      |          | CW01-MW29-A01 |      | CW01-MW29-A01 SOL |      | CW01-MW29-A02 |      | CW01-MW29-A02 SOL |      | CW01-MW29-E01         |      |
| Sample Type                 |          | Total         |      | Soluble           |      | Total         |      | Soluble           |      | Field Rinsate - Total |      |
| Batch#                      |          | 9502G358      |      | 9502G358          |      | 9502G739      |      | 9502G739          |      | 9502G358              |      |
| Prep#                       |          | 95GI454       |      | 95GI454           |      | 95GI508       |      | 95GI508           |      | 95GI454               |      |
| RFW#                        |          | 007           |      | 008               |      | 010           |      | 011               |      | 010                   |      |
| Dilution Factor             |          | 1.00          |      | 1.00              |      | 1.00          |      | 1.00              |      | 1.00                  |      |
| Matrix                      |          | water         |      | water             |      | water         |      | water             |      | water                 |      |
| Units                       | ug/l     | ug/l          |      | ug/l              |      | ug/l          |      | ug/l              |      | ug/l                  |      |
| Sampling Date               |          | 2/21/95       |      | 2/21/95           |      | 3/14/95       |      | 3/14/95           |      | 2/21/95               |      |
| Analysis Date               |          | 3/8/95        |      | 3/8/95            |      | 3/8/95        |      | 3/8/95            |      | 3/8/95                |      |
| Analysis                    | Standard | Analytical    | MDL  | Analytical        | MDL  | Analytical    | MDL  | Analytical        | MDL  | Analytical            | MDL  |
|                             |          | Result        |      | Result            |      | Result        |      | Result            |      | Result                |      |
| Silver                      | 20       | 3.0 U         | 3.0  | 3.0 U             | 3.0  | 2.5 U         | 2.5  | 2.5 U             | 2.5  | 3.0 U                 | 3.0  |
| Aluminum                    | 200      | 1980          | 24.0 | 118               | 24.0 | 2760          | 16.8 | 143               | 16.8 | 24.0 U                | 24.0 |
| Arsenic                     | 8        | 2.3           | 1.9  | 1.9 U             | 1.9  | 1.9 U         | 1.9  | 1.9 U             | 1.9  | 1.9 U                 | 1.9  |
| Barium                      | 2000     | 46.3          | 1.7  | 37.6              | 1.7  | 55.3          | 0.80 | 46.0              | 0.80 | 1.7 U                 | 1.7  |
| Beryllium                   | 20       | 0.90 U        | 0.90 | 0.90 U            | 0.90 | 0.30 U        | 0.30 | 0.30 U            | 0.30 | 0.90 U                | 0.90 |
| Calcium                     |          | 25400         | 10.4 | 25000             | 10.4 | 31300         | 8.4  | 31400             | 8.4  | 113                   | 10.4 |
| Cadmium                     | 4        | 2.8 U         | 2.8  | 2.8 U             | 2.8  | 2.9 U         | 2.9  | 2.9 U             | 2.9  | 2.8 U                 | 2.8  |
| Cobalt                      |          | 4.4           | 3.0  | 3.6               | 3.0  | 5.2           | 2.3  | 4.1               | 2.3  | 3.0 U                 | 3.0  |
| Chromium                    | 100      | 17.5          | 2.9  | 2.9 U             | 2.9  | 21.9          | 4.7  | 4.7 U             | 4.7  | 2.9 U                 | 2.9  |
| Copper                      | 1000     | 1.9 U         | 1.9  | 1.9 U             | 1.9  | 4.0 U         | 4.0  | 4.0 U             | 4.0  | 1.9 U                 | 1.9  |
| Iron                        | 300      | 3810          | 6.4  | 134               | 6.4  | 5300          | 2.5  | 238               | 2.5  | 6.4 U                 | 6.4  |
| Mercury                     | 2        | 0.20 U        | 0.20 | 0.20 U            | 0.20 | 0.20 U        | 0.20 | 0.20 U            | 0.20 | 0.20 U                | 0.20 |
| Potassium                   |          | 10700         | 685  | 9660              | 685  | 11300         | 67.9 | 11000             | 67.9 | 685 U                 | 685  |
| Magnesium                   |          | 4940          | 18.3 | 4520              | 18.3 | 6100          | 34.3 | 5890              | 34.3 | 18.3 U                | 18.3 |
| Manganese                   | 50       | 65.8          | 1.8  | 60.5              | 1.8  | 75.3          | 0.90 | 70.3              | 0.90 | 1.8 U                 | 1.8  |
| Sodium                      | 50000    | 28000         | 30.5 | 27600             | 30.5 | 30800         | 19.1 | 33500             | 19.1 | 321                   | 30.5 |
| Nickel                      | 100      | 15.4          | 10.8 | 10.8 U            | 10.8 | 4.8           | 4.2  | 5.8               | 4.2  | 10.8 U                | 10.8 |
| Lead                        | 10       | 1.6 U         | 1.6  | 1.6 U             | 1.6  | 2.3           | 1.2  | 1.2               | 1.2  | 1.6 U                 | 1.6  |
| Antimony                    | 20       | 20.7 U        | 20.7 | 20.7 U            | 20.7 | 10.9 U        | 10.9 | 10.9 U            | 10.9 | 20.7 U                | 20.7 |
| Selenium                    | 50       | 1.8 U         | 1.8  | 1.8 U             | 1.8  | 1.8 U         | 1.8  | 1.8 U             | 1.8  | 1.8 U                 | 1.8  |
| Thallium                    | 10       | 0.70 U        | 0.70 | 0.70 U            | 0.70 | 1.1 U         | 1.1  | 1.1 U             | 1.1  | 0.70 U                | 0.70 |
| Vanadium                    |          | 14.5          | 2.3  | 2.3 U             | 2.3  | 16.7          | 2.1  | 2.1 U             | 2.1  | 2.3 U                 | 2.3  |
| Zinc                        | 5000     | 21.4          | 3.8  | 15.8              | 3.8  | 23.8          | 1.9  | 16.3              | 1.9  | 3.8 U                 | 3.8  |
| Cyanide                     | 200      |               |      |                   |      |               |      |                   |      |                       |      |
| Method: TAL Metals, Cyanide |          |               |      |                   |      |               |      |                   |      |                       |      |

**CHARLES WOOD  
GROUNDWATER INORGANICS**

| Geographical Location       |          | CW1                     |      | CW2           |      | CW2               |      | CW2           |      | CW2               |      | CW2           |      |
|-----------------------------|----------|-------------------------|------|---------------|------|-------------------|------|---------------|------|-------------------|------|---------------|------|
| Sample                      |          | CW01-MW29-E01 SOL       |      | CW02-MW30-A01 |      | CW02-MW30-A01 SOL |      | CW02-MW30-A02 |      | CW02-MW30-A02 SOL |      | CW02-MW31-A01 |      |
| Sample Type                 |          | Field Rinsate - Soluble |      | Total         |      | Soluble           |      | Total         |      | Soluble           |      | Total         |      |
| Batch#                      |          | 9502G358                |      | 9502G358      |      | 9502G358          |      | 9502G739      |      | 9502G739          |      | 9502G358      |      |
| Prep#                       |          | 95GI454                 |      | 95GI454       |      | 95GI454           |      | 95GI508       |      | 95GI508           |      | 95GI454       |      |
| RFW#                        |          | 011                     |      | 012           |      | 013               |      | 012           |      | 013               |      | 014           |      |
| Dilution Factor             |          | 1.00                    |      | 1.00          |      | 1.00              |      | 1.00          |      | 1.00              |      | 1.00          |      |
| Matrix                      |          | water                   |      | water         |      | water             |      | water         |      | water             |      | water         |      |
| Units                       | ug/l     | ug/l                    |      | ug/l          |      | ug/l              |      | ug/l          |      | ug/l              |      | ug/l          |      |
| Sampling Date               |          | 2/21/95                 |      | 2/21/95       |      | 2/21/95           |      | 3/14/95       |      | 3/14/95           |      | 2/21/95       |      |
| Analysis Date               |          | 3/8/95                  |      | 3/8/95        |      | 3/8/95            |      | 3/8/95        |      | 3/8/95            |      | 3/8/95        |      |
| Analysis                    | Standard | Analytical              | MDL  | Analytical    | MDL  | Analytical        | MDL  | Analytical    | MDL  | Analytical        | MDL  | Analytical    | MDL  |
|                             |          | Result                  |      | Result        |      | Result            |      | Result        |      | Result            |      | Result        |      |
| Silver                      | 20       | 3.0 U                   | 3.0  | 3.0 U         | 3.0  | 3.0 U             | 3.0  | 2.5 U         | 2.5  | 2.5 U             | 2.5  | 3.0 U         | 3.0  |
| Aluminum                    | 200      | 24.0 U                  | 24.0 | 127           | 24.0 | 24.0 U            | 24.0 | 131           | 16.8 | 22.2              | 16.8 | 24.0 U        | 24.0 |
| Arsenic                     | 8        | 1.9 U                   | 1.9  | 1.9 U         | 1.9  | 1.9 U             | 1.9  | 1.9 U         | 1.9  | 1.9 U             | 1.9  | 1.9 U         | 1.9  |
| Barium                      | 2000     | 1.7 U                   | 1.7  | 227           | 1.7  | 219               | 1.7  | 240           | 0.80 | 235               | 0.80 | 170           | 1.7  |
| Beryllium                   | 20       | 0.90 U                  | 0.90 | 0.90 U        | 0.90 | 0.90 U            | 0.90 | 0.30 U        | 0.30 | 0.30 U            | 0.30 | 0.90 U        | 0.90 |
| Calcium                     |          | 72.3                    | 10.4 | 61200         | 10.4 | 59100             | 10.4 | 66000         | 8.4  | 66000             | 8.4  | 37100         | 10.4 |
| Cadmium                     | 4        | 2.8 U                   | 2.8  | 2.8 U         | 2.8  | 2.8 U             | 2.8  | 2.9 U         | 2.9  | 2.9 U             | 2.9  | 2.8 U         | 2.8  |
| Cobalt                      |          | 3.0 U                   | 3.0  | 3.0 U         | 3.0  | 3.0 U             | 3.0  | 2.3 U         | 2.3  | 2.3 U             | 2.3  | 3.0 U         | 3.0  |
| Chromium                    | 100      | 2.9 U                   | 2.9  | 2.9 U         | 2.9  | 2.9 U             | 2.9  | 4.7 U         | 4.7  | 4.7 U             | 4.7  | 2.9 U         | 2.9  |
| Copper                      | 1000     | 1.9 U                   | 1.9  | 1.9 U         | 1.9  | 1.9 U             | 1.9  | 7.6           | 4.0  | 8.2               | 4.0  | 1.9 U         | 1.9  |
| Iron                        | 300      | 6.4 U                   | 6.4  | 42800         | 6.4  | 40500             | 6.4  | 48700         | 2.5  | 47500             | 2.5  | 34600         | 6.4  |
| Mercury                     | 2        | 0.20 U                  | 0.20 | 0.20 U        | 0.20 | 0.20 U            | 0.20 | 0.20 U        | 0.20 | 0.20 U            | 0.20 | 0.20 U        | 0.20 |
| Potassium                   |          | 685 U                   | 685  | 9460          | 685  | 9590              | 685  | 10500         | 67.9 | 10600             | 67.9 | 8270          | 685  |
| Magnesium                   |          | 18.3 U                  | 18.3 | 6770          | 18.3 | 6560              | 18.3 | 7320          | 34.3 | 7300              | 34.3 | 4500          | 18.3 |
| Manganese                   | 50       | 1.8 U                   | 1.8  | 352           | 1.8  | 340               | 1.8  | 378           | 0.90 | 375               | 0.90 | 212           | 1.8  |
| Sodium                      | 50000    | 137                     | 30.5 | 18000         | 30.5 | 17600             | 30.5 | 16200         | 19.1 | 16200             | 19.1 | 9650          | 30.5 |
| Nickel                      | 100      | 12.9                    | 10.8 | 16.7          | 10.8 | 21.1              | 10.8 | 4.6           | 4.2  | 4.2 U             | 4.2  | 26.0          | 10.8 |
| Lead                        | 10       | 1.6 U                   | 1.6  | 1.6 U         | 1.6  | 1.6 U             | 1.6  | 1.2 U         | 1.2  | 1.8               | 1.2  | 1.6 U         | 1.6  |
| Antimony                    | 20       | 20.7 U                  | 20.7 | 20.7 U        | 20.7 | 20.7 U            | 20.7 | 10.9 U        | 10.9 | 12.7              | 10.9 | 20.7 U        | 20.7 |
| Selenium                    | 50       | 1.8 U                   | 1.8  | 1.8 U         | 1.8  | 1.8 U             | 1.8  | 1.8 U         | 1.8  | 1.8 U             | 1.8  | 1.8 U         | 1.8  |
| Thallium                    | 10       | 0.70 U                  | 0.70 | 0.70 U        | 0.70 | 0.70 U            | 0.70 | 1.1 U         | 1.1  | 1.1 U             | 1.1  | 0.70 U        | 0.70 |
| Vanadium                    |          | 2.3 U                   | 2.3  | 3.2           | 2.3  | 2.3 U             | 2.3  | 2.1 U         | 2.1  | 2.1 U             | 2.1  | 2.3 U         | 2.3  |
| Zinc                        | 5000     | 3.8 U                   | 3.8  | 6.6           | 3.8  | 5.1               | 3.8  | 4.8           | 1.9  | 6.1               | 1.9  | 5.6           | 3.8  |
| Cyanide                     | 200      |                         |      |               |      |                   |      |               |      |                   |      |               |      |
| Method: TAL Metals, Cyanide |          |                         |      |               |      |                   |      |               |      |                   |      |               |      |

**CHARLES WOOD  
GROUNDWATER INORGANICS**

| Geographical Location       |          | CW2               |      | CW2           |      | CW2               |      | CW2           |      | CW2               |      |
|-----------------------------|----------|-------------------|------|---------------|------|-------------------|------|---------------|------|-------------------|------|
| Sample                      |          | CW02-MW31-A01 SOL |      | CW02-MW31-A02 |      | CW02-MW31-A02 SOL |      | CW02-MW32-A01 |      | CW02-MW32-A01 SOL |      |
| Sample Type                 |          | Soluble           |      | Total         |      | Soluble           |      | Total         |      | Soluble           |      |
| Batch#                      |          | 9502G358          |      | 9502G739      |      | 9502G739          |      | 9502G358      |      | 9502G358          |      |
| Prep#                       |          | 95GI454           |      | 95GI508       |      | 95GI508           |      | 95GI454       |      | 95GI454           |      |
| RFW#                        |          | 015               |      | 014           |      | 015               |      | 016           |      | 017               |      |
| Dilution Factor             |          | 1.00              |      | 1.00          |      | 1.00              |      | 1.00          |      | 1.00              |      |
| Matrix                      |          | water             |      | water         |      | water             |      | water         |      | water             |      |
| Units                       | ug/l     | ug/l              |      | ug/l          |      | ug/l              |      | ug/l          |      | ug/l              |      |
| Sampling Date               |          | 2/21/95           |      | 3/14/95       |      | 3/14/95           |      | 2/21/95       |      | 2/21/95           |      |
| Analysis Date               |          | 3/8/95            |      | 3/8/95        |      | 3/8/95            |      | 3/8/95        |      | 3/8/95            |      |
| Analysis                    | Standard | Analytical        | MDL  | Analytical    | MDL  | Analytical        | MDL  | Analytical    | MDL  | Analytical        | MDL  |
|                             |          | Result            |      | Result        |      | Result            |      | Result        |      | Result            |      |
| Silver                      | 20       | 3.0 U             | 3.0  | 2.5 U         | 2.5  | 2.5 U             | 2.5  | 3.0 U         | 3.0  | 3.0 U             | 3.0  |
| Aluminum                    | 200      | 24.0 U            | 24.0 | 35.3          | 16.8 | 26.1              | 16.8 | 530           | 24.0 | 24.0 U            | 24.0 |
| Arsenic                     | 8        | 1.9 U             | 1.9  | 1.9 U         | 1.9  | 1.9 U             | 1.9  | 1.9 U         | 1.9  | 1.9 U             | 1.9  |
| Barium                      | 2000     | 169               | 1.7  | 191           | 0.80 | 183               | 0.80 | 216           | 1.7  | 187               | 1.7  |
| Beryllium                   | 20       | 0.90 U            | 0.90 | 0.30 U        | 0.30 | 0.30 U            | 0.30 | 0.90 U        | 0.90 | 0.90 U            | 0.90 |
| Calcium                     |          | 37600             | 10.4 | 40400         | 8.4  | 39500             | 8.4  | 45800         | 10.4 | 43700             | 10.4 |
| Cadmium                     | 4        | 2.8 U             | 2.8  | 2.9 U         | 2.9  | 2.9 U             | 2.9  | 2.8 U         | 2.8  | 2.8 U             | 2.8  |
| Cobalt                      |          | 3.0 U             | 3.0  | 2.3 U         | 2.3  | 2.3 U             | 2.3  | 3.0 U         | 3.0  | 3.0 U             | 3.0  |
| Chromium                    | 100      | 2.9 U             | 2.9  | 4.7 U         | 4.7  | 4.7 U             | 4.7  | 2.9 U         | 2.9  | 2.9 U             | 2.9  |
| Copper                      | 1000     | 1.9 U             | 1.9  | 4.3           | 4.0  | 4.0 U             | 4.0  | 1.9 U         | 1.9  | 1.9 U             | 1.9  |
| Iron                        | 300      | 33300             | 6.4  | 38100         | 2.5  | 34200             | 2.5  | 47700         | 6.4  | 38300             | 6.4  |
| Mercury                     | 2        | 0.20 U            | 0.20 | 0.20 U        | 0.20 | 0.20 U            | 0.20 | 0.20 U        | 0.20 | 0.20 U            | 0.20 |
| Potassium                   |          | 8210              | 685  | 9150          | 67.9 | 8930              | 67.9 | 9480          | 685  | 9210              | 685  |
| Magnesium                   |          | 4540              | 18.3 | 5050          | 34.3 | 4960              | 34.3 | 5560          | 18.3 | 5230              | 18.3 |
| Manganese                   | 50       | 214               | 1.8  | 233           | 0.90 | 228               | 0.90 | 266           | 1.8  | 250               | 1.8  |
| Sodium                      | 50000    | 9790              | 30.5 | 11000         | 19.1 | 10900             | 19.1 | 11500         | 30.5 | 11000             | 30.5 |
| Nickel                      | 100      | 26.4              | 10.8 | 4.2 U         | 4.2  | 14.7              | 4.2  | 10.8 U        | 10.8 | 10.8 U            | 10.8 |
| Lead                        | 10       | 1.6 U             | 1.6  | 1.2 U         | 1.2  | 1.7               | 1.2  | 1.6 U         | 1.6  | 1.6 U             | 1.6  |
| Antimony                    | 20       | 20.7 U            | 20.7 | 10.9 U        | 10.9 | 15.8              | 10.9 | 20.7 U        | 20.7 | 22.3              | 20.7 |
| Selenium                    | 50       | 1.8 U             | 1.8  | 1.8 U         | 1.8  | 1.8 U             | 1.8  | 1.8 U         | 1.8  | 1.8 U             | 1.8  |
| Thallium                    | 10       | 0.70 U            | 0.70 | 1.1 U         | 1.1  | 1.1 U             | 1.1  | 0.70 U        | 0.70 | 0.70 U            | 0.70 |
| Vanadium                    |          | 2.3 U             | 2.3  | 2.1 U         | 2.1  | 2.1 U             | 2.1  | 3.9           | 2.3  | 2.3 U             | 2.3  |
| Zinc                        | 5000     | 3.8 U             | 3.8  | 2.2           | 1.9  | 5.4               | 1.9  | 14.2          | 3.8  | 4.1               | 3.8  |
| Cyanide                     | 200      |                   |      |               |      |                   |      |               |      |                   |      |
| Method: TAL Metals, Cyanide |          |                   |      |               |      |                   |      |               |      |                   |      |

**CHARLES WOOD  
GROUNDWATER INORGANICS**

| Geographical Location       |          | CW2           |      | CW2               |      | CW2           |      | CW2               |      | CW2           |      |
|-----------------------------|----------|---------------|------|-------------------|------|---------------|------|-------------------|------|---------------|------|
| Sample                      |          | CW02-MW32-A02 |      | CW02-MW32-A02 SOL |      | CW02-MW33-A01 |      | CW02-MW33-A01 SOL |      | CW02-MW33-A02 |      |
| Sample Type                 |          | Total         |      | Soluble           |      | Total         |      | Soluble           |      | Total         |      |
| Batch#                      |          | 9502G739      |      | 9502G739          |      | 9502G358      |      | 9502G358          |      | 9502G739      |      |
| Prep#                       |          | 95GI508       |      | 95GI508           |      | 95GI454       |      | 95GI454           |      | 95GI508       |      |
| RFW#                        |          | 016           |      | 017               |      | 018           |      | 019               |      | 018           |      |
| Dilution Factor             |          | 1.00          |      | 1.00              |      | 1.00          |      | 1.00              |      | 1.00          |      |
| Matrix                      |          | water         |      | water             |      | water         |      | water             |      | water         |      |
| Units                       | ug/l     | ug/l          |      | ug/l              |      | ug/l          |      | ug/l              |      | ug/l          |      |
| Sampling Date               |          | 3/14/95       |      | 3/14/95           |      | 2/21/95       |      | 2/21/95           |      | 3/14/95       |      |
| Analysis Date               |          | 3/8/95        |      | 3/8/95            |      | 3/8/95        |      | 3/8/95            |      | 3/8/95        |      |
| Analysis                    | Standard | Analytical    | MDL  | Analytical        | MDL  | Analytical    | MDL  | Analytical        | MDL  | Analytical    | MDL  |
|                             |          | Result        |      | Result            |      | Result        |      | Result            |      | Result        |      |
| Silver                      | 20       | 2.5 U         | 2.5  | 2.5 U             | 2.5  | 3.0 U         | 3.0  | 3.0 U             | 3.0  | 2.5 U         | 2.5  |
| Aluminum                    | 200      | 365           | 16.8 | 16.8              | 16.8 | 651           | 24.0 | 24.0 U            | 24.0 | 701           | 16.8 |
| Arsenic                     | 8        | 1.9 U         | 1.9  | 1.9 U             | 1.9  | 3.0           | 1.9  | 1.9 U             | 1.9  | 1.9 U         | 1.9  |
| Barium                      | 2000     | 206           | 0.80 | 189               | 0.80 | 235           | 1.7  | 184               | 1.7  | 233           | 0.80 |
| Beryllium                   | 20       | 0.30 U        | 0.30 | 0.30 U            | 0.30 | 0.90 U        | 0.90 | 0.90 U            | 0.90 | 0.30 U        | 0.30 |
| Calcium                     |          | 46700         | 8.4  | 47100             | 8.4  | 49300         | 10.4 | 48600             | 10.4 | 53200         | 8.4  |
| Cadmium                     | 4        | 2.9 U         | 2.9  | 2.9 U             | 2.9  | 2.8 U         | 2.8  | 2.8 U             | 2.8  | 2.9 U         | 2.9  |
| Cobalt                      |          | 2.3 U         | 2.3  | 2.5               | 2.3  | 3.0 U         | 3.0  | 3.0 U             | 3.0  | 5.8           | 2.3  |
| Chromium                    | 100      | 4.7 U         | 4.7  | 4.7 U             | 4.7  | 4.3           | 2.9  | 2.9 U             | 2.9  | 4.7 U         | 4.7  |
| Copper                      | 1000     | 4.0           | 4.0  | 4.4               | 4.0  | 8.4           | 1.9  | 1.9 U             | 1.9  | 15.4          | 4.0  |
| Iron                        | 300      | 50200         | 2.5  | 42700             | 2.5  | 54900         | 6.4  | 39700             | 6.4  | 54000         | 2.5  |
| Mercury                     | 2        | 0.20 U        | 0.20 | 0.20 U            | 0.20 | 0.20 U        | 0.20 | 0.20 U            | 0.20 | 0.20 U        | 0.20 |
| Potassium                   |          | 9680          | 67.9 | 9720              | 67.9 | 8030          | 685  | 8130              | 685  | 8880          | 67.9 |
| Magnesium                   |          | 5630          | 34.3 | 5670              | 34.3 | 5890          | 18.3 | 5710              | 18.3 | 6310          | 34.3 |
| Manganese                   | 50       | 271           | 0.90 | 270               | 0.90 | 252           | 1.8  | 248               | 1.8  | 294           | 0.90 |
| Sodium                      | 50000    | 12100         | 19.1 | 12300             | 19.1 | 12800         | 30.5 | 12600             | 30.5 | 15900         | 19.1 |
| Nickel                      | 100      | 23.5          | 4.2  | 6.1               | 4.2  | 10.8 U        | 10.8 | 10.8 U            | 10.8 | 5.4           | 4.2  |
| Lead                        | 10       | 1.4           | 1.2  | 1.2               | 1.2  | 1.6 U         | 1.6  | 1.6 U             | 1.6  | 6.6           | 1.2  |
| Antimony                    | 20       | 10.9 U        | 10.9 | 10.9 U            | 10.9 | 20.7 U        | 20.7 | 20.7 U            | 20.7 | 10.9 U        | 10.9 |
| Selenium                    | 50       | 1.8 U         | 1.8  | 1.8 U             | 1.8  | 1.8 U         | 1.8  | 1.8 U             | 1.8  | 1.8 U         | 1.8  |
| Thallium                    | 10       | 1.1 U         | 1.1  | 1.1 U             | 1.1  | 0.70 U        | 0.70 | 0.70 U            | 0.70 | 1.1 U         | 1.1  |
| Vanadium                    |          | 2.7           | 2.1  | 2.1 U             | 2.1  | 4.5           | 2.3  | 2.3 U             | 2.3  | 5.8           | 2.1  |
| Zinc                        | 5000     | 13.5          | 1.9  | 4.5               | 1.9  | 14.0          | 3.8  | 6.1               | 3.8  | 37.2          | 1.9  |
| Cyanide                     | 200      |               |      |                   |      |               |      |                   |      |               |      |
| Method: TAL Metals, Cyanide |          |               |      |                   |      |               |      |                   |      |               |      |

**CHARLES WOOD  
GROUNDWATER INORGANICS**

| Geographical Location       |          | CW2               |      | CW9           |      | CW9               |      | CW9           |      | CW9               |      |
|-----------------------------|----------|-------------------|------|---------------|------|-------------------|------|---------------|------|-------------------|------|
| Sample                      |          | CW02-MW33-A02 SOL |      | CW09-MW35-A01 |      | CW09-MW35-A01 SOL |      | CW09-MW35-A02 |      | CW09-MW35-A02 SOL |      |
| Sample Type                 |          | Soluble           |      | Total         |      | Soluble           |      | Total         |      | Soluble           |      |
| Batch#                      |          | 9502G739          |      | 9502G300      |      | 9502G300          |      | 9503G723      |      | 9503G723          |      |
| Prep#                       |          | 95GI508           |      | 95GI450       |      | 95GI450           |      | 95GI503       |      | 95GI503           |      |
| RFV#                        |          | 019               |      | 003           |      | 004               |      | 002           |      | 003               |      |
| Dilution Factor             |          | 1.00              |      | 1.00          |      | 1.00              |      | 1.00          |      | 1.00              |      |
| Matrix                      |          | water             |      | water         |      | water             |      | water         |      | water             |      |
| Units                       | ug/l     | ug/l              |      | ug/l          |      | ug/l              |      | ug/l          |      | ug/l              |      |
| Sampling Date               |          | 3/14/95           |      | 2/20/95       |      | 2/20/95           |      | 3/13/95       |      | 3/13/95           |      |
| Analysis Date               |          | 3/8/95            |      | 3/6/95        |      | 3/6/95            |      | 3/15/95       |      | 3/15/95           |      |
| Analysis                    | Standard | Analytical        | MDL  | Analytical    | MDL  | Analytical        | MDL  | Analytical    | MDL  | Analytical        | MDL  |
|                             |          | Result            |      | Result        |      | Result            |      | Result        |      | Result            |      |
| Silver                      | 20       | 2.5 U             | 2.5  | 2.5 U         | 2.5  | 2.5 U             | 2.5  | 2.5 U         | 2.5  | 2.5 U             | 2.5  |
| Aluminum                    | 200      | 25.6              | 16.8 | 242           | 16.8 | 85.2              | 16.8 | 210           | 16.8 | 91.0              | 16.8 |
| Arsenic                     | 8        | 1.9 U             | 1.9  | 1.3 U         | 1.3  | 1.3 U             | 1.3  | 1.3 U         | 1.3  | 1.3 U             | 1.3  |
| Barium                      | 2000     | 192               | 0.80 | 40.5          | 0.80 | 36.8              | 0.80 | 34.0          | 0.80 | 35.4              | 0.80 |
| Beryllium                   | 20       | 0.30 U            | 0.30 | 0.30 U        | 0.30 | 0.30 U            | 0.30 | 0.35          | 0.30 | 0.33              | 0.30 |
| Calcium                     |          | 51800             | 8.4  | 21800         | 8.4  | 20700             | 8.4  | 25000         | 8.4  | 25800             | 8.4  |
| Cadmium                     | 4        | 2.9 U             | 2.9  | 2.9 U         | 2.9  | 2.9 U             | 2.9  | 2.9 U         | 2.9  | 2.9 U             | 2.9  |
| Cobalt                      |          | 4.0               | 2.3  | 4.9           | 2.3  | 4.2               | 2.3  | 2.3 U         | 2.3  | 2.3 U             | 2.3  |
| Chromium                    | 100      | 4.7 U             | 4.7  | 4.7 U         | 4.7  | 4.7 U             | 4.7  | 4.7 U         | 4.7  | 4.7 U             | 4.7  |
| Copper                      | 1000     | 7.7               | 4.0  | 4.0 U         | 4.0  | 4.0 U             | 4.0  | 4.0 U         | 4.0  | 6.5               | 4.0  |
| Iron                        | 300      | 38900             | 2.5  | 123           | 2.5  | 17.1              | 2.5  | 85.4          | 2.5  | 30.1              | 2.5  |
| Mercury                     | 2        | 0.20 U            | 0.20 | 0.20 U        | 0.20 | 0.20 U            | 0.20 | 0.20 U        | 0.20 | 0.20 U            | 0.20 |
| Potassium                   |          | 8700              | 67.9 | 2110          | 67.9 | 1990              | 67.9 | 1960          | 67.9 | 2180              | 67.9 |
| Magnesium                   |          | 6140              | 34.3 | 5770          | 34.3 | 5360              | 34.3 | 5980          | 34.3 | 6200              | 34.3 |
| Manganese                   | 50       | 284               | 0.90 | 43.9          | 0.90 | 40.2              | 0.90 | 36.3          | 0.90 | 37.9              | 0.90 |
| Sodium                      | 50000    | 15900             | 19.1 | 7300          | 19.1 | 6760              | 19.1 | 6660          | 19.1 | 7080              | 19.1 |
| Nickel                      | 100      | 4.3               | 4.2  | 11.3          | 4.2  | 9.6               | 4.2  | 4.2 U         | 4.2  | 9.3               | 4.2  |
| Lead                        | 10       | 5.6               | 1.2  | 1.6 U         | 1.6  | 1.6 U             | 1.6  | 1.1 U         | 1.1  | 1.1 U             | 1.1  |
| Antimony                    | 20       | 10.9 U            | 10.9 | 10.9 U        | 10.9 | 10.9 U            | 10.9 | 10.9 U        | 10.9 | 10.9 U            | 10.9 |
| Selenium                    | 50       | 1.8 U             | 1.8  | 1.5 U         | 1.5  | 1.5 U             | 1.5  | 1.5 U         | 1.5  | 1.5 U             | 1.5  |
| Thallium                    | 10       | 1.1 U             | 1.1  | 0.70 U        | 0.70 | 0.70 U            | 0.70 | 0.70 U        | 0.70 | 0.70 U            | 0.70 |
| Vanadium                    |          | 2.1 U             | 2.1  | 2.1 U         | 2.1  | 2.1 U             | 2.1  | 2.1 U         | 2.1  | 2.1 U             | 2.1  |
| Zinc                        | 5000     | 25.4              | 1.9  | 60.1          | 1.9  | 55.0              | 1.9  | 51.6          | 1.9  | 58.4              | 1.9  |
| Cyanide                     | 200      |                   |      |               |      |                   |      |               |      |                   |      |
| Method: TAL Metals, Cyanide |          |                   |      |               |      |                   |      |               |      |                   |      |

**CHARLES WOOD  
GROUNDWATER INORGANICS**

| Geographical Location       |          | CW9           |      | CW9               |      | CW9           |      | CW9               |      | CW9           |      |
|-----------------------------|----------|---------------|------|-------------------|------|---------------|------|-------------------|------|---------------|------|
| Sample                      |          | CW09-MW35-E01 |      | CW09-MW35-E01 SOL |      | CW09-MW36-A01 |      | CW09-MW36-A01 SOL |      | CW09-MW36-A02 |      |
| Sample Type                 |          | Total         |      | Soluble           |      | Total         |      | Soluble           |      | Total         |      |
| Batch#                      |          | 9502G300      |      | 9502G300          |      | 9502G300      |      | 9502G300          |      | 9503G723      |      |
| Prep#                       |          | 95GI450       |      | 95GI450           |      | 95GI450       |      | 95GI450           |      | 95GI503       |      |
| RFW#                        |          | 007           |      | 008               |      | 005           |      | 006               |      | 004           |      |
| Dilution Factor             |          | 1.00          |      | 1.00              |      | 1.00          |      | 1.00              |      | 1.00          |      |
| Matrix                      |          | water         |      | water             |      | water         |      | water             |      | water         |      |
| Units                       | ug/l     | ug/l          |      | ug/l              |      | ug/l          |      | ug/l              |      | ug/l          |      |
| Sampling Date               |          | 2/20/95       |      | 2/20/95           |      | 2/20/95       |      | 2/20/95           |      | 3/13/95       |      |
| Analysis Date               |          | 3/6/95        |      | 3/6/95            |      | 3/6/95        |      | 3/6/95            |      | 3/15/95       |      |
| Analysis                    | Standard | Analytical    | MDL  | Analytical        | MDL  | Analytical    | MDL  | Analytical        | MDL  | Analytical    | MDL  |
|                             |          | Result        |      | Result            |      | Result        |      | Result            |      | Result        |      |
| Silver                      | 20       | 2.5 U         | 2.5  | 2.5 U             | 2.5  | 2.5 U         | 2.5  | 2.5 U             | 2.5  | 2.5 U         | 2.5  |
| Aluminum                    | 200      | 231           | 16.8 | 16.8 U            | 16.8 | 460           | 16.8 | 39.5              | 16.8 | 645           | 16.8 |
| Arsenic                     | 8        | 1.3 U         | 1.3  | 1.3 U             | 1.3  | 1.3 U         | 1.3  | 1.3 U             | 1.3  | 1.3 U         | 1.3  |
| Barium                      | 2000     | 40.8          | 0.80 | 0.80 U            | 0.80 | 33.2          | 0.80 | 28.3              | 0.80 | 29.4          | 0.80 |
| Beryllium                   | 20       | 0.30 U        | 0.30 | 0.30 U            | 0.30 | 0.30 U        | 0.30 | 0.30 U            | 0.30 | 0.30 U        | 0.30 |
| Calcium                     |          | 21100         | 8.4  | 191               | 8.4  | 37400         | 8.4  | 37600             | 8.4  | 32700         | 8.4  |
| Cadmium                     | 4        | 2.9 U         | 2.9  | 2.9 U             | 2.9  | 2.9 U         | 2.9  | 2.9 U             | 2.9  | 2.9 U         | 2.9  |
| Cobalt                      |          | 4.0           | 2.3  | 2.3 U             | 2.3  | 3.2           | 2.3  | 4.2               | 2.3  | 2.5           | 2.3  |
| Chromium                    | 100      | 4.7 U         | 4.7  | 4.7 U             | 4.7  | 6.4           | 4.7  | 6.5               | 4.7  | 5.0           | 4.7  |
| Copper                      | 1000     | 4.0 U         | 4.0  | 4.0 U             | 4.0  | 4.0 U         | 4.0  | 4.0 U             | 4.0  | 4.0 U         | 4.0  |
| Iron                        | 300      | 85.8          | 2.5  | 3.8               | 2.5  | 1120          | 2.5  | 44.1              | 2.5  | 1420          | 2.5  |
| Mercury                     | 2        | 0.20 U        | 0.20 | 0.20 U            | 0.20 | 0.20 U        | 0.20 | 0.20 U            | 0.20 | 0.20 U        | 0.20 |
| Potassium                   |          | 2090          | 67.9 | 82.5              | 67.9 | 4180          | 67.9 | 4110              | 67.9 | 3820          | 67.9 |
| Magnesium                   |          | 5580          | 34.3 | 34.3 U            | 34.3 | 8200          | 34.3 | 8170              | 34.3 | 7470          | 34.3 |
| Manganese                   | 50       | 43.9          | 0.90 | 0.90 U            | 0.90 | 239           | 0.90 | 240               | 0.90 | 195           | 0.90 |
| Sodium                      | 50000    | 7230          | 19.1 | 654               | 19.1 | 5990          | 19.1 | 6120              | 19.1 | 5810          | 19.1 |
| Nickel                      | 100      | 10.8          | 4.2  | 4.2 U             | 4.2  | 6.4           | 4.2  | 8.3               | 4.2  | 4.9           | 4.2  |
| Lead                        | 10       | 1.6 U         | 1.6  | 1.6 U             | 1.6  | 1.6 U         | 1.6  | 1.6 U             | 1.6  | 4.1           | 1.1  |
| Antimony                    | 20       | 10.9 U        | 10.9 | 10.9 U            | 10.9 | 10.9 U        | 10.9 | 10.9 U            | 10.9 | 10.9 U        | 10.9 |
| Selenium                    | 50       | 1.5 U         | 1.5  | 1.5 U             | 1.5  | 1.5 U         | 1.5  | 1.5 U             | 1.5  | 1.5 U         | 1.5  |
| Thallium                    | 10       | 0.70 U        | 0.70 | 0.70 U            | 0.70 | 0.70 U        | 0.70 | 0.70 U            | 0.70 | 0.70 U        | 0.70 |
| Vanadium                    |          | 2.1 U         | 2.1  | 2.8               | 2.1  | 3.5           | 2.1  | 2.1 U             | 2.1  | 4.2           | 2.1  |
| Zinc                        | 5000     | 60.7          | 1.9  | 2.6               | 1.9  | 25.7          | 1.9  | 24.9              | 1.9  | 28.3          | 1.9  |
| Cyanide                     | 200      |               |      |                   |      |               |      |                   |      |               |      |
| Method: TAL Metals, Cyanide |          |               |      |                   |      |               |      |                   |      |               |      |

**CHARLES WOOD  
GROUNDWATER INORGANICS**

| Geographical Location       |          | CW9               |      | B6           |      | B6               |      | B6           |      | B6               |      | B7           |      |
|-----------------------------|----------|-------------------|------|--------------|------|------------------|------|--------------|------|------------------|------|--------------|------|
| Sample                      |          | CW09-MW36-A02 SOL |      | B6-MW06B-A01 |      | B6-MW06B-A01 SOL |      | B6-MW06B-A02 |      | B6-MW06B-A02 SOL |      | B7-MW07B-A01 |      |
| Sample Type                 |          | Soluble           |      | Total        |      | Soluble          |      | Total        |      | Soluble          |      | Total        |      |
| Batch#                      |          | 9503G723          |      | 9502G198     |      | 9502G198         |      | 9503G641     |      | 9503G641         |      | 9502G198     |      |
| Prep#                       |          | 95GI503           |      | 95GI427      |      | 95GI427          |      | 95GI479      |      | 95GI479          |      | 95GI427      |      |
| RFVW#                       |          | 005               |      | 003          |      | 004              |      | 001          |      | 002              |      | 005          |      |
| Dilution Factor             |          | 1.00              |      | 1.00         |      | 1.00             |      | 1.00         |      | 1.00             |      | 1.00         |      |
| Matrix                      |          | water             |      | water        |      | water            |      | water        |      | water            |      | water        |      |
| Units                       | ug/l     | ug/l              |      | ug/l         |      | ug/l             |      | ug/l         |      | ug/l             |      | ug/l         |      |
| Sampling Date               |          | 3/13/95           |      | 2/15/95      |      | 2/15/95          |      | 3/8/95       |      | 3/8/95           |      | 2/15/95      |      |
| Analysis Date               |          | 3/15/95           |      | 2/23/95      |      | 2/28/95          |      | 3/14/95      |      | 3/10/95          |      | 2/23/95      |      |
| Analysis                    | Standard | Analytical        | MDL  | Analytical   | MDL  | Analytical       | MDL  | Analytical   | MDL  | Analytical       | MDL  | Analytical   | MDL  |
|                             |          | Result            |      | Result       |      | Result           |      | Result       |      | Result           |      | Result       |      |
| Silver                      | 20       | 2.5 U             | 2.5  | 3.0 U        | 3.0  | 3.0 U            | 3.0  | 3.0 U        | 3.0  | 3.0 U            | 3.0  | 3.0 U        | 3.0  |
| Aluminum                    | 200      | 36.2              | 16.8 | 7500         | 24.0 | 152              | 24.0 | 8210         | 24.0 | 245              | 24.0 | 1360         | 24.0 |
| Arsenic                     | 8        | 1.3 U             | 1.3  | 14.6         | 1.9  | 1.9 U            | 1.9  | 25.1         | 1.6  | 2.3              | 1.6  | 1.9 U        | 1.9  |
| Barium                      | 2000     | 22.6              | 0.80 | 170          | 1.7  | 50.8             | 1.7  | 192          | 1.7  | 34.9             | 1.7  | 71.0         | 1.7  |
| Beryllium                   | 20       | 0.35              | 0.30 | 2.3          | 0.90 | 0.90 U           | 0.90 | 2.8          | 0.90 | 0.94             | 0.90 | 0.90 U       | 0.90 |
| Calcium                     |          | 31700             | 8.4  | 5270         | 10.4 | 5050             | 10.4 | 4500         | 10.4 | 4200             | 10.4 | 7610         | 10.4 |
| Cadmium                     | 4        | 2.9 U             | 2.9  | 3.7          | 2.8  | 2.8 U            | 2.8  | 2.8 U        | 2.8  | 2.8 U            | 2.8  | 2.8 U        | 2.8  |
| Cobalt                      |          | 2.6               | 2.3  | 12.5         | 3.0  | 5.2              | 3.0  | 10.7         | 3.0  | 8.7              | 3.0  | 30.6         | 3.0  |
| Chromium                    | 100      | 4.7 U             | 4.7  | 49.6         | 2.9  | 2.9 U            | 2.9  | 48.3         | 2.9  | 2.9 U            | 2.9  | 9.7          | 2.9  |
| Copper                      | 1000     | 4.0 U             | 4.0  | 6.8          | 1.9  | 1.9 U            | 1.9  | 9.8          | 1.9  | 4.0              | 1.9  | 1.9 U        | 1.9  |
| Iron                        | 300      | 29.3              | 2.5  | 15600        | 6.4  | 1800             | 6.4  | 19600        | 6.4  | 1010             | 6.4  | 2150         | 6.4  |
| Mercury                     | 2        | 0.20 U            | 0.20 | 0.20 U       | 0.20 | 0.20 U           | 0.20 | 0.20 U       | 0.20 | 0.20 U           | 0.20 | 0.20 U       | 0.20 |
| Potassium                   |          | 3600              | 67.9 | 4030         | 685  | 2450             | 685  | 4630         | 685  | 2060             | 685  | 2140         | 685  |
| Magnesium                   |          | 7080              | 34.3 | 4770         | 18.3 | 2940             | 18.3 | 4430         | 18.3 | 2540             | 18.3 | 6670         | 18.3 |
| Manganese                   | 50       | 186               | 0.90 | 59.2         | 1.8  | 36.3             | 1.8  | 51.5         | 1.8  | 27.3             | 1.8  | 232          | 1.8  |
| Sodium                      | 50000    | 5640              | 19.1 | 16600        | 30.5 | 16600            | 30.5 | 17000        | 30.5 | 16900            | 30.5 | 36400        | 30.5 |
| Nickel                      | 100      | 5.0               | 4.2  | 48.3         | 10.8 | 23.3             | 10.8 | 35.7         | 10.8 | 22.8             | 10.8 | 12.5         | 10.8 |
| Lead                        | 10       | 1.1 U             | 1.1  | 2.8          | 1.6  | 4.1              | 1.6  | 3.9          | 1.0  | 1.0 U            | 1.0  | 3.3          | 1.6  |
| Antimony                    | 20       | 10.9 U            | 10.9 | 20.7 U       | 20.7 | 20.7 U           | 20.7 | 20.7 U       | 20.7 | 20.7 U           | 20.7 | 20.7 U       | 20.7 |
| Selenium                    | 50       | 1.5 U             | 1.5  | 3.8          | 1.5  | 1.5 U            | 1.5  | 3.7          | 1.8  | 1.8 U            | 1.8  | 1.5 U        | 1.5  |
| Thallium                    | 10       | 0.70 U            | 0.70 | 0.70 U       | 0.70 | 0.70 U           | 0.70 | 1.1 U        | 1.1  | 1.1 U            | 1.1  | 0.70 U       | 0.70 |
| Vanadium                    |          | 2.1 U             | 2.1  | 27.0         | 2.3  | 2.3 U            | 2.3  | 28.9         | 2.3  | 2.3 U            | 2.3  | 9.1          | 2.3  |
| Zinc                        | 5000     | 25.4              | 1.9  | 133          | 3.8  | 70.0             | 3.8  | 126          | 3.8  | 66.3             | 3.8  | 23.5         | 3.8  |
| Cyanide                     | 200      |                   |      | 10 U         | 10   |                  |      | 10 U         | 10   |                  |      | 10 U         | 10   |
| Method: TAL Metals, Cyanide |          |                   |      |              |      |                  |      |              |      |                  |      |              |      |



**CHARLES WOOD  
GROUNDWATER INORGANICS**

| Geographical Location       |          | B7               |      | B7           |      | B7               |      | B8           |      | B8               |      | B8           |      |
|-----------------------------|----------|------------------|------|--------------|------|------------------|------|--------------|------|------------------|------|--------------|------|
| Sample                      |          | B7-MW07B-A01 SOL |      | B7-MW07B-A02 |      | B7-MW07B-A02 SOL |      | B8-MW08B-A01 |      | B8-MW08B-A01 SOL |      | B8-MW08B-A02 |      |
| Sample Type                 |          | Soluble          |      | Total        |      | Soluble          |      | Total        |      | Soluble          |      | Total        |      |
| Batch#                      |          | 9502G198         |      | 9503G617     |      | 9503G617         |      | 9502G198     |      | 9502G198         |      | 9503G641     |      |
| Prep#                       |          | 95GI427          |      | 95GI475      |      | 95GI475          |      | 95GI427      |      | 95GI427          |      | 95GI479      |      |
| RFW#                        |          | 006              |      | 003          |      | 004              |      | 007          |      | 008              |      | 003          |      |
| Dilution Factor             |          | 1.00             |      | 1.00         |      | 1.00             |      | 1.00         |      | 1.00             |      | 1.00         |      |
| Matrix                      |          | water            |      | water        |      | water            |      | water        |      | water            |      | water        |      |
| Units                       | ug/l     | ug/l             |      | ug/l         |      | ug/l             |      | ug/l         |      | ug/l             |      | ug/l         |      |
| Sampling Date               |          | 2/15/95          |      | 3/7/95       |      | 3/7/95           |      | 2/15/95      |      | 2/15/95          |      | 3/8/95       |      |
| Analysis Date               |          | 2/28/95          |      | 3/13/95      |      | 3/13/95          |      | 2/23/95      |      | 2/28/95          |      | 3/14/95      |      |
| Analysis                    | Standard | Analytical       | MDL  | Analytical   | MDL  | Analytical       | MDL  | Analytical   | MDL  | Analytical       | MDL  | Analytical   | MDL  |
|                             |          | Result           |      | Result       |      | Result           |      | Result       |      | Result           |      | Result       |      |
| Silver                      | 20       | 3.0 U            | 3.0  | 2.5 U        | 2.5  | 2.5 U            | 2.5  | 3.0 U        | 3.0  | 3.0 U            | 3.0  | 3.0 U        | 3.0  |
| Aluminum                    | 200      | 327              | 24.0 | 993          | 16.8 | 289              | 16.8 | 340          | 24.0 | 27.9             | 24.0 | 627          | 24.0 |
| Arsenic                     | 8        | 1.9 U            | 1.9  | 1.9 U        | 1.9  | 1.9 U            | 1.9  | 1.9 U        | 1.9  | 1.9 U            | 1.9  | 1.6 U        | 1.6  |
| Barium                      | 2000     | 67.0             | 1.7  | 64.9         | 0.80 | 62.5             | 0.80 | 45.3         | 1.7  | 45.3             | 1.7  | 45.7         | 1.7  |
| Beryllium                   | 20       | 0.90 U           | 0.90 | 0.45         | 0.30 | 0.57             | 0.30 | 0.90 U       | 0.90 | 0.90 U           | 0.90 | 0.90 U       | 0.90 |
| Calcium                     |          | 7420             | 10.4 | 7420         | 8.4  | 7460             | 8.4  | 1890         | 10.4 | 1960             | 10.4 | 1870         | 10.4 |
| Cadmium                     | 4        | 2.8 U            | 2.8  | 2.9 U        | 2.9  | 2.9 U            | 2.9  | 2.8 U        | 2.8  | 2.8 U            | 2.8  | 2.8 U        | 2.8  |
| Cobalt                      |          | 30.6             | 3.0  | 29.3         | 2.3  | 29.7             | 2.3  | 3.0 U        | 3.0  | 3.0 U            | 3.0  | 3.0 U        | 3.0  |
| Chromium                    | 100      | 2.9 U            | 2.9  | 5.7          | 4.7  | 4.7 U            | 4.7  | 2.9 U        | 2.9  | 2.9 U            | 2.9  | 5.7          | 2.9  |
| Copper                      | 1000     | 1.9 U            | 1.9  | 4.0 U        | 4.0  | 4.0 U            | 4.0  | 2.9          | 1.9  | 3.8              | 1.9  | 1.9 U        | 1.9  |
| Iron                        | 300      | 6.4 U            | 6.4  | 1430         | 2.5  | 10.9             | 2.5  | 702          | 6.4  | 6.4 U            | 6.4  | 1240         | 6.4  |
| Mercury                     | 2        | 0.20 U           | 0.20 | 0.20 U       | 0.20 | 0.20 U           | 0.20 | 0.20 U       | 0.20 | 0.20 U           | 0.20 | 0.20 U       | 0.20 |
| Potassium                   |          | 1280             | 685  | 1400         | 67.9 | 1130             | 67.9 | 1740         | 685  | 2230             | 685  | 2120         | 685  |
| Magnesium                   |          | 6260             | 18.3 | 6160         | 34.3 | 6080             | 34.3 | 3260         | 18.3 | 3310             | 18.3 | 3330         | 18.3 |
| Manganese                   | 50       | 223              | 1.8  | 205          | 0.90 | 203              | 0.90 | 16.6         | 1.8  | 16.6             | 1.8  | 15.8         | 1.8  |
| Sodium                      | 50000    | 35500            | 30.5 | 34100        | 19.1 | 34100            | 19.1 | 12000        | 30.5 | 12300            | 30.5 | 12100        | 30.5 |
| Nickel                      | 100      | 10.8 U           | 10.8 | 4.2 U        | 4.2  | 6.5              | 4.2  | 10.8 U       | 10.8 | 14.2             | 10.8 | 10.8 U       | 10.8 |
| Lead                        | 10       | 1.6 U            | 1.6  | 1.0 U        | 1.0  | 1.0 U            | 1.0  | 1.6 U        | 1.6  | 1.6 U            | 1.6  | 1.0 U        | 1.0  |
| Antimony                    | 20       | 20.7 U           | 20.7 | 10.9 U       | 10.9 | 10.9 U           | 10.9 | 20.7 U       | 20.7 | 20.7 U           | 20.7 | 20.7 U       | 20.7 |
| Selenium                    | 50       | 1.5 U            | 1.5  | 1.5 U        | 1.5  | 1.5 U            | 1.5  | 1.5 U        | 1.5  | 1.5 U            | 1.5  | 1.8 U        | 1.8  |
| Thallium                    | 10       | 0.70 U           | 0.70 | 1.1 U        | 1.1  | 1.1 U            | 1.1  | 0.70 U       | 0.70 | 0.70 U           | 0.70 | 1.1 U        | 1.1  |
| Vanadium                    |          | 2.3 U            | 2.3  | 4.3          | 2.1  | 2.1 U            | 2.1  | 2.3 U        | 2.3  | 2.4              | 2.3  | 4.4          | 2.3  |
| Zinc                        | 5000     | 24.7             | 3.8  | 22.3         | 1.9  | 22.0             | 1.9  | 14.7         | 3.8  | 14.7             | 3.8  | 16.0         | 3.8  |
| Cyanide                     | 200      |                  |      | 10 U         | 10   |                  |      | 10 U         | 10   |                  |      | 10 U         | 10   |
| Method: TAL Metals, Cyanide |          |                  |      |              |      |                  |      |              |      |                  |      |              |      |

**CHARLES WOOD  
GROUNDWATER INORGANICS**

| Geographical Location      |          | B8               |      | B8               |      | B9           |      | B9               |      | B9           |      | B9               |      |
|----------------------------|----------|------------------|------|------------------|------|--------------|------|------------------|------|--------------|------|------------------|------|
| Sample                     |          | B8-MW08B-A02 SOL |      | B8-MW10B-A02 SOL |      | B9-MW09B-A01 |      | B9-MW09B-A01 SOL |      | B9-MW09B-A02 |      | B9-MW09B-A02 SOL |      |
| Sample Type                |          | Soluble          |      | Soluble          |      | Total        |      | Soluble          |      | Total        |      | Soluble          |      |
| Batch#                     |          | 9503G641         |      | 9503G641         |      | 9502G198     |      | 9502G198         |      | 9503G617     |      | 9503G617         |      |
| Prep#                      |          | 95GI479          |      | 95GI479          |      | 95GCN040     |      | 95GI427          |      | 95GI475      |      | 95GI475          |      |
| RFW#                       |          | 004              |      | 006              |      | 001          |      | 002              |      | 001          |      | 002              |      |
| Dilution Factor            |          | 1.00             |      | 1.00             |      | 1.00         |      | 1.00             |      | 1.00         |      | 1.00             |      |
| Matrix                     |          | water            |      | water            |      | water        |      | water            |      | water        |      | water            |      |
| Units                      | ug/l     | ug/l             |      | ug/l             |      | ug/l         |      | ug/l             |      | ug/l         |      | ug/l             |      |
| Sampling Date              |          | 3/8/95           |      | 3/8/95           |      | 2/15/95      |      | 2/15/95          |      | 3/7/95       |      | 3/7/95           |      |
| Analysis Date              |          | 3/10/95          |      | 3/10/95          |      | 2/23/95      |      | 2/28/95          |      | 3/13/95      |      | 3/13/95          |      |
| Analysis                   | Standard | Analytical       | MDL  | Analytical       | MDL  | Analytical   | MDL  | Analytical       | MDL  | Analytical   | MDL  | Analytical       | MDL  |
|                            |          | Result           |      | Result           |      | Result       |      | Result           |      | Result       |      | Result           |      |
| Silver                     | 20       | 3.0 U            | 3.0  | 3.0 U            | 3.0  | 3.0 U        | 3.0  | 3.0 U            | 3.0  | 2.5 U        | 2.5  | 2.5 U            | 2.5  |
| Aluminum                   | 200      | 29.1             | 24.0 | 50.5             | 24.0 | 1290         | 24.0 | 400              | 24.0 | 3880         | 16.8 | 399              | 16.8 |
| Arsenic                    | 8        | 1.6 U            | 1.6  | 2.3              | 1.6  | 2.3          | 1.9  | 1.9 U            | 1.9  | 13.2         | 1.9  | 1.9 U            | 1.9  |
| Barium                     | 2000     | 35.7             | 1.7  | 14.9             | 1.7  | 82.8         | 1.7  | 71.2             | 1.7  | 92.3         | 0.80 | 50.0             | 0.80 |
| Beryllium                  | 20       | 0.90 U           | 0.90 | 0.90 U           | 0.90 | 0.90 U       | 0.90 | 0.90 U           | 0.90 | 0.56         | 0.30 | 0.45             | 0.30 |
| Calcium                    |          | 2010             | 10.4 | 3490             | 10.4 | 8600         | 10.4 | 8700             | 10.4 | 7810         | 8.4  | 8030             | 8.4  |
| Cadmium                    | 4        | 2.8 U            | 2.8  | 2.8 U            | 2.8  | 2.8 U        | 2.8  | 2.8 U            | 2.8  | 2.9 U        | 2.9  | 2.9 U            | 2.9  |
| Cobalt                     |          | 3.0 U            | 3.0  | 3.0 U            | 3.0  | 4.8          | 3.0  | 5.1              | 3.0  | 6.3          | 2.3  | 4.8              | 2.3  |
| Chromium                   | 100      | 2.9 U            | 2.9  | 2.9 U            | 2.9  | 8.1          | 2.9  | 2.9 U            | 2.9  | 31.8         | 4.7  | 4.7 U            | 4.7  |
| Copper                     | 1000     | 1.9 U            | 1.9  | 4.8              | 1.9  | 1.9          | 1.9  | 3.0              | 1.9  | 4.0 U        | 4.0  | 4.0 U            | 4.0  |
| Iron                       | 300      | 25.5             | 6.4  | 28.2             | 6.4  | 2650         | 6.4  | 13.6             | 6.4  | 12800        | 2.5  | 33.3             | 2.5  |
| Mercury                    | 2        | 0.20 U           | 0.20 | 0.20 U           | 0.20 | 0.20 U       | 0.20 | 0.20 U           | 0.20 | 0.20 U       | 0.20 | 0.20 U           | 0.20 |
| Potassium                  |          | 1300             | 685  | 1520             | 685  | 2400         | 685  | 1890             | 685  | 2940         | 67.9 | 1620             | 67.9 |
| Magnesium                  |          | 3120             | 18.3 | 2090             | 18.3 | 6460         | 18.3 | 6160             | 18.3 | 7160         | 34.3 | 6380             | 34.3 |
| Manganese                  | 50       | 15.3             | 1.8  | 23.3             | 1.8  | 58.2         | 1.8  | 54.1             | 1.8  | 62.2         | 0.90 | 47.4             | 0.90 |
| Sodium                     | 50000    | 12000            | 30.5 | 14900            | 30.5 | 3330         | 30.5 | 3440             | 30.5 | 3390         | 19.1 | 3530             | 19.1 |
| Nickel                     | 100      | 10.8 U           | 10.8 | 10.8 U           | 10.8 | 23.8         | 10.8 | 22.3             | 10.8 | 18.4         | 4.2  | 15.0             | 4.2  |
| Lead                       | 10       | 1.0 U            | 1.0  | 1.0 U            | 1.0  | 2.0          | 1.6  | 1.6 U            | 1.6  | 3.6          | 1.2  | 1.0 U            | 1.0  |
| Antimony                   | 20       | 20.7 U           | 20.7 | 20.7 U           | 20.7 | 20.7 U       | 20.7 | 20.7 U           | 20.7 | 10.9 U       | 10.9 | 10.9 U           | 10.9 |
| Selenium                   | 50       | 1.8 U            | 1.8  | 1.8 U            | 1.8  | 1.5 U        | 1.5  | 1.5 U            | 1.5  | 1.5 U        | 1.5  | 1.5 U            | 1.5  |
| Thallium                   | 10       | 1.1 U            | 1.1  | 1.1 U            | 1.1  | 0.70 U       | 0.70 | 0.70 U           | 0.70 | 1.1 U        | 1.1  | 1.1 U            | 1.1  |
| Vanadium                   |          | 2.3 U            | 2.3  | 2.3 U            | 2.3  | 4.4          | 2.3  | 2.3 U            | 2.3  | 13.2         | 2.1  | 2.1 U            | 2.1  |
| Zinc                       | 5000     | 18.6             | 3.8  | 24.1             | 3.8  | 54.8         | 3.8  | 53.1             | 3.8  | 75.8         | 1.9  | 61.3             | 1.9  |
| Cyanide                    | 200      |                  |      |                  |      | 10 U         | 10   |                  |      | 10 U         | 10   |                  |      |
| Method:TAL Metals, Cyanide |          |                  |      |                  |      |              |      |                  |      |              |      |                  |      |

**CHARLES WOOD  
GROUNDWATER INORGANICS**

| Geographical Location       |          | B10           |      | B10               |      | B10           |      | B10               |      | B10                   |      |
|-----------------------------|----------|---------------|------|-------------------|------|---------------|------|-------------------|------|-----------------------|------|
| Sample                      |          | B10-MW10B-A01 |      | B10-MW10B-A01 SOL |      | B10-MW10B-A02 |      | B10-MW10B-A02 SOL |      | B10-MW10B-E01         |      |
| Sample Type                 |          | Total         |      | Soluble           |      | Total         |      | Soluble           |      | Field Rinsate - Total |      |
| Batch#                      |          | 9502G198      |      | 9502G198          |      | 9503G641      |      | 9503G641          |      | 9502G198              |      |
| Prep#                       |          | 95GI427       |      | 95GI427           |      | 95GI479       |      | 95GI479           |      | 95GI427               |      |
| RFW#                        |          | 009           |      | 010               |      | 005           |      | 006               |      | 012                   |      |
| Dilution Factor             |          | 1.00          |      | 1.00              |      | 1.00          |      | 1.00              |      | 1.00                  |      |
| Matrix                      |          | water         |      | water             |      | water         |      | water             |      | water                 |      |
| Units                       | ug/l.    | ug/l          |      | ug/l              |      | ug/l          |      | ug/l              |      | ug/l                  |      |
| Sampling Date               |          | 2/15/95       |      | 2/15/95           |      | 3/8/95        |      | 3/8/95            |      | 2/15/95               |      |
| Analysis Date               |          | 2/23/95       |      | 2/28/95           |      | 3/14/95       |      | 3/14/95           |      | 2/23/95               |      |
| Analysis                    | Standard | Analytical    | MDL  | Analytical        | MDL  | Analytical    | MDL  | Analytical        | MDL  | Analytical            | MDL  |
|                             |          | Result        |      | Result            |      | Result        |      | Result            |      | Result                |      |
| Silver                      | 20       | 3.0 U         | 3.0  | 3.0 U             | 3.0  | 3.0 U         | 3.0  | 3.0 U             | 3.0  | 3.0 U                 | 3.0  |
| Aluminum                    | 200      | 1690          | 24.0 | 71.1              | 24.0 | 1250          | 24.0 | 50.5              | 24.0 | 24.0 U                | 24.0 |
| Arsenic                     | 8        | 3.5           | 1.9  | 1.9 U             | 1.9  | 4.0           | 1.6  | 2.3               | 1.6  | 1.9 U                 | 1.9  |
| Barium                      | 2000     | 77.5          | 1.7  | 20.3              | 1.7  | 63.2          | 1.7  | 14.9              | 1.7  | 1.7 U                 | 1.7  |
| Beryllium                   | 20       | 0.90 U        | 0.90 | 0.90 U            | 0.90 | 0.90 U        | 0.90 | 0.90 U            | 0.90 | 0.90 U                | 0.90 |
| Calcium                     |          | 3980          | 10.4 | 3690              | 10.4 | 3500          | 10.4 | 3490              | 10.4 | 33.6                  | 10.4 |
| Cadmium                     | 4        | 2.8 U         | 2.8  | 2.8 U             | 2.8  | 2.8 U         | 2.8  | 2.8 U             | 2.8  | 2.8 U                 | 2.8  |
| Cobalt                      |          | 3.5           | 3.0  | 3.0 U             | 3.0  | 3.0 U         | 3.0  | 3.0 U             | 3.0  | 3.0 U                 | 3.0  |
| Chromium                    | 100      | 12.1          | 2.9  | 2.9 U             | 2.9  | 6.7           | 2.9  | 2.9 U             | 2.9  | 2.9 U                 | 2.9  |
| Copper                      | 1000     | 1.9 U         | 1.9  | 1.9 U             | 1.9  | 1.9 U         | 1.9  | 4.8               | 1.9  | 1.9 U                 | 1.9  |
| Iron                        | 300      | 3070          | 6.4  | 92.3              | 6.4  | 2220          | 6.4  | 28.2              | 6.4  | 6.4 U                 | 6.4  |
| Mercury                     | 2        | 0.20 U        | 0.20 | 0.20 U            | 0.20 | 0.20 U        | 0.20 | 0.20 U            | 0.20 | 0.20 U                | 0.20 |
| Potassium                   |          | 2060          | 685  | 685 U             | 685  | 1870          | 685  | 1520              | 685  | 685 U                 | 685  |
| Magnesium                   |          | 2790          | 18.3 | 2340              | 18.3 | 2450          | 18.3 | 2090              | 18.3 | 18.3 U                | 18.3 |
| Manganese                   | 50       | 34.8          | 1.8  | 30.4              | 1.8  | 27.6          | 1.8  | 23.3              | 1.8  | 2.7                   | 1.8  |
| Sodium                      | 50000    | 16400         | 30.5 | 16200             | 30.5 | 15600         | 30.5 | 14900             | 30.5 | 95.0                  | 30.5 |
| Nickel                      | 100      | 20.4          | 10.8 | 17.3              | 10.8 | 10.8 U        | 10.8 | 10.8 U            | 10.8 | 10.8 U                | 10.8 |
| Lead                        | 10       | 2.2           | 1.6  | 7.3               | 1.6  | 1.0 U         | 1.0  | 1.0 U             | 1.0  | 1.6 U                 | 1.6  |
| Antimony                    | 20       | 20.7 U        | 20.7 | 20.7 U            | 20.7 | 20.7 U        | 20.7 | 20.7 U            | 20.7 | 20.7 U                | 20.7 |
| Selenium                    | 50       | 1.5 U         | 1.5  | 1.5 U             | 1.5  | 1.8 U         | 1.8  | 1.8 U             | 1.8  | 1.5 U                 | 1.5  |
| Thallium                    | 10       | 0.70 U        | 0.70 | 0.70 U            | 0.70 | 1.1 U         | 1.1  | 1.1 U             | 1.1  | 0.70 U                | 0.70 |
| Vanadium                    |          | 8.5           | 2.3  | 2.3 U             | 2.3  | 2.8           | 2.3  | 2.3 U             | 2.3  | 2.3 U                 | 2.3  |
| Zinc                        | 5000     | 35.9          | 3.8  | 32.4              | 3.8  | 30.8          | 3.8  | 24.1              | 3.8  | 3.8 U                 | 3.8  |
| Cyanide                     | 200      | 10 U          | 10   |                   |      | 10 U          | 10   | 10 U              | 10   |                       |      |
| Method: TAL Metals, Cyanide |          |               |      |                   |      |               |      |                   |      |                       |      |

**CHARLES WOOD  
GROUNDWATER INORGANICS**

| Geographical Location       |          | B10                     |      | B10                   |      | B10                     |      |
|-----------------------------|----------|-------------------------|------|-----------------------|------|-------------------------|------|
| Sample                      |          | B10-MW10B-E01 SOL       |      | B10-MW10B-E02         |      | B10-MW10B-E02 SOL       |      |
| Sample Type                 |          | Field Rinsate - Soluble |      | Field Rinsate - Total |      | Field Rinsate - Soluble |      |
| Batch#                      |          | 9502G198                |      | 9503G641              |      | 9503G641                |      |
| Prep#                       |          | 95GI427                 |      | 95GI479               |      | 95GI479                 |      |
| RFW#                        |          | 013                     |      | 008                   |      | 009                     |      |
| Dilution Factor             |          | 1.00                    |      | 1.00                  |      | 1.00                    |      |
| Matrix                      |          | water                   |      | water                 |      | water                   |      |
| Units                       | ug/l     | ug/l                    |      | ug/l                  |      | ug/l                    |      |
| Sampling Date               |          | 2/15/95                 |      | 3/8/95                |      | 3/8/95                  |      |
| Analysis Date               |          | 2/28/95                 |      | 3/14/95               |      | 3/10/95                 |      |
| Analysis                    | Standard | Analytical              | MDL  | Analytical            | MDL  | Analytical              | MDL  |
|                             |          | Result                  |      | Result                |      | Result                  |      |
| Silver                      | 20       | 3.0 U                   | 3.0  | 3.0 U                 | 3.0  | 3.0 U                   | 3.0  |
| Aluminum                    | 200      | 24.0 U                  | 24.0 | 24.0 U                | 24.0 | 24.0 U                  | 24.0 |
| Arsenic                     | 8        | 1.9 U                   | 1.9  | 1.6 U                 | 1.6  | 1.6 U                   | 1.6  |
| Barium                      | 2000     | 1.7 U                   | 1.7  | 1.7 U                 | 1.7  | 1.7 U                   | 1.7  |
| Beryllium                   | 20       | 0.90 U                  | 0.90 | 0.90 U                | 0.90 | 0.90 U                  | 0.90 |
| Calcium                     |          | 111                     | 10.4 | 141                   | 10.4 | 130                     | 10.4 |
| Cadmium                     | 4        | 2.8 U                   | 2.8  | 2.8 U                 | 2.8  | 2.8 U                   | 2.8  |
| Cobalt                      |          | 3.0 U                   | 3.0  | 3.0 U                 | 3.0  | 3.0 U                   | 3.0  |
| Chromium                    | 100      | 2.9 U                   | 2.9  | 2.9 U                 | 2.9  | 2.9 U                   | 2.9  |
| Copper                      | 1000     | 1.9 U                   | 1.9  | 1.9 U                 | 1.9  | 1.9 U                   | 1.9  |
| Iron                        | 300      | 6.4 U                   | 6.4  | 9.3                   | 6.4  | 9.8                     | 6.4  |
| Mercury                     | 2        | 0.20 U                  | 0.20 | 0.20 U                | 0.20 | 0.20 U                  | 0.20 |
| Potassium                   |          | 685 U                   | 685  | 685 U                 | 685  | 685 U                   | 685  |
| Magnesium                   |          | 18.3 U                  | 18.3 | 24.0                  | 18.3 | 18.3 U                  | 18.3 |
| Manganese                   | 50       | 1.8 U                   | 1.8  | 1.8 U                 | 1.8  | 1.8 U                   | 1.8  |
| Sodium                      | 50000    | 70.4                    | 30.5 | 170                   | 30.5 | 231                     | 30.5 |
| Nickel                      | 100      | 10.8 U                  | 10.8 | 10.8 U                | 10.8 | 10.8 U                  | 10.8 |
| Lead                        | 10       | 1.6 U                   | 1.6  | 1.0 U                 | 1.0  | 1.0 U                   | 1.0  |
| Antimony                    | 20       | 20.7 U                  | 20.7 | 20.7 U                | 20.7 | 20.7 U                  | 20.7 |
| Selenium                    | 50       | 1.5 U                   | 1.5  | 1.8 U                 | 1.8  | 1.8 U                   | 1.8  |
| Thallium                    | 10       | 0.70 U                  | 0.70 | 1.1 U                 | 1.1  | 1.1 U                   | 1.1  |
| Vanadium                    |          | 2.3 U                   | 2.3  | 2.3 U                 | 2.3  | 2.3 U                   | 2.3  |
| Zinc                        | 5000     | 3.8 U                   | 3.8  | 6.5                   | 3.8  | 6.4                     | 3.8  |
| Cyanide                     | 200      |                         |      | 10 U                  | 10   |                         |      |
| Method: TAL Metals, Cyanide |          |                         |      |                       |      |                         |      |

**CHARLES WOOD  
GROUNDWATER PESTICIDES/PCBS**

| Geographical Location       |          | CW1           |       | CW1           |       | CW1                 |       | CW1           |       | CW1           |       | CW1           |       |
|-----------------------------|----------|---------------|-------|---------------|-------|---------------------|-------|---------------|-------|---------------|-------|---------------|-------|
| Sample                      |          | CW01-MW26-A01 |       | CW01-MW26-A02 |       | CW01-MW26-E02       |       | CW01-MW27-A01 |       | CW01-MW27-A02 |       | CW01-MW28-A01 |       |
| Sample Type                 |          |               |       |               |       | Field Rinsate Blank |       |               |       |               |       |               |       |
| Batch#                      |          | 9503G358      |       | 9503G739      |       | 9503G739            |       | 9503G358      |       | 9503G739      |       | 9503G358      |       |
| Prep#                       |          | 95GP0154      |       | 95GP0251      |       | 95GP0251            |       | 95GP0154      |       | 95GP0251      |       | 95GP0154      |       |
| RFW#                        |          | 001           |       | 003           |       | 006                 |       | 003           |       | 001           |       | 005           |       |
| Sample Depth                |          |               |       |               |       |                     |       |               |       |               |       |               |       |
| Dilution Factor             |          | 1.00          |       | 1.00          |       | 1.00                |       | 1.00          |       | 1.00          |       | 1.00          |       |
| Matrix                      |          | water         |       | water         |       | water               |       | water         |       | water         |       | water         |       |
| Units                       | ug/l     | ug/l          |       | ug/l          |       | ug/l                |       | ug/l          |       | ug/l          |       | ug/l          |       |
| Sampling Date               |          | 2/21/95       |       | 3/14/95       |       | 3/14/95             |       | 2/21/95       |       | 3/14/95       |       | 2/21/95       |       |
| Analysis Date               |          | 3/15/95       |       | 3/12/95       |       | 3/12/95             |       | 3/15/95       |       | 3/12/95       |       | 3/15/95       |       |
| Analysis                    | Standard | Analytical    | CRDL  | Analytical    | CRDL  | Analytical          | CRDL  | Analytical    | CRDL  | Analytical    | CRDL  | Analytical    | CRDL  |
|                             |          | Result        |       | Result        |       | Result              |       | Result        |       | Result        |       | Result        |       |
| alpha-BHC                   | 0.02     | 0.048 U       | 0.048 | 0.052 U       | 0.052 | 0.052 U             | 0.052 | 0.052 U       | 0.052 | 0.056 U       | 0.056 | 0.047 U       | 0.047 |
| beta-BHC                    | 0.2      | 0.048 U       | 0.048 | 0.052 U       | 0.052 | 0.052 U             | 0.052 | 0.052 U       | 0.052 | 0.056 U       | 0.056 | 0.047 U       | 0.047 |
| delta-BHC                   |          | 0.048 U       | 0.048 | 0.052 U       | 0.052 | 0.052 U             | 0.052 | 0.052 U       | 0.052 | 0.056 U       | 0.056 | 0.047 U       | 0.047 |
| gamma-BHC (Lindane)         | 0.2      | 0.048 U       | 0.048 | 0.052 U       | 0.052 | 0.052 U             | 0.052 | 0.052 U       | 0.052 | 0.056 U       | 0.056 | 0.047 U       | 0.047 |
| Heptachlor                  | 0.4      | 0.048 U       | 0.048 | 0.052 U       | 0.052 | 0.052 U             | 0.052 | 0.052 U       | 0.052 | 0.056 U       | 0.056 | 0.047 U       | 0.047 |
| Aldrin                      | 0.04     | 0.048 U       | 0.048 | 0.052 U       | 0.052 | 0.052 U             | 0.052 | 0.052 U       | 0.052 | 0.056 U       | 0.056 | 0.047 U       | 0.047 |
| Heptachlor epoxide          | 0.2      | 0.048 U       | 0.048 | 0.052 U       | 0.052 | 0.052 U             | 0.052 | 0.052 U       | 0.052 | 0.056 U       | 0.056 | 0.047 U       | 0.047 |
| Endosulfan I                | 0.4      | 0.048 U       | 0.048 | 0.052 U       | 0.052 | 0.052 U             | 0.052 | 0.052 U       | 0.052 | 0.056 U       | 0.056 | 0.047 U       | 0.047 |
| Dieldrin                    | 0.03     | 0.097 U       | 0.097 | 0.10 U        | 0.10  | 0.10 U              | 0.10  | 0.10 U        | 0.10  | 0.11 U        | 0.11  | 0.094 U       | 0.094 |
| 4,4'-DDE                    | 0.1      | 0.097 U       | 0.097 | 0.10 U        | 0.10  | 0.10 U              | 0.10  | 0.10 U        | 0.10  | 0.11 U        | 0.11  | 0.094 U       | 0.094 |
| Endrin                      | 2        | 0.097 U       | 0.097 | 0.10 U        | 0.10  | 0.10 U              | 0.10  | 0.10 U        | 0.10  | 0.11 U        | 0.11  | 0.094 U       | 0.094 |
| Endosulfan II               | 0.4      | 0.097 U       | 0.097 | 0.10 U        | 0.10  | 0.10 U              | 0.10  | 0.10 U        | 0.10  | 0.11 U        | 0.11  | 0.094 U       | 0.094 |
| 4,4'-DDD                    | 0.1      | 0.097 U       | 0.097 | 0.10 U        | 0.10  | 0.10 U              | 0.10  | 0.10 U        | 0.10  | 0.11 U        | 0.11  | 0.094 U       | 0.094 |
| Endosulfan sulfate          | 0.4      | 0.097 U       | 0.097 | 0.10 U        | 0.10  | 0.10 U              | 0.10  | 0.10 U        | 0.10  | 0.11 U        | 0.11  | 0.094 U       | 0.094 |
| 4,4'-DDT                    | 0.1      | 0.097 U       | 0.097 | 0.10 U        | 0.10  | 0.10 U              | 0.10  | 0.10 U        | 0.10  | 0.11 U        | 0.11  | 0.094 U       | 0.094 |
| Methoxychlor                | 40       | 0.48 U        | 0.48  | 0.52 U        | 0.52  | 0.52 U              | 0.52  | 0.52 U        | 0.52  | 0.56 U        | 0.56  | 0.47 U        | 0.47  |
| Endrin ketone               |          | 0.097 U       | 0.097 | 0.10 U        | 0.10  | 0.10 U              | 0.10  | 0.10 U        | 0.10  | 0.11 U        | 0.11  | 0.094 U       | 0.094 |
| Endrin aldehyde             |          | 0.097 U       | 0.097 | 0.10 U        | 0.10  | 0.10 U              | 0.10  | 0.10 U        | 0.10  | 0.11 U        | 0.11  | 0.094 U       | 0.094 |
| alpha-Chlordane             |          | 0.048 U       | 0.048 | 0.052 U       | 0.052 | 0.052 U             | 0.052 | 0.052 U       | 0.052 | 0.056 U       | 0.056 | 0.047 U       | 0.047 |
| gamma-Chlordane             | 0.5      | 0.048 U       | 0.048 | 0.052 U       | 0.052 | 0.052 U             | 0.052 | 0.052 U       | 0.052 | 0.056 U       | 0.056 | 0.047 U       | 0.047 |
| Toxaphene                   | 3        | 4.8 U         | 4.8   | 5.2 U         | 5.2   | 5.2 U               | 5.2   | 5.2 U         | 5.2   | 5.6 U         | 5.6   | 4.7 U         | 4.7   |
| Aroclor-1016                | 2        | 0.97 U        | 0.97  | 1.0 U         | 1.0   | 1.0 U               | 1.0   | 1.0 U         | 1.0   | 1.1 U         | 1.1   | 0.94 U        | 0.94  |
| Aroclor-1221                | 2        | 1.9 U         | 1.9   | 2.1 U         | 2.1   | 2.1 U               | 2.1   | 2.1 U         | 2.1   | 2.2 U         | 2.2   | 1.9 U         | 1.9   |
| Aroclor-1232                | 2        | 0.97 U        | 0.97  | 1.0 U         | 1.0   | 1.0 U               | 1.0   | 1.0 U         | 1.0   | 1.1 U         | 1.1   | 0.94 U        | 0.94  |
| Aroclor-1242                | 2        | 0.97 U        | 0.97  | 1.0 U         | 1.0   | 1.0 U               | 1.0   | 1.0 U         | 1.0   | 1.1 U         | 1.1   | 0.94 U        | 0.94  |
| Aroclor-1248                | 2        | 0.97 U        | 0.97  | 1.0 U         | 1.0   | 1.0 U               | 1.0   | 1.0 U         | 1.0   | 1.1 U         | 1.1   | 0.94 U        | 0.94  |
| Aroclor-1254                | 2        | 0.97 U        | 0.97  | 1.0 U         | 1.0   | 1.0 U               | 1.0   | 1.0 U         | 1.0   | 1.1 U         | 1.1   | 0.94 U        | 0.94  |
| Aroclor-1260                | 2        | 0.97 U        | 0.97  | 1.0 U         | 1.0   | 1.0 U               | 1.0   | 1.0 U         | 1.0   | 1.1 U         | 1.1   | 0.94 U        | 0.94  |
| Method: TCL Pesticides/PCBs |          |               |       |               |       |                     |       |               |       |               |       |               |       |

**CHARLES WOOD  
GROUNDWATER PESTICIDES/PCBS**

| Geographical Location      |          | CW1          |       | CW1           |       | CW1                 |       | CW1          |       | CW2           |       | CW2           |       |
|----------------------------|----------|--------------|-------|---------------|-------|---------------------|-------|--------------|-------|---------------|-------|---------------|-------|
| Sample                     |          | CW01-MW28A02 |       | CW01-MW29-A01 |       | CW01-MW29-E01       |       | CW01-MW29A02 |       | CW02-MW30-A01 |       | CW02-MW30-A02 |       |
| Sample Type                |          |              |       |               |       | Field Rinsate Blank |       |              |       |               |       |               |       |
| Batch#                     |          | 9503G739     |       | 9503G358      |       | 9503G358            |       | 9503G739     |       | 9503G358      |       | 9503G739      |       |
| Prep#                      |          | 95GP0251     |       | 95GP0154      |       | 95GP0154            |       | 95GP0251     |       | 95GP0154      |       | 95GP0251      |       |
| RFW#                       |          | 008          |       | 007           |       | 010                 |       | 010          |       | 012           |       | 012           |       |
| Sample Depth               |          |              |       |               |       |                     |       |              |       |               |       |               |       |
| Dilution Factor            |          | 1.00         |       | 1.00          |       | 1.00                |       | 1.00         |       | 1.00          |       | 1.00          |       |
| Matrix                     |          | water        |       | water         |       | water               |       | water        |       | water         |       | water         |       |
| Units                      | ug/l     | ug/l         |       | ug/l          |       | ug/l                |       | ug/l         |       | ug/l          |       | ug/l          |       |
| Sampling Date              |          | 3/14/95      |       | 2/21/95       |       | 2/21/95             |       | 3/14/95      |       | 2/21/95       |       | 3/14/95       |       |
| Analysis Date              |          | 3/12/95      |       | 3/16/95       |       | 3/16/95             |       | 3/12/95      |       | 3/16/95       |       | 3/12/95       |       |
| Analysis                   | Standard | Analytical   | CRDL  | Analytical    | CRDL  | Analytical          | CRDL  | Analytical   | CRDL  | Analytical    | CRDL  | Analytical    | CRDL  |
|                            |          | Result       |       | Result        |       | Result              |       | Result       |       | Result        |       | Result        |       |
| alpha-BHC                  | 0.02     | 0.052 U      | 0.052 | 0.047 U       | 0.047 | 0.053 U             | 0.053 | 0.051 U      | 0.051 | 0.052 U       | 0.052 | 0.052 U       | 0.052 |
| beta-BHC                   | 0.2      | 0.052 U      | 0.052 | 0.047 U       | 0.047 | 0.053 U             | 0.053 | 0.051 U      | 0.051 | 0.052 U       | 0.052 | 0.052 U       | 0.052 |
| delta-BHC                  |          | 0.052 U      | 0.052 | 0.047 U       | 0.047 | 0.053 U             | 0.053 | 0.051 U      | 0.051 | 0.052 U       | 0.052 | 0.052 U       | 0.052 |
| gamma-BHC (Lindane)        | 0.2      | 0.052 U      | 0.052 | 0.047 U       | 0.047 | 0.053 U             | 0.053 | 0.051 U      | 0.051 | 0.052 U       | 0.052 | 0.052 U       | 0.052 |
| Heptachlor                 | 0.4      | 0.052 U      | 0.052 | 0.047 U       | 0.047 | 0.053 U             | 0.053 | 0.051 U      | 0.051 | 0.052 U       | 0.052 | 0.052 U       | 0.052 |
| Aldrin                     | 0.04     | 0.052 U      | 0.052 | 0.047 U       | 0.047 | 0.053 U             | 0.053 | 0.051 U      | 0.051 | 0.052 U       | 0.052 | 0.052 U       | 0.052 |
| Heptachlor epoxide         | 0.2      | 0.052 U      | 0.052 | 0.047 U       | 0.047 | 0.053 U             | 0.053 | 0.051 U      | 0.051 | 0.052 U       | 0.052 | 0.052 U       | 0.052 |
| Endosulfan I               | 0.4      | 0.052 U      | 0.052 | 0.047 U       | 0.047 | 0.053 U             | 0.053 | 0.051 U      | 0.051 | 0.052 U       | 0.052 | 0.052 U       | 0.052 |
| Dieldrin                   | 0.03     | 0.10 U       | 0.10  | 0.094 U       | 0.094 | 0.11 U              | 0.11  | 0.10 U       | 0.10  | 0.10 U        | 0.10  | 0.10 U        | 0.10  |
| 4,4'-DDE                   | 0.1      | 0.10 U       | 0.10  | 0.094 U       | 0.094 | 0.11 U              | 0.11  | 0.10 U       | 0.10  | 0.10 U        | 0.10  | 0.10 U        | 0.10  |
| Endrin                     | 2        | 0.10 U       | 0.10  | 0.094 U       | 0.094 | 0.11 U              | 0.11  | 0.10 U       | 0.10  | 0.10 U        | 0.10  | 0.10 U        | 0.10  |
| Endosulfan II              | 0.4      | 0.10 U       | 0.10  | 0.094 U       | 0.094 | 0.11 U              | 0.11  | 0.10 U       | 0.10  | 0.10 U        | 0.10  | 0.10 U        | 0.10  |
| 4,4'-DDD                   | 0.1      | 0.10 U       | 0.10  | 0.094 U       | 0.094 | 0.11 U              | 0.11  | 0.10 U       | 0.10  | 0.10 U        | 0.10  | 0.10 U        | 0.10  |
| Endosulfan sulfate         | 0.4      | 0.10 U       | 0.10  | 0.094 U       | 0.094 | 0.11 U              | 0.11  | 0.10 U       | 0.10  | 0.10 U        | 0.10  | 0.10 U        | 0.10  |
| 4,4'-DDT                   | 0.1      | 0.10 U       | 0.10  | 0.094 U       | 0.094 | 0.11 U              | 0.11  | 0.10 U       | 0.10  | 0.10 U        | 0.10  | 0.10 U        | 0.10  |
| Methoxychlor               | 40       | 0.52 U       | 0.52  | 0.47 U        | 0.47  | 0.53 U              | 0.53  | 0.51 U       | 0.51  | 0.52 U        | 0.52  | 0.52 U        | 0.52  |
| Endrin ketone              |          | 0.10 U       | 0.10  | 0.094 U       | 0.094 | 0.11 U              | 0.11  | 0.10 U       | 0.10  | 0.10 U        | 0.10  | 0.10 U        | 0.10  |
| Endrin aldehyde            |          | 0.10 U       | 0.10  | 0.094 U       | 0.094 | 0.11 U              | 0.11  | 0.10 U       | 0.10  | 0.10 U        | 0.10  | 0.10 U        | 0.10  |
| alpha-Chlordane            |          | 0.052 U      | 0.052 | 0.047 U       | 0.047 | 0.053 U             | 0.053 | 0.051 U      | 0.051 | 0.052 U       | 0.052 | 0.052 U       | 0.052 |
| gamma-Chlordane            | 0.5      | 0.052 U      | 0.052 | 0.047 U       | 0.047 | 0.053 U             | 0.053 | 0.051 U      | 0.051 | 0.052 U       | 0.052 | 0.052 U       | 0.052 |
| Toxaphene                  | 3        | 5.2 U        | 5.2   | 4.7 U         | 4.7   | 5.3 U               | 5.3   | 5.1 U        | 5.1   | 5.2 U         | 5.2   | 5.2 U         | 5.2   |
| Aroclor-1016               | 2        | 1.0 U        | 1.0   | 0.94 U        | 0.94  | 1.1 U               | 1.1   | 1.0 U        | 1.0   | 1.0 U         | 1.0   | 1.0 U         | 1.0   |
| Aroclor-1221               | 2        | 2.1 U        | 2.1   | 1.9 U         | 1.9   | 2.1 U               | 2.1   | 2.0 U        | 2.0   | 2.1 U         | 2.1   | 2.1 U         | 2.1   |
| Aroclor-1232               | 2        | 1.0 U        | 1.0   | 0.94 U        | 0.94  | 1.1 U               | 1.1   | 1.0 U        | 1.0   | 1.0 U         | 1.0   | 1.0 U         | 1.0   |
| Aroclor-1242               | 2        | 1.0 U        | 1.0   | 0.94 U        | 0.94  | 1.1 U               | 1.1   | 1.0 U        | 1.0   | 1.0 U         | 1.0   | 1.0 U         | 1.0   |
| Aroclor-1248               | 2        | 1.0 U        | 1.0   | 0.94 U        | 0.94  | 1.1 U               | 1.1   | 1.0 U        | 1.0   | 1.0 U         | 1.0   | 1.0 U         | 1.0   |
| Aroclor-1254               | 2        | 1.0 U        | 1.0   | 0.94 U        | 0.94  | 1.1 U               | 1.1   | 1.0 U        | 1.0   | 1.0 U         | 1.0   | 1.0 U         | 1.0   |
| Aroclor-1260               | 2        | 1.0 U        | 1.0   | 0.94 U        | 0.94  | 1.1 U               | 1.1   | 1.0 U        | 1.0   | 1.0 U         | 1.0   | 1.0 U         | 1.0   |
| Method:TCL Pesticides/PCBs |          |              |       |               |       |                     |       |              |       |               |       |               |       |

**CHARLES WOOD  
GROUNDWATER PESTICIDES/PCBS**

| Geographical Location       |          | CW2           |       | CW2           |       | CW2           |       | CW2           |       | CW2           |       | CW2           |       |
|-----------------------------|----------|---------------|-------|---------------|-------|---------------|-------|---------------|-------|---------------|-------|---------------|-------|
| Sample                      |          | CW02-MW31-A01 |       | CW02-MW31-A02 |       | CW02-MW32-A01 |       | CW02-MW32-A02 |       | CW02-MW33-A01 |       | CW02-MW33-A02 |       |
| Sample Type                 |          |               |       |               |       |               |       |               |       |               |       |               |       |
| Batch#                      |          | 9503G358      |       | 9503G739      |       | 9503G358      |       | 9503G739      |       | 9503G358      |       | 9503G739      |       |
| Prep#                       |          | 95GP0154      |       | 95GP0251      |       | 95GP0154      |       | 95GP0251      |       | 95GP0154      |       | 95GP0251      |       |
| RFW#                        |          | 014           |       | 014           |       | 016           |       | 016           |       | 018           |       | 018           |       |
| Sample Depth                |          |               |       |               |       |               |       |               |       |               |       |               |       |
| Dilution Factor             |          | 1.00          |       | 1.00          |       | 1.00          |       | 1.00          |       | 1.00          |       | 1.00          |       |
| Matrix                      |          | water         |       | water         |       | water         |       | water         |       | water         |       | water         |       |
| Units                       | ug/l     | ug/l          |       | ug/l          |       | ug/l          |       | ug/l          |       | ug/l          |       | ug/l          |       |
| Sampling Date               |          | 2/21/95       |       | 3/14/95       |       | 2/21/95       |       | 3/14/95       |       | 2/21/95       |       | 3/14/95       |       |
| Analysis Date               |          | 3/16/95       |       | 3/12/95       |       | 3/16/95       |       | 3/12/95       |       | 3/16/95       |       | 3/12/95       |       |
| Analysis                    | Standard | Analytical    | CRDL  | Analytical    | CRDL  | Analytical    | CRDL  | Analytical    | CRDL  | Analytical    | CRDL  | Analytical    | CRDL  |
|                             |          | Result        |       | Result        |       | Result        |       | Result        |       | Result        |       | Result        |       |
| alpha-BHC                   | 0.02     | 0.070 U       | 0.070 | 0.052 U       | 0.052 | 0.054 U       | 0.054 | 0.052 U       | 0.052 | 0.062 U       | 0.062 | 0.053 U       | 0.053 |
| beta-BHC                    | 0.2      | 0.070 U       | 0.070 | 0.052 U       | 0.052 | 0.054 U       | 0.054 | 0.052 U       | 0.052 | 0.062 U       | 0.062 | 0.053 U       | 0.053 |
| delta-BHC                   |          | 0.070 U       | 0.070 | 0.052 U       | 0.052 | 0.054 U       | 0.054 | 0.052 U       | 0.052 | 0.062 U       | 0.062 | 0.053 U       | 0.053 |
| gamma-BHC (Lindane)         | 0.2      | 0.070 U       | 0.070 | 0.052 U       | 0.052 | 0.054 U       | 0.054 | 0.052 U       | 0.052 | 0.062 U       | 0.062 | 0.053 U       | 0.053 |
| Heptachlor                  | 0.4      | 0.070 U       | 0.070 | 0.052 U       | 0.052 | 0.054 U       | 0.054 | 0.052 U       | 0.052 | 0.062 U       | 0.062 | 0.053 U       | 0.053 |
| Aldrin                      | 0.04     | 0.070 U       | 0.070 | 0.052 U       | 0.052 | 0.054 U       | 0.054 | 0.052 U       | 0.052 | 0.062 U       | 0.062 | 0.053 U       | 0.053 |
| Heptachlor epoxide          | 0.2      | 0.070 U       | 0.070 | 0.052 U       | 0.052 | 0.054 U       | 0.054 | 0.052 U       | 0.052 | 0.062 U       | 0.062 | 0.053 U       | 0.053 |
| Endosulfan I                | 0.4      | 0.070 U       | 0.070 | 0.052 U       | 0.052 | 0.054 U       | 0.054 | 0.052 U       | 0.052 | 0.062 U       | 0.062 | 0.053 U       | 0.053 |
| Dieldrin                    | 0.03     | 0.14 U        | 0.14  | 0.10 U        | 0.10  | 0.11 U        | 0.11  | 0.10 U        | 0.10  | 0.12 U        | 0.12  | 0.11 U        | 0.11  |
| 4,4'-DDE                    | 0.1      | 0.14 U        | 0.14  | 0.10 U        | 0.10  | 0.11 U        | 0.11  | 0.10 U        | 0.10  | 0.12 U        | 0.12  | 0.11 U        | 0.11  |
| Endrin                      | 2        | 0.14 U        | 0.14  | 0.10 U        | 0.10  | 0.11 U        | 0.11  | 0.10 U        | 0.10  | 0.12 U        | 0.12  | 0.11 U        | 0.11  |
| Endosulfan II               | 0.4      | 0.14 U        | 0.14  | 0.10 U        | 0.10  | 0.11 U        | 0.11  | 0.10 U        | 0.10  | 0.12 U        | 0.12  | 0.11 U        | 0.11  |
| 4,4'-DDD                    | 0.1      | 0.14 U        | 0.14  | 0.10 U        | 0.10  | 0.11 U        | 0.11  | 0.10 U        | 0.10  | 0.12 U        | 0.12  | 0.11 U        | 0.11  |
| Endosulfan sulfate          | 0.4      | 0.14 U        | 0.14  | 0.10 U        | 0.10  | 0.11 U        | 0.11  | 0.10 U        | 0.10  | 0.12 U        | 0.12  | 0.11 U        | 0.11  |
| 4,4'-DDT                    | 0.1      | 0.14 U        | 0.14  | 0.10 U        | 0.10  | 0.11 U        | 0.11  | 0.10 U        | 0.10  | 0.12 U        | 0.12  | 0.11 U        | 0.11  |
| Methoxychlor                | 40       | 0.70 U        | 0.70  | 0.52 U        | 0.52  | 0.54 U        | 0.54  | 0.52 U        | 0.52  | 0.62 U        | 0.62  | 0.053 U       | 0.053 |
| Endrin ketone               |          | 0.14 U        | 0.14  | 0.10 U        | 0.10  | 0.11 U        | 0.11  | 0.10 U        | 0.10  | 0.12 U        | 0.12  | 0.11 U        | 0.11  |
| Endrin aldehyde             |          | 0.14 U        | 0.14  | 0.10 U        | 0.10  | 0.11 U        | 0.11  | 0.10 U        | 0.10  | 0.12 U        | 0.12  | 0.11 U        | 0.11  |
| alpha-Chlordane             |          | 0.070 U       | 0.070 | 0.052 U       | 0.052 | 0.054 U       | 0.054 | 0.052 U       | 0.052 | 0.062 U       | 0.062 | 0.053 U       | 0.053 |
| gamma-Chlordane             | 0.5      | 0.070 U       | 0.070 | 0.052 U       | 0.052 | 0.054 U       | 0.054 | 0.052 U       | 0.052 | 0.062 U       | 0.062 | 0.053 U       | 0.053 |
| Toxaphene                   | 3        | 7.0 U         | 7.0   | 5.2 U         | 5.2   | 5.4 U         | 5.4   | 5.2 U         | 5.2   | 6.2 U         | 6.2   | 5.3 U         | 5.3   |
| Aroclor-1016                | 2        | 1.4 U         | 1.4   | 1.0 U         | 1.0   | 1.1 U         | 1.1   | 1.0 U         | 1.0   | 1.2 U         | 1.2   | 1.1 U         | 1.1   |
| Aroclor-1221                | 2        | 2.8 U         | 2.8   | 2.1 U         | 2.1   | 2.2 U         | 2.2   | 2.1 U         | 2.1   | 2.5 U         | 2.5   | 2.1 U         | 2.1   |
| Aroclor-1232                | 2        | 1.4 U         | 1.4   | 1.0 U         | 1.0   | 1.1 U         | 1.1   | 1.0 U         | 1.0   | 1.2 U         | 1.2   | 1.1 U         | 1.1   |
| Aroclor-1242                | 2        | 1.4 U         | 1.4   | 1.0 U         | 1.0   | 1.1 U         | 1.1   | 1.0 U         | 1.0   | 1.2 U         | 1.2   | 1.1 U         | 1.1   |
| Aroclor-1248                | 2        | 1.4 U         | 1.4   | 1.0 U         | 1.0   | 1.1 U         | 1.1   | 1.0 U         | 1.0   | 1.2 U         | 1.2   | 1.1 U         | 1.1   |
| Aroclor-1254                | 2        | 1.4 U         | 1.4   | 1.0 U         | 1.0   | 1.1 U         | 1.1   | 1.0 U         | 1.0   | 1.2 U         | 1.2   | 1.1 U         | 1.1   |
| Aroclor-1260                | 2        | 1.4 U         | 1.4   | 1.0 U         | 1.0   | 1.1 U         | 1.1   | 1.0 U         | 1.0   | 1.2 U         | 1.2   | 1.1 U         | 1.1   |
| Method: TCL Pesticides/PCBs |          |               |       |               |       |               |       |               |       |               |       |               |       |

**CHARLES WOOD**  
**GROUNDWATER PESTICIDES/PCBS**

| Geographical Location      |          | CW6           |       | CW6           |       | CW6                 |       | CW6           |       | CW6           |       | CW6           |       |
|----------------------------|----------|---------------|-------|---------------|-------|---------------------|-------|---------------|-------|---------------|-------|---------------|-------|
| Sample                     |          | CW06-MW01-A01 |       | CW06-MW01-A02 |       | CW06-MW01-E02       |       | CW06-MW34-A01 |       | CW06-MW34-A02 |       | CW06-MW35-A01 |       |
| Sample Type                |          |               |       |               |       | Field Rinsate Blank |       |               |       |               |       |               |       |
| Batch#                     |          | 9505G840      |       | 9505G138      |       | 9505G138            |       | 9502G300      |       | 9503G723      |       | 9502G300      |       |
| Prep#                      |          | 95GP0510      |       | 95GP0580      |       | 95GP0580            |       | 95GP0154      |       | 95GP0247      |       | 95GP0154      |       |
| RFW#                       |          | 002           |       | 002           |       | 003                 |       | 001           |       | 001           |       | 003           |       |
| Sample Depth               |          |               |       |               |       |                     |       |               |       |               |       |               |       |
| Dilution Factor            |          | 1.00          |       | 1.00          |       | 1.00                |       | 1.00          |       | 1.00          |       | 1.00          |       |
| Matrix                     |          | water         |       | water         |       | water               |       | water         |       | water         |       | water         |       |
| Units                      | ug/l     | ug/l          |       | ug/l          |       | ug/l                |       | ug/l          |       | ug/l          |       | ug/l          |       |
| Sampling Date              |          | 5/10/95       |       | 5/10/95       |       | 5/25/95             |       | 2/20/95       |       | 3/13/95       |       | 2/20/95       |       |
| Analysis Date              |          | 5/19/95       |       | 6/1/95        |       | 6/1/95              |       | 3/15/95       |       | 3/29/95       |       | 3/12/95       |       |
| Analysis                   | Standard | Analytical    | CRDL  | Analytical    | CRDL  | Analytical          | CRDL  | Analytical    | CRDL  | Analytical    | CRDL  | Analytical    | CRDL  |
|                            |          | Result        |       | Result        |       | Result              |       | Result        |       | Result        |       | Result        |       |
| alpha-BHC                  | 0.02     | 0.054 U       | 0.054 | 0.046 U       | 0.046 | 0.053 U             | 0.053 | 0.047 U       | 0.047 | 0.053 U       | 0.053 | 0.048 U       | 0.048 |
| beta-BHC                   | 0.2      | 0.054 U       | 0.054 | 0.046 U       | 0.046 | 0.053 U             | 0.053 | 0.047 U       | 0.047 | 0.053 U       | 0.053 | 0.048 U       | 0.048 |
| delta-BHC                  |          | 0.054 U       | 0.054 | 0.046 U       | 0.046 | 0.053 U             | 0.053 | 0.047 U       | 0.047 | 0.053 U       | 0.053 | 0.048 U       | 0.048 |
| gamma-BHC (Lindane)        | 0.2      | 0.054 U       | 0.054 | 0.046 U       | 0.046 | 0.053 U             | 0.053 | 0.047 U       | 0.047 | 0.053 U       | 0.053 | 0.048 U       | 0.048 |
| Heptachlor                 | 0.4      | 0.054 U       | 0.054 | 0.046 U       | 0.046 | 0.053 U             | 0.053 | 0.047 U       | 0.047 | 0.053 U       | 0.053 | 0.048 U       | 0.048 |
| Aldrin                     | 0.04     | 0.054 U       | 0.054 | 0.046 U       | 0.046 | 0.053 U             | 0.053 | 0.047 U       | 0.047 | 0.053 U       | 0.053 | 0.048 U       | 0.048 |
| Heptachlor epoxide         | 0.2      | 0.054 U       | 0.054 | 0.046 U       | 0.046 | 0.053 U             | 0.053 | 0.047 U       | 0.047 | 0.053 U       | 0.053 | 0.048 U       | 0.048 |
| Endosulfan I               | 0.4      | 0.054 U       | 0.054 | 0.046 U       | 0.046 | 0.053 U             | 0.053 | 0.047 U       | 0.047 | 0.053 U       | 0.053 | 0.048 U       | 0.048 |
| Dieldrin                   | 0.03     | 0.11 U        | 0.11  | 0.092 U       | 0.092 | 0.11 U              | 0.11  | 0.094 U       | 0.094 | 0.11 U        | 0.11  | 0.097 U       | 0.097 |
| 4,4'-DDE                   | 0.1      | 0.11 U        | 0.11  | 0.092 U       | 0.092 | 0.11 U              | 0.11  | 0.094 U       | 0.094 | 0.11 U        | 0.11  | 0.097 U       | 0.097 |
| Endrin                     | 2        | 0.11 U        | 0.11  | 0.092 U       | 0.092 | 0.11 U              | 0.11  | 0.094 U       | 0.094 | 0.11 U        | 0.11  | 0.097 U       | 0.097 |
| Endosulfan II              | 0.4      | 0.11 U        | 0.11  | 0.092 U       | 0.092 | 0.11 U              | 0.11  | 0.094 U       | 0.094 | 0.11 U        | 0.11  | 0.097 U       | 0.097 |
| 4,4'-DDD                   | 0.1      | 0.098 J       | 0.11  | 0.074 J       | 0.092 | 0.11 U              | 0.11  | 0.094 U       | 0.094 | 0.11 U        | 0.11  | 0.097 U       | 0.097 |
| Endosulfan sulfate         | 0.4      | 0.11 U        | 0.11  | 0.092 U       | 0.092 | 0.11 U              | 0.11  | 0.094 U       | 0.094 | 0.11 U        | 0.11  | 0.097 U       | 0.097 |
| 4,4'-DDT                   | 0.1      | 0.11 U        | 0.11  | 0.092 U       | 0.092 | 0.11 U              | 0.11  | 0.094 U       | 0.094 | 0.11 U        | 0.11  | 0.097 U       | 0.097 |
| Methoxychlor               | 40       | 0.54 U        | 0.54  | 0.46 U        | 0.46  | 0.53 U              | 0.53  | 0.47 U        | 0.47  | 0.53 U        | 0.53  | 0.48 U        | 0.48  |
| Endrin ketone              |          | 0.11 U        | 0.11  | 0.092 U       | 0.092 | 0.11 U              | 0.11  | 0.094 U       | 0.094 | 0.11 U        | 0.11  | 0.097 U       | 0.097 |
| Endrin aldehyde            |          | 0.11 U        | 0.11  | 0.092 U       | 0.092 | 0.11 U              | 0.11  | 0.094 U       | 0.094 | 0.11 U        | 0.11  | 0.097 U       | 0.097 |
| alpha-Chlordane            |          | 0.054         | 0.054 | 0.055         | 0.046 | 0.053 U             | 0.053 | 0.047 U       | 0.047 | 0.053 U       | 0.053 | 0.048 U       | 0.048 |
| gamma-Chlordane            | 0.5      | 0.033 JP      | 0.054 | 0.037 J       | 0.046 | 0.053 U             | 0.053 | 0.047 U       | 0.047 | 0.053 U       | 0.053 | 0.048 U       | 0.048 |
| Toxaphene                  | 3        | 5.4 U         | 4.7   | 4.6 U         | 4.6   | 5.3 U               | 5.3   | 4.7 U         | 4.7   | 5.3 U         | 5.3   | 4.8 U         | 4.8   |
| Aroclor-1016               | 2        | 1.1 U         | 1.1   | 0.92 U        | 0.92  | 1.1 U               | 1.1   | 0.94 U        | 0.94  | 1.1 U         | 1.1   | 0.97 U        | 0.97  |
| Aroclor-1221               | 2        | 2.2 U         | 2.2   | 1.8 U         | 1.8   | 2.1 U               | 2.1   | 1.9 U         | 1.9   | 2.1 U         | 2.1   | 1.9 U         | 1.9   |
| Aroclor-1232               | 2        | 1.1 U         | 1.1   | 0.92 U        | 0.92  | 1.1 U               | 1.1   | 0.94 U        | 0.94  | 1.1 U         | 1.1   | 0.97 U        | 0.97  |
| Aroclor-1242               | 2        | 1.1 U         | 1.1   | 0.92 U        | 0.92  | 1.1 U               | 1.1   | 0.94 U        | 0.94  | 1.1 U         | 1.1   | 0.97 U        | 0.97  |
| Aroclor-1248               | 2        | 1.1 U         | 1.1   | 0.92 U        | 0.92  | 1.1 U               | 1.1   | 0.94 U        | 0.94  | 1.1 U         | 1.1   | 0.97 U        | 0.97  |
| Aroclor-1254               | 2        | 1.1 U         | 1.1   | 0.92 U        | 0.92  | 1.1 U               | 1.1   | 0.94 U        | 0.94  | 1.1 U         | 1.1   | 0.97 U        | 0.97  |
| Aroclor-1260               | 2        | 1.1 U         | 1.1   | 0.92 U        | 0.92  | 1.1 U               | 1.1   | 0.94 U        | 0.94  | 1.1 U         | 1.1   | 0.97 U        | 0.97  |
| Method:TCL Pesticides/PCBs |          |               |       |               |       |                     |       |               |       |               |       |               |       |



**CHARLES WOOD  
GROUNDWATER PESTICIDES/PCBS**

| Geographical Location       |          | CW9           |       | CW9                 |       | CW6           |       | CW9           |       | B6           |       | B6           |       |
|-----------------------------|----------|---------------|-------|---------------------|-------|---------------|-------|---------------|-------|--------------|-------|--------------|-------|
| Sample                      |          | CW09-MW35-A02 |       | CW09-MW35-E01       |       | CW06-MW36-A01 |       | CW09-MW36-A02 |       | B6-MW06B-A01 |       | B6-MW06B-A02 |       |
| Sample Type                 |          |               |       | Field Rinsate Blank |       |               |       |               |       |              |       |              |       |
| Batch#                      |          | 9503G723      |       | 9502G300            |       | 9502G300      |       | 9503G723      |       | 9502G198     |       | 9503G641     |       |
| Prep#                       | /        | 95GP0247      |       | 95GP0154            |       | 95GP0154      |       | 95GP0247      |       | 95GP0119     |       | 95GP0229     |       |
| RFW#                        |          | 002           |       | 007                 |       | 005           |       | 004           |       | 003          |       | 001          |       |
| Sample Depth                |          |               |       |                     |       |               |       |               |       |              |       |              |       |
| Dilution Factor             |          | 1.00          |       | 1.00                |       | 1.00          |       | 1.00          |       | 1.00         |       | 1.00         |       |
| Matrix                      |          | water         |       | water               |       | water         |       | water         |       | water        |       | water        |       |
| Units                       | ug/l     | ug/l          |       | ug/l                |       | ug/l          |       | ug/l          |       | ug/l         |       | ug/l         |       |
| Sampling Date               |          | 3/13/95       |       | 2/20/95             |       | 2/20/95       |       | 3/13/95       |       | 2/15/95      |       | 3/8/95       |       |
| Analysis Date               |          | 3/29/95       |       | 3/15/95             |       | 3/15/95       |       | 3/29/95       |       | 3/4/95       |       | 3/19/95      |       |
| Analysis                    | Standard | Analytical    | CRDL  | Analytical          | CRDL  | Analytical    | CRDL  | Analytical    | CRDL  | Analytical   | CRDL  | Analytical   | CRDL  |
|                             |          | Result        |       | Result              |       | Result        |       | Result        |       | Result       |       | Result       |       |
| alpha-BHC                   | 0.02     | 0.055 U       | 0.055 | 0.050 U             | 0.050 | 0.048 U       | 0.048 | 0.053 U       | 0.053 | 0.048 U      | 0.048 | 0.050 U      | 0.050 |
| beta-BHC                    | 0.2      | 0.055 U       | 0.055 | 0.050 U             | 0.050 | 0.048 U       | 0.048 | 0.053 U       | 0.053 | 0.048 U      | 0.048 | 0.050 U      | 0.050 |
| delta-BHC                   |          | 0.055 U       | 0.055 | 0.050 U             | 0.050 | 0.048 U       | 0.048 | 0.053 U       | 0.053 | 0.048 U      | 0.048 | 0.050 U      | 0.050 |
| gamma-BHC (Lindane)         | 0.2      | 0.055 U       | 0.055 | 0.050 U             | 0.050 | 0.048 U       | 0.048 | 0.053 U       | 0.053 | 0.048 U      | 0.048 | 0.050 U      | 0.050 |
| Heptachlor                  | 0.4      | 0.055 U       | 0.055 | 0.050 U             | 0.050 | 0.048 U       | 0.048 | 0.053 U       | 0.053 | 0.048 U      | 0.048 | 0.050 U      | 0.050 |
| Aldrin                      | 0.04     | 0.055 U       | 0.055 | 0.050 U             | 0.050 | 0.048 U       | 0.048 | 0.053 U       | 0.053 | 0.048 U      | 0.048 | 0.050 U      | 0.050 |
| Heptachlor epoxide          | 0.2      | 0.055 U       | 0.055 | 0.050 U             | 0.050 | 0.048 U       | 0.048 | 0.053 U       | 0.053 | 0.048 U      | 0.048 | 0.050 U      | 0.050 |
| Endosulfan I                | 0.4      | 0.055 U       | 0.055 | 0.050 U             | 0.050 | 0.048 U       | 0.048 | 0.053 U       | 0.053 | 0.048 U      | 0.048 | 0.050 U      | 0.050 |
| Dieldrin                    | 0.03     | 0.11 U        | 0.11  | 0.10 U              | 0.10  | 0.096 U       | 0.096 | 0.11 U        | 0.11  | 0.096 U      | 0.096 | 0.10 U       | 0.10  |
| 4,4'-DDE                    | 0.1      | 0.11 U        | 0.11  | 0.10 U              | 0.10  | 0.096 U       | 0.096 | 0.11 U        | 0.11  | 0.096 U      | 0.096 | 0.10 U       | 0.10  |
| Endrin                      | 2        | 0.11 U        | 0.11  | 0.10 U              | 0.10  | 0.096 U       | 0.096 | 0.11 U        | 0.11  | 0.096 U      | 0.096 | 0.10 U       | 0.10  |
| Endosulfan II               | 0.4      | 0.11 U        | 0.11  | 0.10 U              | 0.10  | 0.096 U       | 0.096 | 0.11 U        | 0.11  | 0.096 U      | 0.096 | 0.10 U       | 0.10  |
| 4,4'-DDD                    | 0.1      | 0.11 U        | 0.11  | 0.10 U              | 0.10  | 0.096 U       | 0.096 | 0.11 U        | 0.11  | 0.096 U      | 0.096 | 0.10 U       | 0.10  |
| Endosulfan sulfate          | 0.4      | 0.11 U        | 0.11  | 0.10 U              | 0.10  | 0.096 U       | 0.096 | 0.11 U        | 0.11  | 0.096 U      | 0.096 | 0.10 U       | 0.10  |
| 4,4'-DDT                    | 0.1      | 0.11 U        | 0.11  | 0.10 U              | 0.10  | 0.096 U       | 0.096 | 0.11 U        | 0.11  | 0.096 U      | 0.096 | 0.10 U       | 0.10  |
| Methoxychlor                | 40       | 0.55 U        | 0.55  | 0.50 U              | 0.50  | 0.48 U        | 0.48  | 0.53 U        | 0.53  | 0.48 U       | 0.48  | 0.50 U       | 0.50  |
| Endrin ketone               |          | 0.11 U        | 0.11  | 0.10 U              | 0.10  | 0.096 U       | 0.096 | 0.11 U        | 0.11  | 0.096 U      | 0.096 | 0.10 U       | 0.10  |
| Endrin aldehyde             |          | 0.11 U        | 0.11  | 0.10 U              | 0.10  | 0.096 U       | 0.096 | 0.11 U        | 0.11  | 0.096 U      | 0.096 | 0.10 U       | 0.10  |
| alpha-Chlordane             |          | 0.055 U       | 0.055 | 0.050 U             | 0.050 | 0.048 U       | 0.048 | 0.053 U       | 0.053 | 0.048 U      | 0.048 | 0.050 U      | 0.050 |
| gamma-Chlordane             | 0.5      | 0.055 U       | 0.055 | 0.050 U             | 0.050 | 0.048 U       | 0.048 | 0.053 U       | 0.053 | 0.048 U      | 0.048 | 0.050 U      | 0.050 |
| Toxaphene                   | 3        | 5.5 U         | 5.5   | 5.0 U               | 5.0   | 4.8 U         | 4.8   | 5.3 U         | 5.3   | 4.8 U        | 4.8   | 5.0 U        | 5.0   |
| Aroclor-1016                | 2        | 1.1 U         | 1.1   | 1.0 U               | 1.0   | 0.96 U        | 0.96  | 1.1 U         | 1.1   | 0.96 U       | 0.96  | 1.0 U        | 1.0   |
| Aroclor-1221                | 2        | 2.2 U         | 2.2   | 2.0 U               | 2.0   | 1.9 U         | 1.9   | 2.1 U         | 2.1   | 1.9 U        | 1.9   | 2.0 U        | 2.0   |
| Aroclor-1232                | 2        | 1.1 U         | 1.1   | 1.0 U               | 1.0   | 0.96 U        | 0.96  | 1.1 U         | 1.1   | 0.96 U       | 0.96  | 1.0 U        | 1.0   |
| Aroclor-1242                | 2        | 1.1 U         | 1.1   | 1.0 U               | 1.0   | 0.96 U        | 0.96  | 1.1 U         | 1.1   | 0.96 U       | 0.96  | 1.0 U        | 1.0   |
| Aroclor-1248                | 2        | 1.1 U         | 1.1   | 1.0 U               | 1.0   | 0.96 U        | 0.96  | 1.1 U         | 1.1   | 0.96 U       | 0.96  | 1.0 U        | 1.0   |
| Aroclor-1254                | 2        | 1.1 U         | 1.1   | 1.0 U               | 1.0   | 0.96 U        | 0.96  | 1.1 U         | 1.1   | 0.96 U       | 0.96  | 1.0 U        | 1.0   |
| Aroclor-1260                | 2        | 1.1 U         | 1.1   | 1.0 U               | 1.0   | 0.96 U        | 0.96  | 1.1 U         | 1.1   | 0.96 U       | 0.96  | 1.0 U        | 1.0   |
| Method: TCL Pesticides/PCBs |          |               |       |                     |       |               |       |               |       |              |       |              |       |

**CHARLES WOOD  
GROUNDWATER PESTICIDES/PCBS**

| Geographical Location      |          | B7           |       | B7           |       | B8           |       | B8           |       | B9           |       | B9           |       |
|----------------------------|----------|--------------|-------|--------------|-------|--------------|-------|--------------|-------|--------------|-------|--------------|-------|
| Sample                     |          | B7-MW07B-A01 |       | B7-MW07B-A02 |       | B8-MW08B-A01 |       | B8-MW08B-A02 |       | B9-MW09B-A01 |       | B9-MW09B-A02 |       |
| Sample Type                |          |              |       |              |       |              |       |              |       |              |       |              |       |
| Batch#                     |          | 9502G198     |       | 9503G617     |       | 9502G198     |       | 9503G641     |       | 9502G198     |       | 9503G617     |       |
| Prep#                      |          | 95GP0119     |       | 95GP0219     |       | 95GP0119     |       | 95GP0229     |       | 95GP0119     |       | 95GP0219     |       |
| RFW#                       |          | 005          |       | 003          |       | 007          |       | 003          |       | 001          |       | 001          |       |
| Sample Depth               |          |              |       |              |       |              |       |              |       |              |       |              |       |
| Dilution Factor            |          | 1.00         |       | 1.00         |       | 1.00         |       | 1.00         |       | 1.00         |       | 1.00         |       |
| Matrix                     |          | water        |       | water        |       | water        |       | water        |       | water        |       | water        |       |
| Units                      | ug/l     | ug/l         |       | ug/l         |       | ug/l         |       | ug/l         |       | ug/l         |       | ug/l         |       |
| Sampling Date              |          | 2/15/95      |       | 3/7/95       |       | 2/15/95      |       | 3/8/95       |       | 2/15/95      |       | 3/7/95       |       |
| Analysis Date              |          | 3/4/95       |       | 3/17/95      |       | 3/7/95       |       | 3/19/95      |       | 3/4/95       |       | 3/17/95      |       |
| Analysis                   | Standard | Analytical   | CRDL  | Analytical   | CRDL  | Analytical   | CRDL  | Analytical   | CRDL  | Analytical   | CRDL  | Analytical   | CRDL  |
|                            |          | Result       |       | Result       |       | Result       |       | Result       |       | Result       |       | Result       |       |
| alpha-BHC                  | 0.02     | 0.060 U      | 0.060 | 0.051 U      | 0.051 | 0.060 U      | 0.060 | 0.052 U      | 0.052 | 0.047 U      | 0.047 | 0.048 U      | 0.048 |
| beta-BHC                   | 0.2      | 0.060 U      | 0.060 | 0.051 U      | 0.051 | 0.060 U      | 0.060 | 0.052 U      | 0.052 | 0.047 U      | 0.047 | 0.048 U      | 0.048 |
| delta-BHC                  |          | 0.060 U      | 0.060 | 0.051 U      | 0.051 | 0.060 U      | 0.060 | 0.052 U      | 0.052 | 0.047 U      | 0.047 | 0.048 U      | 0.048 |
| gamma-BHC (Lindane)        | 0.2      | 0.060 U      | 0.060 | 0.051 U      | 0.051 | 0.060 U      | 0.060 | 0.052 U      | 0.052 | 0.047 U      | 0.047 | 0.048 U      | 0.048 |
| Heptachlor                 | 0.4      | 0.060 U      | 0.060 | 0.051 U      | 0.051 | 0.060 U      | 0.060 | 0.052 U      | 0.052 | 0.047 U      | 0.047 | 0.048 U      | 0.048 |
| Aldrin                     | 0.04     | 0.060 U      | 0.060 | 0.051 U      | 0.051 | 0.060 U      | 0.060 | 0.052 U      | 0.052 | 0.047 U      | 0.047 | 0.048 U      | 0.048 |
| Heptachlor epoxide         | 0.2      | 0.060 U      | 0.060 | 0.051 U      | 0.051 | 0.060 U      | 0.060 | 0.052 U      | 0.052 | 0.047 U      | 0.047 | 0.048 U      | 0.048 |
| Endosulfan I               | 0.4      | 0.060 U      | 0.060 | 0.051 U      | 0.051 | 0.060 U      | 0.060 | 0.052 U      | 0.052 | 0.047 U      | 0.047 | 0.048 U      | 0.048 |
| Dieldrin                   | 0.03     | 0.12 U       | 0.12  | 0.10 U       | 0.10  | 0.12 U       | 0.12  | 0.10 U       | 0.10  | 0.094 U      | 0.094 | 0.095 U      | 0.095 |
| 4,4'-DDE                   | 0.1      | 0.12 U       | 0.12  | 0.10 U       | 0.10  | 0.12 U       | 0.12  | 0.10 U       | 0.10  | 0.094 U      | 0.094 | 0.095 U      | 0.095 |
| Endrin                     | 2        | 0.12 U       | 0.12  | 0.10 U       | 0.10  | 0.12 U       | 0.12  | 0.10 U       | 0.10  | 0.094 U      | 0.094 | 0.095 U      | 0.095 |
| Endosulfan II              | 0.4      | 0.12 U       | 0.12  | 0.10 U       | 0.10  | 0.12 U       | 0.12  | 0.10 U       | 0.10  | 0.094 U      | 0.094 | 0.095 U      | 0.095 |
| 4,4'-DDD                   | 0.1      | 0.12 U       | 0.12  | 0.10 U       | 0.10  | 0.12 U       | 0.12  | 0.10 U       | 0.10  | 0.094 U      | 0.094 | 0.095 U      | 0.095 |
| Endosulfan sulfate         | 0.4      | 0.12 U       | 0.12  | 0.10 U       | 0.10  | 0.12 U       | 0.12  | 0.10 U       | 0.10  | 0.094 U      | 0.094 | 0.095 U      | 0.095 |
| 4,4'-DDT                   | 0.1      | 0.12 U       | 0.12  | 0.10 U       | 0.10  | 0.12 U       | 0.12  | 0.10 U       | 0.10  | 0.094 U      | 0.094 | 0.095 U      | 0.095 |
| Methoxychlor               | 40       | 0.60 U       | 0.60  | 0.51 U       | 0.51  | 0.60 U       | 0.60  | 0.52 U       | 0.52  | 0.47 U       | 0.47  | 0.48 U       | 0.48  |
| Endrin ketone              |          | 0.12 U       | 0.12  | 0.10 U       | 0.10  | 0.12 U       | 0.12  | 0.10 U       | 0.10  | 0.094 U      | 0.094 | 0.095 U      | 0.095 |
| Endrin aldehyde            |          | 0.12 U       | 0.12  | 0.10 U       | 0.10  | 0.12 U       | 0.12  | 0.10 U       | 0.10  | 0.094 U      | 0.094 | 0.095 U      | 0.095 |
| alpha-Chlordane            |          | 0.060 U      | 0.060 | 0.051 U      | 0.051 | 0.060 U      | 0.060 | 0.052 U      | 0.052 | 0.047 U      | 0.047 | 0.048 U      | 0.048 |
| gamma-Chlordane            | 0.5      | 0.060 U      | 0.060 | 0.051 U      | 0.051 | 0.060 U      | 0.060 | 0.052 U      | 0.052 | 0.047 U      | 0.047 | 0.048 U      | 0.048 |
| Toxaphene                  | 3        | 6.0 U        | 6.0   | 5.1 U        | 5.1   | 6.0 U        | 6.0   | 5.2 U        | 5.2   | 4.7 U        | 4.7   | 4.8 U        | 4.8   |
| Aroclor-1016               | 2        | 1.2 U        | 1.2   | 1.0 U        | 1.0   | 1.2 U        | 1.2   | 1.0 U        | 1.0   | 0.94 U       | 0.94  | 0.95 U       | 0.95  |
| Aroclor-1221               | 2        | 2.4 U        | 2.4   | 2.0 U        | 2.0   | 2.4 U        | 2.4   | 2.1 U        | 2.1   | 1.9 U        | 1.9   | 1.9 U        | 1.9   |
| Aroclor-1232               | 2        | 1.2 U        | 1.2   | 1.0 U        | 1.0   | 1.2 U        | 1.2   | 1.0 U        | 1.0   | 0.94 U       | 0.94  | 0.95 U       | 0.95  |
| Aroclor-1242               | 2        | 1.2 U        | 1.2   | 1.0 U        | 1.0   | 1.2 U        | 1.2   | 1.0 U        | 1.0   | 0.94 U       | 0.94  | 0.95 U       | 0.95  |
| Aroclor-1248               | 2        | 1.2 U        | 1.2   | 1.0 U        | 1.0   | 1.2 U        | 1.2   | 1.0 U        | 1.0   | 0.94 U       | 0.94  | 0.95 U       | 0.95  |
| Aroclor-1254               | 2        | 1.2 U        | 1.2   | 1.0 U        | 1.0   | 1.2 U        | 1.2   | 1.0 U        | 1.0   | 0.94 U       | 0.94  | 0.95 U       | 0.95  |
| Aroclor-1260               | 2        | 1.2 U        | 1.2   | 1.0 U        | 1.0   | 1.2 U        | 1.2   | 1.0 U        | 1.0   | 0.94 U       | 0.94  | 0.95 U       | 0.95  |
| Method:TCL Pesticides/PCBs |          |              |       |              |       |              |       |              |       |              |       |              |       |

**CHARLES WOOD  
GROUNDWATER PESTICIDES/PCBS**

| Geographical Location       |          | B10           |       | B10           |       | B10                 |       | B10                 |       |
|-----------------------------|----------|---------------|-------|---------------|-------|---------------------|-------|---------------------|-------|
| Sample                      |          | B10-MW10B-A01 |       | B10-MW10B-A02 |       | B10-MW10B-E01       |       | B10-MW10B-E02       |       |
| Sample Type                 |          |               |       |               |       | Field Rinsate Blank |       | Field Rinsate Blank |       |
| Batch#                      |          | 9502G198      |       | 9503G641      |       | 9502G198            |       | 9503G641            |       |
| Prep#                       |          | 95GP0119      |       | 95GP0229      |       | 95GP0119            |       | 95GP0229            |       |
| RFW#                        |          | 009           |       | 005           |       | 012                 |       | 008                 |       |
| Sample Depth                |          |               |       |               |       |                     |       |                     |       |
| Dilution Factor             |          | 1.00          |       | 1.00          |       | 1.00                |       | 1.00                |       |
| Matrix                      |          | water         |       | water         |       | water               |       | water               |       |
| Units                       | ug/l     | ug/l          |       | ug/l          |       | ug/l                |       | ug/l                |       |
| Sampling Date               |          | 2/15/95       |       | 3/8/95        |       | 2/13/95             |       | 3/8/95              |       |
| Analysis Date               |          | 3/7/95        |       | 3/19/95       |       | 3/7/95              |       | 3/19/95             |       |
| Analysis                    | Standard | Analytical    | CRDL  | Analytical    | CRDL  | Analytical          | CRDL  | Analytical          | CRDL  |
|                             |          | Result        |       | Result        |       | Result              |       | Result              |       |
| alpha-BHC                   | 0.02     | 0.051 U       | 0.051 | 0.061 U       | 0.061 | 0.052 U             | 0.052 | 0.055 U             | 0.055 |
| beta-BHC                    | 0.2      | 0.051 U       | 0.051 | 0.061 U       | 0.061 | 0.052 U             | 0.052 | 0.055 U             | 0.055 |
| delta-BHC                   |          | 0.051 U       | 0.051 | 0.061 U       | 0.061 | 0.052 U             | 0.052 | 0.055 U             | 0.055 |
| gamma-BHC (Lindane)         | 0.2      | 0.051 U       | 0.051 | 0.061 U       | 0.061 | 0.052 U             | 0.052 | 0.055 U             | 0.055 |
| Heptachlor                  | 0.4      | 0.051 U       | 0.051 | 0.061 U       | 0.061 | 0.052 U             | 0.052 | 0.055 U             | 0.055 |
| Aldrin                      | 0.04     | 0.051 U       | 0.051 | 0.061 U       | 0.061 | 0.052 U             | 0.052 | 0.055 U             | 0.055 |
| Heptachlor epoxide          | 0.2      | 0.051 U       | 0.051 | 0.061 U       | 0.061 | 0.052 U             | 0.052 | 0.055 U             | 0.055 |
| Endosulfan I                | 0.4      | 0.051 U       | 0.051 | 0.061 U       | 0.061 | 0.052 U             | 0.052 | 0.055 U             | 0.055 |
| Dieldrin                    | 0.03     | 0.10 U        | 0.10  | 0.12 U        | 0.12  | 0.10 U              | 0.10  | 0.11 U              | 0.11  |
| 4,4'-DDE                    | 0.1      | 0.10 U        | 0.10  | 0.12 U        | 0.12  | 0.10 U              | 0.10  | 0.11 U              | 0.11  |
| Endrin                      | 2        | 0.10 U        | 0.10  | 0.12 U        | 0.12  | 0.10 U              | 0.10  | 0.11 U              | 0.11  |
| Endosulfan II               | 0.4      | 0.10 U        | 0.10  | 0.12 U        | 0.12  | 0.10 U              | 0.10  | 0.11 U              | 0.11  |
| 4,4'-DDD                    | 0.1      | 0.10 U        | 0.10  | 0.12 U        | 0.12  | 0.10 U              | 0.10  | 0.11 U              | 0.11  |
| Endosulfan sulfate          | 0.4      | 0.10 U        | 0.10  | 0.12 U        | 0.12  | 0.10 U              | 0.10  | 0.11 U              | 0.11  |
| 4,4'-DDT                    | 0.1      | 0.10 U        | 0.10  | 0.12 U        | 0.12  | 0.10 U              | 0.10  | 0.11 U              | 0.11  |
| Methoxychlor                | 40       | 0.51 U        | 0.51  | 0.61 U        | 0.61  | 0.52 U              | 0.52  | 0.55 U              | 0.55  |
| Endrin ketone               |          | 0.10 U        | 0.10  | 0.12 U        | 0.12  | 0.10 U              | 0.10  | 0.11 U              | 0.11  |
| Endrin aldehyde             |          | 0.10 U        | 0.10  | 0.12 U        | 0.12  | 0.10 U              | 0.10  | 0.11 U              | 0.11  |
| alpha-Chlordane             |          | 0.051 U       | 0.051 | 0.061 U       | 0.061 | 0.052 U             | 0.052 | 0.055 U             | 0.055 |
| gamma-Chlordane             | 0.5      | 0.051 U       | 0.051 | 0.061 U       | 0.061 | 0.052 U             | 0.052 | 0.055 U             | 0.055 |
| Toxaphene                   | 3        | 5.1 U         | 5.1   | 6.1 U         | 6.1   | 5.2 U               | 5.2   | 5.5 U               | 5.5   |
| Aroclor-1016                | 2        | 1.0 U         | 1.0   | 1.2 U         | 1.2   | 1.0 U               | 1.0   | 1.1 U               | 1.1   |
| Aroclor-1221                | 2        | 2.0 U         | 2.0   | 2.4 U         | 2.4   | 2.1 U               | 2.1   | 2.2 U               | 2.2   |
| Aroclor-1232                | 2        | 1.0 U         | 1.0   | 1.2 U         | 1.2   | 1.0 U               | 1.0   | 1.1 U               | 1.1   |
| Aroclor-1242                | 2        | 1.0 U         | 1.0   | 1.2 U         | 1.2   | 1.0 U               | 1.0   | 1.1 U               | 1.1   |
| Aroclor-1248                | 2        | 1.0 U         | 1.0   | 1.2 U         | 1.2   | 1.0 U               | 1.0   | 1.1 U               | 1.1   |
| Aroclor-1254                | 2        | 1.0 U         | 1.0   | 1.2 U         | 1.2   | 1.0 U               | 1.0   | 1.1 U               | 1.1   |
| Aroclor-1260                | 2        | 1.0 U         | 1.0   | 1.2 U         | 1.2   | 1.0 U               | 1.0   | 1.1 U               | 1.1   |
| Method: TCL Pesticides/PCBs |          |               |       |               |       |                     |       |                     |       |

**CHARLES WOOD  
TRANSFORMERS - PCBs**

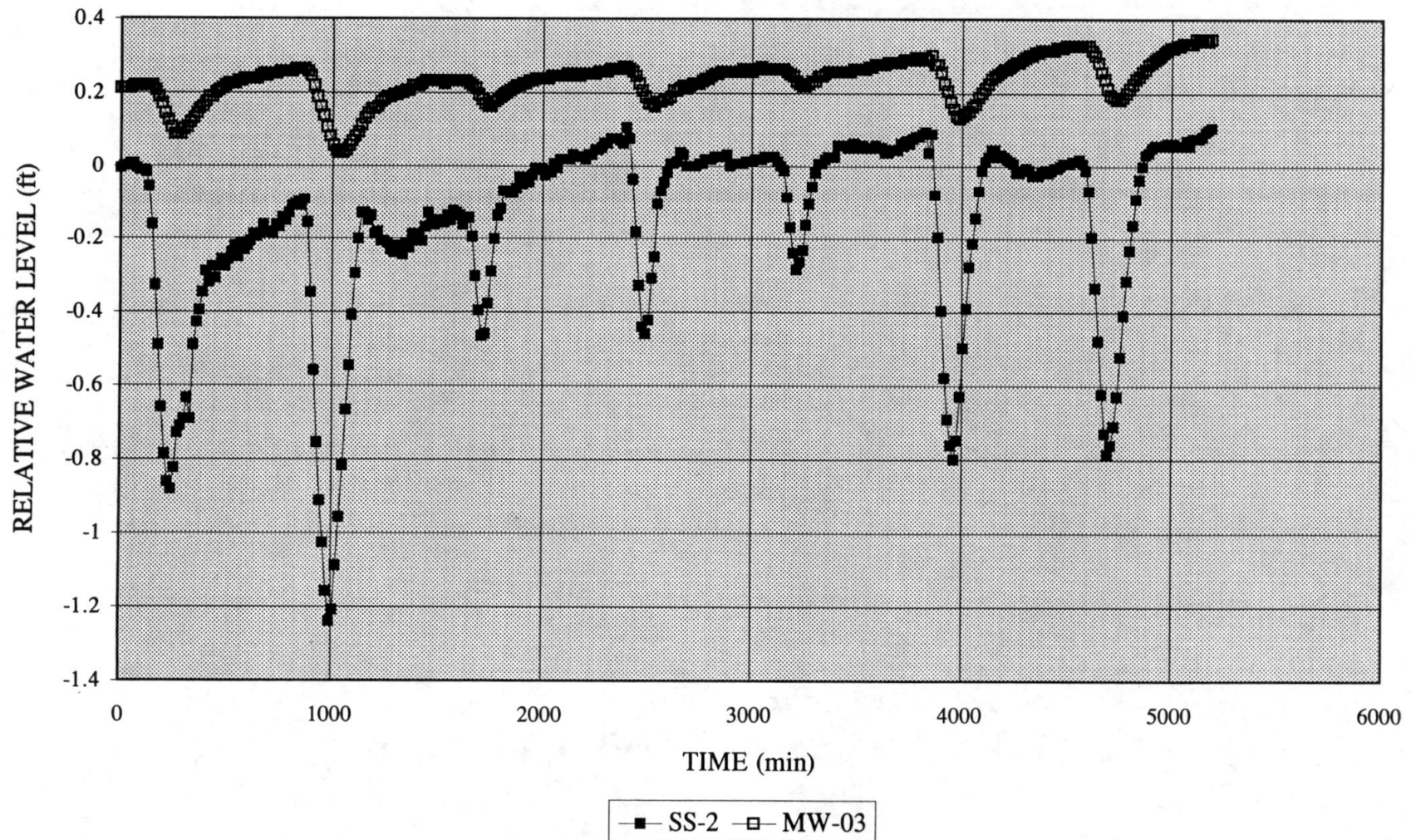
|                       |          |               |           |               |           |               |           |               |           |               |           |               |           |
|-----------------------|----------|---------------|-----------|---------------|-----------|---------------|-----------|---------------|-----------|---------------|-----------|---------------|-----------|
| Geographical Location |          | Building 2000 |           | Building 2000 |           | Building 2000 |           | Building 2000 |           | Building 2018 |           | Building 2018 |           |
| Sample                |          | CW07-TR01-A01 |           | CW07-TR02-A01 |           | CW07-TR03-A01 |           | CW07-TR04-A01 |           | CW07-TR05-A01 |           | CW07-TR06-A01 |           |
| Sample Type           |          | Transformer   |           | Transformer   |           | Transformer   |           | Transformer   |           | Transformer   |           | Transformer   |           |
| Batch#                |          | 9411G831      |           | 9411G831      |           | 9411G831      |           | 9411G831      |           | 9412G854      |           | 9412G854      |           |
| Prep#                 |          | 94GP1024      |           | 94GP1024      |           | 94GP1024      |           | 94GP1024      |           | 94GP1024      |           | 94GP1024      |           |
| RFW#                  |          | 001           |           | 002           |           | 003           |           | 004           |           | 017           |           | 018           |           |
| Sample Depth          |          |               |           |               |           |               |           |               |           |               |           |               |           |
| Dilution Factor       |          | 250           |           | 50.0          |           | 50.0          |           | 10.0          |           | 50.0          |           | 5.0           |           |
| Matrix                |          | soil          |           | soil          |           | soil          |           | soil          |           | soil          |           | soil          |           |
| Units                 | mg/kg    | mg/kg         |           | mg/kg         |           | mg/kg         |           | mg/kg         |           | mg/kg         |           | mg/kg         |           |
| Sampling Date         |          | 11/29/94      |           | 11/29/94      |           | 11/29/94      |           | 11/29/94      |           | 11/30/91      |           | 11/30/91      |           |
| Analysis Date         |          | 12/21/94      |           | 12/20/94      |           | 12/20/94      |           | 12/21/94      |           | 12/22/94      |           | 12/21/94      |           |
| Analysis              | Standard | Analytical    | Reporting | Analytical    | Reporting | Analytical    | Reporting | Analytical    | Reporting | Analytical    | Reporting | Analytical    | Reporting |
|                       |          | Result        | Limit     | Result        | Limit     | Result        | Limit     | Result        | Limit     | Result        | Limit     | Result        | Limit     |
| % Solids              |          | 85.8          | 0.10      | 89.0          | 0.10      | 90.3          | 0.10      | 85.7          | 0.10      | 86.4          | 0.10      | 92.5          | 0.10      |
| Aroclor-1016          | 0.055    | 23 U          | 23        | 4.4 U         | 4.4       | 4.4 U         | 4.4       | 0.91 U        | 0.91      | 4.50          | 4.5       | 0.42 U        | 0.42      |
| Aroclor-1221          | 0.055    | 23 U          | 23        | 4.4 U         | 4.4       | 4.4 U         | 4.4       | 0.91 U        | 0.91      | 4.50          | 4.5       | 0.42 U        | 0.42      |
| Aroclor-1232          | 0.055    | 23 U          | 23        | 4.4 U         | 4.4       | 4.4 U         | 4.4       | 0.91 U        | 0.91      | 4.50          | 4.5       | 0.42 U        | 0.42      |
| Aroclor-1242          | 0.055    | 23 U          | 23        | 4.4 U         | 4.4       | 4.4 U         | 4.4       | 0.91 U        | 0.91      | 4.50          | 4.5       | 0.42 U        | 0.42      |
| Aroclor-1248          | 0.055    | 23 U          | 23        | 4.4 U         | 4.4       | 4.4 U         | 4.4       | 0.91 U        | 0.91      | 4.50          | 4.5       | 0.42 U        | 0.42      |
| Aroclor-1254          | 0.055    | 46 U          | 46        | 8.8 U         | 8.8       | 8.7 U         | 8.8       | 1.8 U         | 1.8       | 9 U           | 9         | 0.84 U        | 0.84      |
| Aroclor-1260          | 0.055    | 100           |           | 27            |           | 26            |           | 6.4           |           | 9 U           | 9         | 0.84 U        | 0.84      |
| Method: TCL PCBs      |          |               |           |               |           |               |           |               |           |               |           |               |           |

**CHARLES WOOD  
TRANSFORMERS - PCBs**

|                       |          |               |           |               |           |
|-----------------------|----------|---------------|-----------|---------------|-----------|
| Geographical Location |          | Building 2276 |           | Building 2276 |           |
| Sample                |          | CWAE-TR01-A01 |           | CWAE-TR01-C01 |           |
| Sample Type           |          | Transformer   |           | Duplicate     |           |
| Batch#                |          | 9412G854      |           | 9412G854      |           |
| Prep#                 |          | 94GP1024      |           | 94GTS467      |           |
| RFW#                  |          | 015           |           | 016           |           |
| Sample Depth          |          |               |           |               |           |
| Dilution Factor       |          | 2.5           |           | 0.5           |           |
| Matrix                |          | soil          |           | soil          |           |
| Units                 | mg/kg    | mg/kg         |           | mg/kg         |           |
| Sampling Date         |          | 11/30/94      |           | 11/30/94      |           |
| Analysis Date         |          | 12/22/94      |           | 12/21/94      |           |
| Analysis              | Standard | Analytical    | Reporting | Analytical    | Reporting |
|                       |          | Result        | Limit     | Result        | Limit     |
| % Solids              |          | 92.0          | 1.0       | 90.7          | 1.0       |
| Aroclor-1016          | 0.055    | 0.21 U        | 0.21      | 0.044 U       | 0.044     |
| Aroclor-1221          | 0.055    | 0.21 U        | 0.21      | 0.044 U       | 0.044     |
| Aroclor-1232          | 0.055    | 0.21 U        | 0.21      | 0.044 U       | 0.044     |
| Aroclor-1242          | 0.055    | 0.21 U        | 0.21      | 0.044 U       | 0.044     |
| Aroclor-1248          | 0.055    | 0.21 U        | 0.21      | 0.044 U       | 0.044     |
| Aroclor-1254          | 0.055    | 0.43 U        | 0.43      | 0.088 U       | 0.088     |
| Aroclor-1260          | 0.055    | 0.43 U        | 0.43      | 0.088 U       | 0.088     |
| Method: TCL PCBs      |          |               |           |               |           |

**APPENDIX E**  
**TIDAL MONITORING GRAPHS**

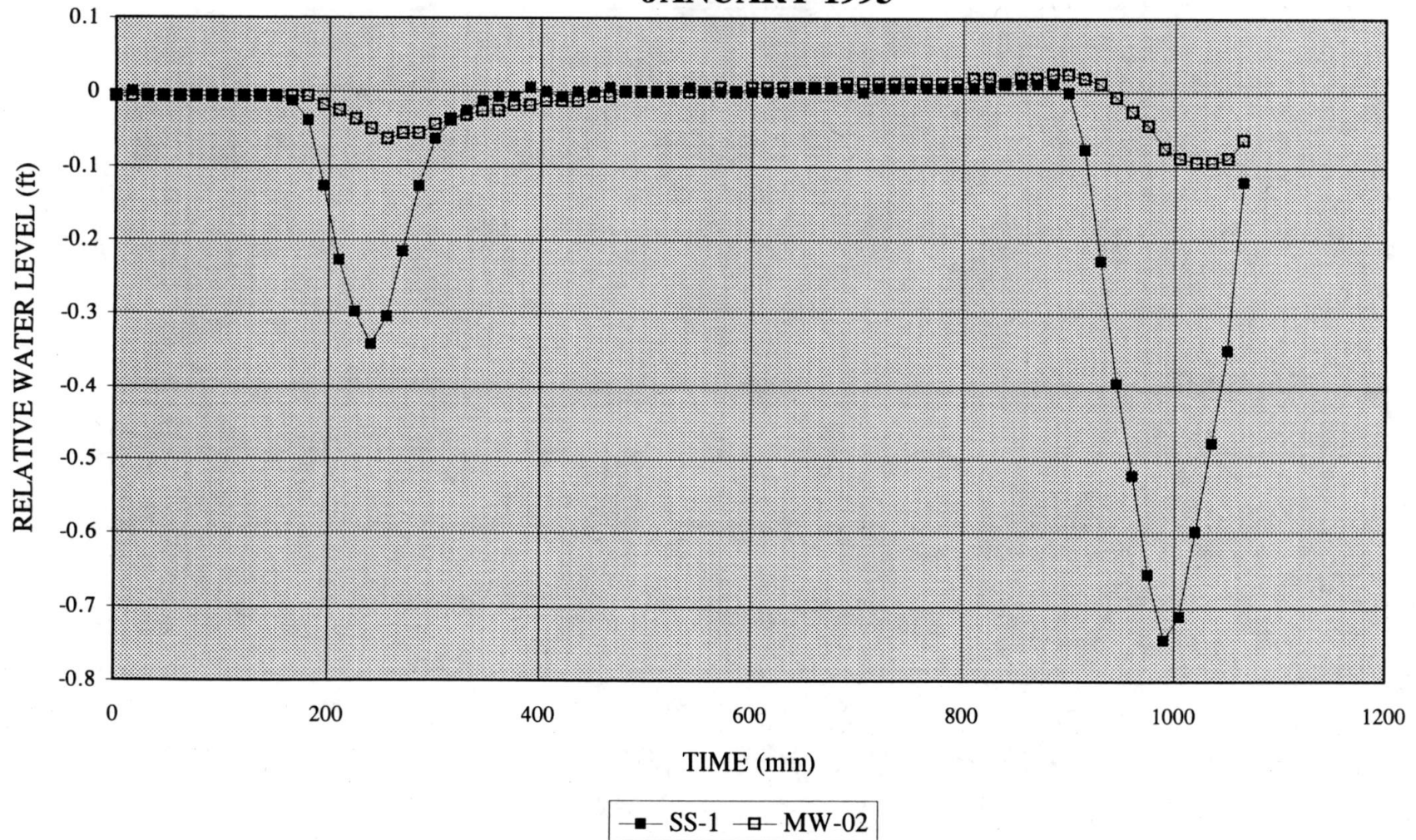
**USACE, FT. MONMOUTH  
TIDAL MONITORING STUDY (M-2)  
JANUARY 1995**



(-) negative value shows rise in water level  
(+) positive value shows fall in water level



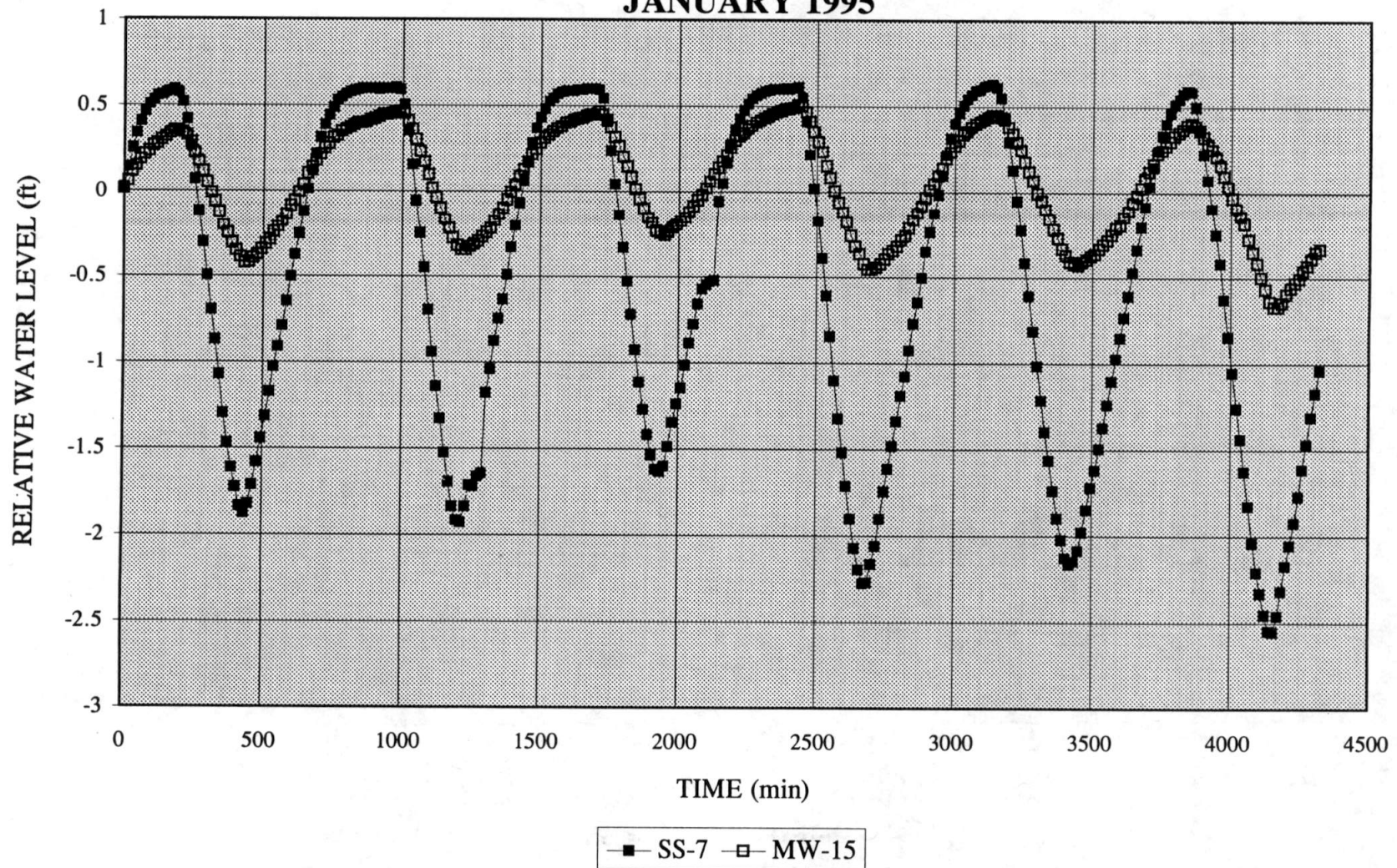
USACE, FT. MONMOUTH  
TIDAL MONITORING STUDY (M-2)  
JANUARY 1995



(-) negative value shows rise in water level  
(+) positive value shows fall in water level

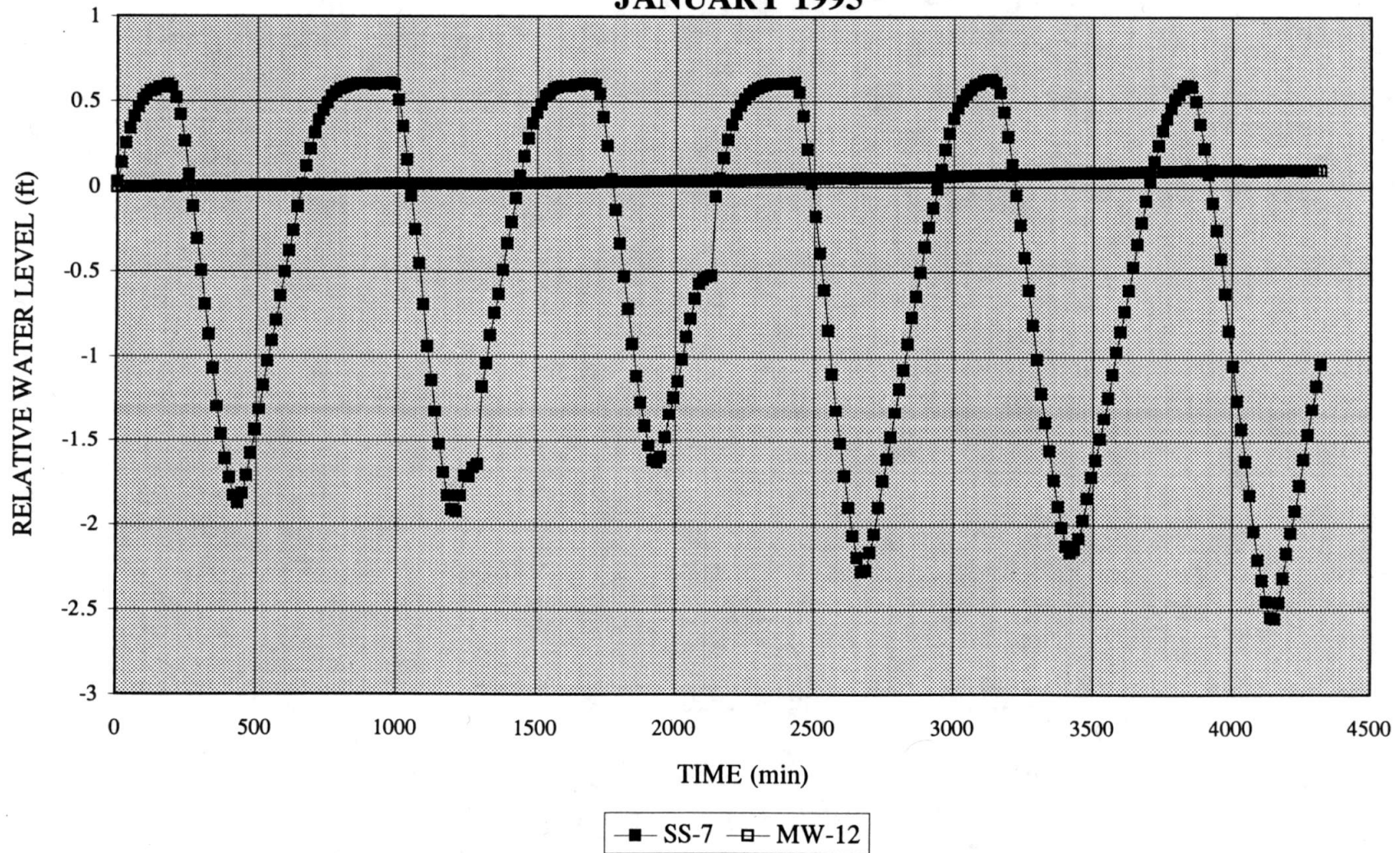


USACE, FT. MONMOUTH  
TIDAL MONITORING STUDY (M-8)  
JANUARY 1995



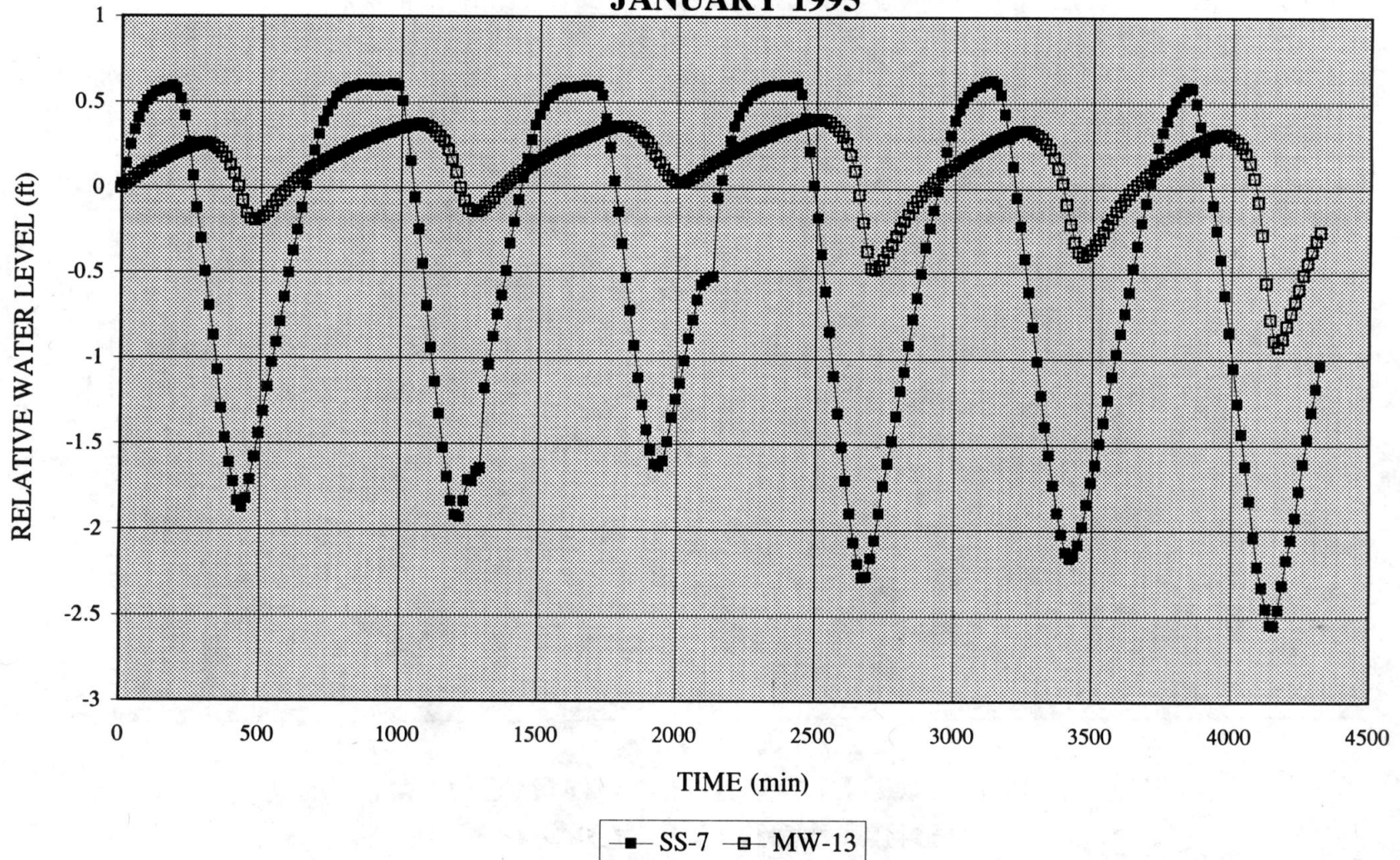
(-) negative value shows rise in water level  
(+) positive value shows fall in water level

USACE, FT. MONMOUTH  
TIDAL MONITORING STUDY (M-8)  
JANUARY 1995



(-) negative value shows rise in water level  
(+) positive value shows fall in water level

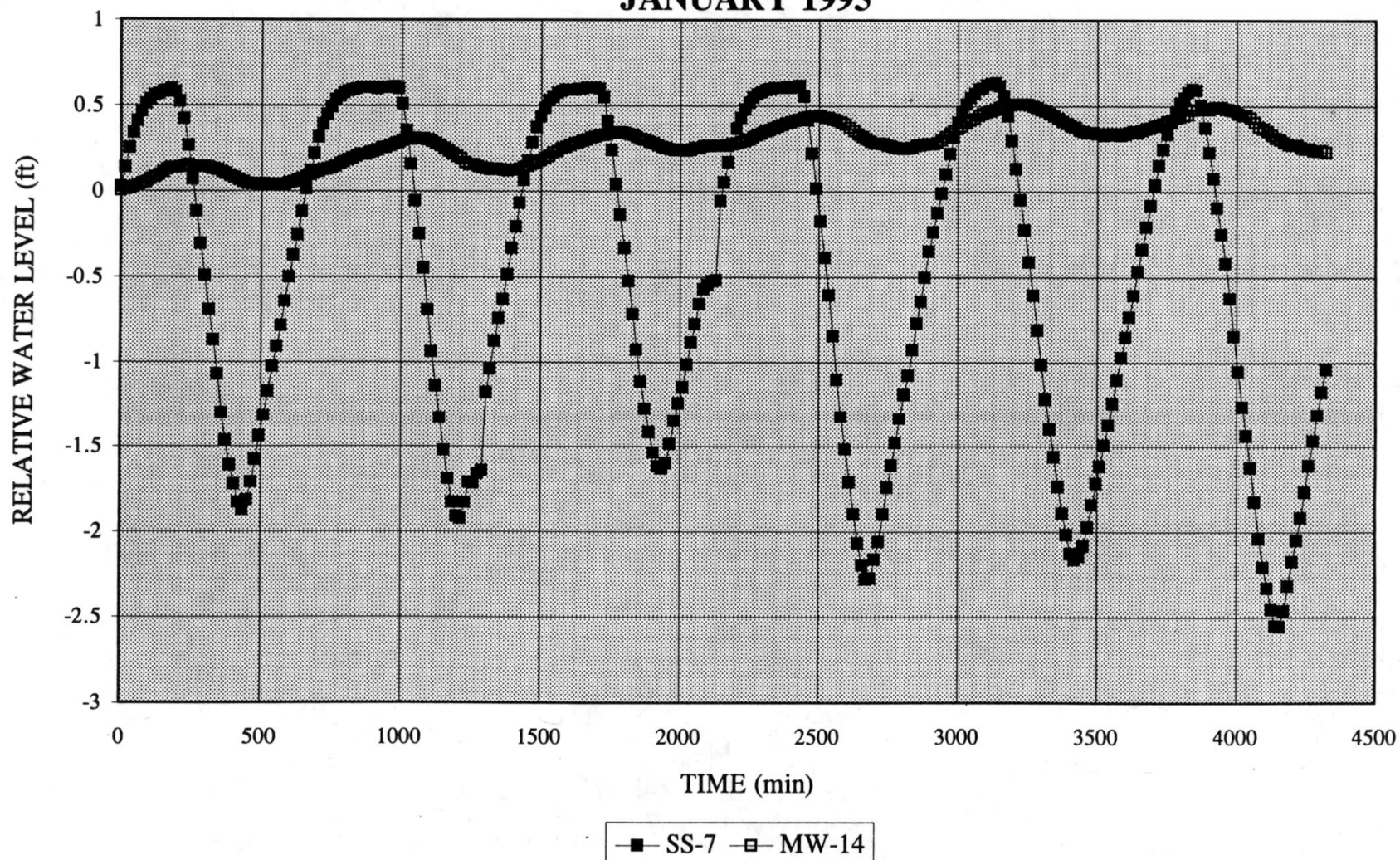
USACE, FT. MONMOUTH  
TIDAL MONITORING STUDY (M-8)  
JANUARY 1995



(-) negative value shows rise in water level  
(+) positive value shows fall in water level

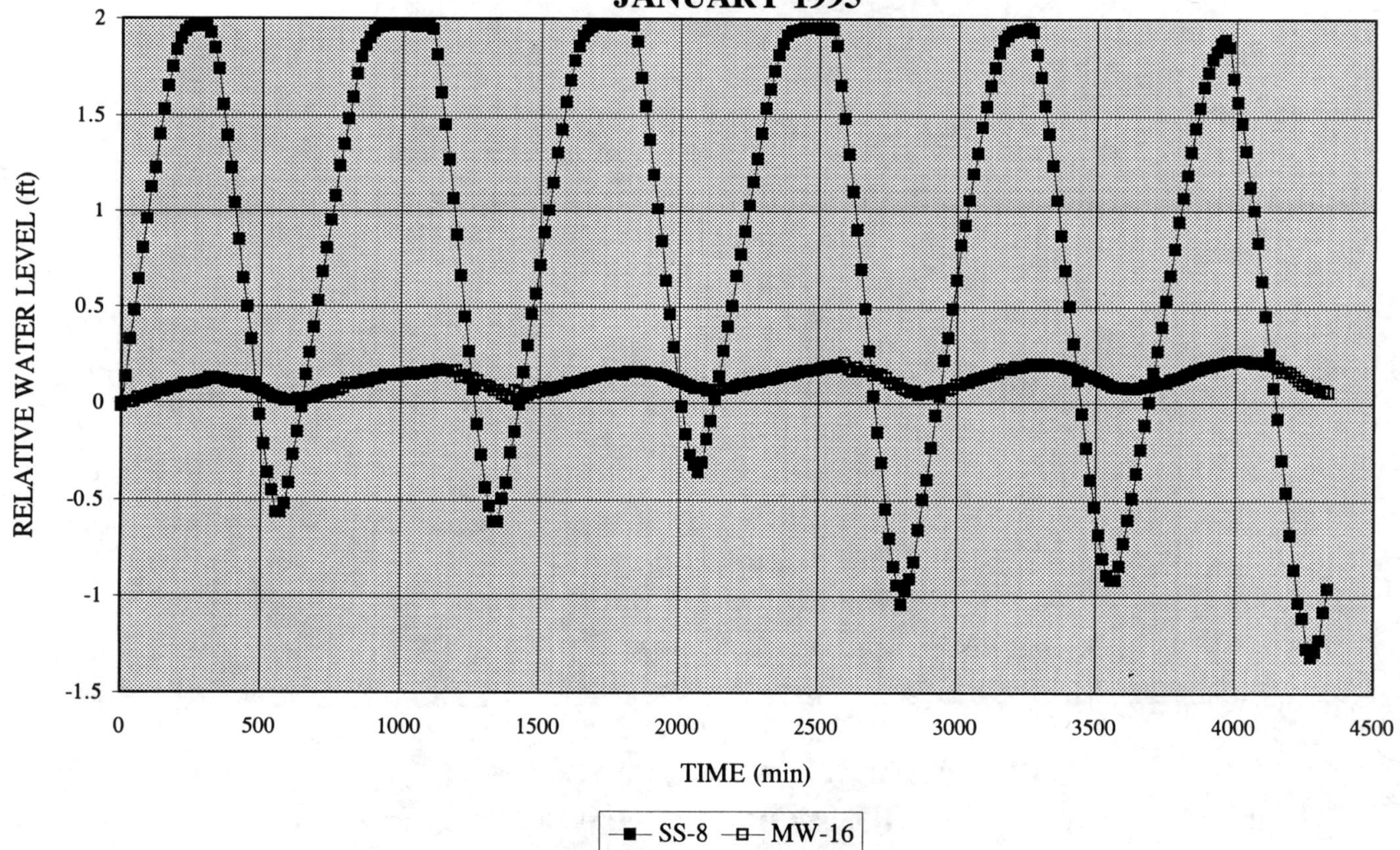


USACE, FT. MONMOUTH  
TIDAL MONITORING STUDY (M-8)  
JANUARY 1995



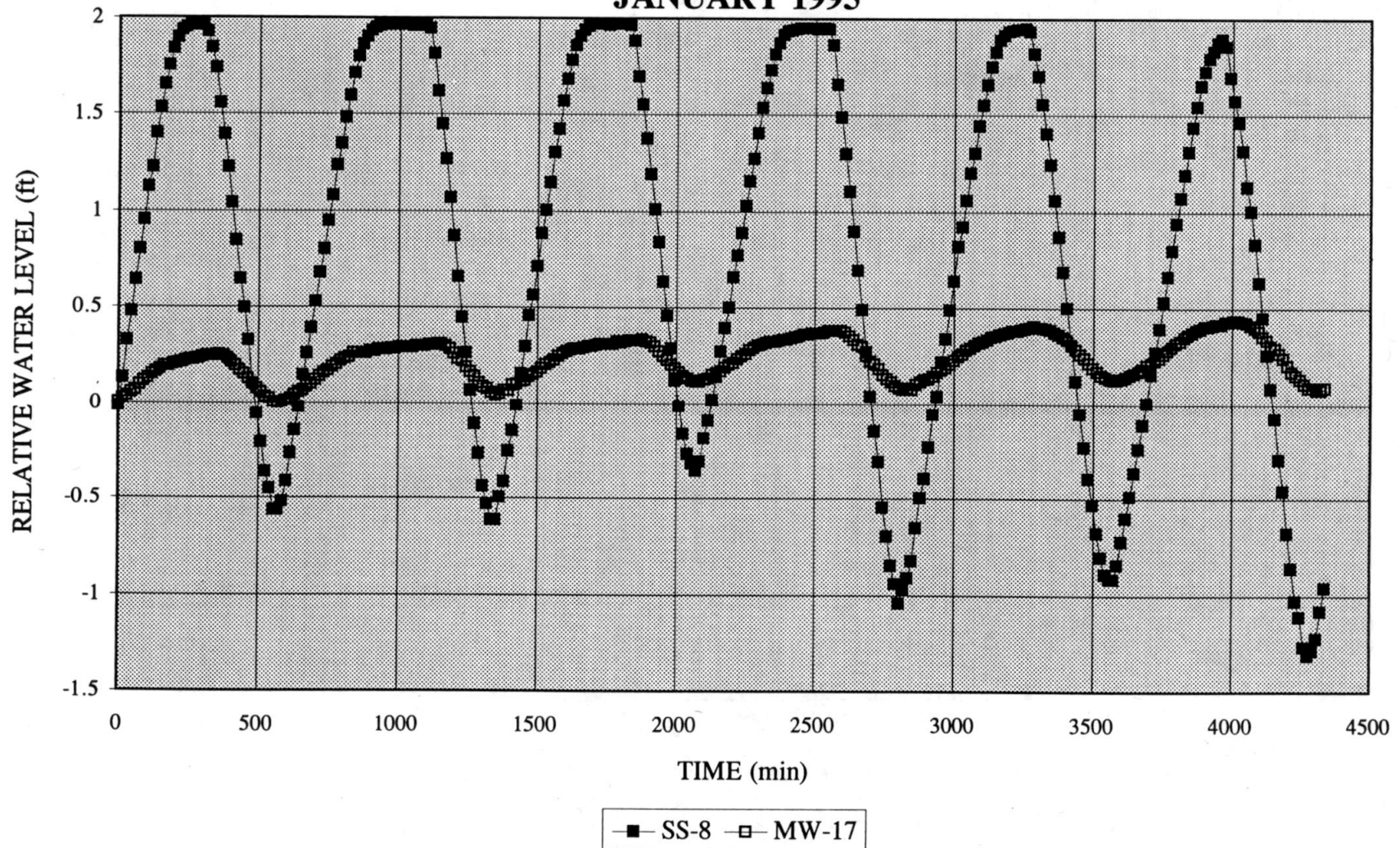
(-) negative value shows rise in water level  
(+) positive value shows fall in water level

USACE, FT. MONMOUTH  
TIDAL MONITORING STUDY (M-12)  
JANUARY 1995



(-) negative value shows rise in water level  
(+) positive value shows fall in water level

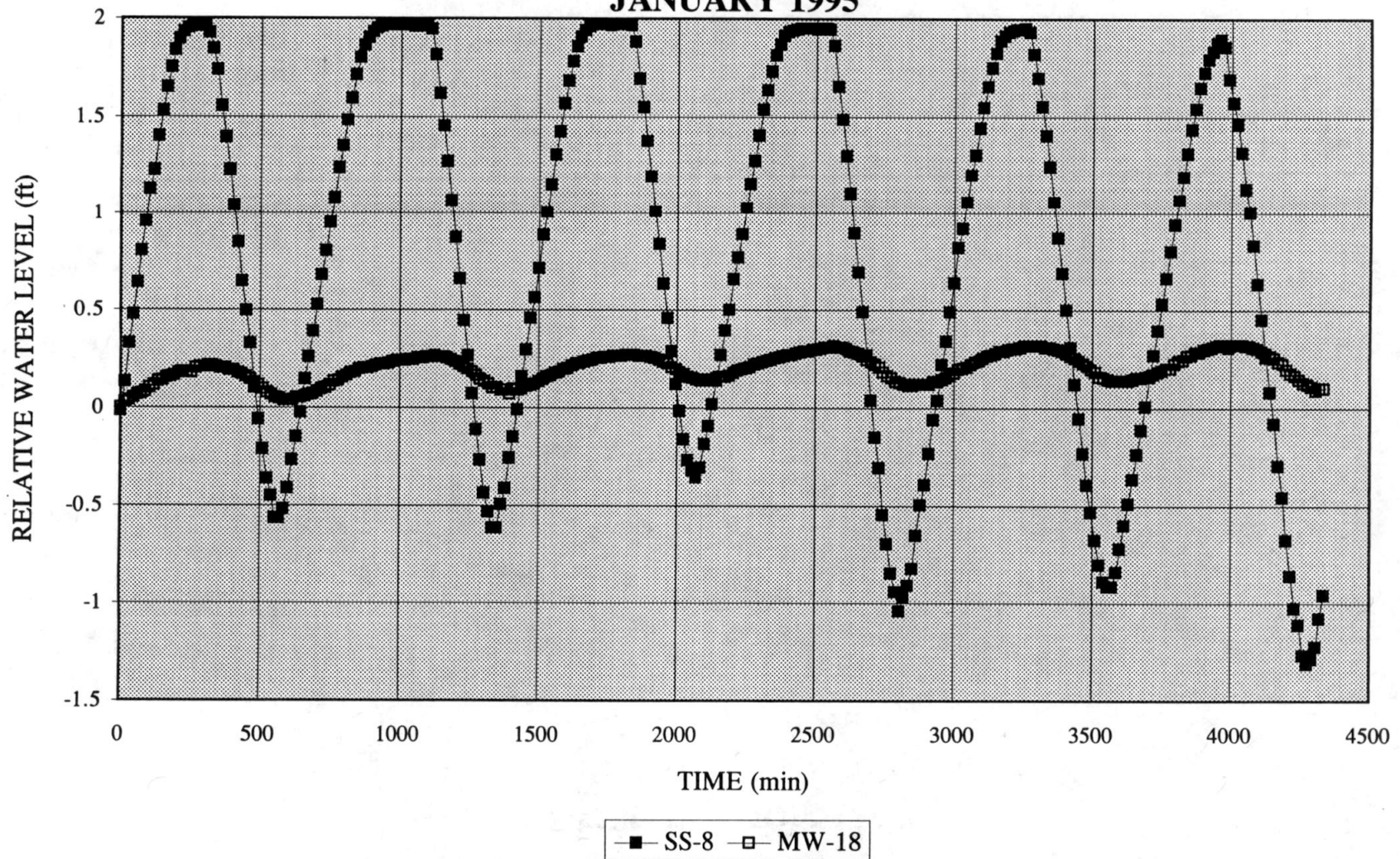
USACE, FT. MONMOUTH  
TIDAL MONITORING STUDY (M-12)  
JANUARY 1995



(-) negative value shows rise in water level  
(+) positive value shows fall in water level

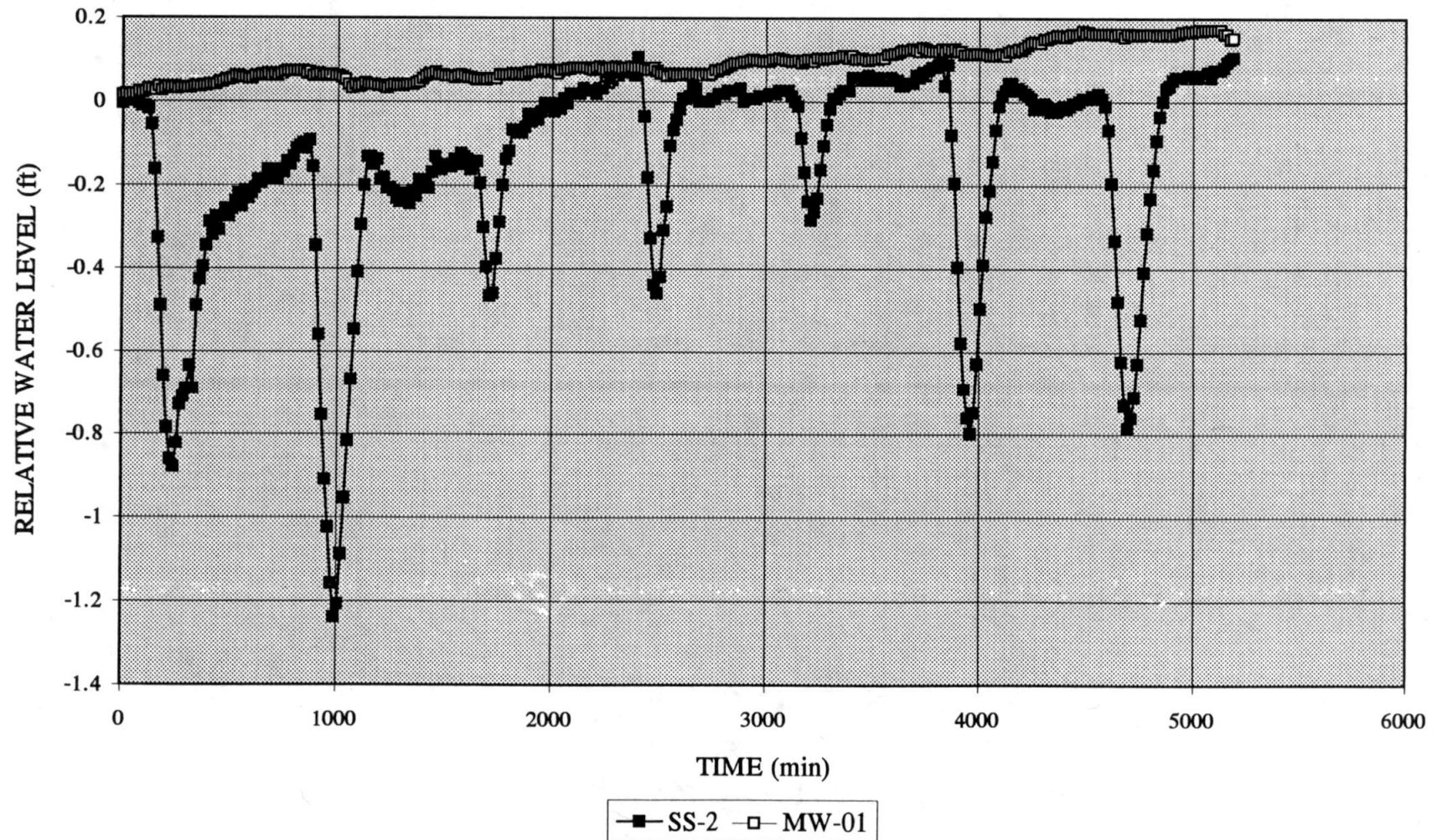


USACE, FT. MONMOUTH  
TIDAL MONITORING STUDY (M-12)  
JANUARY 1995



(-) negative value shows rise in water level  
(+) positive value shows fall in water level

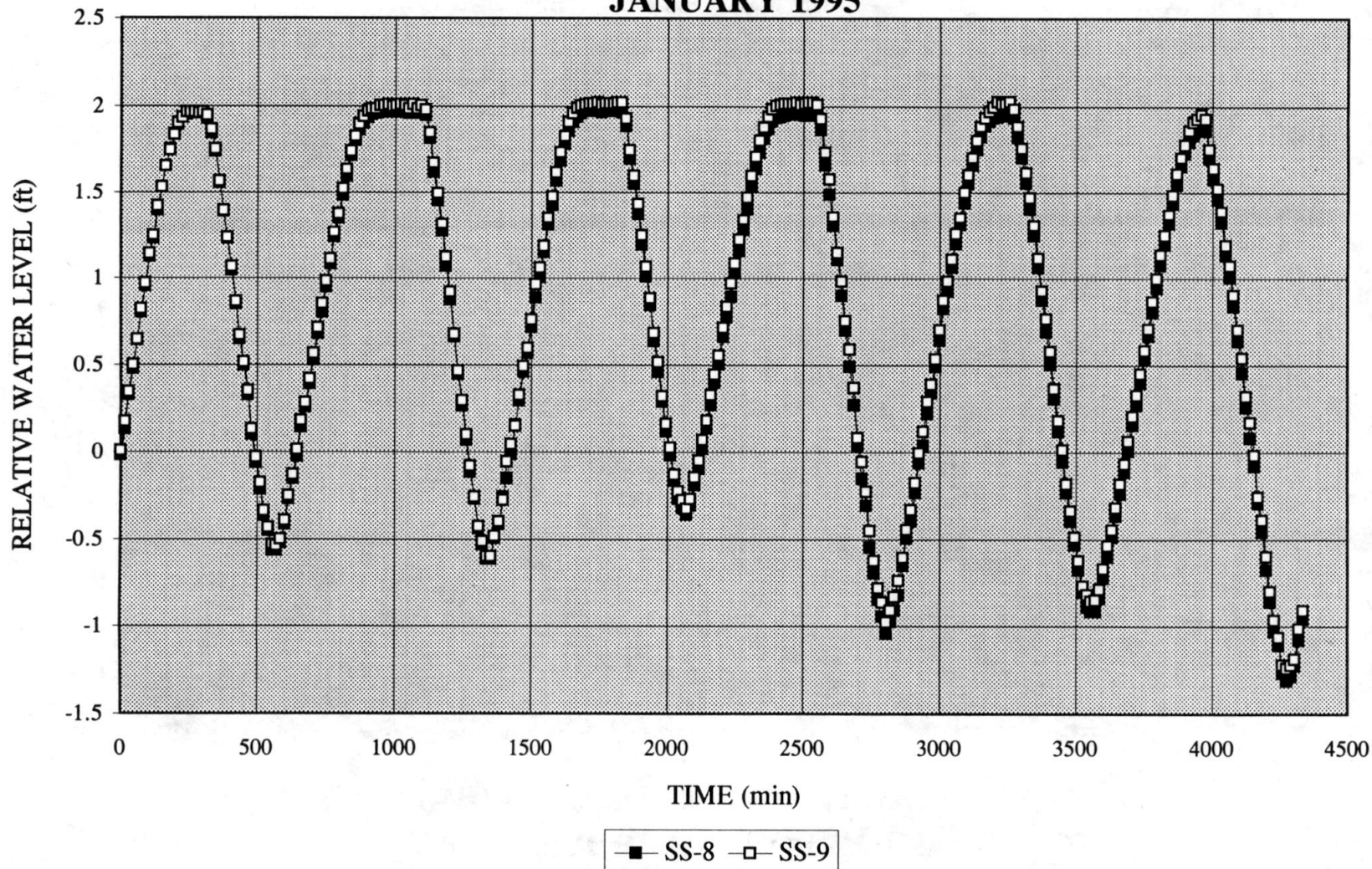
USACE, FT. MONMOUTH  
TIDAL MONITORING STUDY (M-12)  
JANUARY 1995



(-) negative value shows rise in water level  
(+) positive value shows fall in water level

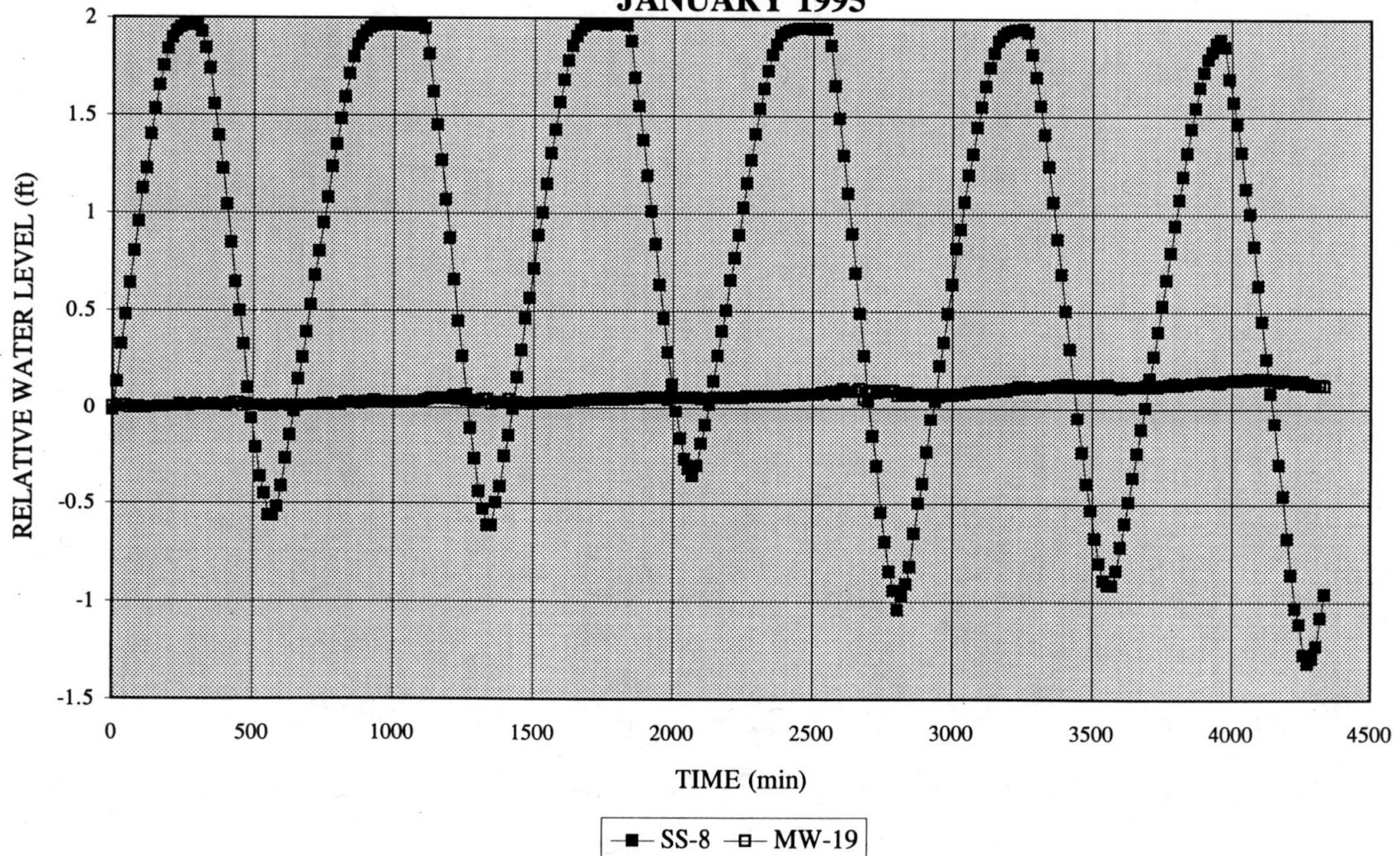


USACE, FT. MONMOUTH  
TIDAL MONITORING STUDY (M-12)  
JANUARY 1995



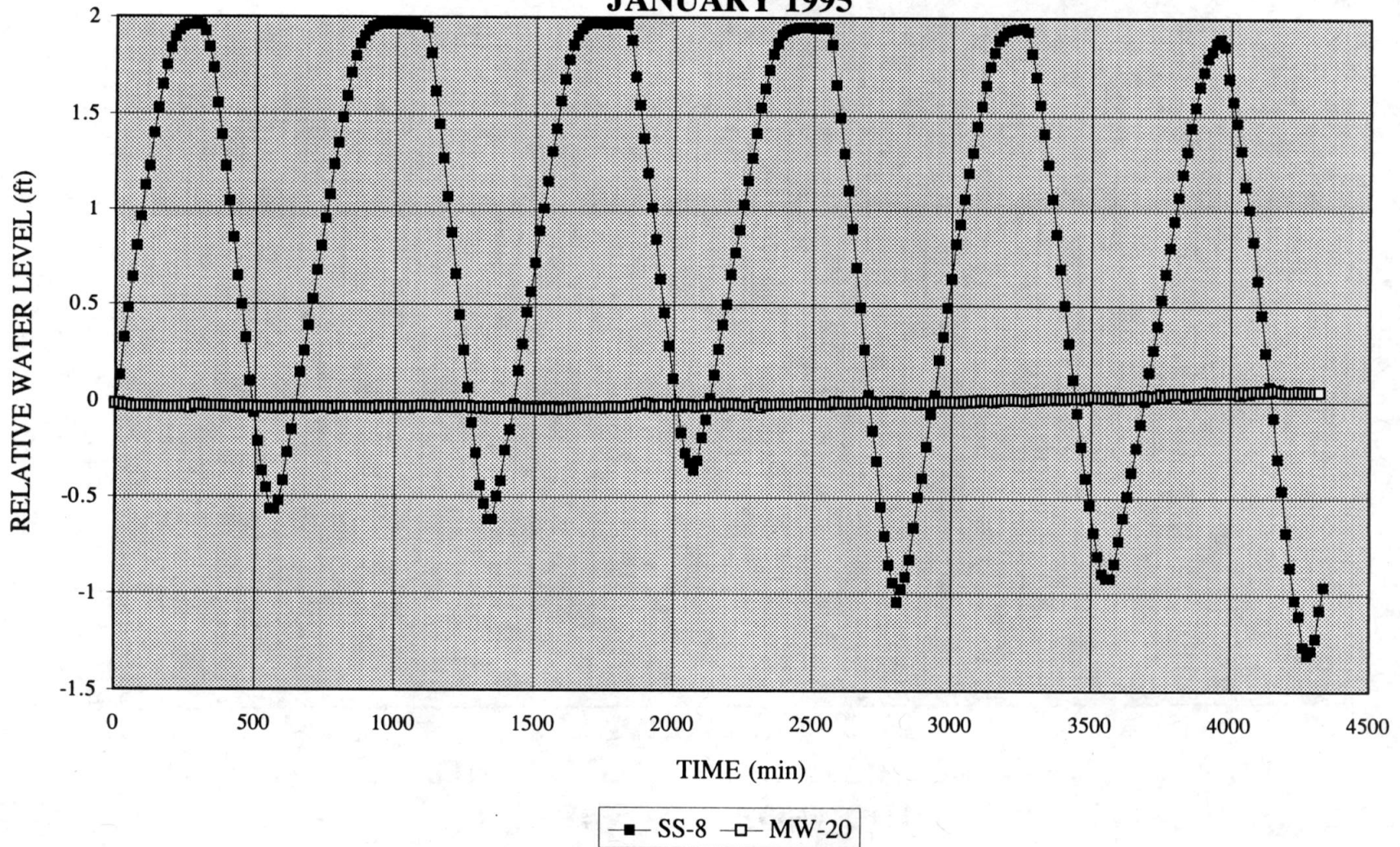
(-) negative value shows rise in water level  
(+) positive value shows fall in water level

USACE, FT. MONMOUTH  
TIDAL MONITORING STUDY (M-14)  
JANUARY 1995



(-) negative value shows rise in water level  
(+) positive value shows fall in water level

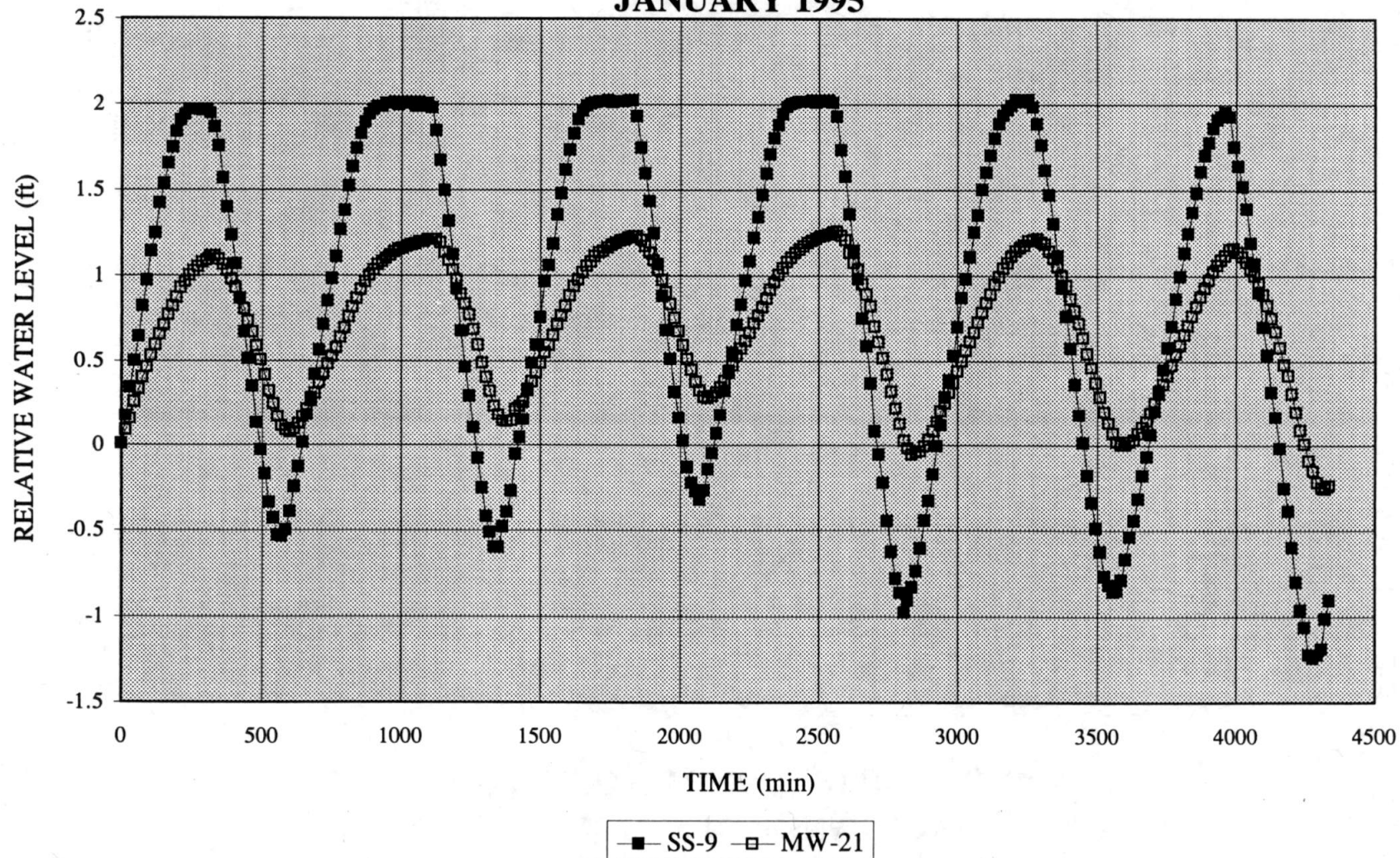
USACE, FT. MONMOUTH  
TIDAL MONITORING STUDY (M-14)  
JANUARY 1995



(-) negative value shows rise in water level  
(+) positive value shows fall in water level

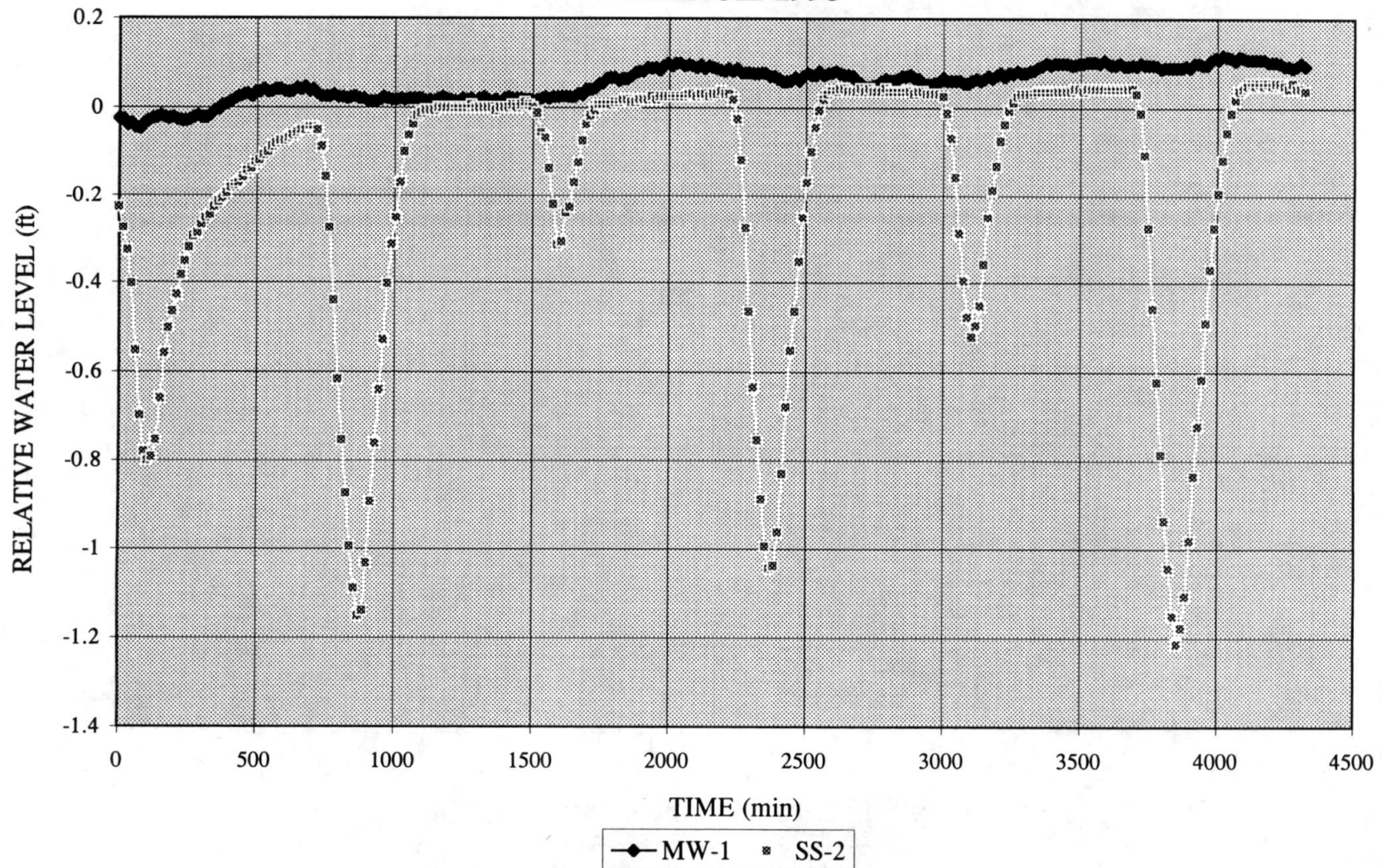


USACE, FT. MONMOUTH  
TIDAL MONITORING STUDY (M-14)  
JANUARY 1995



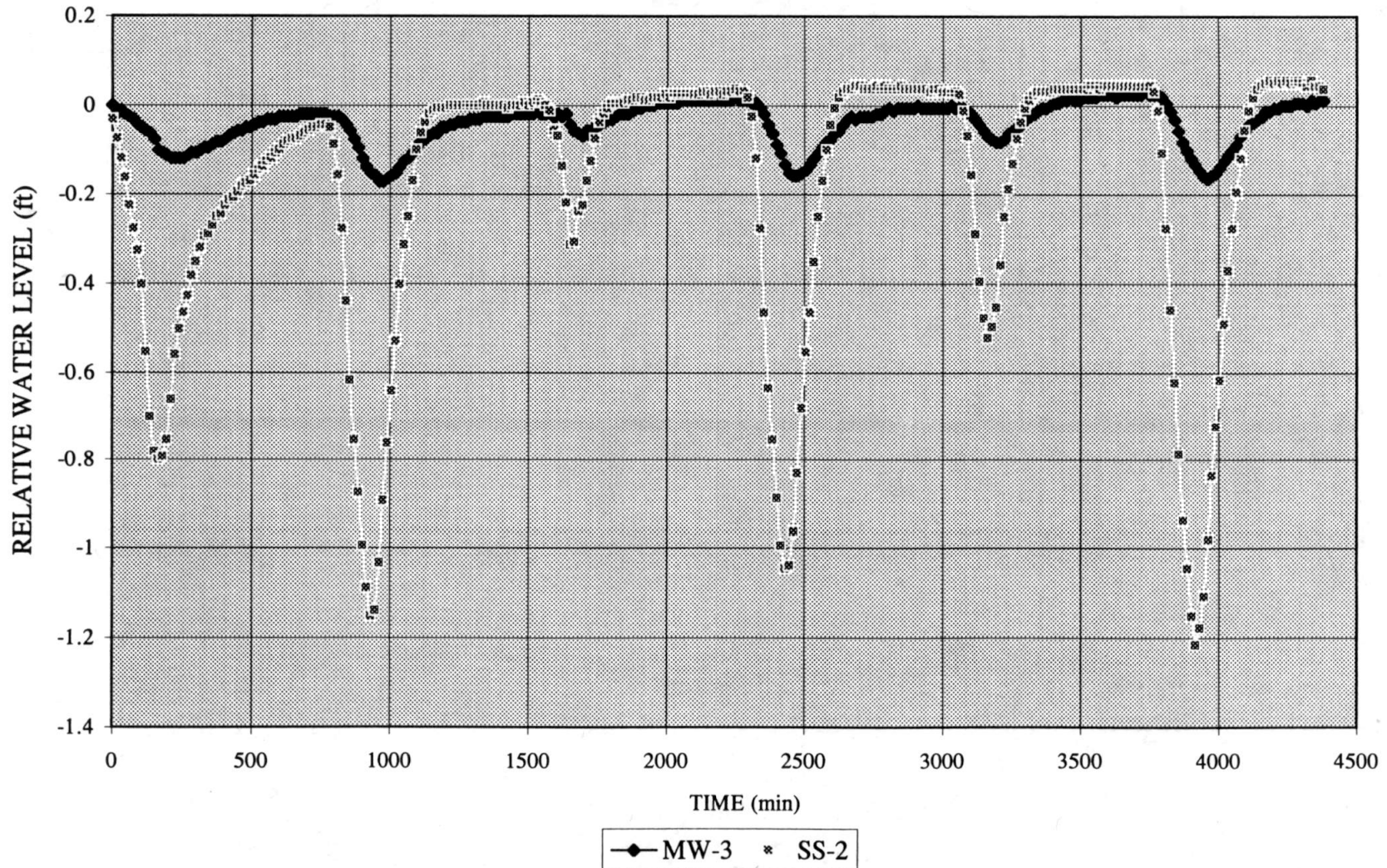
(-) negative value shows rise in water level  
(+) positive value shows fall in water level

USACE, FT. MONMOUTH  
TIDAL MONITORING STUDY (M-2)  
MARCH 1995



(-) negative value shows a rise in water level  
(+) positive value shows fall in water level

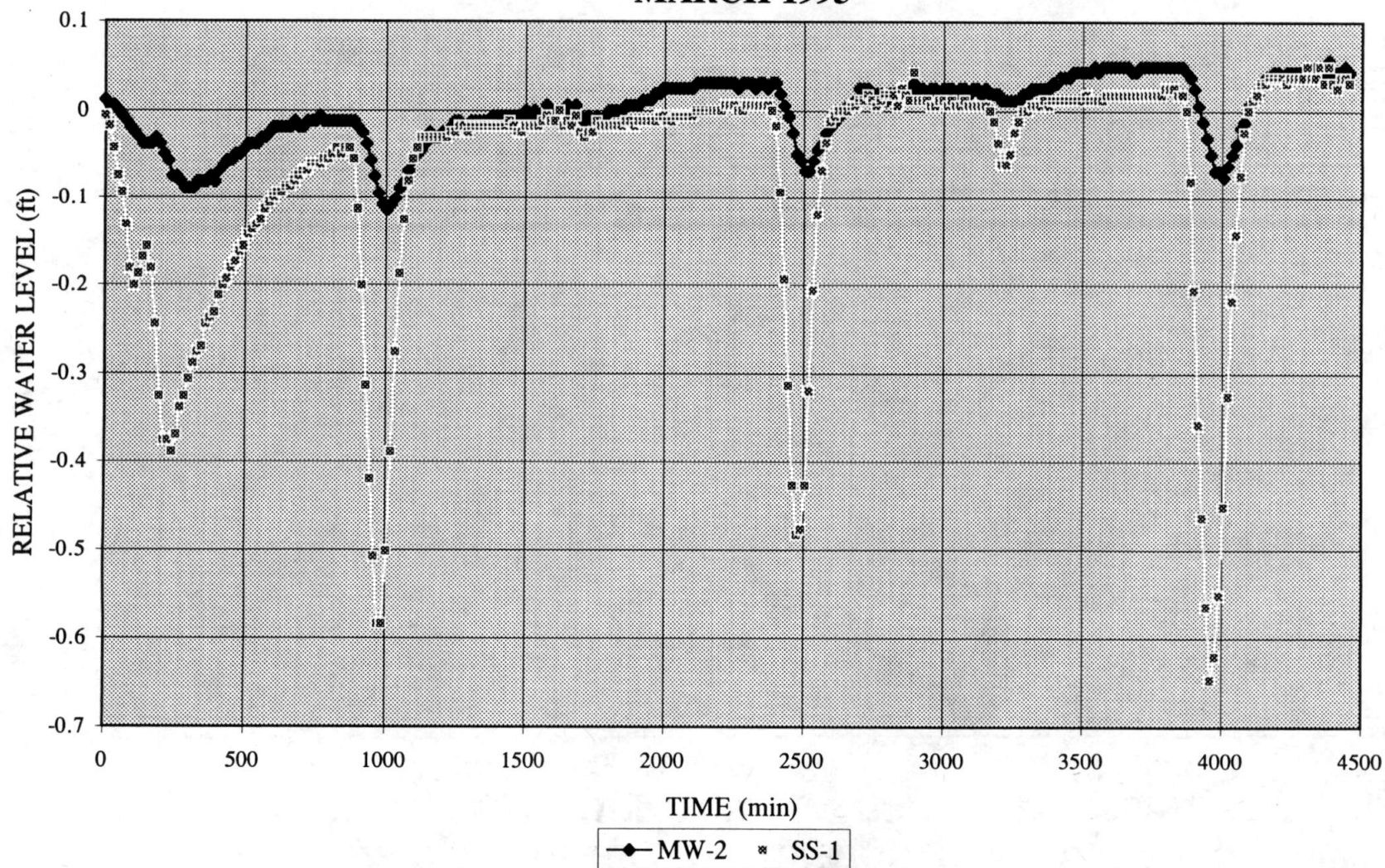
USACE, FT. MONMOUTH  
TIDAL MONITORING STUDY (M-2)  
MARCH 1995



(-) negative value shows rise in water level  
(+) positive value shows fall in water level

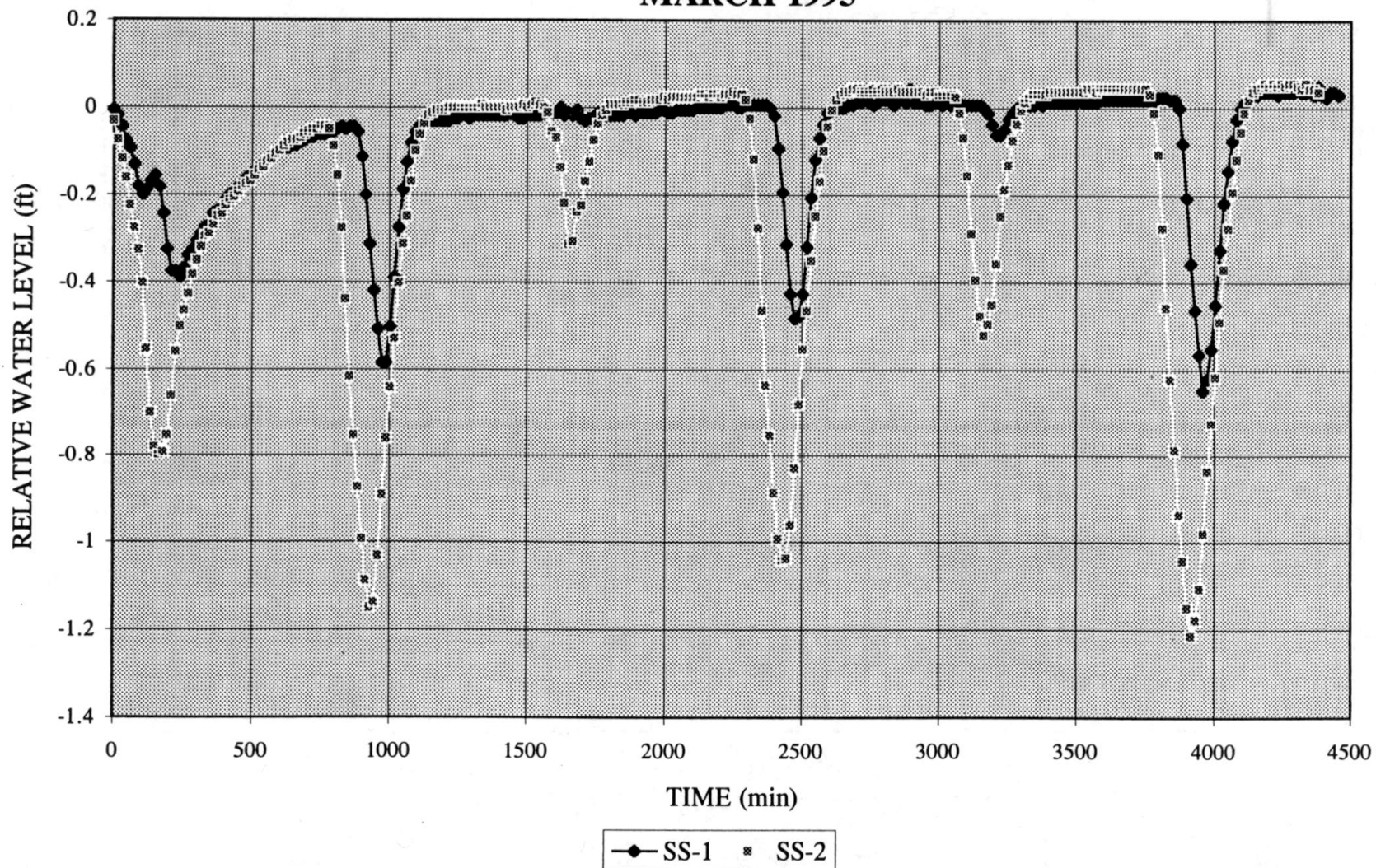


USACE, FT. MONMOUTH  
TIDAL MONITORING STUDY (M-2)  
MARCH 1995



(-) negative value shows rise in water level  
(+) positive value shows fall in water level

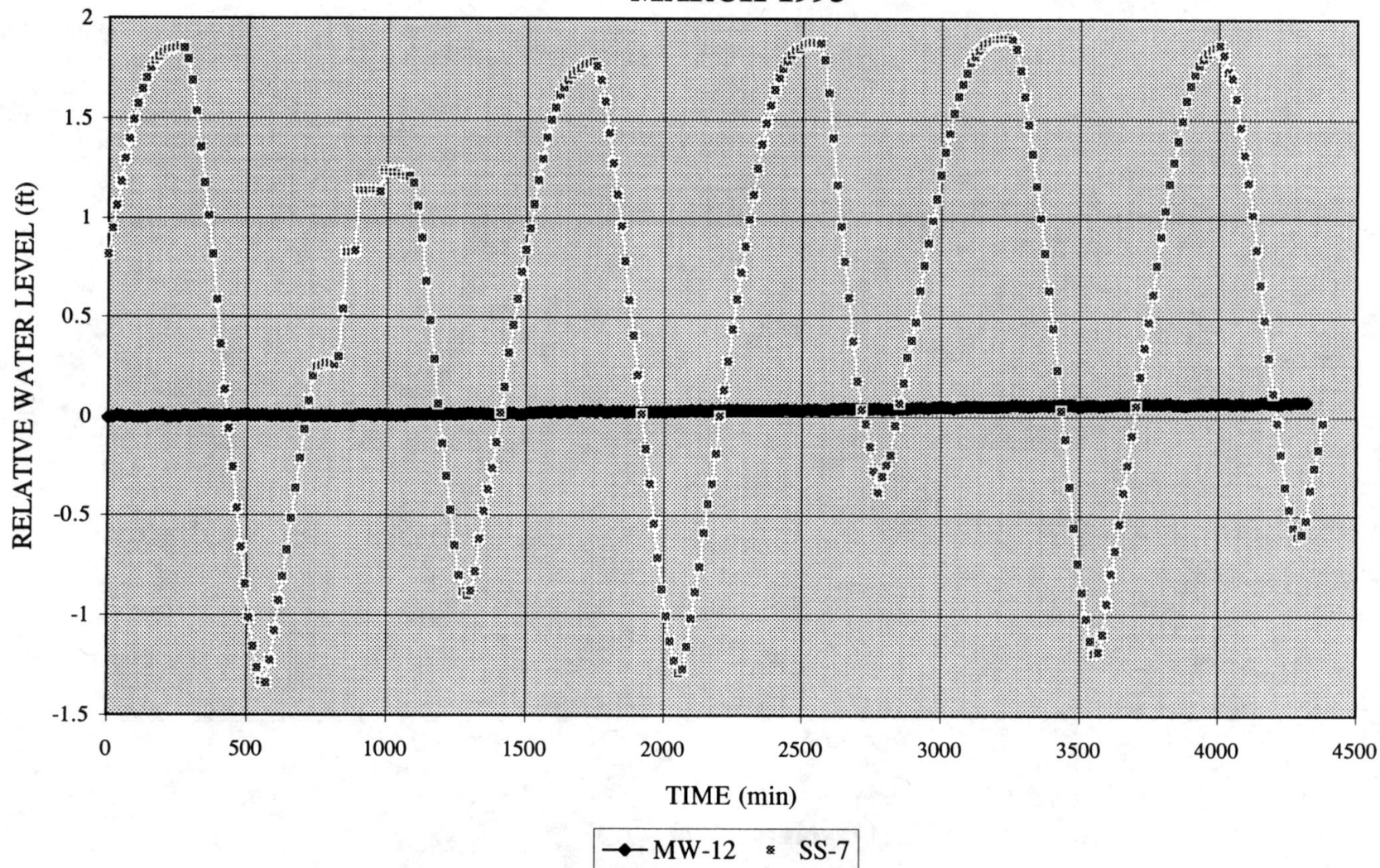
USACE, FT. MONMOUTH  
TIDAL MONITORING STUDY (M-2)  
MARCH 1995



(-) negative value shows rise in water level  
(+) positive value shows fall in water level

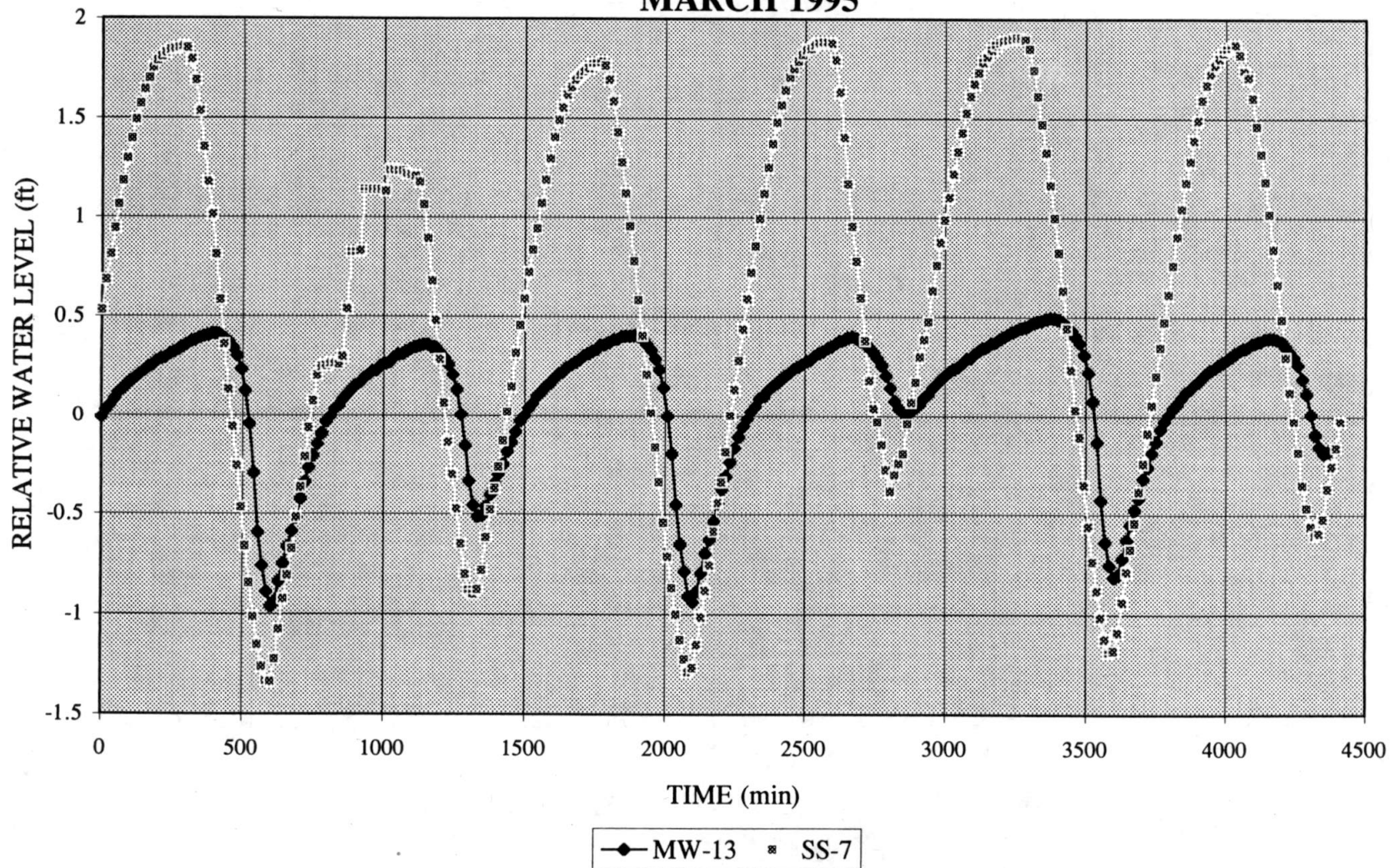


USACE, FT. MONMOUTH  
TIDAL MONITORING STUDY (M-8)  
MARCH 1995



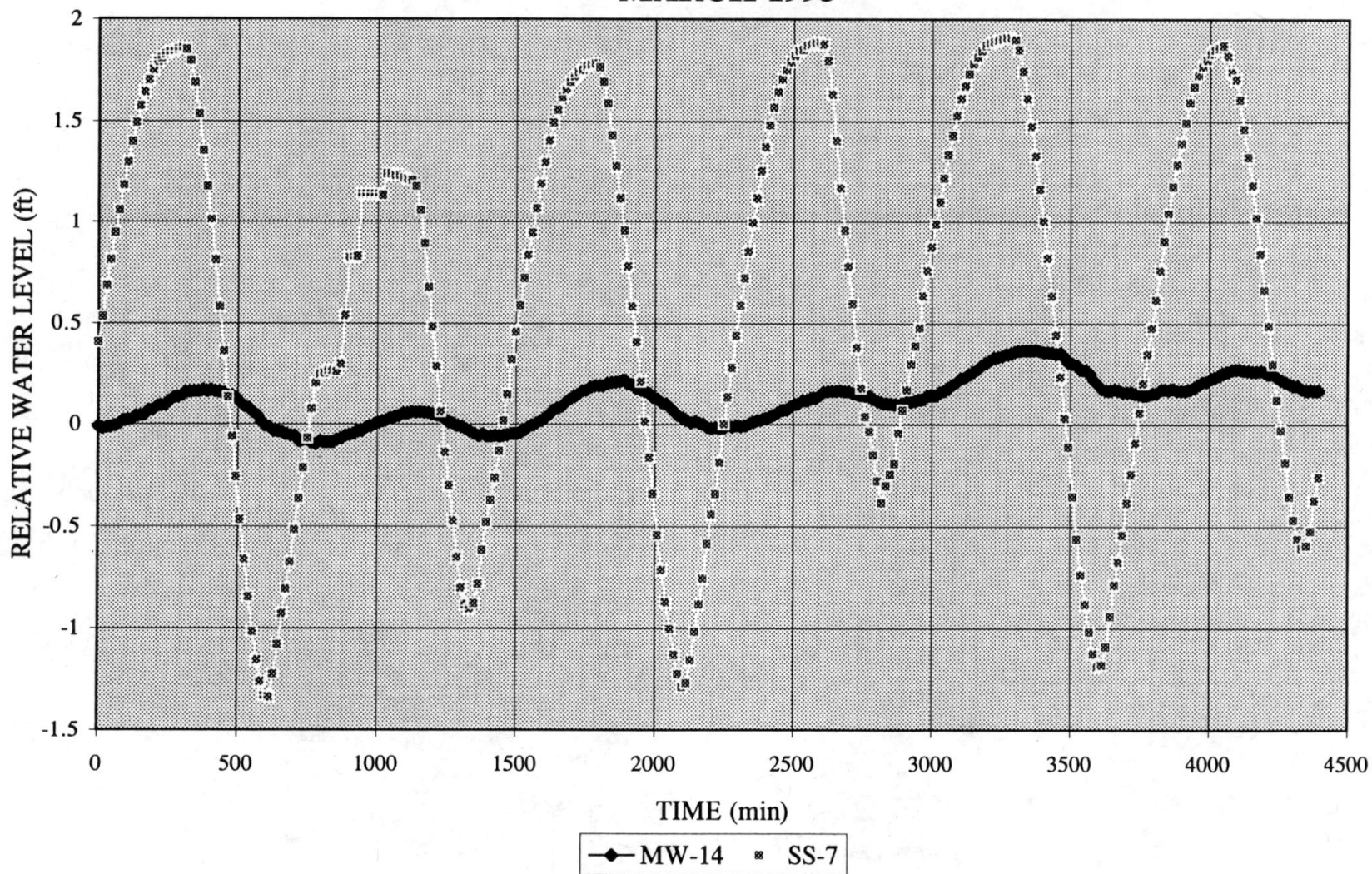
(-) negative value shows rise in water level  
(+) positive value shows fall in water level

**USACE, FT. MONMOUTH  
TIDAL MONITORING STUDY (M-8)  
MARCH 1995**



(-)negative value shows rise in water level  
(+) positive value shows fall in water level

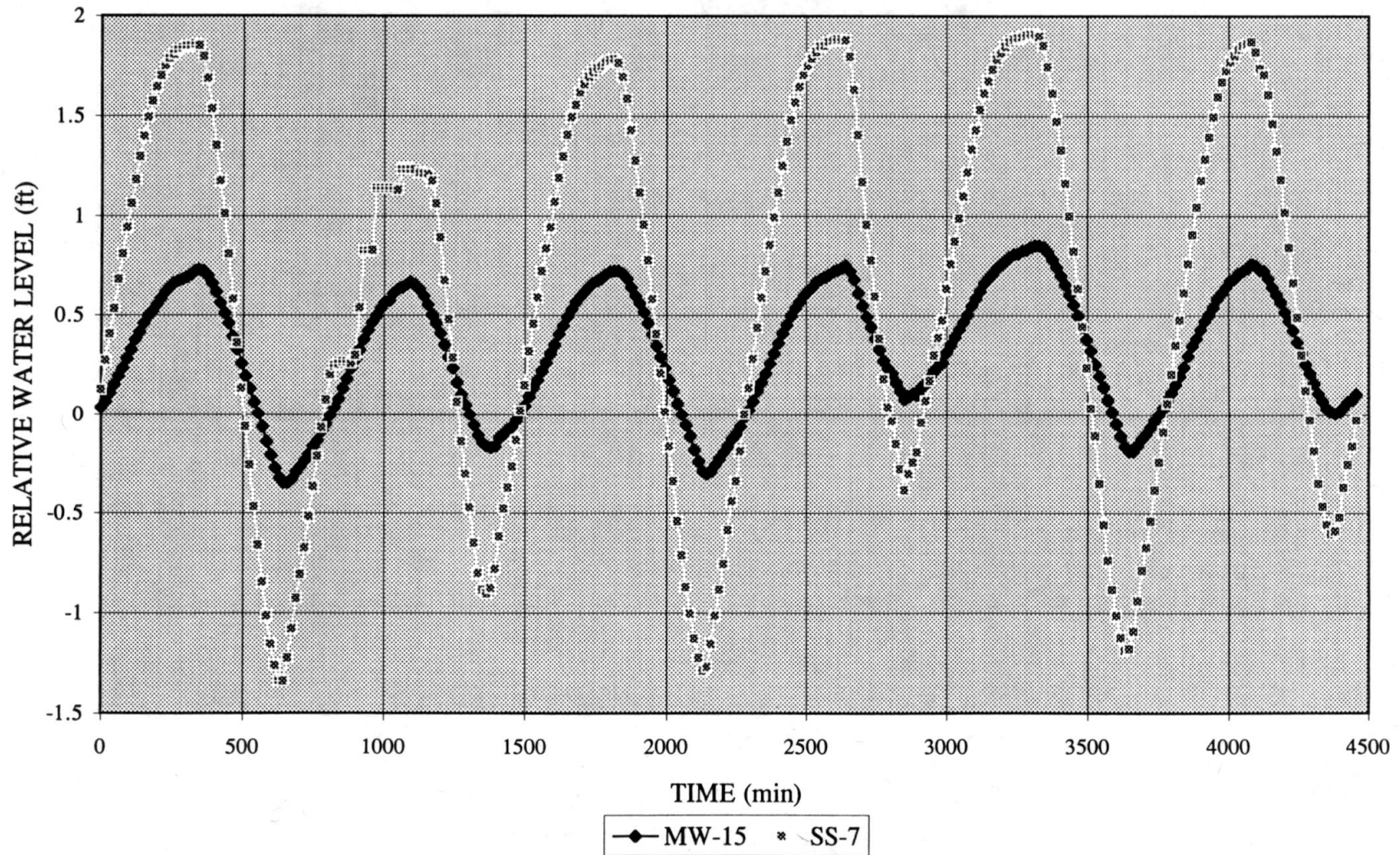
USACE, FT. MONMOUTH  
TIDAL MONITORING STUDY (M-8)  
MARCH 1995



(-) negative value shows rise in water table  
(+) positive value shows fall in water level

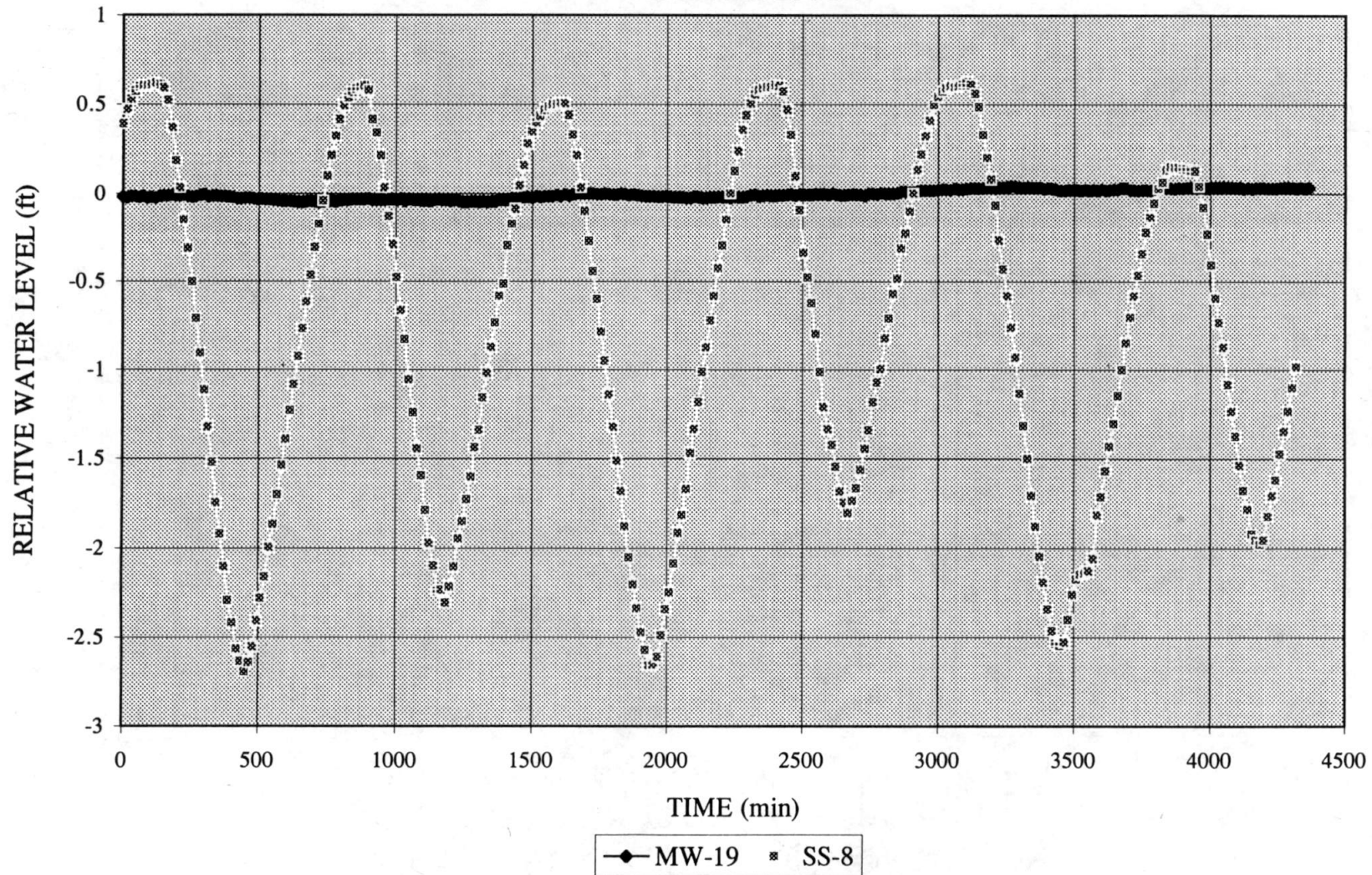


USACE, FT. MONMOUTH  
TIDAL MONITORING STUDY (M-8)  
MARCH 1995



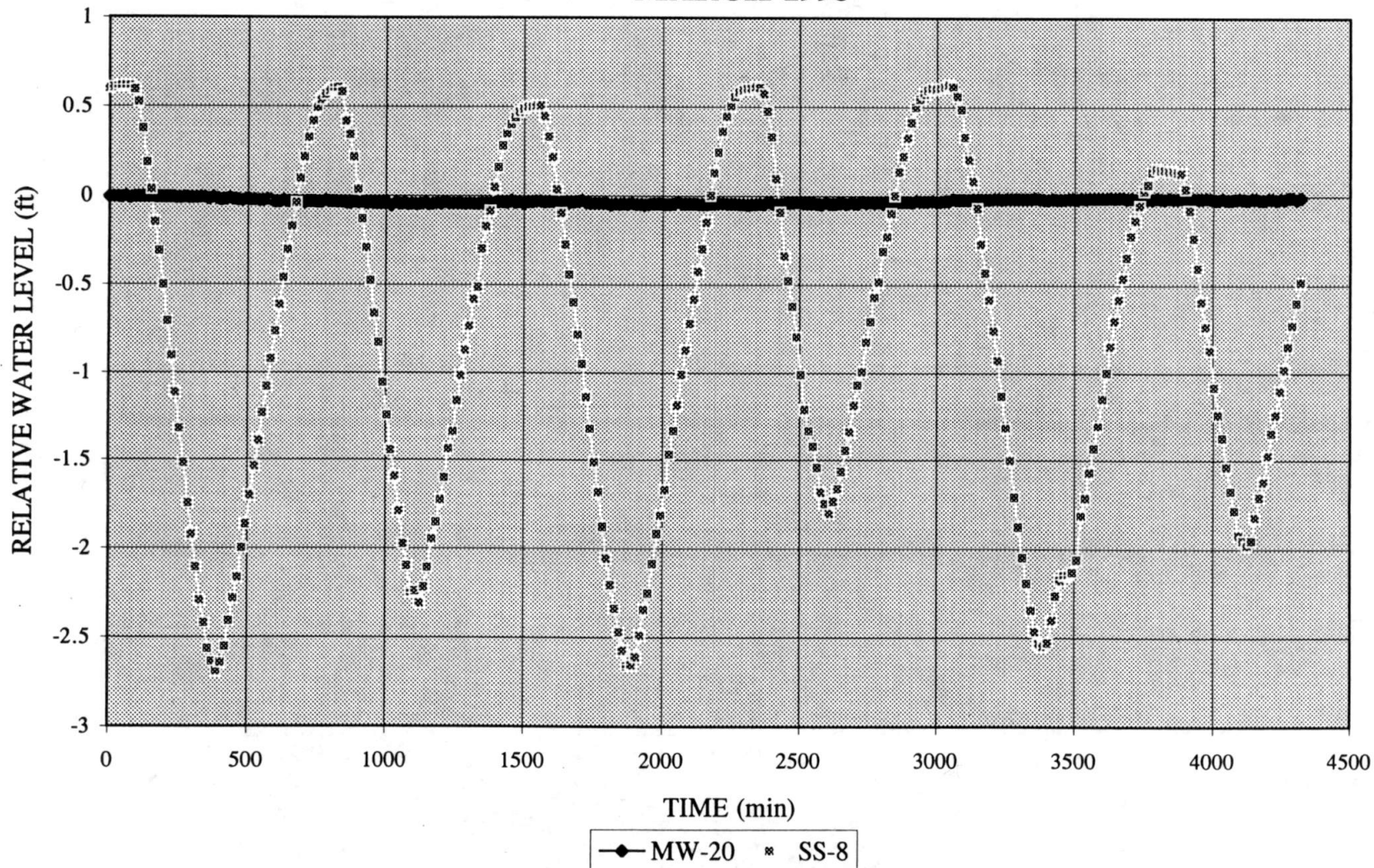
(-) negative value shows rise in water level  
(+) positive value shows fall in water level

USACE, FT. MONMOUTH  
TIDAL MONITORING STUDY (M-12)  
MARCH 1995



(-) negative value shows rise in water level  
(+) positive value shows fall in water level

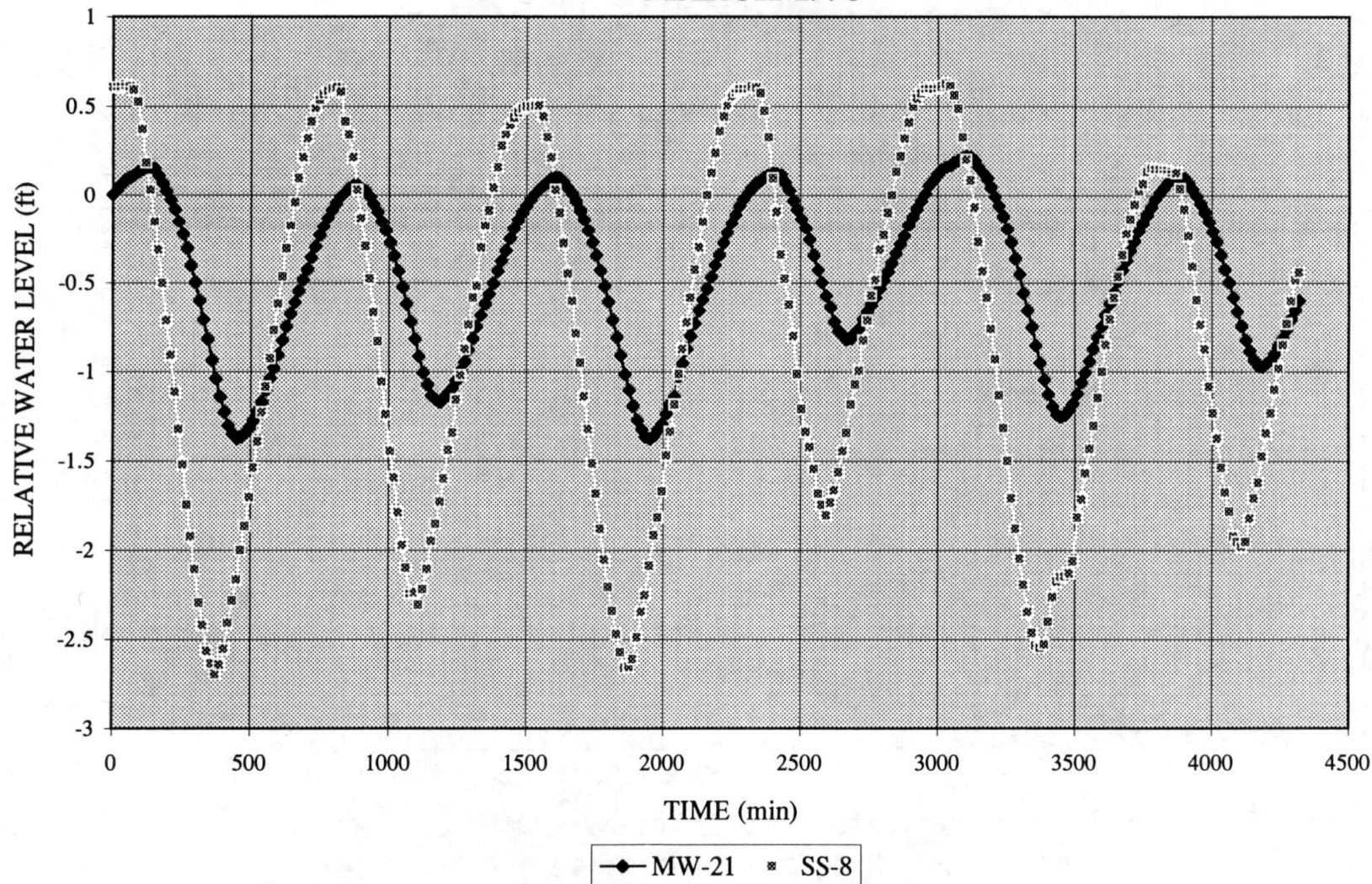
USACE, FT. MONMOUTH  
TIDAL MONITORING STUDY (M-14)  
MARCH 1995



(-) negative value shows rise in water level  
(+) positive value shows fall in water level

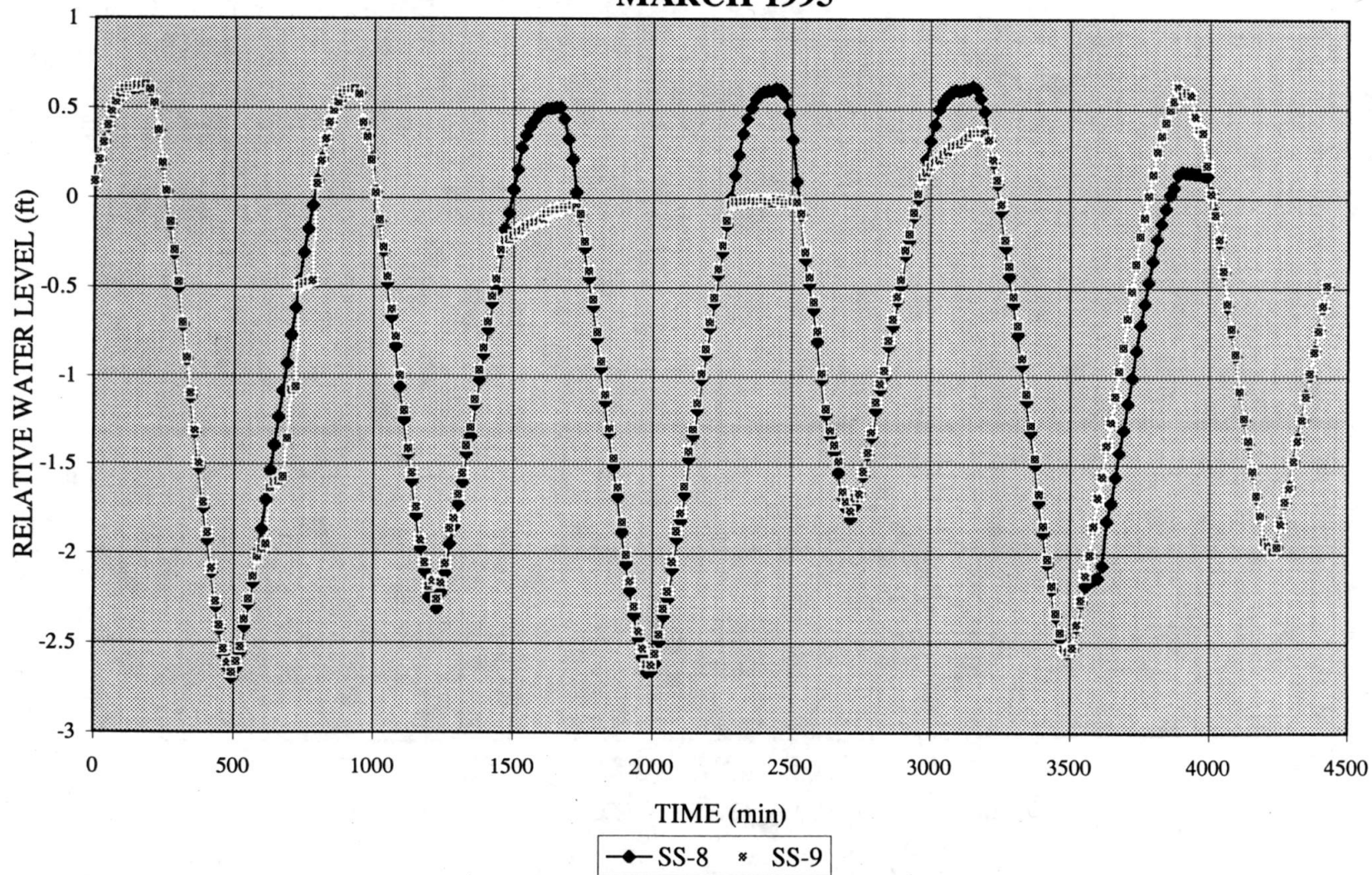


USACE, FT. MONMOUTH  
TIDAL MONITORING STUDY (M-14)  
MARCH 1995



(-) negative value shows rise in water level  
(+) positive value shows fall in water level

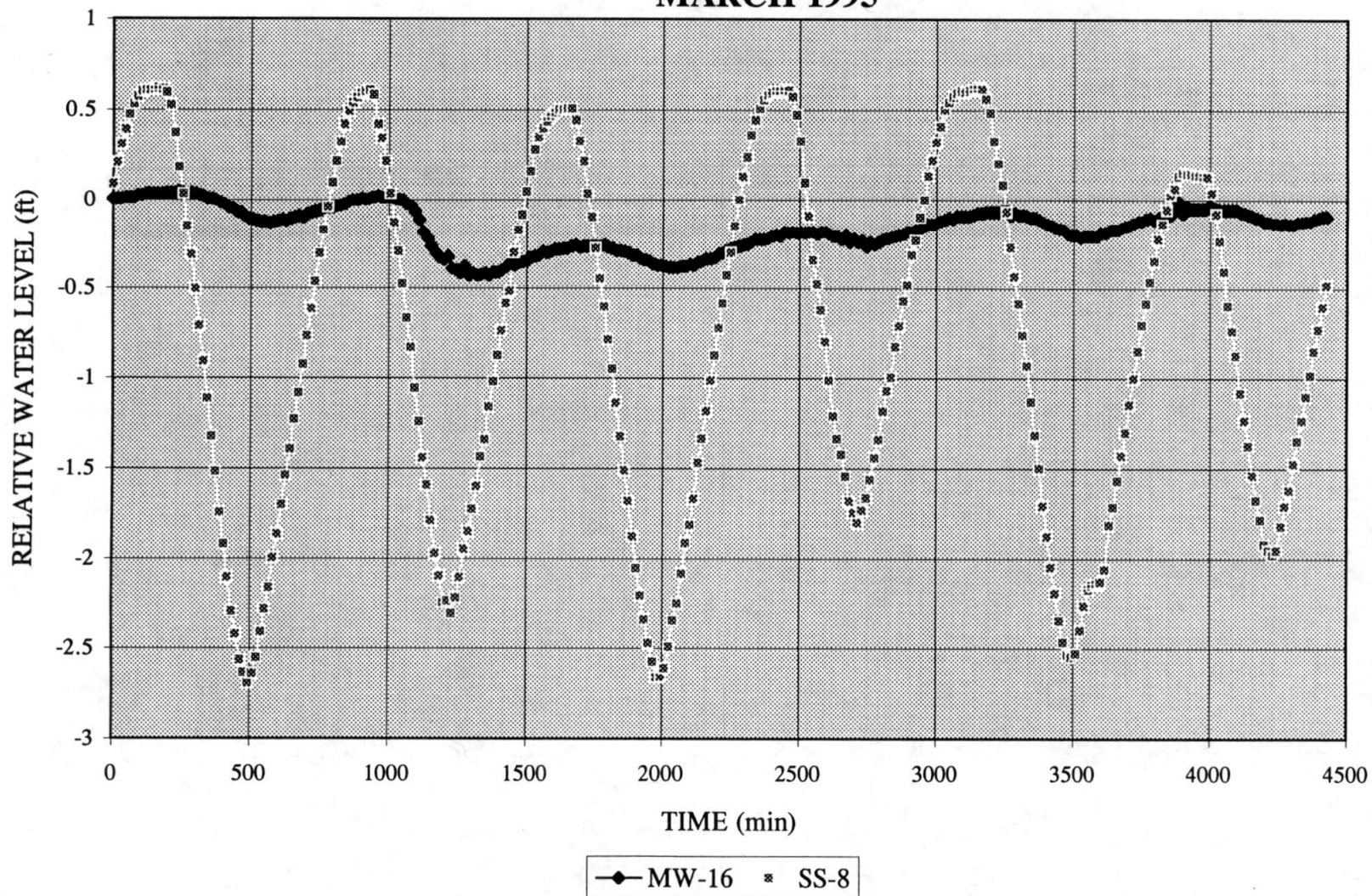
USACE, FT. MONMOUTH  
TIDAL MONITORING STUDY (M-12)  
MARCH 1995



(-) negative value shows rise in water level  
(+) positive value shows fall in water level

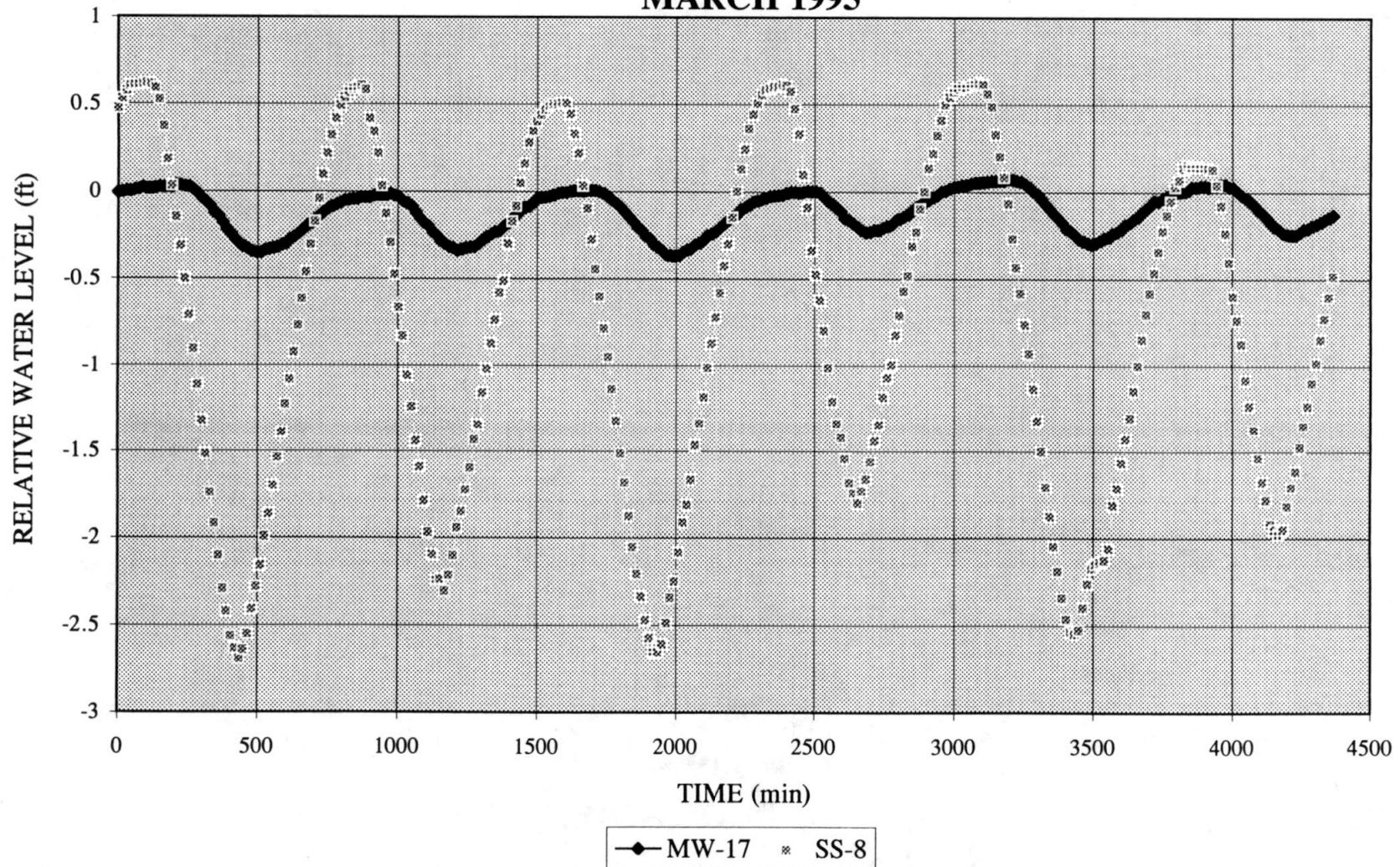


USACE, FT. MONMOUTH  
TIDAL MONITORING STUDY (M-12)  
MARCH 1995



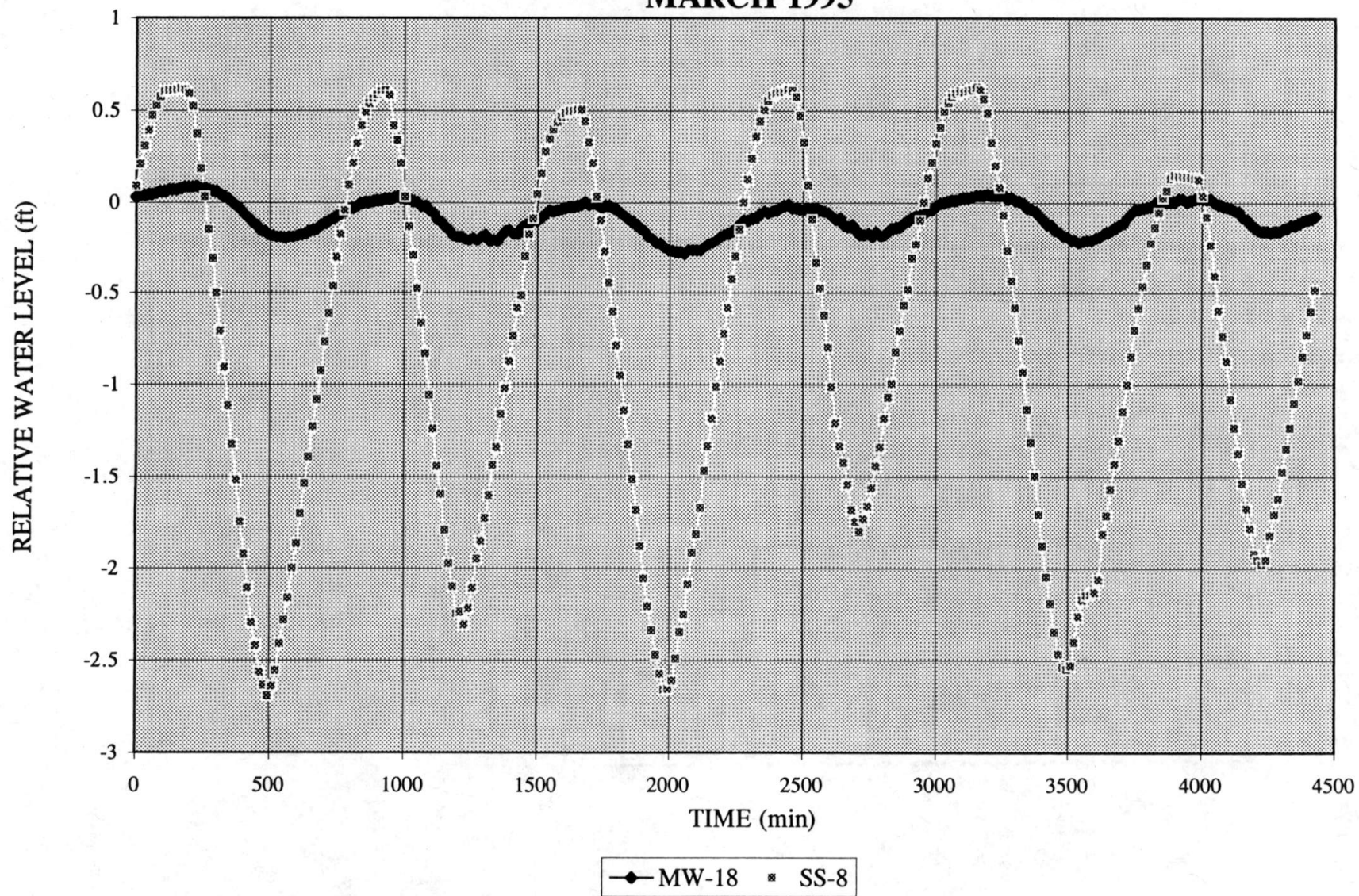
(-) negative value shows rise in water level  
(+) positive value shows fall in water level

**USACE, FT. MONMOUTH**  
**TIDAL MONITORING STUDY (M-12)**  
**MARCH 1995**



(-) negative value shows rise in water level  
(+) positive value shows fall in water level

USACE, FT. MONMOUTH  
TIDAL MONITORING STUDY (M-12)  
MARCH 1995



(-) negative value shows rise in water level  
(+) positive value shows fall in water level

**Table E-1**  
**Conductivity and Salinity Summary**  
**Tidal Monitoring Study**  
**January 1995**  
**Tide Out**

| Well No.               | Tide (In/Out) | SPCD (umhos) | Salinity (umhos) |
|------------------------|---------------|--------------|------------------|
| MW-1                   | Out           | ND           | ND               |
| MW-2                   | Out           | ND           | ND               |
| MW-3                   | Out           | 350          | 0.3              |
| Stilling Well-1 (SS-1) | Out           | 198          | 0.2              |
| Stilling Well-2 (SS-2) | Out           | 200          | 0.2              |
| MW-12                  | Out           | ND           | ND               |
| MW-13                  | Out           | 2300         | 1.5              |
| MW-14                  | Out           | 2300         | 2.0              |
| MW-15                  | Out           | 2250         | 2.0              |
| Stilling Well-7 (SS-7) | Out           | 4200         | 6.5              |
| MW-16                  | Out           | ND           | ND               |
| MW-17                  | Out           | ND           | ND               |
| MW-18                  | Out           | ND           | ND               |
| MW-19                  | Out           | 130          | 0.0              |
| MW-20                  | Out           | ND           | ND               |
| MW-21                  | Out           | ND           | ND               |
| Stilling Well-8 (SS-8) | Out           | 2200         | 2                |
| Stilling Well-9 (SS-9) | Out           | 4500         | 4.2              |

Note: SPCD - specific conductance.  
ppth - parts per thousand.  
ND - No data.



**Table E-2**  
**Conductivity and Salinity Summary**  
**Tidal Monitoring Study**  
**March 1995**  
**Tide In**

| Well No.               | Tide (In/Out) | SPCD (umhos) | Salinity (umhos) |
|------------------------|---------------|--------------|------------------|
| MW-1                   | In            | 210          | 0.0              |
| MW-2                   | In            | 850          | 0.0              |
| MW-3                   | In            | 355          | 0.0              |
| Stilling Well-1 (SS-1) | In            | 225          | 0.0              |
| Stilling Well-2 (SS-2) | In            | 235          | 0.0              |
| MW-12                  | In            | 160          | 0.0              |
| MW-13                  | In            | 170          | 1.5              |
| MW-14                  | In            | 270          | 2.0              |
| MW-15                  | In            | 2000         | 2.0              |
| Stilling Well-7 (SS-7) | In            | 3600         | 1.5              |
| MW-16                  | In            | 140          | 0.0              |
| MW-17                  | In            | 200          | 0.0              |
| MW-18                  | In            | 165          | 0.0              |
| MW-19                  | In            | 128          | 0.0              |
| MW-20                  | In            | 195          | 0.0              |
| MW-21                  | In            | 180          | 0.0              |
| Stilling Well-8 (SS-8) | In            | 11000        | 9.5              |
| Stilling Well-9 (SS-9) | In            | 11000        | 9.5              |

Note: SPCD - specific conductance.  
ppth - parts per thousand.

**Table E-3**  
**Conductivity and Salinity Summary**  
**Tidal Monitoring Study**  
**March 1995**  
**Tide Out**

| Well No.               | Tide (In/Out) | SPCD (umhos) | Salinity (umhos) |
|------------------------|---------------|--------------|------------------|
| MW-1                   | Out           | 190          | 0.0              |
| MW-2                   | Out           | 880          | 0.0              |
| MW-3                   | Out           | 320          | 0.0              |
| Stilling Well-1 (SS-1) | Out           | 235          | 0.0              |
| Stilling Well-2 (SS-2) | Out           | 240          | 0.0              |
| MW-12                  | Out           | 150          | 1.0              |
| MW-13                  | Out           | 1600         | 1.0              |
| MW-14                  | Out           | 2600         | 2.0              |
| MW-15                  | Out           | 210          | 2.0              |
| Stilling Well-7 (SS-7) | Out           | 4000         | 4.5              |
| MW-16                  | Out           | 130          | 0.0              |
| MW-17                  | Out           | 198          | 0.0              |
| MW-18                  | Out           | 150          | 0.0              |
| MW-19                  | Out           | 120          | 0.0              |
| MW-20                  | Out           | 140          | 0.0              |
| MW-21                  | Out           | 170          | 0.0              |
| Stilling Well-8 (SS-8) | Out           | 3600         | 3.0              |
| Stilling Well-9 (SS-9) | Out           | 3000         | 2.0              |

Note: SPCD - specific conductance.  
ppth - parts per thousand.

**APPENDIX F**  
**GPR PROFILES**