United States Army
Fort Monmouth, New Jersey

Underground Storage Tank Closure and Site Investigation Report

Building 1108
Main Post

NJDEP UST Registration No. 081533-168
NJDEP Closure Approval No. C-93-3713
Spill Case No. 94-05-13-0932-29

May 2000

VOLUME 1 OF 2

UNDERGROUND STORAGE TANK
CLOSURE AND SITE INVESTIGATION REPORT

BUILDING 1108

MAIN POST
NJDEP UST REGISTRATION NO. 081533-168
NJDEP CLOSURE APPROVAL NO. C-93-3713
SPILL CASE NO. 94-05-13-0932-29

MAY 2000

PROJECT NO.: 68.02711.0001

PREPARED FOR:

UNITED STATES ARMY, FORT MONMOUTH, NEW JERSEY
DIRECTORATE OF PUBLIC WORKS
BUILDING 167
FORT MONMOUTH, NJ 07703

PREPARED BY:

ATC ASSOCIATES, INC.
BROMLEY CORPORATE CENTER
THREE TERRI LANE
BURLINGTON, NEW JERSEY 08016

TABLE OF CONTENTS

TABLE OF CONTENTS (CONTINUED)

TABLES

FIGURES

APPENDICES

EXECUTIVE SUMMARY

UST Closure

On 11 May 1994, a 1,000 gallon, steel diesel underground storage tank (UST) was closed by removal in accordance with the New Jersey Department of Environmental Protection (NJDEP) Closure Approval No. C-93-3713 at U.S. Army Fort Monmouth, Fort Monmouth, New Jersey. The UST, NJDEP Registration No. 081533-168, was located immediately adjacent to Building 1108 in the Main Post area of U.S. Army, Fort Monmouth. The tank closure was performed by Cleaning Up The Environment Inc. (CUTE).

Site Assessment - Soil

The site assessment was performed by U.S. Army personnel in accordance with the NJDEP *Technical Requirements for Site Remediation* (N.J.A.C. 7:26E) and the NJDEP *Field Sampling Procedures Manual*. Soils surrounding the tank were screened visually and with air monitoring equipment for evidence of contamination. Following removal, the UST was inspected for holes. No holes were noted in the UST, however, evidence of potentially contaminated soils was observed surrounding the tank.

On 11 May 1994, post-excavation soil samples Site A, Site B, Site C, and Site D were collected from a total of four (4) locations along the sidewalls of the excavation immediately above groundwater. Samples Site F was collected below a concrete pad in the UST excavation. Groundwater was present at approximately 5 to 6 feet bgs. The samples were analyzed for total petroleum hydrocarbons (TPHC).

Due to slightly elevated TPHC results from sample location Site D, an additional soil sample was collected from the excavation on 31 May 1994, 1993 and was analyzed for volatile organic compounds plus 15 tentatively identified compounds (VO+10) and total lead.

Based on an inspection of the UST, and field screening of subsurface soils the Directorate of Public Works (DPW) concluded that an historical discharge was associated with the UST. On 13 May 1994, a spill was reported to the NJDEP "Hotline" for UST No. 081533-168 and was assigned Spill Case No. 94-05-13-0932-29.

Findings - Soil

To evaluate soil conditions following removal of the UST and associated piping, post-excavation soil samples were collected from a total of five (5) locations on 11 May 1995. All five samples reported concentrations of TPHC with the highest concentration of 10,400 mg/kg detected in sample Site D.

Due to the elevated TPHC concentration in sample location Site D, sample Site D-2 was collected on 31 May 1994 to be analyzed for VO+15 and lead. No volatile organic compounds were detected above the NJDEP soil cleanup criteria. Lead was detected at 2.61 mg/kg, below the NJDEP soil cleanup criteria of 10 mg/kg

Site Restoration

Following receipt of all post-excavation soil sampling results, the excavation was backfilled to grade with a combination of uncontaminated excavated soil and certified clean fill. The excavation site was then restored to its original condition.

Site Assessment Quality Assurance

The sampling and laboratory analysis conducted during the site assessment were performed in accordance with Section 7:26E-2.1 of the *Technical Requirements*.

Site Assessment - Groundwater

In response to the observation of potentially contaminated soil near the shallow water table, one shallow overburden monitoring well (MW-1) was installed at the Building 1108 area on 9 September 1994. It was installed immediately approximately east of the UST excavation in the downgradient direction. It was screened in the 5 to 15 foot depth interval, across the water table, which is approximately 6 to 7 feet below grade surface.

On 19 May 1995 and 13 June 1995, MW-1 was sampled for VO+15 and base neutral compounds with a library search of fifteen tentatively identified compounds (BN+15). Sampling and analysis were performed in accordance with the NJDEP *Field Sampling Procedures Manual* and the *Technical Requirements For Site Remediation.*

Findings - Groundwater

All groundwater analytical results were either below the detection limit or in compliance with the New Jersey Ground Water Quality Standard (GWQS). No product or sheen was observed in MW-1 on either of the sampling dates.

The depth to the water table was 6.99 feet below grade on 19 May 1995, and 7.38 feet below grade on 13 June 1995.

Conclusions and Recommendations

The analytical results for the post-excavation soil samples collected from the UST closure excavation at Building 1108 indicate TPHC concentrations were detected. Further sampling and analysis for VO+15 compounds were below the NJDEP soil cleanup criteria.

Based on the analytical results of the groundwater samples collected on 19 May 1995 and 13 June 1995, groundwater quality at the Building 1108 UST closure site complies with the New Jersey Groundwater Quality Standards.

No further action is proposed in regard to the closure and site assessment of UST No. 081533-168 at Building 1108.

1.0 UNDERGROUND STORAGE TANK DECOMMISSIONING ACTIVITIES

1.1 OVERVIEW

One underground storage tank (UST), New Jersey Department of Environmental Protection (NJDEP) Registration No. 081533-168 was closed at Building 1108 at U.S. Army Fort Monmouth, Fort Monmouth, New Jersey on 11 May 1994. Refer to site location map on Figure 1. This report presents the results of the DPW's implementation of the UST Decommissioning/Closure Plan submitted to the NJDEP on 5 August 1993. The plan was approved on September 7, 1993 and assigned TMS No. C-93-3713. The UST was a steel, 1,000-gallon tank containing diesel.

Decommissioning activities for UST No. 081533-168 complied with all applicable Federal, State and Local laws and ordinances in effect at the date of decommissioning. These laws included but were not limited to: N.J.A.C. 7:14B-1 et seq., N.J.A.C. 5:23-1 et seq., and Occupational Safety and Health Administration (OSHA) 1910.146 & 1910.120. All permits including but not limited to the NJDEP-approved Decommissioning/Closure Plan were posted onsite for inspection. CUTE, the contractor that conducted the decommissioning activities, is registered and certified by the NJDEP for performing UST closure activities. Closure of UST No. 081533-168 proceeded under the approval of the NJDEP Bureau of Underground Storage Tanks (NJDEP-BUST). The NJDEP-BUST closure approval and signed certifications for UST No. 081533-168 are included in Appendices A and B, respectively.

Based on an inspection of the UST, and field screening of subsurface soils the Directorate of Public Works (DPW) concluded that an historical discharge was associated with the UST. On 13 May 1994, a spill was reported to the NJDEP "Hotline" for UST No. 081533-168 and was assigned Spill Case No. 94-05-13-0932-29.

This UST Closure and Site Investigation Report has been prepared by ATC Associates, Inc., to assist the United States Army Directorate of Public Works (DPW) in complying with the NJDEP Bureau of Underground Storage Tanks (NJDEP-BUST) regulations. The applicable NJDEP-BUST regulations at the date of closure were the *Interim Closure Requirements for Underground Storage Tank Systems* (N.J.A.C. 7:14B-1 et seq. September 1990 and revisions dated November 1, 1991).

This report was prepared using information required at the time of closure. Section 1 of this UST Closure and Site Investigation Report provides a summary of the UST decommissioning activities. Section 2 of this report describes the site investigation activities. Conclusions and recommendations, including the results of the soil sampling investigation, are presented in the final section of this report.

1.2 SITE DESCRIPTION

Building 1108 is located in the eastern portion of the Main Post area of Fort Monmouth, as shown on Figure 1. UST No. 081533-168 was located northeast of Building 1108. A site map is provided on Figure 2.

1.2.1 Geological/Hydrogeological Setting

The following is a description of the geological/hydrogeological setting of the area surrounding Building 1108. Included is a description of the regional geology of the area surrounding Fort Monmouth as well as descriptions of the local geology and hydrogeology of the Main Post area.

Regional Geology

Monmouth County lies within the New Jersey Section of the Atlantic Coastal Plain physiographic province. The Main Post, Charles Wood, and the Evans areas are located in what may be referred to as 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, 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 (Zapecza, 1989). These sediments, predominantly derived from deltaic, shallow marine, and continental shelf environments, date from Cretaceous through the Quaternary Periods. The mineralogy ranges from quartz to glauconite.

The formations record several major transgressive/regressive cycles and contain units which are generally thicker to the southeast and reflect a deeper water environment. Over 20 regional geologic units are present within the sediments of the Coastal Plain. 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 individual thicknesses for these units vary greatly (i.e., from several feet to several hundred feet). The Coastal Plain deposits thicken to the southeast from the Fall Line to greater than 6,500 feet in Cape May County (Brown and Zapecza, 1990).

Local Geology

Based on the regional geologic map (Jablonski, 1968), the Cretaceous age Red Bank and Tinton Sands outcrop at the Main Post area. The Red Bank sand conformably overlies the Navesink Formation and dips to the southeast at 35 feet per mile. The upper member (Shrewsbury) of the Red Bank sand is a yellowish-gray to reddish brown clayey, medium-to-coarse-grained sand that contains abundant rock fragments, minor mica and glauconite (Jablonski). The 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 percent of the sand fraction in the upper part of the unit (Minard, 1969). The upper part of the Tinton is often highly oxidized and iron oxide encrusted (Minard).

Hydrogeology

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

Based on records of wells drilled in the Main Post area, water is typically encountered at depths of 2 to 9 feet below ground surface (bgs). According to Jablonski, wells drilled in the Red Bank and Tinton Sands may produce 2 to 25 gallons per minute (gpm). Some well owners have reported acidic water that requires treatment to remove iron.

Due to the proximity of the Atlantic Ocean to Fort Monmouth, shallow groundwater may be tidally influenced and may flow toward creeks and brooks as the tide goes out, and away from creeks and brooks as the tide comes in. However, an abundance of clay lenses and sand deposits were noted in borings installed throughout Fort Monmouth. Therefore the direction of shallow groundwater should be determined on a case by case basis.

1.3 Health and Safety

Before, during, and after all decommissioning activities, hazards at the work site which may have posed a threat to the Health and Safety of all personnel who were involve with, or were affected by, the decommissioning of the UST system were minimized. All areas which posed, or may have been suspected to pose a vapor hazard were monitored by a qualified individual utilizing an organic vapor analyzer (OVA). The individual ascertained if the area was properly vented to render the area safe, as defined by OSHA.

1.4 REMOVAL OF UNDERGROUND STORAGE TANK

1.4.1 General Procedures

- All underground obstructions (utilities, etc.) were marked out by the contractor performing the closure prior to excavation activities.
- All activities were carried out with the greatest regard to safety and health and the safeguarding of the environment.
- All excavated soils were visually examined and screened with an OVA for evidence of contamination. Potentially contaminated soils were identified and logged during closure activities.
- Surface materials (i.e., asphalt, concrete, etc.) were excavated and staged separately from all soil and recycled in accordance with all applicable regulations and laws.
- A Sub-Surface Evaluator from the DPW was present during all site assessment activities.

1.4.2 Underground Storage Tank Excavation and Cleaning

Prior to UST decommissioning activities, surficial soil was removed to expose the UST and associated piping. All free product present in the piping was drained into the UST, and the UST was purged to remove vapors prior to cutting and removal of the piping. After removal of the associated piping, a manway was made in the UST to allow for proper cleaning. The UST was completely emptied of all liquids prior to removal from the ground. Approximately 570 gallons of liquid were transported by Freehold Cartage Inc. to Lionetti Oil Recovery Co. Inc., a NJDEP-approved petroleum recycling and disposal company located in Old Bridge, New Jersey. Refer to Appendix C for the waste manifest (NJA-1706532).

The UST was cleaned prior to removal from the excavation in accordance with the NJDEP-BUST regulations. After the UST was removed from the excavation, it was staged on polyethylene sheeting and examined for holes. No holes or punctures were observed during the inspection by the Sub-Surface Evaluator. Soils surrounding the UST were screened visually and with an OVA for evidence of contamination. Evidence of contamination was observed.

1.5 UNDERGROUND STORAGE TANK TRANSPORTATION AND DISPOSAL

The tank was transported by CUTE to Fort Monmouth Reclamation Center for disposal in compliance with all applicable regulations and laws. See Appendix D for UST Disposal Certificate.

The removal contractor labeled the UST prior to transport with the following information:

- site of origin
- contact person
- NJDEP UST Facility ID number
- name of transporter/contact person
- destination site/contact person

1.6 MANAGEMENT OF EXCAVATED SOILS

Potentially contaminated soils were stockpiled separately from other excavated material and were placed on and covered with polyethylene sheets. Potentially contaminated soils were transported to T-80 on Main Post for storage prior to ultimate disposal at Soil Remediation of Philadelphia. Soils that did not exhibit signs of contamination were used as backfill following removal of the UST.

2.0 SITE INVESTIGATION ACTIVITIES

2.1 OVERVIEW

The Site Investigation was managed and carried out by U.S. Army DPW personnel. All TPHC soil analyses were performed and reported by U.S. Army Fort Monmouth Environmental Laboratory. All VOC and lead soil analyses were performed and reported by Princeton Testing Laboratory, Inc. Groundwater samples were analyzed by Electron-Microscopy Service Laboratories, Inc. (EMSL). All laboratories are NJDEP-certified testing laboratories.. All sampling was performed under the direct supervision of a NJDEP Certified Sub-Surface Evaluator according to the methods described in the NJDEP *Field Sampling Procedures Manual* (1992). Sampling frequency and parameters analyzed complied with he NJDEP-BUST document *Interim Closure Requirements for Underground Storage Tank Systems* (September 1990 and revisions dated November 1, 1991) which was the applicable regulation at the date of the closure. All records of the Site Investigation activities are maintained by the Fort Monmouth DPW Environmental Office.

The following Parties participated in Closure and Site Investigation Activities.

- Closure Contractor: Cleaning Up The Environment Inc. (CUTE)
  Closure Supervisor: John Lonergan
  Phone Number: (201)427-2881
  NJDEP Certification No.: 3248

- Subsurface Evaluator: Charles M. Appleby
  Employer: U.S. Army, Fort Monmouth
  Phone Number: (908) 532-6224
  NJDEP Certification No.: 2056

- Analytical Laboratory: U.S. Army Fort Monmouth Environmental Laboratory
  Contact Person: Brian K. McKee
  Phone Number: (908)532-4359
  NJDEP Certification No.: 13461

- Analytical Laboratory: Princeton Testing Laboratory, Inc.
  Contact Person: W. Alan Volk
  Phone Number: (609)452-9050
  NJDEP Certification No.: 11118

- Hazardous Waste Hauler: Freehold Cartage Inc.
  Contact Person: Barry Olsen
  Phone Number: (908)721-0900
  NJDEP Hazardous Waste Hauler No.: 2265

2.2 FIELD SCREENING/MONITORING

Field screening was performed by a NJDEP Certified Sub-Surface Evaluator using an OVA and visual observations to identify potentially contaminated material.

2.3 SOIL SAMPLING

On 11 May 1994, following removal of the UST, post-excavation soil samples Site A, Site B, Site C, and Site D were collected from a total of four (4) locations along the sidewalls of the excavation immediately above groundwater. Samples Site F was collected below a concrete pad in the UST excavation. Groundwater was present in the excavation at approximately 5 to 6 feet bgs. The samples were analyzed for total petroleum hydrocarbons (TPHC).

Due to elevated TPHC results from sample location Site D, an additional soil sample, Site D-2 was collected from the excavation on 31 May 1994 and was analyzed for volatile organic compounds plus 15 tentatively identified compounds (VO+15) and total lead.

Based on an inspection of the UST, and field screening of subsurface soils the Directorate of Public Works (DPW) concluded that an historical discharge was associated with the UST. On 13 May 1994, a spill was reported to the NJDEP "Hotline" for UST No. 081533-168 and was assigned Spill Case No. 94-05-13-0932-29.

The site assessment was performed by U.S. Army personnel in accordance with the NJDEP *Technical Requirements* and the NJDEP *Field Sampling Procedures Manual*. A summary of sampling activities including parameters analyzed is provided in Table 1. The post-excavation soil samples were collected using polystyrene scoops. Following soil sampling activities, samples being analyzed for TPHC were chilled and delivered to U.S. Army Fort Monmouth Environmental Laboratory located in Fort Monmouth, New Jersey. Samples being analyzed for VOCs and lead were chilled and delivered to Princeton Testing Laboratory, Inc. located in Princeton, New Jersey.

2.4 GROUNDWATER SAMPLING

2.4.1 Monitoring Well Installation

In response to the observation of potentially contaminated soil near the shallow water table, one shallow monitoring well (MW-1) was installed at the Building 1108 area on 12 September 1994. It was installed immediately east of the UST excavation in the downgradient direction. It was screened in the 5 to 15 foot interval, across the water table, which is approximately 6 to 7 feet below grade surface.

The well was constructed in accordance with the NJDEP's well construction protocols outlined in its May 1992 *Field Sampling Procedures Manual.* The NJDEP well drilling permit and a well construction log is presented in Appendix E.

The well was constructed with 4-inch (ID) PVC riser and 0.020 slotted PVC well screen. A silica sand pack was installed in the annulus between the borehole wall and the screen. The sand pack was extended approximately 2 feet above the top of the screen. The sand pack above the well screen was graded down to a fine sand to minimize grout intrusion.

The borehole was tremie-grouted with bentonite-cement grout from the top of the sand pack to 0.5 inches bgs. The well was secured with a water-tight, flush-mounted locking road box. The road box was set in place with concrete, which was placed in the remaining open borehole. The elevation of the well riser was surveyed to the nearest 0.01 feet by a New Jersey-licensed surveyor. The well permit number was marked on the well casing as required.

The monitoring well was developed using a peristaltic surface pump. The well was pumped for 1 hour or until silt free. All residual soils and liquids generated during monitoring well installation and development program were collected in New Jersey Department of Transportation-approved
55-gallon drums. The drums were placed in a designated secure location for waste characterization and offsite disposal.

2.4.2 Monitoring Well Sampling

On 19 May 1995 and 13 June 1995, MW-1 was sampled for VO+15 and base neutral compounds with a library search of fifteen tentatively identified compounds (BN+15). Sampling and analysis were performed in accordance with the NJDEP *Field Sampling Procedures Manual* and the *Technical Requirements For Site Remediation.*

Prior to sampling, the water level was measured to the nearest 0.01 feet, and the distance to the bottom of the well was to be measured to the nearest 0.1 feet. The well was checked for floating product (light non-aqueous phase liquids). The well was purged of three to five well volumes of standing water. Sample volume was then collected using a dedicated decontaminated Teflon bottom-filled bailer attached to PTFE (Teflon)-coated stainless steel.

3.0 CONCLUSIONS AND RECOMMENDATIONS

3.1 SOIL SAMPLING RESULTS

All UST excavation samples were analyzed for TPHC. The post-excavation sampling results were compared to the NJDEP residential direct contact total organic contaminants soil cleanup criteria of 10,000 mg/kg (N.J.A.C. 7:26D and revisions dated February 3, 1994). A summary of the analytical results is provided in Table 2. The analytical data package is provided in Appendix F.

To evaluate soil conditions following removal of the UST and associated piping, post-excavation soil samples were collected from a total of five (5) locations on 11 May 1995. All five samples reported concentrations of TPHC with the highest concentration of 10,400 mg/kg detected in sample Site D.

Due to the elevated TPHC concentration in sample location Site D, sample Site D-2 was collected on 31 May 1994 to be analyzed for VO+15 and lead. No volatile organic compounds were detected above the NJDEP soil cleanup criteria. Lead was detected at 2.61 mg/kg, below the NJDEP soil cleanup criteria of 10 mg/kg. The analytical report, included in Appendix F, is summarized in Table 3.

3.2 GROUNDWATER SAMPLING RESULTS

The samples collected from MW-1 on 19 May 1995 and 13 June 1995 report no concentrations of volatile or semi-volatile organic compounds above the NJDEP Groundwater Quality Standards.

No product or sheen was observed in MW-1 on either of the sampling dates. The depth to the water table was 6.99 feet below the well casing on 19 May 1995 and 7.38 feet below the well casing 13 June 1995.

All groundwater analytical results are presented in Table 4. The groundwater analytical data package is provided in Appendix G.

3.3 CONCLUSIONS AND RECOMMENDATIONS

The analytical results for the post-excavation soil samples collected from the UST closure excavation at Building 1108 indicate TPHC concentrations were detected. Further sampling and analysis for VO+15 compounds were below the NJDEP soil cleanup criteria.

Based on the analytical results of the groundwater samples collected on 19 May 1995 and 13 June 1995, groundwater quality at the Building 1108 UST closure site complies with the New Jersey Groundwater Quality Standards.

No further action is proposed in regard to the closure and site assessment of UST No. 081533-168 at Building 1108.

TABLE 1
SAMPLING SUMMARY
Fort Monmouth, Main Post
Site 1108

Sample Identification	Laboratory Identification	Sample Date	Sample Time	Sample Matrix	Sample Analyses
Site A, W. Sidewall 6'	1488.1	05/11/94	14:29	Soil	TPH
Site B, N. Sidewall 6'	1488.2	05/11/94	14:30	Soil	TPH
Site C, E. Sidewall 6'	1488.3	05/11/94	14:34	Soil	TPH
Site D, S. Sidewall 6'	1488.4	05/11/94	14:33	Soil	TPH
Site E, Dupe.	1488.5	05/11/94	NA	Soil	TPH
Site F, SW corner below pad	1488.6	05/11/94	14:52	Soil	TPH
Site D-2	1511.1	05/31/94	13:30	Soil	VO+15, Pb
Field Blank	1511.2	05/31/94	13:25	Water	VO+15, Pb
Bldg 1108 MW1-2931785	95-23343	05/19/95	12:49	Groundwater	VO+15, BN+15
Trip Blank	95-23340	05/19/95	6:15	Water	VO+15
Field Blank	95-23341	05/19/95	15:33	Water	VO+15, BN+15
Bldg 1108 MW1-2931785	95-26426	06/13/95	6:05	Groundwater	VO+15, BN+15
Trip Blank	95-26427	06/13/95	15:35	Water	VO+15
Field Blank	95-26434	06/13/95	14:57	Water	VO+15, BN+15

Notes:
NA - Not Available
TPH - Total petroleum hydrocarbons
VO+15 - Volatile organic compounds with a library search of fifteen tentatively identified compounds
BN+15 - Base/neutral organic compounds with a library search of fifteen tentatively identified compou
Pb - Total lead

TABLE 2
SOIL ANALYTICAL RESULTS - 05/11/94
Fort Monmouth, Main Post
Site 1108

Sample Identification Lab Identification	Site A 1488.1	Site B 1488.2	Site C 1488.3	Site D 1488.5	Site F 1488.7
TPH	891	333	2,170	10,400	2,700

Notes:

1. All results reported in milligrams per kilogram (mg/kg).

TPH- Total petroleum hydrocarbons

TABLE 3
SOIL ANALYTICAL RESULTS - 05/31/94
Fort Monmouth, Main Post
Site 1108

Sample Identification Lab Identification	Site D-2 1511.1	NJDEP SCC
Lead (in mg/kg)	2.61	10

Detected Volatile Organic Compounds	Site D-2 1511.1	NJDEP SCC
None Detected	ND	NA
# of TICs	0	
TIC Concentration (total)	ND	NA

Notes:

1. All results reported in micrograms per kilogram (µg/kg), unless otherwise noted.
2. All results exceeding NJDEP SCC are denoted in bold.

NJDEP- New Jersey Department of Environmental Protection
SCC- Soil Cleanup Criteria
TIC- Tentatively identified compound
mg/kg- Milligrams per kilogram
ND- Not detected
NA- Not applicable

TABLE 4
GROUNDWATER ANALYTICAL RESULTS - MW-1
Fort Monmouth, Main Post
Site 1108

Detected Volatile Organic Compounds	MW-1		NJDEP GWQS
	05/19/1995	06/13/1995	
None Detected	ND	ND	NA
Methylene Chloride	1.4	1.3	3
# of TICs	0	0	
TIC Concentration (total)	ND	ND	NA

Detected Semi-Volatile Organic Compounds	MW-1		NJDEP GWQS
	05/19/1995	06/13/1995	
None Detected	ND	ND	NA
# of TICs	0	0	
TIC Concentration (total)	ND	ND	NA

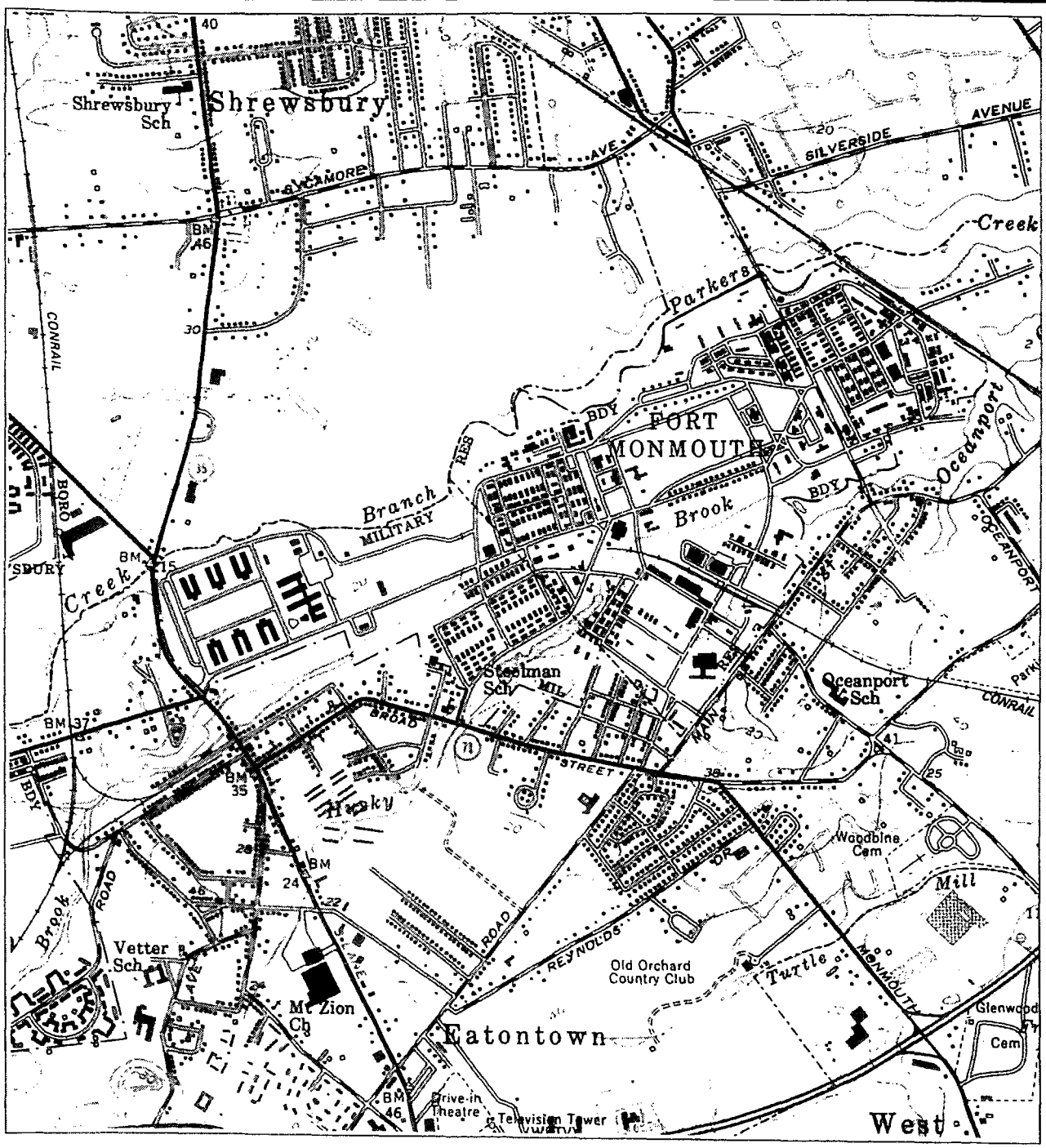
Notes:

1. All results reported in micrograms per liter (µg/L).
2. All results exceeding NJDEP GWQS are denoted in bold.

NJDEP- New Jersey Department of Environmental Protection
GWQS- Groundwater Quality Standard
TIC- Tentatively identified compound
ND- Not detected
NA- Not applicable

BCM ENGINEERS
A Division of Arc

U.S. Army
Department of Public Works
Fort Monmouth, New Jersey



N

SCALE
0 2000 FT.

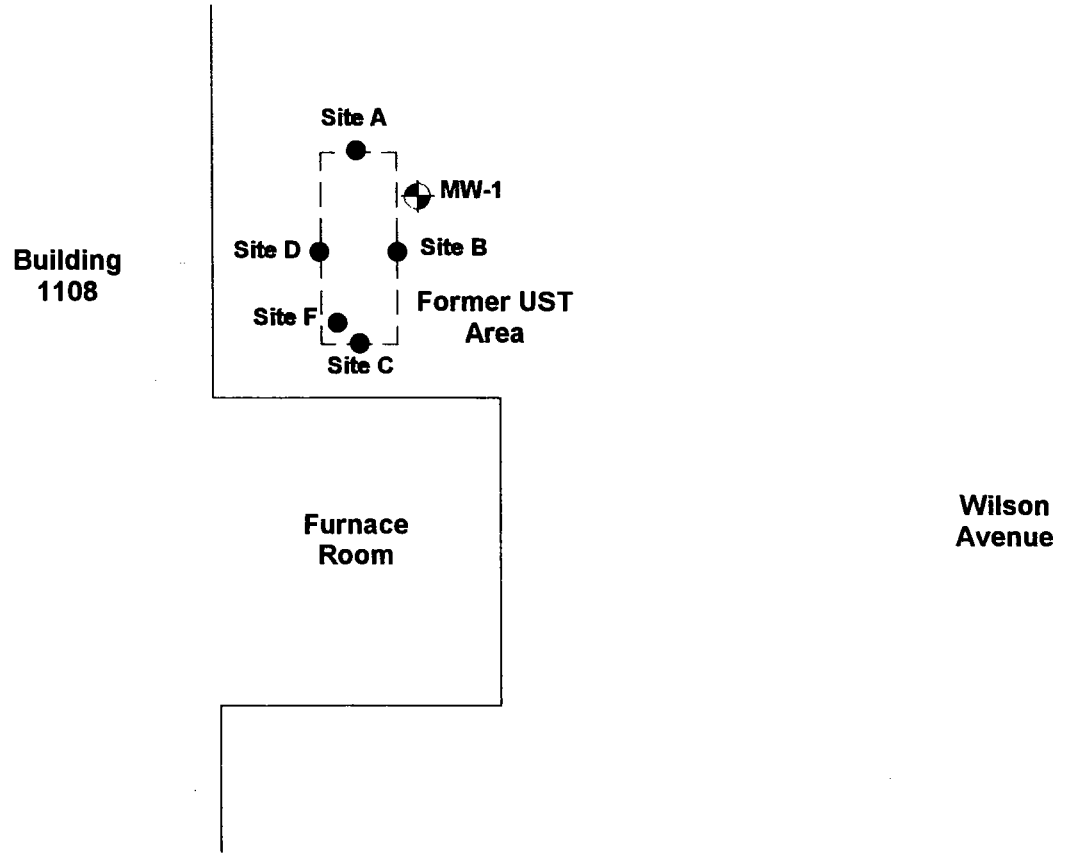
NEW JERSEY

QUADRANGLE LOCATION

Source: Long Branch, New Jersey Quadrangle

Project No. 09-5004-14

Figure 1
Site Location Map



Legend:

Monitoring Well

Soil sample location
Site A

FIGURE 2 SITE PLAN/SAMPLE LOCATION MAP

Site Address: **U.S. Army Fort Monmouth** **Building 1108** **Fort Monmouth, New Jersey**	**ATC** **Associates, Inc.**
Client: U.S Army Fort Monmouth, NJ **Directorate of Public Works**	**Three Terri Lane, Burlington, New Jersey 08016**
ATC Project Number: 68.02711.0001	**Scale: 1" = 10'**

APPENDIX A

NJDEP BUST CLOSURE APPROVAL

UNDERGROUND STORAGE TANK SYSTEM
CLOSURE APPROVAL

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION AND ENERGY

DIVISION OF RESPONSIBLE PARTY SITE REMEDIATION
BUREAU OF UNDERGROUND STORAGE TANKS
CN-029, TRENTON, NJ 08625-0029

TMS # C-93-3713 **UST #** 0081535

US Army
BLDG. 1108
Ft. Monmouth, NJ

Monmouth

THE ABOVE LISTED FACILITY IS HEREBY GRANTED APPROVAL TO PERFORM THE FOLLOWING ACTIVITY IN ACCORDANCE WITH N.J.A.C. 7:14B-1 et. seq.:

Removal of: one 1,000 gallon #2 diesel UST(s) and appurtenant piping.
SITE ASSESSMENT: Soil samples will be taken every five (5) feet along the center line of each tank and one (1) soil sample for every 15 feet along all associated piping. Two (2) additional samples will be taken from around the tank and biased to the areas of highest field screened readings. Samples will be analyzed for TPHC. If sample results are greater than 1,000ppm than 25% of the samples will be analyzed for VO+10.

ON-SITE MANAGER: C. Appleby TELEPHONE: 908-532-1475

OWNER: TELEPHONE:

EFFECTIVE DATE: SEP 07 1993

THIS FORM MUST BE DISPLAYED AT THE SITE DURING THE APPROVED ACTIVITY AND MUST BE MADE AVAILABLE FOR INSPECTION AT ALL TIMES.

Fred Alleman

KEVIN F. KRATINA, BUREAU CHIEF
BUREAU OF UNDERGROUND STORAGE TANKS

APPENDIX B

CERTIFICATIONS

Let's protect our earth

State of New Jersey
Department of Environmental Protection and Energy
Division of Responsible Party Site Remediation
CN 028
Trenton, NJ 08625-0029

ATTN: UST Program
(609) 984-3156

For State Use Only	
Date Rec'd.	
Auth.	
Routing	
UST NO.	

STANDARD REPORTING FORM
for reporting activities at an UST facility:

___ General Facility Information Changes	___ Sale or Transfer
X Closure (Abandonment or Removal)	___ Substantial Modification
___ Temporary Closure	___ Financial Responsibility
___ Change in Service	___ Address Change Only

Check ONLY One Type of Activity – Complete Form For That Activity

(More than one tank can be listed per activity)

*** * * NOTE * * * ALL NEW tank installations at existing registered facilities must submit a Registration Questionnaire for the new tanks.**

Answer questions 1 through 5 and others as applicable.

1. Company name and address (as it appears on registration questionnaire): U.S. ARMY Fort Monmouth
DEH Bldg 167
Fort Monmouth NJ 07703
ATTN: Charles Appleby

2. Facility name and location (if different from above):

3. Contact person for this activity: Charles Appleby
Telephone Number: (908) 532-6224

4. The identification number of the affected tank as it appears in Question Number 12 on the Registration Questionnaire: 0081533-168

5. Registration Number (if known): UST - 168

6. For GENERAL FACILITY INFORMATION changes (address, telephone, contact person, etc. – supply NEW information only):

a. Facility name:
b. Facility location:
c. Owner's mailing address:
NJ
d. Block: Lot:
e. Contact person (facility operator):
f. Contact telephone number: ( ) -
g. Other (Specify):

(OVER)

Bldg. 1108
UST File Copy - Sent 5-16-11

APPENDIX C

WASTE MANIFEST

State of New Jersey
Department of Environmental Protection and Energy
Hazardous Waste Regulation Program
Manifest Section
CN 028, Trenton, NJ 08625-0028

Please type or print in block letters. (Form designed for use on elite (12-pitch) typewriter.) *Form Approved. OMB No. 2050-0039. Expires 9-30-94*

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: ADBRILOOR05917 — Manifest Document No.: 03246
2. Page 1 of 1

Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address: US Army Communications Electronics Command
c/o James Shirghio, Bldg 2504, ATTN: SELFM-DL-EM-MS,
Fort Monmouth, NJ 07703 MAIN POST

4. Generator's Phone (908) 532-6224

A. State Manifest Document Number: **NJA** 1603246

B. State Generator's ID: a) B12J 1106 b) B12J 1108

5. Transporter 1 Company Name: Freehold Cartage, Inc.
6. US EPA ID Number: NJD054126164

C. State Trans. ID: NJDEP S2265

D. Transporter's Phone (908) 462-1001

7. Transporter 2 Company Name:
8. US EPA ID Number:

E. State Trans. ID

F. Transporter's Phone ( )

9. Designated Facility Name and Site Address: Lionetti Oil Recovery Co., Inc.
Runyon & Cheesequake Rds.
Old Bridge, NJ 08857

10. US EPA ID Number: NJD084044064

G. State Facility's ID

H. Facility's Phone (908) 721-0900

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. X Petroleum Oil, N.O.S. Class 3 (Petroleum Oil) Combustible Liquid UN 1270 PG III	001	TT	004810	G	X722
b. X Petroleum oil, NOS class 3 (Petroleum oil) Combustible Liquid UN 1270 PG III	001	TT	00090	G	X722
c.					
d.					

J. Additional Descriptions for Materials Listed Above
a. T,L Petroleum 70% Water 30%
b. T,L Petroleum 70% Water 30%
c.
d.

K. Handling Codes for Wastes Listed Above
a. T04=Filtration
b. T04 = Filtration
c.
d.

15. Special Handling Instructions and Additional Information
NOT REGULATED BY EPA. REGULATED AS HAZARDOUS WASTE IN NJ a.) 81533-166
24 HOUR EMERGENCY# 201-427-2881
NJ DECAL# . 5546 b) 81533-168

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: Charles M. Appleby SELFM-PW-EV — Signature: [signature] — Month Day Year: 04 21 94

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: David S. Smith — Signature: [signature] — Month Day Year: 04 21 94

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name — Signature — Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name — Signature — Month Day Year

FREEHOLD CARTAGE, INC.

MANIFEST

P.O. BOX 5010
FREEHOLD, NJ 07728-5010
PHONE: (908) 462-1001
FAX: (908) 308-0924

175 BARTOW MUN. AIRPORT
BARTOW, FL 33830
PHONE: (813) 533-4599
FAX: (813) 533-1613

108 MONAHAN AVENUE
DUNMORE, PA 18512
PHONE: (717) 342-7232
FAX: (717) 342-7367

FCI EPA ID NO.: NJD054126164

G 53050

STATE MANIFEST NO.:

(X) HM		PROPER U.S. DOT SHIPPING NAME	U.S. DOT HAZARDOUS CLASS	PACKING GROUP	NA/UN NO.	FORM	NET QTY.	UNIT MEASURE
	1					S		Y
	2							
	3							

SPECIAL HANDLING INSTRUCTIONS INCLUDING CONTAINER EXEMPTION (I.E., IDENTIFICATION SHIPMENT OF A NON-HAZARDOUS NATURE WHICH DOES NOT HAVE TO BE MANIFESTED).

- UST

GENERATOR NAME/ADDRESS: SELFm - Plw - EV

PHONE (AREA CODE): 908 53 - 6204

TRACTOR:

TRAILER:

GENERATOR EPA ID NO.:

TIME AT GENERATOR (MILITARY TIME ONLY): ARRIVAL TIME : ; DEPARTURE TIME :

FCI REP. LOADING (PRINT):

PROCEDURE: V

BOX SPOTTED:

BOX REMOVED:

EQUIPMENT USED:

COMMENTS OR DELAYS AT GENERATOR:

GENERATOR'S CERTIFICATION: This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation, U.S. EPA and the State. The wastes described above were consigned to the Transported named. The Treatment, Storage or Disposal Facility can and will accept the shipment of hazardous waste, and has a valid permit to do so. I certify that the foregoing is true and correct to the best of my knowledge.

Payment to the contractor for waste removal does not constitute payment to the carrier and if the contractor does not pay the carrier, the generator is obligated to pay the agreed rate offered to the contractor.

GENERATOR'S SIGNATURE: X _____ I HAVE READ THE ABOVE AND UNDERSTAND AND AGREE TO ALL OF ITS CONTENT.

PLEASE PRINT NAME/TITLE: Charles Appleby - Environ. Prot. Spec.

DATE LOADED: 6 / 13 / 94 (MO. DAY YR.)

TSDF NAME/ADDRESS:

PHONE (AREA CODE): –

TRACTOR: 53

TRAILER:

TSDF EPA ID NO.:

TIME AT TSDF (MILITARY TIME ONLY): ARRIVAL TIME : ; DEPARTURE TIME :

FCI REP. UNLOADING (PRINT):

PROCEDURE:

BOX SPOTTED:

BOX REMOVED:

EQUIPMENT USED:

COMMENTS OR DELAYS AT TSDF:

TSDF SIGNATURE: X _____

PLEASE PRINT NAME/TITLE:

DATE UNLOADED: 6 / 13 / 94 (MO. DAY YR.)

AR H-0257 PC 944	ME ME-HWT-47 ME-WOT-47	MO H-1490	NOVA SCOTIA, CANADA NSC 000 147	QUEBEC, CANADA QC-6ML-047
CT CT-HW-307	MD HWH-167 91-OP-1765	ND WH-429	OH 333-HW	RI RI-535
DE DE-HW-203 DE-SW-203	MA MA-294	NH TNH-0047	OK 3358	TX 40705
IL SWH-1540	MN 61572	NJ S-2265 15939	ONTARIO, CANADA A 840943	WI 11602
		NY JA-113	PA PA-AH-0067	

Original - FCI Office Copy
Yellow - FCI Office Copy
Blue - FCI Office Copy/Customer
Green - Retained by TSDF
Gold - Retained by Generator

G 53050

6-13-94 Auto Fuel Return Tank Truck

Bldg 1108 UST Fuel Copy

FREEHOLD CARTAGE, INC.

P.O. BOX 5010
FREEHOLD, NJ 07728-5010
PHONE: (908) 462-1001
FAX: (908) 308-0924

175 BARTOW MUN. AIRPORT
BARTOW, FL 33830
PHONE: (813) 533-4599
FAX: (813) 533-1613

108 MONAHAN AVENUE
DUNMORE, PA 18512
PHONE: (717) 342-7232
FAX: (717) 342-7367

MANIFEST

FCI EPA ID NO.: NJD054126164

G52559

STATE MANIFEST NO.:

(X) HM		PROPER U.S. DOT SHIPPING NAME	U.S. DOT HAZARDOUS CLASS	PACKING GROUP	NA/UN NO.	FORM	NET QTY.	UNIT MEASURE
	1	NON-HAZARDOUS WASTE-WATER	N/A	N/A	N/A	Liq.	5500	G
	2							
	3							

SPECIAL HANDLING INSTRUCTIONS INCLUDING CONTAINER EXEMPTION (I.E., IDENTIFICATION SHIPMENT OF A NON-HAZARDOUS NATURE WHICH DOES NOT HAVE TO BE MANIFESTED).

NJDEPE 15939 - 23520

GENERATOR NAME/ADDRESS
US ARMY COMMUNICATIONS ELECTRONICS COMMAND
Main Post and Chambers Wood Areas
FORT MONMOUTH NJ

PHONE (AREA CODE) 908 532 - 6223

GENERATOR EPA ID NO. Not Reg.

TRACTOR 63 | TRAILER 314

TIME AT GENERATOR (MILITARY TIME ONLY)
ARRIVAL TIME 07:00 | DEPARTURE TIME :

FCI REP. LOADING (PRINT)	PROCEDURE	BOX SPOTTED	BOX REMOVED
David Smith	—	X	X

~~EQUIPMENT USED~~ Sites. | GAL.

Bldg 707 81533-226 | 2400

Bldg. 1109 81533-168 | 100

Bldg 3067 192486-37 | 3000 ~~3700~~

COMMENTS OR DELAYS AT GENERATOR

GENERATOR'S CERTIFICATION: This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation, U.S. EPA and the State. The wastes described above were consigned to the Transported named. The Treatment, Storage or Disposal Facility can and will accept the shipment of hazardous waste, and has a valid permit to do so. I certify that the foregoing is true and correct to the best of my knowledge.

Payment to the contractor for waste removal does not constitute payment to the carrier and if the contractor does not pay the carrier, the generator is obligated to pay the agreed rate offered to the contractor.

GENERATOR'S SIGNATURE
X _____
I HAVE READ THE ABOVE AND UNDERSTAND AND AGREE TO ALL OF ITS CONTENT.

PLEASE PRINT NAME/TITLE Charles M. Appleby / Environ Prot Spec

DATE LOADED 5/27/94 (MO. DAY YR.)

TSDF NAME/ADDRESS
E I DUPONT COMPANY
CHAMBERS WORKS RT #130
DEEPWATER NJ 08023

PHONE (AREA CODE) 609 540 - 2773

TSDF EPA ID NO. NJD002385730

TRACTOR 63 | TRAILER 314

TIME AT TSDF (MILITARY TIME ONLY)
ARRIVAL TIME : | DEPARTURE TIME :

FCI REP. UNLOADING (PRINT)	PROCEDURE	BOX SPOTTED	BOX REMOVED
David Smith		X	X

EQUIPMENT USED

COMMENTS OR DELAYS AT TSDF

TSDF SIGNATURE
X _____

PLEASE PRINT NAME/TITLE

DATE UNLOADED 5/27/94 (MO. DAY YR.)

AR H-0257 PC 944	ME ME-HWT-47 ME-WOT-47	MO H-1490	NOVA SCOTIA, CANADA NSC 000 147	QUEBEC, CANADA QC-6ML-047
CT CT-HW-307	MD HWH-167 91-OP-1765	ND WH-429	OH 333-HW	RI RI-535
DE DE-HW-203 DE-SW-203	MA MA-294	NH TNH-0047	OK 3358	TX 40705
IL SWH-1540	MN 61572	NJ S-2265 15939	ONTARIO, CANADA A 840943	WI 11602
		NY JA-113	PA PA-AH-0067	

Original - FCI Office Copy
Yellow - FCI Office Copy
Blue - FCI Office Copy/Customer
Green - Retained by TSDF
Gold - Retained by Generator

G52559

UST File Copy Bldg. 1108

E.I. DU PONT DE NEMOURS AND COMPANY
CHAMBERS WORKS WASTE TREATMENT FACILITY

Part I. Land Disposal Restrictions Status Form

The purpose of this form is to ensure that all wastes accepted for treatment at Chambers Works are correctly classified and treated in accordance with the land ban requirements. After August 8, 1990, all shipments of wastes for treatment and disposal at Chambers Works must be accompanied by a completed Land Disposal Restrictions Status Form.

LAND DISPOSAL RESTRICTIONS STATUS FORM

(You must check one box and sign the form on the reverse side.)

☑ 1. This waste is not hazardous under U.S. EPA regulations (40 CFR Part 261).
Waste Description NON-HAZARDOUS WASTE-WATER

☐ 2. This waste is a newly listed or newly characteristic hazardous waste and is not yet subject to the land ban.

Newly Listed Wastes

Code _____ Waste Description _____

Code _____ Waste Description _____

Newly Characteristic Wastes

Wastes previously subject to Bevill exemption.

Code _____ Waste Description _____

Wastes that are hazardous after September 25, 1990 due to toxicity characteristic

____	D018 Benzene	____	D031 Heptachlor (and its hydroxide)
____	D019 Carbon tetrachloride	____	D032 Hexachlorobenzene
____	D020 Chlordane	____	D033 Hexachloro-1,3-butadiene
____	D021 Chlorobenzene	____	D034 Hexachloroethane
____	D022 Chloroform	____	D035 Methyl ethyl ketone
____	D023 o-Cresol	____	D036 Nitrobenzene
____	D024 m-Cresol	____	D037 Pentachlorophenol
____	D025 p-Cresol	____	D038 Pyridine
____	D026 Cresol	____	D039 Tetrachloroethylene
____	D027 1,4-Dichlorobenzene	____	D040 Trichloroethylene
____	D028 1,2-Dichloroethane	____	D041 2,4,5-Trichlorophenol
____	D029 1,1-Dichloroethylene	____	D042 2,4,6-Trichlorophenol
____	D030 2,4-Dinitrotoluene	____	D043 Vinyl chloride

☐ 3. This waste is a land disposal restricted waste requiring treatment before land disposal. If you check this box, you must complete Part II—Land Disposal Restrictions Notification Form.

____ California List because of _____.

____ First Third, Second Third, or Third Third waste.

☐ 4. This waste is a characteristically hazardous waste that has been pretreated and that meets the land disposal restrictions standards. If you check this box, you must complete Part II—Land Disposal Restrictions Notification Form.

[Note that high TOC ignitable nonwastewaters (TOC >= 10%), Sulfide reactive wastes, cyanide reactive wastes, and EP toxic pesticides D012-D017 cannot be diluted to meet the treatment standards.]

I certify under penalty of law that I have personally examined and am familiar with the treatment technology and operation of the treatment process used to support this certification and, based on my inquiry of those individuals immediately responsible for obtaining this information, I believe that the treatment process has been operated and maintained properly so as to comply with the performance levels specified in 40 CFR part 268, Subpart D, and all applicable prohibitions set forth in 40 CFR 268.32 or RCRA Section 3004(d) without impermissible dilution of the prohibited waste. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment.

☐ 5. This waste is a land disposal restricted waste subject to a

____ National Capacity Variance that expires _____ or

____ Case-by-Case Extension that expires _____

_____ _____
Code Waste Description

If you check this box, you must complete Part II—Land Disposal Restrictions Notification Form.

☐ 6. This waste is not described by the entries on this form.

Please explain. _____

CERTIFICATION

I believe that all the information submitted in this document is true, accurate, and complete.

1. _____ Envir Prot Spec SEGFA-PW-EV
Signature Title

2. Charles M. Appleby 5-27-94
Print Name Date

State of New Jersey
Department of Environmental Protection and Energy
Hazardous Waste Regulation Program
Manifest Section
CN 028, Trenton, NJ 08625-0028

Please type or print in block letters. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039. Expires 9-30-94

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. NJ3R10020597 Manifest Document No. 032416

2. Page 1 of 1

Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address: US Army Communications Electronics Command
c/o James Shirghio, Bldg 2504, ATTN: SELFM-DL-EM-MS,
Fort Monmouth, NJ 07703 MAIN POST

4. Generator's Phone (908) 532-6224

A. State Manifest Document Number: NJA 1603246

B. State Generator's ID: a) B12J 1106 b) B12J 1108

5. Transporter 1 Company Name: Freehold Cartage, Inc.

6. US EPA ID Number: NJD054121616

C. State Trans. ID: NJDEP53265

7. Transporter 2 Company Name

8. US EPA ID Number

D. Transporter's Phone (908) 462-1001

E. State Trans. ID

9. Designated Facility Name and Site Address
Lionetti Oil Recovery Co., Inc.
Runyon & Cheesequake Rds.
Old Bridge, NJ 08857

10. US EPA ID Number: NJD084044064

F. Transporter's Phone ( )

G. State Facility's ID

H. Facility's Phone (908) 721-0900

	11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number) HM	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.	X Petroleum Oil, N.O.S. Class 3 (Petroleum Oil) Combustible Liquid UN 1270 PG III	001	TT	00480	G	X 722
b.	X Petroleum oil, NOS class 3 (Petroleum oil) Combustible liquid UN 1270 PG III	001	TT	00090	G	X 722
c.						
d.						

Bldg 1108 - UST 6

J. Additional Descriptions for Materials Listed Above

a. T,L Petroleum 70%
Water 30%

b. T,L Petroleum 70%
Water 30%

c.

d.

K. Handling Codes for Wastes Listed Above

a. T04=Filtration

b. T04=Filtration

c.

d.

15. Special Handling Instructions and Additional Information
NOT REGULATED BY EPA. REGULATED AS HAZARDOUS WASTE IN NJ
24 HOUR EMERGENCY# 201-427-2881
NJ DECAL# 5546

a.) 81533-166
b) 81533-168

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

GENERATOR

Printed/Typed Name: Charles M. Appleby SELFM-PW-EV | Signature | Month Day Year: 04 12 1994

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: David S. Smith | Signature | Month Day Year: 04 12 1994

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name | Signature | Month Day Year

EPA Form 8700-22 (Rev. 9/88) Previous editions are obsolete.

SIGNATURE AND INFORMATION *MUST* BE LEGIBLE ON ALL COPIES

GENERATOR CERTIFICATION

I hereby certify that the waste described on Hazardous Waste Manifest No. NJA1603246 dated 4-21-94, is generated by one or more of the following processes and does not contain more than 2 ppm polychlorinated biphenyls (P.C.B.'s) and does not display any characteristic or contain any hazardous constituents other than for which waste oils are listed in New Jersey.

X721: Waste automotive crankcase and lubricating oils from automotive service and gasoline stations, truck terminals, and garages.

X722: Waste oil and bottom sludge generated from tank cleanouts from residential/commercial fuel oil tanks.

X723: Waste oil and bottom sludge generated by gasoline stations when gasoline and oil tanks are tested, cleaned or replaced.

X724: Waste petroleum oil generated when tank trucks or other vehicles or mobile vessels are cleaned, including, but not limited to, oil ballast water from product transport units of boats, barges, ships or other vessels.

X725: Oil spill cleanup residue which: A. is contaminated beyond saturation; or B. the generator fails to demonstrate that the spill material was not one of the listed hazardous waste oils.

X726: The following used and unused waste oils: metal working oils; turbine lubricating oils; diesel lubricating oils; and quenching oils.

X728: Bottom sludge generated from the processing, blending, and treatment of waste oil in waste oil processing facilities.

I am duly authorized to sign said certification.

Generator U.S. Army/Communications Electronics Command

Generator's EPA ID No. NJ321002597

Address Fort Monmouth, NJ MAIN POST 07703

Print Name Charles M. Apple Signature

Title Enviro Prot. Spec.

Date 4-21-94

Form 003 5/91

APPENDIX D

UST DISPOSAL CERTIFICATE

UNDERGROUND STORAGE TANK (UST)
CLOSURE CERTIFICATION

BUILDING NO. 1108

NJDEP UST REGISTRATION NO. 81533-168

DATE TANK REMOVED 5/11/94

I/O / CONTRACT NUMBER 91-0148

I CERTIFY UNDER PENALTY OF LAW THAT TANK DECOMMISSIONING ACTIVITIES WERE PERFORMED IN COMPLIANCE WITH NJAC 7:14B-9.2(b)3. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE, INACCURATE, OR INCOMPLETE INFORMATION, INCLUDING FINES AND/OR IMPRISONMENT.

NAME (Print or Type) John Lonergan

SIGNATURE

NJDEP UST CLOSURE CERTIFICATE NO. 0003248

COMPANY PERFORMING TANK DECOMMISSIONING CUTE Inc

NJDEP UST CLOSURE CORPORATE CERTIFICATE NO. 0200128

DATE OF SUBMITTAL 6/10/94

UNDERGROUND STORAGE TANK REMOVAL (UST)

(Submit one form for each tank)

Building No. 1108 **NJDEPE UST Reg. No.** 0081533 - 168

IJO No. 91-0148 **Date Tank Removed** 5/11/94

ITEM NO.	ITEM OF WORK	UNIT	UNIT PRICE	QUANTITY	TOTAL PRICE
01100-1.1	Rmv ID#27 soil to stockpile	TN	$14.50	30	$ 435.00
01100-1.2	Supply, fill & relocate 55 Gal containers to storage	CT	$47.50		$ N/A
01100-1.4	Rmv & dispose of #2 fuel mixed with water Manifest #:NJA	GL	$ 0.69	100	$ 69.00
01100-1.5	Rmv & dispose of #2 fuel mixed with solvent Manifest #:NJA	GL	$ 4.50		$ N/A
01100-1.6	Rmv & dispose of diesel fuel	GL	$ 0.69		$ N/A
01100-1.7	Rmv & dispose of diesel fuel mixed with water Manifest #:NJA	GL	$ 0.69		$ N/A
02050-1 & 02050-4	Tank removal	GL	$ 0.975	1000	$ 975.00
02050-5.1	Sawcut blacktop *	TN	$27.50		$ N/A
02050-5.2	Sawcut concrete *	TN	$29.50		$ N/A
02050-5.3	Sawcut reinforced concrete	TN	$32.50		$ N/A
02222-1.1	Backfill cert. clean fill *	TN	$16.25	15.5	$ 251.88
02222-1.2	3/4" clean stone *	TN	$17.50	14.5	$ 253.75
02511-1.1	Concrete slab 4" thick	SY	$19.80		$ N/A
02511-1.2	Concrete slab 6" thick	SY	$21.80		$ N/A
02511-1.3	Concrete slab 8" thick	SY	$24.50		$ N/A
02511-1.4	6" Concrete curb	LF	$16.00		$ N/A
02551-1.1	6" Base course of 3/4" dirty blend stone	SY	$ 6.40		$ N/A
02551-1.2	4" stabilized base	SY	8.00		$ N/A
02551-1.3	2" top course	SY	$ 5.50		$ N/A
02935-1.1	4" top soil & sod	SY	$ 7.80		$ N/A
02935-1.2	4" top soil & hydroseed	SY	$ 5.40	70	$ 378.00

* Supply certified weight tickets to Contracting Officer at time of request for payment. $2,362.63

I certify under penalty of law that tank decommissioning activities were performed in compliance with NJAC 7:14B-9.2(b)3. I am aware that there are significant penalties for submitting false, inaccurate, or incomplete information, including fines and/or imprisonment.

NAME (Print or Type): John Lonergan SIGNATURE: [signature]

NJDEPE UST Closure Cert. #: 0003248 DATE: June 9, 1994

COMPANY NAME: CUTE, Inc.
(Performer of Tank Decommissioning)

NJDEPE UST Closure Corp. Cert. #: 0200128

List of Abbreviations:

CT – 55 Gallon Containers GL – Gallon TN – Tons

CALCULATION SHEET

Building No. 1108 NJDEPE Reg. No. 0081533 - 168

Tank Size 1000 gal Tank Void 7.5 tons

CLEAN FILL

ITEM NO.	DESCRIPTION	QUANTITY	TICKET #
02222-1.1	clean fill	23.0	18729

TOTAL

STONE

ITEM NO.	DESCRIPTION	QUANTITY	TICKET #
02222-1.2	3/4" stone	14.5	924130

TOTAL

ID#27 soil to stockpile (23.0 + 14.5) - 7.5 = 30.0 **tons**

Chargeable clean fill 23.0 - 7.5 = 15.5 tons

Chargeable stone 14.5 tons

...EEHOLD CARTAGE, INC.

P.O. BOX 5010
FREEHOLD, NJ 07728-5010
PHONE: (908) 462-1001
FAX: (908) 308-0924

175 BARTOW MUN. AIRPORT
BARTOW, FL 33830
PHONE: (813) 533-4599
FAX: (813) 533-1613

108 MONAHAN AVENUE
DUNMORE, PA 18512
PHONE: (717) 342-7232
FAX: (717) 342-7367

MANIFEST

FCI EPA ID NO.: NJD054126164

G 53050

STATE MANIFEST NO.: N/A

(X) HM		PROPER U.S. DOT SHIPPING NAME	U.S. DOT HAZARDOUS CLASS	PACKING GROUP	NA/UN NO.	FORM	NET QTY.	UNIT MEASURE
	1	NON-HAZ	— N/A —		—	S		Y
	2							
	3							

SPECIAL HANDLING INSTRUCTIONS INCLUDING CONTAINER EXEMPTION (I.E., IDENTIFICATION SHIPMENT OF A NON-HAZARDOUS NATURE WHICH DOES NOT HAVE TO BE MANIFESTED).

C.U.T.E.) EMPTY TANK(S) 1@10000 gallon Fiberglass Tank - UST Bldg 108 NJDEP#8533-168

GENERATOR NAME/ADDRESS	PHONE	GENERATOR EPA ID NO.
FT. Monmouth SELFM-PW-EV Eatontown N.J.	(AREA CODE) 908 53-6224	N/A
	TRACTOR ? ? / TRAILER	TIME AT GENERATOR 7:15 (MILITARY TIME ONLY) :
		ARRIVAL TIME / DEPARTURE TIME

FCI REP. LOADING (PRINT)	PROCEDURE	BOX SPOTTED	BOX REMOVED	EQUIPMENT USED
	IV			

COMMENTS OR DELAYS AT GENERATOR

GENERATOR'S CERTIFICATION: This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation, U.S. EPA and the State. The wastes described above were consigned to the Transported named. The Treatment, Storage or Disposal Facility can and will accept the shipment of hazardous waste, and has a valid permit to do so. I certify that the foregoing is true and correct to the best of my knowledge.

Payment to the contractor for waste removal does not constitute payment to the carrier and if the contractor does not pay the carrier, the generator is obligated to pay the agreed rate offered by the contractor.

GENERATOR'S SIGNATURE	PLEASE PRINT NAME/TITLE	DATE LOADED
X _____ I HAVE READ THE ABOVE AND UNDERSTAND AND AGREE TO ALL OF ITS CONTENT.	Chas Appleby - Enviro. Prot. Spec.	06/13/94 MO. DAY YR.

TSDF NAME/ADDRESS	PHONE	TSDF EPA ID NO.
M.C.R.C. Tinton Falls N.J.	(AREA CODE) —	
	TRACTOR ? ? / TRAILER	TIME AT TSDF : (MILITARY TIME ONLY) :
		ARRIVAL TIME / DEPARTURE TIME

FCI REP. UNLOADING (PRINT)	PROCEDURE	BOX SPOTTED	BOX REMOVED	EQUIPMENT USED
	UNT			

COMMENTS OR DELAYS AT TSDF

TSDF SIGNATURE	PLEASE PRINT NAME/TITLE	DATE UNLOADED
X _____		06/13/94 MO. DAY YR.

AR H-0257 PC 944	ME ME-HWT-47 ME-WOT-47	MO H-1490	NOVA SCOTIA, CANADA NSC 000 147	QUEBEC, CANADA QC-6ML-047
CT CT-HW-307	MD HWH-167 91-OP-1765	ND WH-429	OH 333-HW	RI RI-535
DE DE-HW-203 DE-SW-203	MA MA-294	NH TNH-0047	OK 3358	TX 40705
IL SWH-1540	MN 61572	NJ S-2265 15939	ONTARIO, CANADA A 840943	WI 11602
		NY JA-113	PA PA-AH-0067	

Original - FCI Office Copy
Yellow - FCI Office Copy
Blue - FCI Office Copy/Customer
Green - Retained by TSDF
Gold - Retained by Generator

G 53050

FREEHOLD CARTAGE, INC.

P.O. BOX 5010
FREEHOLD, NJ 07728-5010
PHONE: (908) 462-1001
FAX: (908) 308-0824

175 BARTOW MUN. AIRPORT
BARTOW, FL 33830
PHONE: (813) 533-4599
FAX: (813) 533-1613

108 MONAHAN AVENUE
DUNMORE, PA 18512
PHONE: (717) 342-7232
FAX: (717) 342-7357

MANIFEST

FCI EPA ID NO.: NJD054126164

G 52559

STATE MANIFEST NO.:

(X) HM		PROPER U.S. DOT SHIPPING NAME	U.S. DOT HAZARDOUS CLASS	PACKING GROUP	NA/UN NO.	FORM	NET QTY.	UNIT MEASURE
	1	NON-HAZARDOUS WASTE - WATER	N/A	N/A	N/A	Liq	5500	G
	2							
	3							

SPECIAL HANDLING INSTRUCTIONS INCLUDING CONTAINER EXEMPTION (I.E. IDENTIFICATION SHIPMENT OF A NON-HAZARDOUS NATURE WHICH DOES NOT HAVE TO BE MANIFESTED).

NJDEPE 15939 - 23520

GENERATOR NAME/ADDRESS: US ARMY COMMUNICATIONS ELECTRONICS COMMAND Maint Asst and Change Naval Area FORT MONMOUTH NJ

PHONE: (908) 532 - 6023

GENERATOR EPA ID NO.: Not Req.

TRACTOR: 63 TRAILER: 314

TIME AT GENERATOR (MILITARY TIME ONLY): ARRIVAL TIME 07:00 DEPARTURE TIME

FCI REP. LOADING (PRINT)	PROCEDURE	BOX SPOTTED	BOX REMOVED
David Smith	—	X	X

EQUIPMENT USED: Size — (Gal.)

Rig 707 #1538-236 2400

Rig 1108 #1533-168 Tap

Rig 2107 19486-37 Tap 3000

COMMENTS OR DELAYS AT GENERATOR:

GENERATOR'S CERTIFICATION: This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation, U.S. EPA and the State. The wastes described above were consigned to the Transported named. The Treatment, Storage or Disposal Facility can and will accept the shipment of hazardous waste, and has a valid permit to do so. I certify that the foregoing is true and correct to the best of my knowledge.

Payment to the contractor for waste removal does not constitute payment to the carrier and if the contractor does not pay the carrier, the generator is obligated to pay the agreed rate offered by the contractor.

GENERATOR'S SIGNATURE: X _____ I HAVE READ THE ABOVE AND UNDERSTAND AND AGREE TO ALL OF ITS CONTENT.

PLEASE PRINT NAME/TITLE: Charles M. Asst for Supervisor

DATE LOADED: 5/27/94 (MO. DAY YR.)

TSDF NAME/ADDRESS: E.I. DUPONT COMPANY CHAMBERS WORKS RT #130 DEEPWATER NJ 08023

PHONE: (609) 540-2773

TSDF EPA ID NO.: NJD002385730

TRACTOR: 63 TRAILER: 314

TIME AT TSDF (MILITARY TIME ONLY): ARRIVAL TIME DEPARTURE TIME

FCI REP. UNLOADING (PRINT)	PROCEDURE	BOX SPOTTED	BOX REMOVED
David Smith		X	X

EQUIPMENT USED:

COMMENTS OR DELAYS AT TSDF:

TSDF SIGNATURE: X _____

PLEASE PRINT NAME/TITLE:

DATE UNLOADED: 5/27/94 (MO. DAY YR.)

AR H-0257 PC 844	ME ME-HWT-47 ME-WOT-47	MO H-1480	NOVA SCOTIA, CANADA NSC 000 147	QUEBEC, CANADA QC-SML-047
CT CT-HW-007	MD HWH-167 91-CP-1765	ND WH-499	OH 233-HW	RI RI-535
DE DE-HW-203 DE-SW-003	MA MA-294	NH TNH-0047	OK 3358	TX 40705
IL SWH-1540	MN 61572	NJ 8-2265 16039	ONTARIO, CANADA A 840043	WI 11402
		NY JA-113	PA PA-AH-0067	

Original - FCI Office Copy
Yellow - FCI Office Copy
Blue - FCI Office Copy/Customer
Green - Retained by TSDF
Gold - Retained by Generator

G 52559

S. C. M. I. – BOUND BROOK

CUSTOMER'S COPY

CONTROL NO. A-924130

Stavola Construction Materials, Inc.

PLANT: CHIMNEY ROCK ROAD, BOUND BROOK, N.J. • 908/356-5700

Bldg 1108
14.5 tons
Bldg 702
4.8 tons
Bldg 707
4.8 tons

2/4/94
FH 1.5-0 RA 1108
to stg. shed
TEP

X T Wagner
DRIVER'S SIGNATURE

RECEIVED & ACCEPTED BY:
X D Bowman
CUSTOMER'S SIGNATURE

CRUSHED STONE • SAND • GRAVEL

EXECUTIVE OFFICE
HAMILTON ROAD
TINTON FALLS, N.J.
908/542-2828

ADDRESS REPLY TO
P.O. BOX 482
RED BANK, N.J. 07701

THIS COMPANY WILL NOT BE RESPONSIBLE FOR DAMAGE CAUSED BY VEHICLES DELIVERING MATERIALS OFF PUBLIC ROADS.

EXPLANATION OF DELIVERY CODES
1 - F.O.B.
2 - DELIVERED
3 - NET DELIVERED

DATE	CUST. NO.	JOB NO.	TICKET NO.
05/11/94	08888	13:34	924130

CUSTOMER
CLEANING UP THE ENVIORNMENT
103 GODWIN AVE.
P.O. BOX 237
MIDLAND PARK NJ 07432

DELIVER TO ZONE:FT MONMOUTH
BLDG.296

GROSS 37.94
TARE 13.85
NET 24.09

TRUCKER	TRUCK NO.	DRIVER NO.	METHOD OF PAYMENT	DELIVERY CODE	ZONE
04251	2		CHARGE	2	030

QUANTITY	PRODUCT CODE/DESCRIPTION	UNIT OF MEASURE	UNIT PRICE	EXTENDED	FREIGHT	SALES TAX	TOTAL
24.09	20 3/4 QPS-DGA	T			4.35		

COMMENTS

LOADS 1 ACCU. TONS 24.09

WAIT TIME

GRAND TOTAL

Joseph Scarano Sand & Gravel Co.

1453 W. Park Ave., Wayside
Asbury Park, N.J. 07712
908-493-3333

18729

Order Date 11/13+h

Deliver Date 11/15

Name Big A Trucking

Address Clinton Fill

Delivered ☐ C.O.D. ☐

F.O.B./P.U. ☐ Charge ☐

Item(s)	Quantity / Measure (tons, lbs., yds., ea.)	Unit Price	Total
	72000		
BLK 1108	2000		
	46000	23 tons	

Sub Total

Delivery

N.J. Tax

Total

Driver

Received

* Company not responsible for damage done off public roads. Color not guaranteed.

KRISTEN W. HAUGE NOTARY PUBLIC No. 2381 REICHER N.J.

Have gravel will travel!
since 1925

APPENDIX E

MONITORING WELL PERMIT AND CONSTRUCTION LOG

SERIAL # 41184

DWR-133M (10/93)

Mail to

NJDEPE
Bureau Water Allocation
CN426
Trenton, NJ 08625

STATE OF NEW JERSEY
DEPARTMENT OF ENVIRONMENTAL PROTECTION AND ENERGY
TRENTON, NJ

MONITORING WELL PERMIT

VALID ONLY AFTER APPROVAL BY THE D.E.P.E.

Permit No. 29317855

COORD #: 29.136555

Owner US Army - Fort Monmouth
Address SELFM PW EV
Fort Monmouth NJ 07703

Name of Facility S-1108
Address Main Post
Fort Monmouth NJ

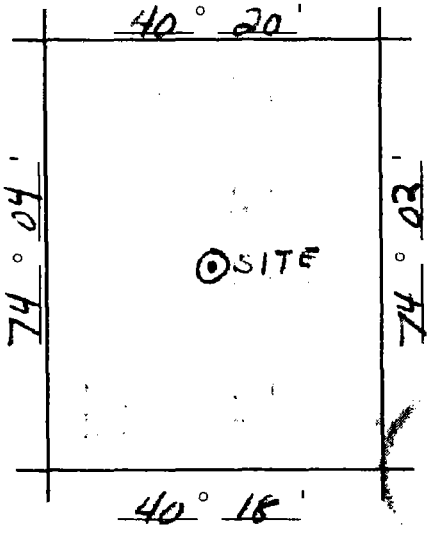
Driller Tyrec Organization, Ltd
Address 1350 US Hwy 130
Burlington NJ 08016

Diameter of Well(s)	4 Inches	Proposed Depth of Well(s)	15 Feet
# of Wells Applied for (max. 10)	1	Will pumping equipment be installed? YES ☐ NO ☒	
Type of Well (see reverse)	Monitoring	If Yes, give pump capacity	N/A GPM

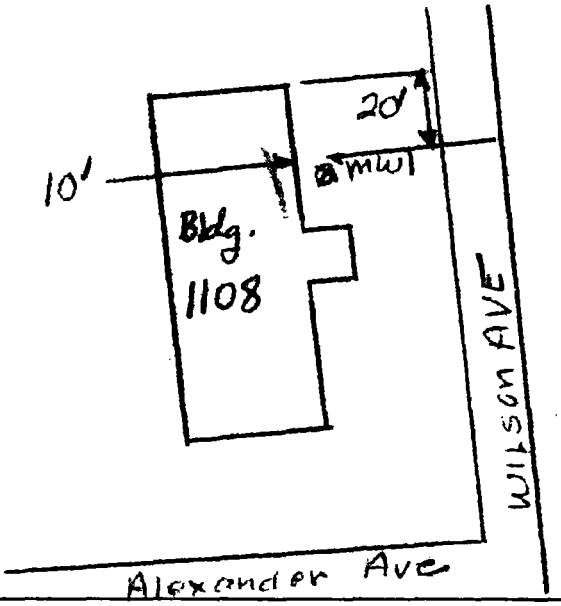
LOCATION OF WELL(S)

Lot #	Block #	Municipality	County
		Fort Monmouth	Monmouth

State Atlas Map No. 27



Draw sketch of well(s) nearest roads, buildings, etc. with marked distances in feet. Each well MUST be labeled with a name and/or number on the sketch.



FOR MONITORING WELLS, RECOVERY WELLS, OR PIEZOMETERS, THE FOLLOWING MUST BE COMPLETED BY THE APPLICANT. PLEASE INDICATE WHY THE WELLS ARE BEING INSTALLED:

- ☐ Spill Site
- ☐ ISRA Site
- ☐ CERCLA (Superfund) Site
- ☐ RCRA Site
- ☒ Underground Storage Tank Site
- ☐ Operational Ground Water Permit Site
- ☐ Pretreatment and Residuals Site
- ☐ Water and Hazardous Waste Enforcement Case
- ☐ Water Supply Aquifer Test Observation Well
- ☐ Other (explain) _____

CASE I.D. Number

94-5-13-0932 27
(Site Bldg. 1108)

This Space for Approval Stamp

WELL PERMIT APPROVED
NJDEP
AUG 3 1994
BUREAU OF WATER ALLOCATION

FOR D.E.P.E. USE

☒ Issuance of this permit is subject to the conditions attached. (see next page)
☒ For monitoring purposes only
☐ _____
☒ The well(s) may not be completed with more than 25 feet of total screen or uncased borehole.

SEE REVERSE SIDE FOR IMPORTANT PROVISIONS AND REGULATIONS PERTAINING TO THIS PERMIT.

In compliance with N.J.S.A. 58:4A-14, application is made for a permit to drill a well as described above.

Date 7-25-94

Signature of Driller _____ License # 1421

Signature of Owner _____ SELFM-PW-EV

COPIES: Water Allocation White and Pink

DWR-138 M
12/91

ey Department of Environmental Protection and
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. _____ - _____
Atlas Sheet Coordinates _____ : _____ : _____

OWNER IDENTIFICATION - Owner _____
Address _____
City _____ State _____ Zip Code _____

WELL LOCATION - If not the same as owner please give address. Owner's Well No. MW-1
County _____ Municipality _____ Lot No. _____ Block No. _____
Address _____

TYPE OF WELL (as per Well Permit Categories) _____ Date well completed 9/15/17
Regulatory Program Requiring Well _____ Case I.D. # _____

CONSULTING FIRM/FIELD SUPERVISOR (if applicable) _____ Tele. # _____

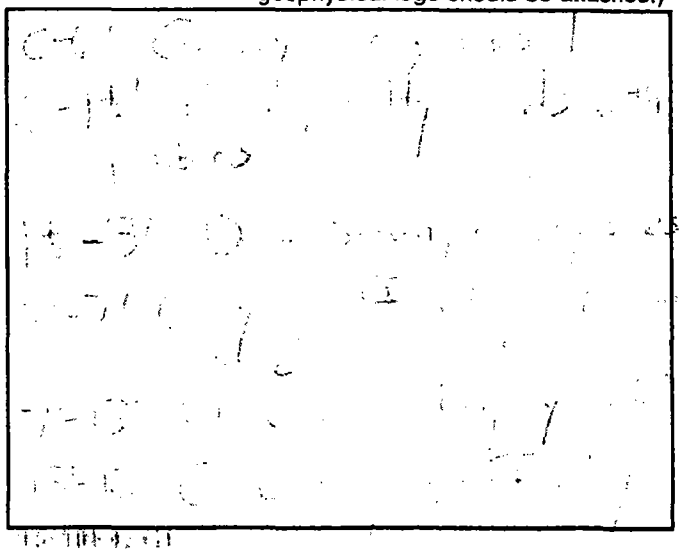
WELL CONSTRUCTION

Total depth drilled 15 ft.
Well finished to 15 ft.
Borehole diameter:
Top _____ in.
Bottom _____ in.
Well was finished: ☐ above grade ☑ flush mounted
If finished above grade, casing height (stick up) above land surface _____ ft.
Was steel protective casing installed? ☐ Yes ☐ No

	Depth to Top (ft.) [From land surface]	Depth to Bottom (ft.) [From land surface]	Diameter (inches)	Type and Material
Inner Casing	0'	5'	4	PC
Outer Casing (Not Protective Casing)				
Screen (Note slot size)	5'	15'	1	PC
Tail Piece				
Gravel Pack	3'	15'		
Annular Seal/Grout	0'	3'		
Method of Grouting	C			

Static water level after drilling _____ ft.
Water level was measured using _____
Well was developed for _____ hours at _____ gpm
Method of development _____
Was permanent pumping equipment installed? ☐ Yes ☑ No
Pump capacity _____ gpm
Pump type: _____
Drilling Method _____
Drilling Fluid _____ Type of Rig _____
Name of Driller _____
Health and Safety Plan submitted? ☑ Yes ☐ No
Level of Protection used on site (circle one) (None) D C B A
N.J. License No. _____
Name of Drilling Company _____

GEOLOGIC LOG (Copies of other geologic logs and/or geophysical logs should be attached.)



I certify that I have drilled the above-referenced well in accordance with all well permit requirements and all applicable State rules and regulations.

Driller's Signature _____ Date _____

COPIES: White & Green - DEPE Canary - Driller Pink - Owner Goldenrod - Health Dept.

MONITORING WE[illegible]ERTIFICATION-FORM B-LOCAT[illegible]CERTIFICATION

Name of Permittee: U.S. ARMY
Name of Facility: FORT MONMOUTH
Location: MONMOUTH COUNTY, NJ
~~NJPDES~~ Number: 94-5-13-0932-29
Dear

LAND SURVEYOR'S CERTIFICATION

Well Permit Number:
This number must be permanently affixed to the well casing. 29-31785-

Longitude (to nearest second): West 74°02'59.26"

Latitude (to nearest second): North 40°18'39.15"

Elevation of Top of Inner Casing (cap off) (one-hundredth of a foot): 16.55

Elevation of ground level (1/100th ft.) 16.80

Source of elevation datum (benchmark, nail, etc.) and year. (If an alternate datum has been approved by the Department, identify here, assume datum of 100', and give approximated actual elevation.) Source: BM FM-113

☒ 1927 ☐ 1983

Elev.:

Owners Well Number (As shown on application or plans): BLDG. 1108 MW-1

Elevations are to be determined by double run, three wire leveling methods using balanced sights, commencing from a well marked and described point. This beginning point shall either be derived from Federal or State benchmarks if not more than 1000 feet from the site or from an alternate datum approved by the Department. Tolerances should meet third order standards, which are 0.05 ft x $(\text{mile})^{1/2}$. For sections less than 0.1 mile, let miles = 0.1.

AUTHENTICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

Wayne W. Burgett
PROFESSIONAL LAND SURVEYOR'S SIGNATURE

WAYNE W BURGETT
PROFESSIONAL LAND SURVEYOR'S NAME
(Please print or type)

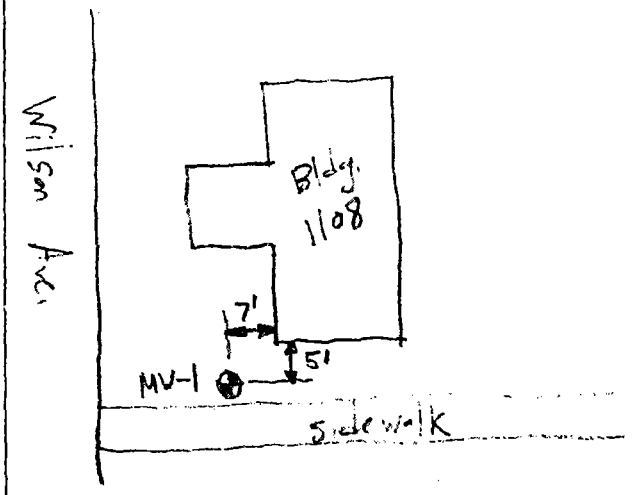
SEAL

31654
PROFESSIONAL LAND SURVEYOR'S LICENSE #

FIELD LOG OF BORING

SHEET 1 OF 2

LOCATION OF BORING:



PROJECT: US Army Ft. Monmouth	BORING NO: MW-1
	TOTAL DEPTH: 15
JOB NO:	LOGGED BY: E. Pyc
PROJ. MGR.: Capriffi	EDITED BY:
DRILLING CONTRACTOR: Tyree	
DRILL RIG TYPE: B 80	
DRILLERS NAME: Mike Beck	
SAMPLING METHODS: SS	
HAMMER WT.: 120 lbs.	DROP:
STARTED, TIME: 12:05	DATE:
COMPLETED, TIME: 12:40	DATE:
BORING DEPTH (ft): 15	
CASING DEPTH (ft): 0-5'	
WATER DEPTH (ft): 6'4"	
TIME: 6:30	
DATE: 9/14/94	
BACKFILLED, TIME: 12:45	DATE: 9/12 BY: Tyree
SURFACE ELEV:	DATUM:
CONDITIONS:	

SAMPLE DEPTH	SAMPLER TYPE	BLOWS / 6 IN.	INCHES DRIVEN	INCHES RECOVERED	SAMPLE CONDITION	DRILLING RATE (min./ft.)	PID READING (ppm)	ODOR (Y / N ?)	GRAPHIC WELL CONST.	DEPTH IN FEET	GRAPHIC LOG	
												Grassy area, topsoil
										1	SM	Brown, silty sands w/ pebbles
												Dark brown, clayey sands
2-4	SS	4	6	24			<1	N		2	SC	
		3	6									
		3	6							3		Gray stiff clay w/ brown fine sand
		4	6									
4-6	SS	1	6	18			<1	N		4		
		3	6									
		5	6							5	CL	
		4	6				<1	N				
										6		
										7		Dark greenish-gray stiff clay
										8	CL	
										9		
										10		

Casing

Screen Morie sand

1105

D LOG OF BORING (CONTINUED) SHEET 2 OF 2

DEPTH	TYPE	BLOWS	DRIVEN	REC'V'D	COND.	D. RATE	PID	ODOR	GR.WELL	DEPTH	GRAPHIC LOG
									Monic sand screen	11	
										12	
										13	
										14	CL
										15	
										6	
										7	
										8	
										9	
										0	
										1	
										2	
										3	
										4	
										5	
										6	
										7	
										8	

PROJECT: | NO: | BORING NO: MW-1

Olive gray stiff clay

TYREE ENVIRONMENTAL TECHNOLOGIES

U.S. ARMY
FORT MONMOUTH
SELFM PW EV

LOG OF BORING 1108-mw1

Produced for Charles Appleby

Project Name	: BLDG. 1108	Completion Date	: 9/12/94
NJDEP Case #	: 94-5-13-0932-29	Northing	: N 538783.901
Logged By	: TYREE INC.	Easting	: E 2172039.301
Start Date	: 9/12/94	Driller	: M. Beck

Depth in Feet	29-31785 ELEV: 16.55	DESCRIPTION	GRAPHIC	USCS	Samples	Blows/Ft	Well Construction Information
0		Grassy area/topsoil					
.6		Brown silty sands with pebbles		SM			
2		Dark brown, clayey sands		SC			
3		Gray stiff clay with brown fine sands		SC			
4							
5							
6	9/94						
8		Dark greenish-gray stiff clay		CL			
10							
12							
14		Olive gray stiff clay		CL			
15							
16							

Well Construction

Date Completed	: 9/12/94
Hole Diameter	: 8 in
Drill Method	: HSA
Company Rep	: M Beck

Well Casing

Material	: PVC
Diameter	: 4 in
Joints	: Threaded

Well Screen

Material	: PVC
Diameter	: 4 in
Joints	: Threaded
Opening	: 20 Slot
Sand Pack	: # 2 Morie Sand
Annulus Seal	: Bentonite/Portland : Tremmie

Well Screen

Material	: PVC
Diameter	: 4 in
Cap	:

NOTES

Well #1 is 1108 MW1

2-28-1996 C:\1108\GEO\1108 mw.ge3

APPENDIX F

SOIL ANALYTICAL DATA PACKAGE

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEPE Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 167
Ft. Monmouth, NJ 07703

Lab. ID #: 1488.1-.6
Sample Rec'd: 05/11/94
Analysis Start: 05/12/94
Analysis Comp: 05/12/94

Analysis: 418.1 (TPH)
Matrix: Soil
Analyst: S. Hubbard
Ext. Meth: Sonc.

NJDEPE UST Reg.#: **0081533-168**
Closure #: **C-93-3713**
DICAR #: 94-5-13-0932-29
Location #: **Bldg. 1108**

Lab ID.	Description	%Solid	Result (mg/Kg)	MDL
1488.1	Site A, W. Sidewall 6' OVA= 5.0	87	891.	6.6
1488.2	Site B, N. Sidewall 6' OVA= 5.0	83	333.	6.6
1488.3	Site C, E. Sidewall 6' OVA= 5.0	83	2170.	46.
1488.4	Site D, S. Sidewall 6' OVA= 10.	83	10400.	115
1488.5	Site E, Dupe. OVA= Na	84	2320.	46.
1488.6	Site F, SW corner below pad, OVA=100 (Bkm)	80	2700.	46.
M. Bl.	Method Blank	100	ND	3.3

Notes: ND = Not Detected, MDL = Method Detection Limit
* = Silica Gel Added, NA = Not Applicable
1489.1dup= 81% 1489.1spike= 118% 1489.1spike dup= 125% RPD= 3.5%

Brian K. McKee
Laboratory Director

Report of Analysis
U.S. Army, Fort Monmouth Environmental Laboratory
NJDEPE Certification # 13461

Client: U.S. Army
DPW, SELFM-PW-EV
Bldg. 167
Ft. Monmouth, NJ 07703

Lab. ID #: 1488.1-.6
Sample Rec'd: 05/11/94
Analysis Start: 05/12/94
Analysis Comp: 05/12/94

Analysis: Munsel

Lab ID#	Soil Color
1488.1	5Y 4/2 Olive Gray
1488.2	5Y 3/2 Dark Olive Gray
1488.3	5Y 3/2 Dark Olive Gray
1488.4	5Y 3/2 Dark Olive Gray
1488.5	5Y 4/2 Olive Gray
1488.6	5Y 3/2 Dark Olive Gray

Brian K. McKee
Laboratory Director

SERV-AIR, INC.
An E-SYSTEMS Company

P.O. #: PWS-007

Chain of Custody

Project #: C-93-3713
Customer: C. Appleby
Phone: X26224

Sampler: CAppleby
Site Name: Bldg. 1108
UST # 0081533 -168
C-93-3713

Date / Time: 5/11/94 | 1400

Analysis Parameters

Start:
Finish:

Preservation Method

Lab Sample ID Number	Date/Time		Customer Sample Location/ID Number	Sample Matrix	# of Bottles	TPHC	o/g Solid	Mineral	OVA-Reading	Remarks
1488.1	5/11/94	14:29	Site A W-Sidewall 6'	Soil	1	X	X	X	5	Samples Kept 4°C
.2		1430	Site B N-Sidewall 6'		1	X	X	X	5	
.3		1434	Site C - E-Sidewall 6'		1	X	X	X	5	
.4		1433	Site D S-Sidewall 6'		1	X	X	X	10	
.5		NA	Site E Dupl		1	X	X	X	NA	
.6		1457	Site F-S-W-Corner Below Pad		1	X	X	X	100	OVA-128 G.C. SN-195114
										Calibrated w/ Zero Air and 95 PPM methane at Gas Select 300 - Read 100 PPM at Charging 5/11/94 1412 hrs.

Relinquished By (signature)	Date / Time	Received By (signature)	Shipped By:

Relinquished By (signature)	Date / Time	Received for Lab by (signature):	Date / Time
	5/11/94 | 1615		5/11/94 | 1615

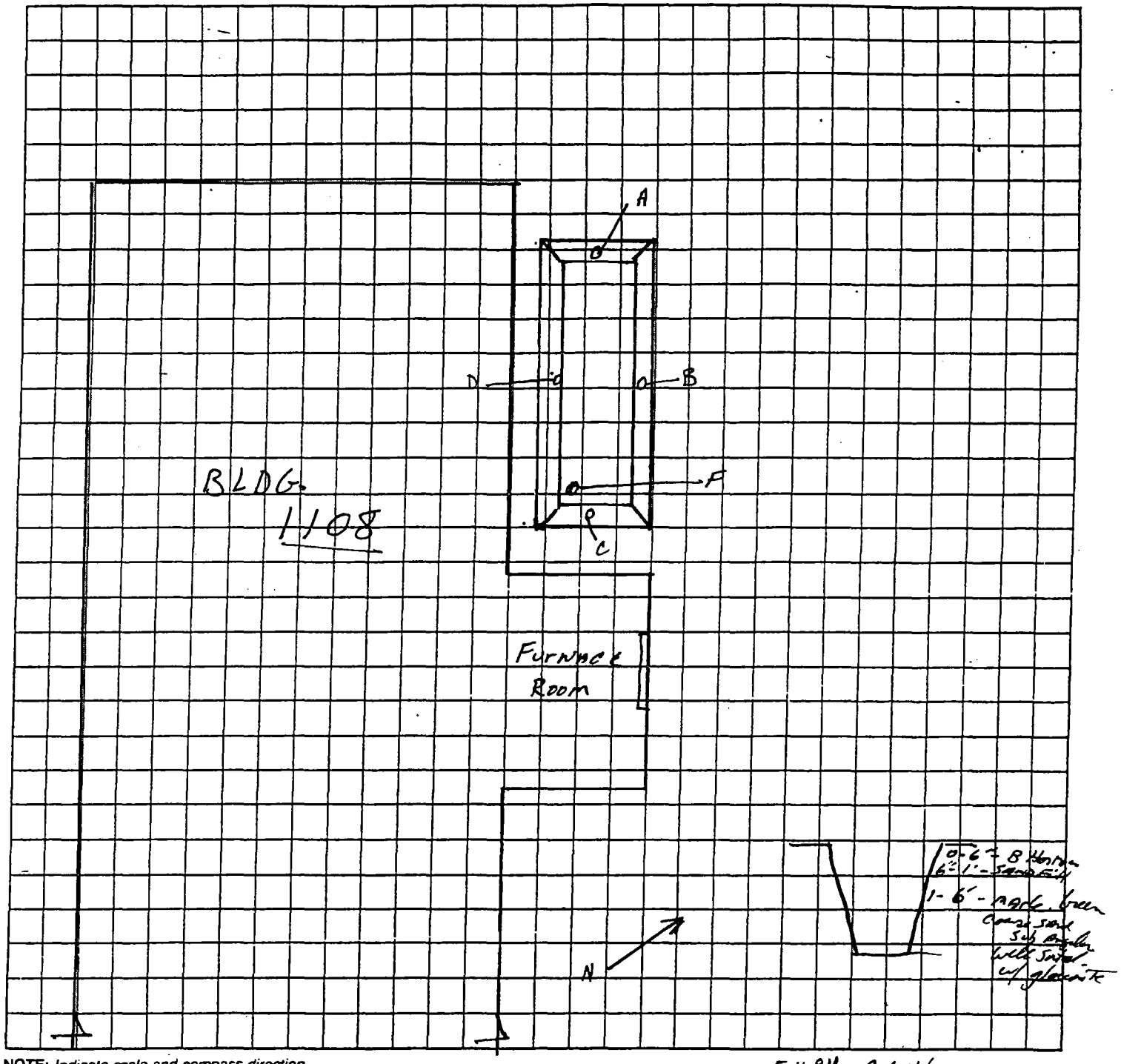
Note: A drawing depicting sample location should be attached or drawn on the reverse side of this chain of custody. Attached

SAI-ENV COC Form 01 Page 1 of 1 Pages Rev. A Date: 02 Apr 93

FT. MONMOUTH OFFICE
E-SYSTEMS, INC • P.O. BOX 369, BUILDING 1209 • FT. MONMOUTH, NEW JERSEY 07703-5000 • (908) 544-0500

SERV-AIR, INC. FORT MONMOUTH, NEW JERSEY

PROPOSED SITE PLAN



NOTE: *Indicate scale and compass direction.*

5-11-94 - C. Appleby.

REMARKS

- Concrete Pad at Base of tank. Could not be Removed. - Below Water.
- Work may be Performed on Pad or GW.?
- F-Sample Below Pad

A-E - Bep Sidewall Samples ~ 6" Above GW. GW at 6'

TANK LOCATION

BLDG# 1108

TANK # 0081533-168

TANK SIZE 1000 FRP

TANK CONTENTS #2 oil

May 12, 1994 1050
Sarah J. Hubbard

Blank	0 MV
40.75	106 MV
81.5	210 MV
163	409 MV
1488.1	295 MV
1488.2	107 MV
1488.3	100 MV (dil 7)
1488.4	188 MV (dil 17.5)
1488.5	108 MV (dil 7)
1488.6	119 MV (dil 7)
~~1488~~	VOID ~~SJH~~ 5/12/94
1489.1	14 MV
1489.1	12 MV Dup.
1489.1	92 MV Spk.
1489.1	97 MV Dup. Spk.
1489.2	7 MV
1489.3	6 MV
1489.4	18 MV
1489.5	12 MV
1489.6	11 MV

PHC Conformance/Non-conformance Summary Report

	No	Yes
1. Blank Contamination - If yes, list the sample and the corresponding concentrations in each blank	✓	
2. Matrix Spike/Matrix Sp Dup. Recoveries Meet Criteria (If not met, list the sample and corresponding recovery which falls outside the acceptable range)		✓
3. IR Spectra submitted for standards, blanks, & samples		✓
4. Chromatograms submitted for standards, blanks, and samples if GC fingerprinting was conducted.		N/A
5. Extraction holding time met. (If not met, list number of days exceeded for each sample)		✓
6. Analysis holding time met. (If not met,list number of days exceeded for each sample)		✓

Comments: _____

Laboratory Authentication Statement

I certify under penalty of law, where applicable, that this laboratory meets the Laboratory Performance Standards and Quality Control requirements specified in N.J.A.C. 7:18 and 40 CFR Part 136 for Water and Wastewater Analyses and SW 846 for Solid Waste Analysis. I have personally examined the information contained in this report, and to the best of my knowledge, I believe that the submitted information is true, accurate, complete, and meets the above referenced standards where applicable. I am aware that there are significant penalties for purposefully submitting falsified information, including the possibility of a fine and imprisonment.

Brian K. McKee
Laboratory Manager

SERV-AIR, INC.
An E-SYSTEMS Company

P.O. #: PWS-007

Chain of Custody

Project #: C-93-3713

Customer: C. Appleby

Phone: X26024

Sampler: CAppleby

Site Name: Bldg. 1108

UST # 0081533 - 168

C-93-3713

Date / Time: 5/11/94 | 1400

Analysis Parameters

Start:

Finish:

Lab Sample ID Number	Date/Time	Customer Sample Location/ID Number	Sample Matrix	# of Bottles	TPHC	% Solid	Munsell	OVA-Reading	Preservation Method / Remarks
	5/11/94 14:29	Site A W-Sidewall 6'	Soil	1	X	X	X	5	Samples Kept 4°C
	1430	Site B N-Sidewall 6'		1	X	X	X	5	
	1434	Site C - E-Sidewall 6'		1	X	X	X	5	
	1433	Site D S-Sidewall 6'		1	X	X	X	10	
	NA	Site E Dupe		1	X	X	X	NA	
	1452	Site F - S-W-Corner Below Pad		1	X	X	X	100	OVA-128 GC SN-A5 2114
									Calibrated w/ Zero Air and
									95 PPM methane at Gas Select
									300 - Read 100 PPM at
									Charging 5/11/94 1442 hrs.

Relinquished By (signature)	Date / Time	Received By (signature)	Shipped By:

Relinquished By (signature)	Date / Time	Received for Lab by (signature):	Date / Time
	5/11/94 | 1615		5/11/94 | 1615

Note: A drawing depicting sample location should be attached or drawn on the reverse side of this chain of custody.

Attached

SAI-ENV COC Form 01 Page 1 of 1 Pages Rev. A Date: 02 Apr 93

FT. MONMOUTH OFFICE
E-SYSTEMS, INC • P O BOX 369, BUILDING 1209 • FT MONMOUTH NEW JERSEY 07703-5000 • (908) 544-0000

SERV-AIR, INC.

P.O. #: BPA- / Princeton Labs.

Chain of Custody

Project #:	Sampler: C. Appleby / Cute Inc.	Date / Time 5/31/94 | 1315	Analysis Parameters	Start:
Customer: C. Appleby SELFm- PW- EV	Site Name: Bldg. 1108 UST# 0081533-168			Finish:
Phone: x 26224				Preservation Method

Lab Sample Number	Date/Time		Customer Sample Location/ID Number	Sample Matrix	# of Bottles	VOA+15	Xylene TBA-mtbe	Pb.	Remarks
	5-31-94	1330	Site D-2	2	2	1	1		Samples Kept <4°C
	5-31-94	1325	Field Blank	3	3	2	1		

Relinquished By (signature)	Date / Time	Received By (signature)	Shipped By:
[signature]	5/31/94 | 1540	Sarah J Hubbard	
Relinquished By (signature)	Date / Time	Received for Lab by (signature):	Date / Time

Note: A drawing depicting sample location should be attached or drawn on the reverse side of this chain of custody. NA

princeton testing laboratory inc.

P.O. Box 3108
3490 U.S. Route 1
Princeton, NJ 08543-3108
(609) 452-9050
FAX (609) 452-0347

U.S. Army Fort Monmouth
ATTN: SELFM-PW
Building 167
Fort Monmouth, New Jersey 07703-5108

Attn: Charles Appleby

Project Name: Bldg. 1108 - UST 0081533-168

JOB # 9402817-001

Laboratory Certification # 11118

Reviewed by: W. Alan Volk 7/5/95

1817(2)

LABORATORY DELIVERABLES

THIS FORM MUST BE COMPLETED BY THE LABORATORY OR ENVIRONMENTAL CONSULTANT AND ACCOMPANY ALL DATA SUBMISSIONS

The following laboratory deliverables shall be included in the data submission. All deviations from the accepted methodology and procedures, or performance values outside acceptable ranges shall be summarized in the Non-Conformance Summary. The proposed "Technical Requirements for Site Remediation" rules, which appeared in the May 4, 1992 New Jersey Register, provides further details. The document shall be bound and paginated, contain a table of contents, and all pages shall be legible. Incomplete packages will be returned or held without review until the data package is completed.

It is recommended that the analytical results summary sheets listing all targeted and non-targeted compounds with the method detection limits be included in one section of the data package and in the main body of the report.

		Check if Complete
1.	Cover Page, Title Page listing Lab Certification #, facility name & address, & date of report	✓
2.	Table of Contents	✓
3.	Summary Sheets listing analytical results for all targeted and non-targeted compounds	✓
4.	Summary Table cross-referencing field ID #'s vs. Lab ID #'s	✓
5.	Document bound, paginated and legible	✓
6.	Chain of Custody	✓
7.	Methodology Summary	✓
8.	Laboratory Chronicle and Holding Time Check	
9.	Results submitted on a dry weight basis (if applicable)	✓
10.	Method Detection Limits	
11.	Lab certified by NJDEPE for parameters or appropriate category of parameters or a member of the USEPA CLP	✓
12.	Non-Conformance Summary	✓

W. Clay Hall

Laboratory Manager or Environmental Consultant's Signature

7/3/95

Date

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET

LABORATORY NAME Princeton Testing Laboratory
CITY/STATE Princeton, NJ

CASE NO. 2817 SDG NO. 151P.1 SDG NOS. TO FOLLOW ____
____ ____ SAS NO. ____

CONTRACT NO. Fort Monmouth
SOW NO. OLM01.8

All documents delivered in the complete SDG file must be original documents where possible. (REFERENCE EXHIBIT B, SECTION II and SECTION III.)

		PAGE NOs FROM	TO	CHECK LAB	EPA
1.	Inventory Sheet (Form DC-2) (Do not number)	___	___	✓	___
2.	SDG Case Narrative	___	___	✓	___
3.	SDG Cover Sheet/Traffic Report	___	___	___	___
4.	Volatiles Data				
	a. QC Summary				
	System Monitoring Compound Summary (Form II VOA)	___	___	✓	___
	Matrix Spike/Matrix Spike Duplicate Summary ~~(Form III VOA)~~ N/A	___	___	✓	___
	Method Blank Summary (Form IV VOA)	___	___	✓	___
	GC/MS Instrument Performance Check (Form V VOA)	___	___	✓	___
	Internal Standard Area and RT Summary (Form VIII VOA)	___	___	✓	___
	b. Sample Data	___	___		
	TCL Results - (Form I VOA)			✓	___
	Tentatively Identified Compounds (Form I VOA-TIC)			✓	___
	Reconstructed total ion chromatograms (RIC) for each sample			✓	___
	For each sample:				
	Raw spectra and background-subtracted mass spectra of target compounds identified			✓	___
	Quantitation reports			___	___
	Mass spectra of all reported TICs with three best library matches			✓	___
	c. Standards Data (All Instruments)	___	___		
	Initial Calibration Data (Form VI VOA)			✓	___
	RICs and Quan Reports for all Standards			✓	___
	Continuing Calibration Data (Form VII VOA)			✓	___
	RICs and Quantitation Reports for all Standards			✓	___
	d. Raw QC Data				
	BFB	___	___	✓	___
	Blank Data	___	___	✓	___
	Matrix Spike/Matrix Spike Duplicate Data	___	___	✓	___

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET (Cont.)

CASE NO. 2817 SDG NO. 1511.1 SDG NOS. TO FOLLOW _____
_____ _____ SAS NO. _____

	PAGE NOs FROM	TO	CHECK LAB	EPA
Miscellaneous Data				
Original preparation and analysis forms or copies of preparation and analysis logbook pages				
Internal sample and sample extract transfer chain-of-custody records				
Screening records				
All instrument output, including strip charts from screening activities (describe or list)				
_____				
_____				
EPA Shipping/Receiving Documents				
Airbills (No. of shipments ___)				
Chain-of-Custody Records			✓	
Sample Tags			✓	
Sample Log-In Sheet (Lab & DCl)				
Miscellaneous Shipping/Receiving Records (describe or list)				
_____				
_____				
Internal Lab Sample Transfer Records and Tracking Sheets (describe or list)				
_____				
_____				
Other Records (describe or list)				
Telephone Communication Log				
_____				
_____				

Comments: _____

_____

_____

_____

Completed by: W.A. Volk (CLP Lab) (Signature) W.A. Volk QA/QC Coordinator (Printed Name/Title) 6/29/94 (Date)

Audited by: _____ (EPA) (Signature) _____ (Printed Name/Title) _____ (Date)

FORM DC-2-4

TABLE OF CONTENTS

APPROVED SAMPLE ANALYSIS REQUEST

U.S. Army, Fort Monmouth N.J.
ATTN: SELFM-PW
Building 167
Fort Monmouth, New Jersey 07703-5108
Attention: Charles Appleby
Phone:(908) 532-6224 FAX:(908) 532-2367

Project No.: 9402817-001EWM

Date Received: 06/01/94
Analysis Due : 06/03/94

Number Of Samples : 4
Number Of Containers: 9

Customer Number: 1636-000
P.O. Number: E03-94U
Standard Tests
Project Name: Bldg. 1108

Approved By: Steven Burns

Reports: Custom Report Format

Sample I.D.'s	Code	Requested Analytical Services	Sampled
001 1510.1 Site A-2 Bldg. 2000	VMS0B /PBS1 CTS% VMS0A	Volatile Organics Library Search Lead, SW, GFAA, SW-846 7421 (Dry) Solids, Percent, SW, EPA 160.3 Volatile Organics, SW, SW-846 8240	05/31/94
002 1510.2 Site F-2 Bldg. 2000	VMS0B /PBS1 CTS% VMS0A	Volatile Organics Library Search Lead, SW, GFAA, SW-846 7421 (Dry) Solids, Percent, SW, EPA 160.3 Volatile Organics, SW, SW-846 8240	05/31/94
003 1511.2 5/31/94 Field Blank Bldg. 1108/2000	VMW0B /PBW0 VMW0A	Volatile Organics Library Search Lead, WW, GFAA, EPA 239.2 Volatile Organics, WW, SW-846 8240	05/31/94
004 1511.1 Site D-2 Bldg. 1108	VMS0B /PBS1 CTS% VMS0A	Volatile Organics Library Search Lead, SW, GFAA, SW-846 7421 (Dry) Solids, Percent, SW, EPA 160.3 Volatile Organics, SW, SW-846 8240	05/31/94

Project Notes:

verbals -- 48 hour TAT report -- 3 week TAT
MISCM = xylene, TBA, MTBE
**Hardcopy must be sent with ASCII disk.

Customer Notes:

Three copies of packages. See Data Mgmt. for details.

Initials/Date

Received By Lab: _____
Revlewed By: _____
Q.A. Approved: _____

Printed By: Jane Dennison
Date: 07/05/95
Time: 16:29:30

Princeton Testing Laboratory, Inc.
3490 U.S. Route 1
Princeton, NJ 08543-3108
(609) 452-9050
FAX (609) 452-1959

L9094

CHAIN OF CUSTODY RECORD

NT Ft. MONMOUTH
TACT
JE NO
PLING SITE

SAMPLERS CLIENT
FIELD SUPERVISOR
COMPANY
PHONE NO.

PTL JOB NO. 9402817
CLIENT PROJECT NO.
Page of

SAMPLE ENTIFICATION	MATRIX	COLLECTION				CONTAINER		ANALYSES REQUIRED (Specify Method If Known)	REMARKS (Specify QA/QC, preservation required, due date, etc.)
		COMP.	GRAB	DATE	TIME	TYPE	NO.		
510.1	Soil						2	VOA + 15 XYLENE TBA + MTBE Pb	
510.2	Soil						2	Pb, VOA + 15, XYLENE TBA + MTBE	
511.02	AQ Field Blank						3	VOA + 15 XYLENE	
511.1							2	Pb VOA + 15, XYLENE, TBA - MTBE	

ORATORY SEAL NO
ED ON (Date) AT (Military Time)
ARED BY
NS OF TRANSPORT

LABORATORY SEAL NO.
UNSEALED ON (Date) AT (Military Time)
SAMPLING COMPLETED ON (Date) AT (Military Time)
FIELD SEAL NO.

FIELD SEAL BROKEN BY
DATE MILITARY TIME
REMARKS

RELINQUISHED BY (Print and Sign Name)	RECEIVED BY (Print and Sign Name)	DATE	TIME	REASON FOR CHANGE OF CUSTODY
[signature]	USA Vasconcellos	6-1-94	4:30	
2 Vasconcellos	Uma Chaudhary	06-2-94	9:35	Lic/Mt.
3 Vasconcellos	C Ey	6/2/94	1008	FedEx

ORIGINAL – Lab Copy 3/89
PINK – Transfer Copy

SERV-AIR, INC.

P.O. #: BPH- / Princeton Labs

Chain of Custody

Project #:	Sampler:	Date / Time	Analysis Parameters	Start:
Customer: C. Appleby SELFm- PW- EV	C. Appleby / Cate Inc	5/31/94 | 1315		Finish:
Phone: x 26224	Site Name: Bldg. 1108 UST # 00815533-168			

Lab Sample ID Number	Date/Time		Customer Sample Location/ID Number	Sample Matrix	# of Bottles	VOA + 15 Xylene TBA + TBE	Pb	Remarks	Preservation Method
1511.1	5-31-94	1330	Site D-2	2	2	1	1	Samples Kept < 4 °C	
↓ .2	5-31-94	1325	Field Blank	3	3	2	1		

Relinquished By (signature)	Date / Time	Received By (signature)	Shipped By:
	5/31/94 | 1540	Sarah J. Hubbard	

Relinquished By (signature)	Date / Time	Received for Lab by (signature):	Date / Time
Sarah J. Hubbard	6/1/94 | 1212		6-1-94 | 12:15

Note: A drawing depicting sample location should be attached or drawn on the reverse side of this chain of custody. NA

John Cate 9/10 TS 6-24-94

SERV-AIR, INC.

P.O. #: BPA / Priority Labs

Chain of Custody

oject #: C93-3884

stomer: C. Appleby
STLCm-PU-EV

one: 530.6224

Sampler: C. Appleby / Cute Inc.

Date / Time: 5-31-94 | 1345

Site Name: Bldg. 2000
UST # - 19486-1
C-93-3884

Analysis Parameter

Start:

Finish:

Preservation Method

Lab Sample Number	Date/Time		Customer Sample Location/ID Number	Sample Matrix	# of Bottles	VOA x 15 ½ hr-mtbe	pb.							Remarks
5101	5-31-94	1435	Site A-2	Soil	2	1	1							Samples Kept <4°C
↓ .2	5-31-94	1420	Site F-2	Soil	2	1	1							
~~Field Blank~~	5-31-94	1325	Field Blank (From Site UST #19486-1)	AQ	3	2	1							
Sample is on			Separate COC Q.E.D											
														note: FB taken at Bldg 1008 & on Separate COC as well. Use one Sample ID # for Field Blank

Relinquished By (signature)	Date / Time	Received By (signature)	Shipped By:
	5/31/94 | 1540	Sarah J. Hubbard	
Relinquished By (signature)	Date / Time	Received for Lab by (signature):	Date / Time
Sarah J. Hubbard	6/1/94 | 1213		6-1-94 | 12.15

e: A drawing depicting sample location should be attached or drawn on the reverse side of this chain of custody. N/A

-ENV COC Form 01

Rev. A Date: 02 Apr 93

princeton testing laboratory inc.

P.O. Box 3108
3490 U.S. Route 1
Princeton, NJ 08543-3108
(609) 452-9050
FAX (609) 452-0347

METHODOLOGY SUMMARY

Laboratory: Princeton Testing Lab. Case Name: U.S. Army Ft.Monmouth

Location: Princeton, New Jersey Case Number: 9502817

VOLATILE ORGANIC ANALYSES:

EPA Method SW-486 8240

SEMIVOLATILE ORGANIC ANALYSES (ABN EXTRACTABLES):

PESTICIDES/PCBs and CHLORINATED HERBICIDES:

METALS ANALYSES:

Lead EPA Method 239.2

TOTAL CYANIDE ANALYSES:

TOTAL PHENOL ANALYSES:

OTHER ANALYSES (SPECIFY):

Total Solids EPA Method 160.3

NOTE: Only methods actually used in the performance of analyses for this data package may be entered on this form:

NJDEPE Form A-3 (9/91)

princeton testing laboratory inc.

P.O. Box 3108
3490 U.S. Route 1
Princeton, NJ 08543-3108
(609) 452-9050
FAX (609) 452-0347

LABORATORY CHRONICLE
ORGANIC ANALYSIS

Company: US Army, Fort Monmouth N.J. Job #: 9402817

Date Received & Refrigerated: 06/01/94

EXTRACTION INFORMATION	ANALYSIS INFORMATION
Base-Neutral Extractables	Base-Neutral Extractables
___ ___/___/___	___ ___/___/___
___ ___/___/___	___ ___/___/___
___ ___/___/___	___ ___/___/___
Acid Extractables	Acid Extractables
___ ___/___/___	___ ___/___/___
___ ___/___/___	___ ___/___/___
___ ___/___/___	___ ___/___/___
Pesticides/ PCBs	Pesticides/ PCBs
___ ___/___/___	___ ___/___/___
___ ___/___/___	___ ___/___/___
PCBs only	PCBs only
___ ___/___/___	___ ___/___/___
___ ___/___/___	___ ___/___/___
Herbicides	Herbicides
___ ___/___/___	___ ___/___/___
___ ___/___/___	___ ___/___/___
Pesticides (EPTOX)	Pesticides (EPTOX)
___ ___/___/___	___ ___/___/___
Other: _____	Volatiles - 601/602
___ ___/___/___	___ ___/___/___
	___ ___/___/___
	Volatiles - ~~624~~/8240
	UVC 06/03/1994
	___ ___/___/___
	___ ___/___/___
	Other: _____
	___ ___/___/___

Dept. Manager Review and Approval: [signature] 11/30/94

QC Supervisor Review and Approval: [signature] 11/30/94

princeton testing laboratory inc.

PRINCETON TESTING LABORATORY

LABORATORY CHRONICLE

Company: Ft. Monmouth Job No. 9402817

Type Samples: Soil Due Date: 6/3/94

Number: 2 Date Received & Refrigerated: 6/1/94

INORGANICS ANALYTES		OTHER
1. Metals	RBK	Lead 6/3/94
2. Cyanides	____	_____
3. Phenol	____	_____

DIVISION SUPERVISOR REVIEW & APPROVAL: _____

Date: 7/7/95

QUALITY CONTROL SUPERVISOR REVIEW & APPROVAL: _____

Date: 7/7/95

If fractions are re-extracted and re-analyzed because initial endeavors did not meet quality control acceptance criteria, include dates for both.

6.47

GCMS ANALYSIS NON CONFORMANCE SUMMARY

	NO	YES
1. GCMS TUNE SPECIFICATION.		
a. BFB Passed	____	✓
b. DFTPP Passed	____	____
2. GCMS TUNING FREQUENCY.		
a. Performed every 12 hours.	____	✓
b. Performed every 24 hours.	____	____
3. GCMS Calibration.		
a. Initial calibration performed w/i 30 days of sample analysis.	____	✓
b. Continuing calibration w/i 12 hours.	____	____
c. Continuing calibration w/i 24 hours.	____	____
4. GCMS Calibration requirements.		
a. Calibration check compounds.	____	✓
b. System performance check compounds.	____	____
5. Blank Contamination.		
a. VOA Fraction None.		
b. B/N Fraction		
c. Acid Fraction		
6. Surrogate Recoveries Within Limits.		
a. VOA Fraction	____	✓
b. B/N Fraction	____	____
c. Acid Fraction	____	____
7. Extraction Holding Time Met.	____	____
8. Analysis Holding Time Met.		
a. VOA Fraction	____	✓
b. BNA Fraction	____	____

Comments:

Laboratory Manager Peggy Date 11/30/94

1

princeton testing laboratory inc.

METAL ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY FORMAT

		No	Yes
1.	Calibration Summary Meet Criteria	____	✓
2.	ICP Interference Check Sample Results Summary Submitted (if applicable) / Meet Criteria . . . . . N/A.	____	____
3.	Serial Dilution Summary Submitted (if applicable) / Meet Criteria . . . . . N/A.	____	____
4.	Laboratory Control Sample Summary Submitted (if applicable) / Meet Criteria	____	✓
5.	Blank Contamination - If yes, list compounds and concentrations in each blank: Lead - preparation blank = 0.117 mg/kg, 1511.2 - Blank - 4.7 ug/L		
6.	Matrix Spike/Matrix spike Duplicate Recoveries Meet Criteria (If not met, list those compounds and their recoveries which fall outside the acceptable range)	____	✓
7.	Extraction Holding Time Met	____	✓
	If not met, list number of days exceeded for each sample:		
8.	Analysis Holding Time Met	____	✓
	If not met, list number of days exceeded for ea.sample:		

Additional Comments: For the analysis of 1511.2 Blank, this sample was used for the spike and duplicate. This blank should not have been used for this, but it was because it was the only aqueous sample prepared for this job

Laboratory Supervisor: Anna Stewart Date: 6/24/94

VOLATILE ORGANICS

QUALITY CONTROL SUMMARY

princeton testing laboratory inc.

P.O. Box 3108
3490 U.S. Route 1
Princeton, NJ 08543-3108
(609) 452-9050
FAX (609) 452-0347

June 20,1994

US Army Fort Monmouth NJ
Building 167
Fort Monmouth, New Jersey 07703-5108

Attention: Charles Appleby
Job Number: 9402817-001EWM

CASE NARRATIVE

This data package pertains to the samples received by Princeton Testing Lab on 06/01/94 and analyzed for Volatile Organic Compounds by the GC/MS.

If you have any questions regarding this report, do not hesitate to contact me or Dr. Jane Dennison at (609) 452-9050.

Sincerely,

Khaja Eazazuddin.
GC/MS Laboratory Supervisor.
Princeton Testing Laboratory.

S T A N D A R D T E S T L I S T

Test Name: Volatile Organics, SW, SW-846 8240
SPEC CODE: VMS0A

Lab Code: M
Manager : KE
Units : ug/kg

Short Name: VO.SW.8240
List Price:
Report Type:

escription

#	Compound	MDL	CAS#	KEY#	CLIENT KEY#
1	Chloromethane	10	00074873	C010	1454
2	Bromomethane	10	00074839	C015	1462
3	Vinyl chloride	10	00075014		1531
4	Chloroethane	10	00075003		1452
5	Methylene chloride	5	00075092		1172
6	Acetone	5	00067641		1498
7	Carbon disulfide	5	00075150		1646
8	1,1-Dichloroethene	5	00075354		1442
9	1,1-Dichloroethane	5	00075343		1580
10	1,2-Dichloroethene (Total)	5	00540590		1583
11	Chloroform	5	00067663		1078
12	1,2-Dichloroethane	5	00107062		1383
13	2-Butanone	5	00078933		1278
14	1,1,1-Trichloroethane	5	00071556		1068
15	Carbon tetrachloride	5	00056235		1384
16	Bromodichloromethane	5	00075274		1480
17	1,1,2,2-Tetrachloroethane	5	00079345		1200
18	1,2-Dichloropropane	5	00078875		1368
19	trans-1,3-Dichloropropene	5	10061026		1364
20	Trichloroethene	5	00079016		1074
21	Dibromochloromethane	5	00124481		1390
22	1,1,2-Trichloroethane	5	00079005		1070
23	Benzene	5	00071432		1466
24	cis-1,3-Dichloropropene	5	10061015		1362
25	Bromoform	5	00075252		1124
26	2-Hexanone	5	00591786		1324
27	4-Methyl-2-Pentanone	5	00108101		1158
28	Tetrachloroethene	5	00127184		1096
29	Toluene	5	00108333		1426
30	Chlorobenzene	5	00108907		1564
31	Ethylbenzene	5	00100414		1394
32	Styrene	5	00100425		1120
33	Total Xylenes	5	01330207		1677
34	.				
35	.				
36	RECOVERY DATA	QC LIMITS			
37	.				
38	1,2-Dichloroethane-D4	70-121%			1577
39	Toluene-d8	84-138%	02037265		1579
40	4-Bromofluorobenzene	59-113%	00460004		1433

2B
VOLATILE SURROGATE SUMMARY

Lab Name: Princeton Testing Lab. Contract: US Army, Fort. Monmouth.

Lab Code: PTL Case No.: 23117 SAS No.: SDG No.:

Instrument ID: INCOS 500

SAMPLE NO.	(1,2-DCE)	(TOL D8)	(4 BFB)
M.BLANK 5/26/94	105	102	89
1503.2	105	108	89
1503.2 MS	109	100	80
1503.2 MSD	106	103	82
M.BLANK 6/03/94	108	99	81
1510.1	104	102	84
1510.2	107	97	80
1511.1	107	92	86
1511.2	106	102	81

(1,2 DCE)	1,2 DICHLOROETHANE d4	(70 121)
(TOL d8)	TOLUENE d8	(84 138)
(4 BFB)	4-BROMOFLUOROBENZENE	(59 113)

COMMENTS:

Princeton Testing Laboratory Inc.

P.O. Box 3108
3490 U.S. Route 1
Princeton, NJ 08543-3108
(609) 452-9050
(FAX) (609) 452-0347

Matrix Spike/Matrix Spike Duplicate Recovery Data
Test: Volatile Organics, Method 8240

Client: U.S. Army, Fort Monmouth N.J.

Project No.: 9402712-001

Lab Sample I.D.: 002

Client Sample I.D.: 1503.2
05/23/94

Analyst: Uma Chaudhary
Instrument: Incos 500 Volatiles
Units: ug/kg

QC Batch Number: 940526SV

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	MATRIX SPIKE CONCENTRATION	MS % REC	QC LIMITS REC
1,1-Dichloroethene	50	0	46.4	92.80	59-172
Trichloroethene	50	0	54.3	108.60	62-137
Benzene	50	0	46.3	92.60	66-142
Toluene	50	0	51.5	103.00	59-139
Chlorobenzene	50	0	51.8	103.60	60-133

COMPOUND	SPIKE ADDED	MSD CONCENTRATION	RPD	MSD % REC	QC LIMITS RPD
1,1-Dichloroethene	50	50.5	8.46	101.00	0-22
Trichloroethene	50	53.8	.93	107.60	0-24
Benzene	50	46.9	1.29	93.80	0-21
Toluene	50	51.2	.58	102.40	0-21
Chlorobenzene	50	52.7	1.72	105.40	0-21

VOLATILE METHOD BLANK SUMMARY

Lab Name: Princeton Testing Lab. Contract: US ARMY FORT MONMOUTH N.J.

Case No.: 2817 Lab Sample ID: LAB BLK06/03 Lab File ID: CBLK603

Date Analyzed: 06/03/94

Instrument ID: INCOS 500

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	1510.1	2817-1	C7813	6/03/94
02	1510.2	2817-2	C7814	6/03/94
03	1511.1	2817-4	C7815	6/03/94
04	1511.2	2817-3	C7812	6/03/94

Princeton Testing Laboratory Inc.

P.O. Box 3108
3490 U.S. Route 1
Princeton, NJ 08543-3108
(609) 452-9050
(FAX) (609) 452-0347

U.S. Army, Fort Monmouth N.J.
ATTN: SELFM-PW
Building 167
Fort Monmouth, New Jersey 07703-5108
Attention: Charles Appleby

Report Date: 06/20/94
Job Number: 9402817-001
Date Received: 06/01/94

Analysis: Volatile Organics, SW, SW-846 8240
Units: ug/kg

Parameters	*Sample I.D.: Blank 06/03/94*
Chloromethane	<10
Bromomethane	<10
Vinyl chloride	<10
Chloroethane	<10
Methylene chloride	<5.0
Acetone	<5.0
Carbon disulfide	<5.0
1,1-Dichloroethene	<5.0
1,1-Dichloroethane	<5.0
1,2-Dichloroethene (Total)	<5.0
Chloroform	<5.0
1,2-Dichloroethane	<5.0
2-Butanone	<5.0
1,1,1-Trichloroethane	<5.0
Carbon tetrachloride	<5.0
Bromodichloromethane	<5.0
1,1,2,2-Tetrachloroethane	<5.0
1,2-Dichloropropane	<5.0
trans-1,3-Dichloropropene	<5.0
Trichloroethene	<5.0
Dibromochloromethane	<5.0
1,1,2-Trichloroethane	<5.0
Benzene	<5.0
cis-1,3-Dichloropropene	<5.0
Bromoform	<5.0
2-Hexanone	<5.0
4-Methyl-2-Pentanone	<5.0
Tetrachloroethene	<5.0
Toluene	<5.0
Chlorobenzene	<5.0
Ethylbenzene	<5.0
Styrene	<5.0
Total Xylenes	<5.0

RECOVERY DATA	QC LIMITS	
1,2-Dichloroethane-d4 (Surrogate)	70-121%	108
Toluene-d8 (Surrogate)	84-138%	99
4-Bromofluorobenzene (Surrogate)	59-113%	81

SAMPLE NO.
LAB BLANK

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: Princeton Testing Lab Contract: US ARMY FORT MONMOUTH NJ

Lab Code: PTL Case No.: 2817 SAS No.: SDG No.:

Matrix: (Soil/Water) Soil Lab Sample ID: LAB BLANK

Sample wt/vol: 5.0 (g/mL) g Lab File ID: CBLK603

Level: (low/med) LOW Date Received:

% Moisture: not dec. Date Analyzed: 6/3/94

GC Column: CAP ID: 0.53 mm Dilution Factor: 1.0

Soil Extract Vol: ul Soil Aliquot Vol: ul

Number TICs found: 0 CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	SCAN

5A

VOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - BROMOFLUOROBENZENE (BFB)

Lab Name: Princeton Testing Lab. Contract: US ARMY, FORT MONMOUTH

Lab Code: PTL Case No.: 2817 SAS No.: SDG No.:

Lab File ID: BFB421 BFB Injection Date: 4/21/94

Instrument ID: INCOS 500 BFB Injection Time: 1001

Column: (pack/cap) Cap

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	17.6
75	30.0 - 60.0% of mass 95	44.4
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	8.0
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	65.6
175	5.0 - 9.0% of mass 174	1.6 (7.0)1
176	Greater than 95.0%, but less than 101.0% of mass 174	63.2 (96.3)1
177	5.0 - 9.0% of mass 176	4.0 (6.4)2

1 Value is % mass 174 2 Value is % mass 176

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
50 PPB STD	50 PPB STD	C7444	4/21/94	1200
10 PPB STD	10 PPB STD	C7445	4/21/94	1246
20 PPB STD	20 PPB STD	C7446	4/21/94	1342
100 PPB STD	100 PPB STD	C7447	4/21/94	1428
200 PPB STD	200 PPB STD	C7448	4/21/94	1516

VOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - BROMOFLUOROBENZENE (BFB)

Lab Name: Princeton Testing Lab. Contract: US ARMY FORT MONMOUTH NJ

Case No.: 2817 Lab File ID: BFB603 BFB Injection Date: 06/03/94

Instrument ID: INCOS 500 BFB Injection Time: 1126

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	16.5
75	30.0 - 60.0% of mass 95	43.0
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.7
173	Less than 2.0% of mass 174	0.0
174	Greater than 50.0% of mass 95	88.9
175	5.0 - 9.0% of mass 174	6.9
176	Greater than 95.0%, but less than 101.0% of mass 174	97.5
177	5.0 - 9.0% of mass 176	6.4

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
VSTD050	50 PPB STD	CV0603	06/03/94	1159
LAB BLANK	LAB BLANK	CBLK603	06/03/94	1318
1510.1	2817-01	C7813	06/03/94	1458
1510.2	2817-02	C7814	06/03/94	1548
1511.1	2817-04	C7815	06/03/94	1637
1511.2	2817-03	C7812	06/03/94	1408

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Princeton Testing Lab. Contract: US ARMY FORT MONMOUTH NJ.
Case No.: 2817 Lab File ID (standard):CV0603 Instrument ID:HNCOS-500
Date Analyzed: 06/03/94 Time Analyzed: 1159

		IS1(BCM)	RT	IS2(DFB)	RT	IS3(CB)	RT
	12hr. STD	21762	09:27	73132	11:50	58537	23:54
	Upper Limit	43524	09:77	146264	12:00	117074	24:04
	Lower Limit	10881	08:77	36566	11:00	29269	23:04
	EPA Sample.						
1	LAB BLANK6/3	18304	09:27	63429	11:52	56775	23:59
2	1510.1	14386	09:27	51260	11:52	42977	23:54
3	1510.2	15732	09:27	52867	11:52	47711	23:54
4	1511..	10155	09:28	35753	11:53	30895	23:56
5	1511.1	14141	09:27	44974	11:52	42238	23:56

IS1=BROMOCHLOROMETHANE
IS2=1,4-DIFLUOROBENZENE
IS3=CHLOROBENZENE-D5

Area Upper Limit = +100% of Internal Standard area.
Area Lower Limit = - 50% of Internal Standard area.
RT Upper Limit = +0.50 minutes of Internal Standard RT.
RT Lower Limit = -0.50 minutes of Internal Standard RT.

* Values outside of QC limits. FORM VIII V-1

SAMPLE DATA

PAGES 21 THRU 33 INTENTIONALLY LEFT OUT

Princeton Testing Laboratory Inc.

P.O. Box 3108
3490 U.S. Route 1
Princeton, NJ 08543-3108
(609) 452-9050
(FAX) (609) 452-1959

U.S. Army, Fort Monmouth N.J.
ATTN: SELFM-PW
Building 167
Fort Monmouth, New Jersey 07703-5108
Attention: Charles Appleby
Project Name: Bldg. 2000/1108

Report Date: 11/07/94
Job Number: 9402817-001
Date Received: 06/01/94

Analysis: Volatile Organics, WW, SW-846 8240
Units: ug/liter

Parameters	*Sample I.D.: 1511.2 5/31/94 Field Blank Bldg. 1108/2000*
Chloromethane	<10
Bromomethane	<10
Vinyl chloride	<10
Chloroethane	<10
Methylene chloride	<5.0
Acetone	<5.0
Carbon disulfide	<5.0
1,1-Dichloroethene	<5.0
1,1-Dichloroethane	<5.0
1,2-Dichloroethene (Total)	<5.0
Chloroform	<5.0
1,2-Dichloroethane	<5.0
2-Butanone	<5.0
1,1,1-Trichloroethane	<5.0
Carbon tetrachloride	<5.0
Bromodichloromethane	<5.0
1,1,2,2-Tetrachloroethane	<5.0
1,2-Dichloropropane	<5.0
trans-1,3-Dichloropropene	<5.0
Trichloroethene	<5.0
Dibromochloromethane	<5.0
1,1,2-Trichloroethane	<5.0
Benzene	<5.0
cis-1,3-Dichloropropene	<5.0
Bromoform	<5.0
2-Hexanone	<5.0
4-Methyl-2-Pentanone	<5.0
Tetrachloroethene	<5.0
Toluene	<5.0
Chlorobenzene	<5.0
Ethylbenzene	<5.0
Styrene	<5.0
Total Xylenes	<5.0

RECOVERY DATA	QC LIMITS	
1,2-Dichloroethane-d4 (Surrogate)	76-114%	106
Toluene-d8 (Surrogate)	88-110%	102
4-Bromofluorobenzene (Surrogate)	86-115%	81

Analyst & Date of Analysis: UVC 06/03

SAMPLE NO.
1511.2

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: Princeton Testing Lab Contract: US ARMY FORT MONMOUTH NJ

Lab Code: PTL Case No.: 2817 SAS No.: SDG No.:

Matrix: (Soil/Water) Water Lab Sample ID: 2817-5

Sample wt/vol: 5.0 (g/mL) mL Lab File ID: C7812

Level: (low/med) LOW Date Received: 6/1/94

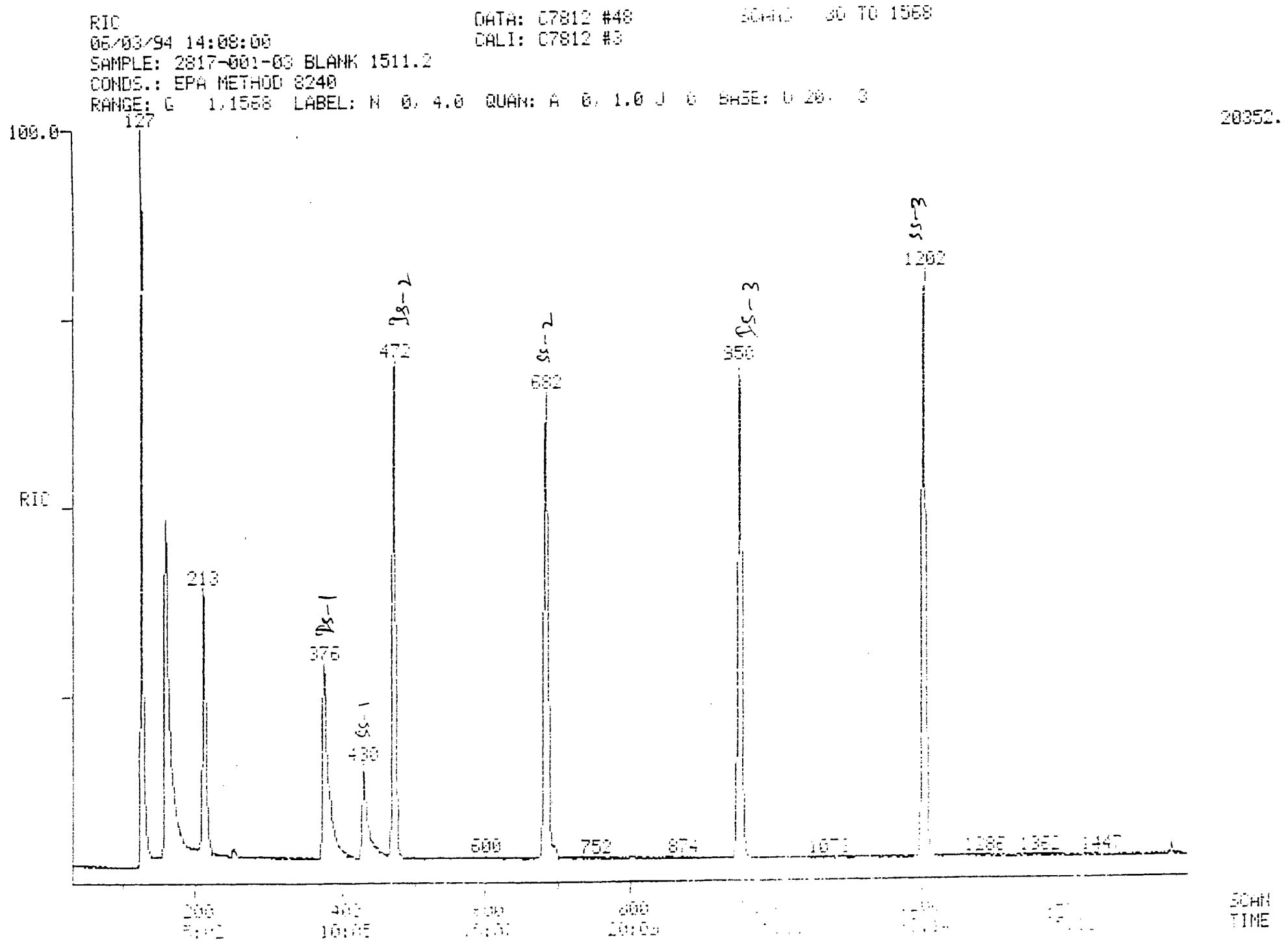
%Moisture: not dec. Date Analyzed: 6/3/94

GC Column: CAP ID: 0.53 mm Dilution Factor:

Soil Extract Vol: ul Soil Aliquot Vol: ul

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	SCAN


RIC
06/03/94 14:08:00
SAMPLE: 2817-001-03 BLANK 1511.2
CONDS.: EPA METHOD 8240
RANGE: G 1.1568 LABEL: N 0. 4.0 QUAN: A 0. 1.0 J 0 BASE: U 20. 3
DATA: C7812 #48
CALI: C7812 #3
SCANS 30 TO 1568
20352.
100.0
RIC
127
213
376
IS-1
430
IS-1
472
IS-2
600
692
IS-2
752
874
850
IS-3
1071
1202
IS-3
1386
1451
1447
SCAN
TIME

Quantitation Report File: C7812

Data: C7812.TI
06/03/94 14:08:00
Sample: 2817-001-03 BLANK 1511.2
Conds.: EPA METHOD 8240
Formula: SML Instrument: FINN Weight 0.000
Submitted by: USARMY Analyst: UC Acct. No.: 2817-001

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. Fac. from Library Entry

No	Name
1	C101 BROMOCHLOROMETHANE **INT. STD. **
2	C110 1,4-DIFLUOROBENZENE **INT. STD. **
3	C120 CHLOROBENZENE-D5 **INT. STD. **
4	C515 1,2-DICHLOROETHANE-D4 **S. STD. **
5	C505 TOLUENE-D8 **S. STD. **
6	C510 4-BROMOFLUOROBENZENE **S. STD. **
7	C010 CHLOROMETHANE **
8	C015 BROMOMETHANE
9	C020 VINYL CHLORIDE *
10	C025 CHLOROETHANE
11	C030 METHYLENE CHLORIDE
12	C251 ACROLIN
13	C035 ACETONE
14	C252 ACRYLONITRILE
15	C040 CARBON DISULFIDE
16	C045 1,1-DICHLOROETHENE *
17	C050 1,1-DICHLOROETHANE **
18	C055 TRANS-1,2-DICHLOROETHENE
19	C000 TRICHLOROFLUOROMETHANE
20	C060 CHLOROFORM *
21	C065 1,2-DICHLOROETHANE
22	C110 2-BUTANONE
23	C115 1,1,1-TRICHLOROETHANE
24	C120 CARBON TETRACHLORIDE
25	C125 VINYL ACETATE
26	C130 BROMO DICHLOROMETHANE
27	C140 1,2-DICHLOROPROPANE *
28	C145 TRANS-1,3 DICHLOROPROPENE
29	C150 TRICHLOROETHENE
30	C155 DIBROMOCHLOROMETHANE
31	C160 1,1,2-TRICHLOROETHANE
32	C165 BENZENE
33	C143 CIS-1,3-DICHLOROPROPENE
34	C175 2-CHLOROETHYL VINYL ETHER
35	C180 BROMOFORM **
36	C220 TETRACHLOROETHENE
37	C210 2-HEXANONE
38	C205 4-METHYL 2-PENTANONE
39	C225 1,1,2,2-TETRACHLOROETHANE **
40	C230 TOLUENE *
41	C235 CHLOROBENZENE **
42	C240 ETHYL BENZENE *
43	C245 STYRENE
44	C250 M+P-XYLENES
45	C253 1,3-DICHLOROBENZENE
	1,2-DICHLOROBENZENE

	C010	CHLOROMETHANE	**
	C015	BROMOMETHANE	
	C020	VINYL CHLORIDE	*
	C025	CHLOROETHANE	
	C030	METHYLENE CHLORIDE	
12	C251	ACROLIN	
13	C035	ACETONE	
14	C252	ACRYLONITRILE	
15	C040	CARBON DISULFIDE	
16	C045	1,1-DICHLOROETHENE	*
17	C050	1,1-DICHLOROETHANE	**
18	C055	TRANS-1,2-DICHLOROETHENE	
19	C000	TRICHLOROFLUOROMETHANE	
20	C060	CHLOROFORM	*
21	C065	1,2-DICHLOROETHANE	
22	C110	2-BUTANONE	
23	C115	1,1,1-TRICHLOROETHANE	
24	C120	CARBON TETRACHLORIDE	
25	C125	VINYL ACETATE	
26	C130	BROMO DICHLOROMETHANE	
27	C140	1,2-DICHLOROPROPANE	*
28	C145	TRANS-1,3 DICHLOROPROPENE	
29	C150	TRICHLOROETHENE	
30	C155	DIBROMOCHLOROMETHANE	
31	C160	1,1,2-TRICHLOROETHANE	
32	C165	BENZENE	
33	C143	CIS-1,3-DICHLOROPROPENE	
34	C175	2-CHLOROETHYL VINYL ETHER	
35	C180	BROMOFORM	**
36	C220	TETRACHLOROETHENE	
37	C210	2-HEXANONE	
38	C205	4-METHYL 2-PENTANONE	
39	C225	1,1,2,2-TETRACHLOROETHANE	**
40	C230	TOLUENE	*
41	C235	CHLOROBENZENE	**
42	C240	ETHYL BENZENE	*
43	C245	STYRENE	
44	C250	M+P-XYLENES	
45	C253	1,3-DICHLOROBENZENE	
46	C254	1,4-DICHLOROBENZENE	

27

33	NOT FOUND											
34	NOT FOUND											
35	NOT FOUND											
36	NOT FOUND											
37	NOT FOUND											
38	NOT FOUND											
39	NOT FOUND											
40	91	695	17:30	3	0.732	A	BB	926	1	339	NG	0.45
41	NOT FOUND											
42	NOT FOUND											
43	NOT FOUND											
44	NOT FOUND											
45	NOT FOUND											
46	NOT FOUND											
47	NOT FOUND											
48	NOT FOUND											

PROCEDURE: FILTER/TIC DIAGNOSTIC REPORT 6/03/94 15:08:48

DATA FILE: C7812

FILTER SCAN PARAMETERS

MAX NUMBER TICS:	15
I-TABLE ENTRIES:	528
SCAN TOLERANCE	2
MIN RIC HT. [%]:	10
FIRST SCAN :	1
LAST SCAN :	1600
TIC THRESHOLD :	600

METHOD LIBRARY & LISTS

TIC I.S. LIBRARY:	LIBRARYLS
NBS SEARCH PROC :	SERLIB
PEAK FINDER PROC.	VOME
TCA I.S. LL :	LS
FILE NAME LIST :	TCAREF2

TARGET COMPOUND ANALYSIS:

TARGETS (QUAN LIST)	IS PEAKS	TOTAL TARGET PEAKS
4	3	7

FILTER PROCESSING:

TOTAL PEAKS	< 1ST SCAN	> LAST SCAN	< MIN RIC HT	< SCAN TOL	> MAX # PEAKS	TOTAL REJECTS	TOTAL TICS
	<----------REJECT PEAKS---------->						
8	0	0	0	6	0	6	2

TIC PROCESSING:

NO.	SCAN#	PURITY	FIT	MW	COMPOUND NAME (BEFORE TIC THRESHOLD)
1	160	326	463	76	ETHANETHIOIC ACID
2	213	966	988	186	ETHANE, 1,1,2-TRICHLORO-1,2,2-

Quantitation Report File: C7812

Data: C7812.TI
08/03/94 14:08:00
Sample: 2817-001-03 BLANK 1511.2
Conds.: EPA METHOD 8240
Formula: AMT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp fac. from Library Entry

Formula: SML Instrument: FINN Weight 0.000
Submitted by: USARMY Analyst: UC Acct No. 2817-001

No	CAS #	Name
1	0-00-0	CI01 BROMOCHLOROMETHANE **INT. STD.**
2	0-00-0	CI10 1,4-DIFLUOROBENZENE **INT. STD.**
3	0-00-0	CI20 CHLOROBENZENE-D5 **INT STD.**
4	0-00-0	UNKNOWN
5	76-13-1	ETHANE, 1,1,2-TRICHLORO-1,2,2-TRIFLUORO-

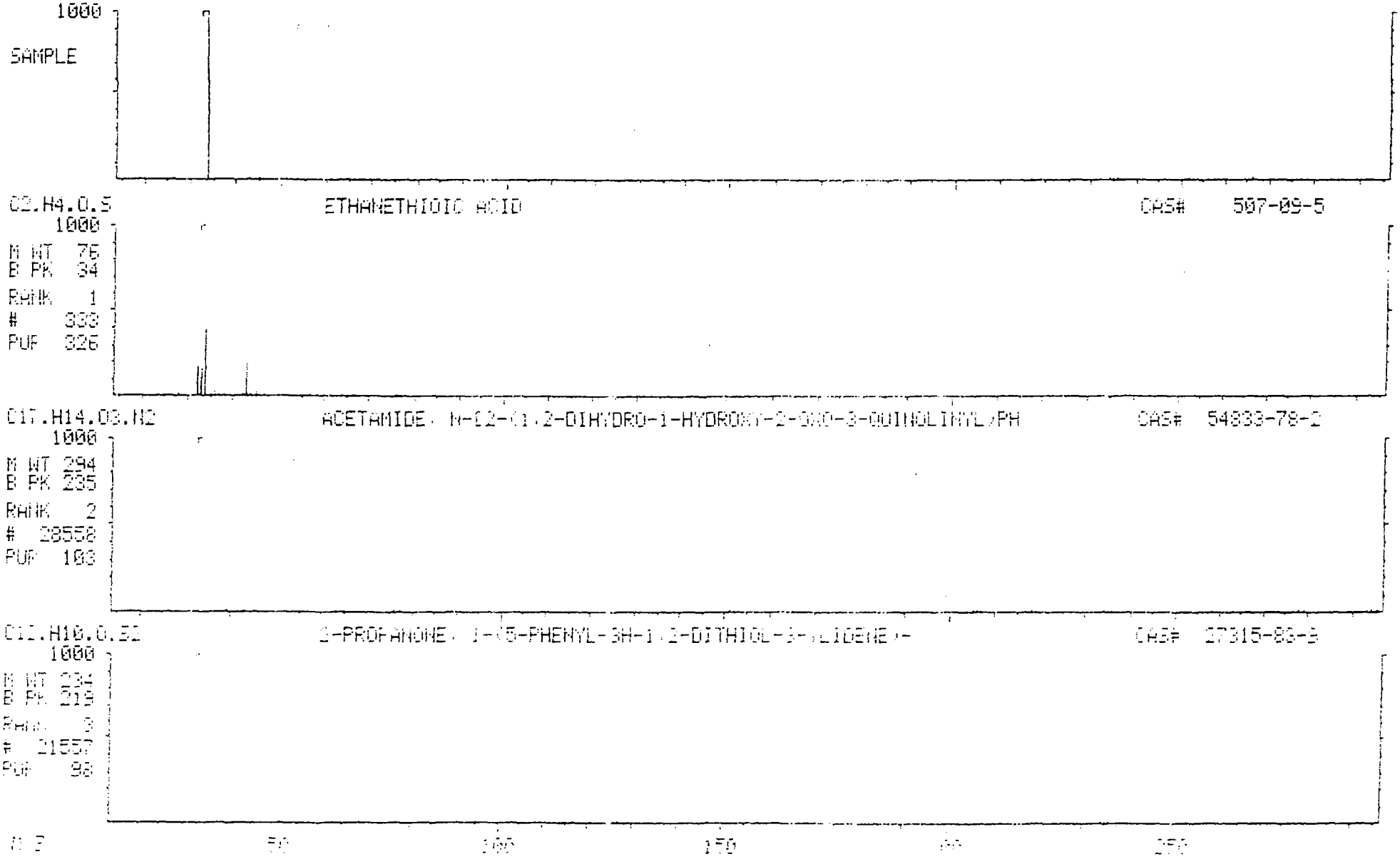
#	S/S	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	TOT	376	9:28	0	ISINV	A BB	35982	******	UG/L	00.00
2	TOT	472	11:53	0	ISINV	A BB	58834	******	UG/L	00.00
3	TOT	950	23:56	0	ISINV	A BB	71504	******	UG/L	00.00
4	TOT	161	4:03	1	0.428	A BB	66833.	92.870		65.50
5	TOT	213	5:22	1	0.566	A BB	35204.	48.919		34.50

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:13	1.03	1.000						
2	19:21	0.61	1.000						
3	23:54	1.00	1.000						
4					92.87	1.00	92.870	1.000	92.87
5					48.92	1.00	48.919	1.000	48.92

MID LIBRARY SEARCH (LIBRARY/NB)
06/03/94 14:08:00 + 4:02
SAMPLE: 2817-001-03 BLANK 1511.2
CONDS.: EPA METHOD 8240
ENHANCED (S 15E 2N 0T)

DATA: C7812 # 160
CALI: C7812 # 3

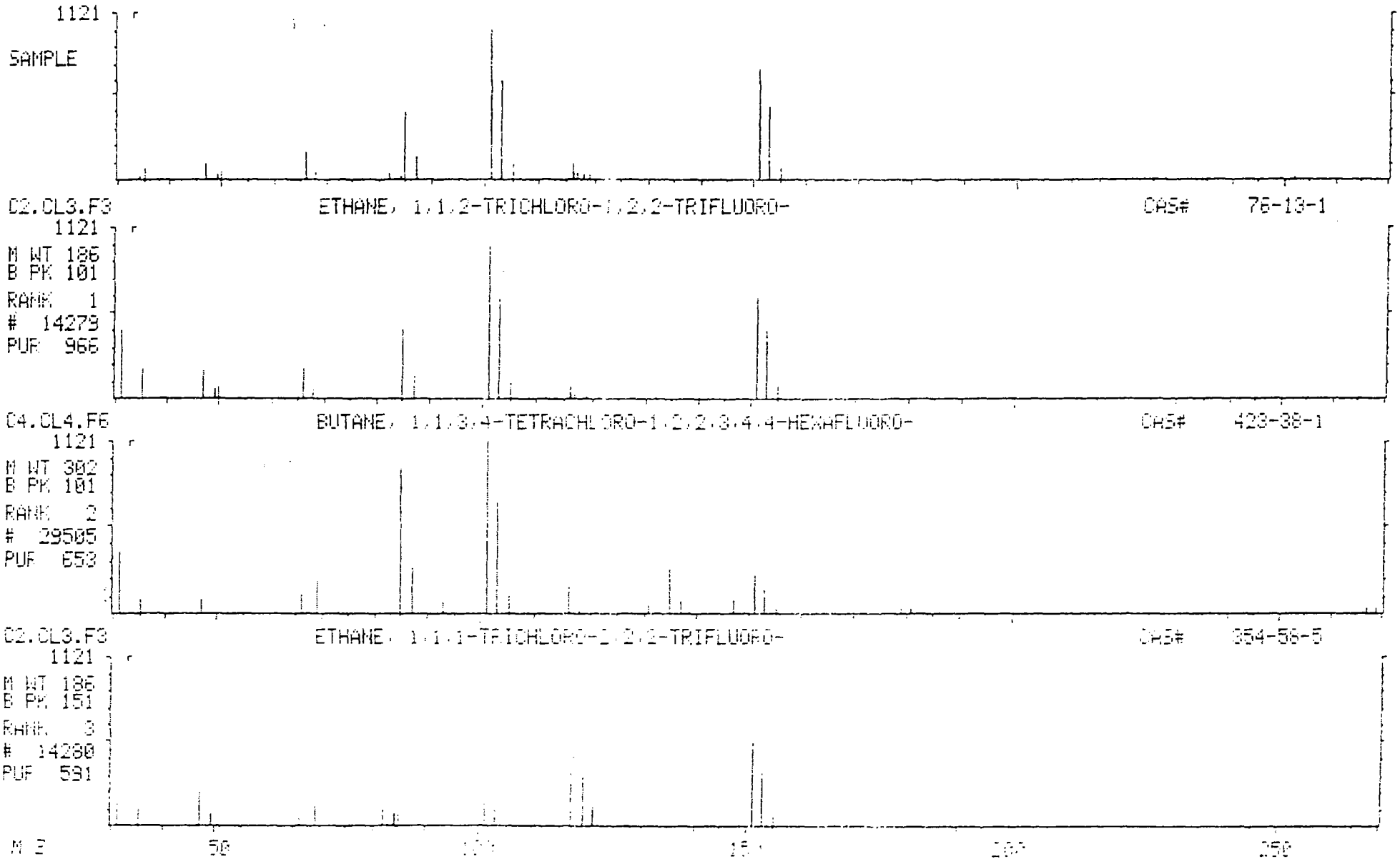
BASE M/Z: 34
RIC: 7088.



MID LIBRARY SEARCH (LIBRARYNB)
06/03/84 14:08:00 + 5:22
SAMPLE: 2817-001-03 BLANK 1511.2
CONDS.: EPA METHOD 8240
ENHANCED (S 15B 2N 0T)

DATA: C7812 # 213
CALI: C7812 # 3

BASE M/Z: 101
RIC: 6886.



Princeton Testing Laboratory Inc.

P.O. Box 3108
3490 U.S. Route 1
Princeton, NJ 08543-3108
(609) 452-9050
(FAX) (609) 452-1959

U.S. Army, Fort Monmouth N.J.
ATTN: SELFM-PW
Building 167
Fort Monmouth, New Jersey 07703-5108
Attention: Charles Appleby
Project Name: Bldg. 2000/1108

Report Date: 11/07/94
Job Number: 9402817-001
Date Received: 06/01/94

Analysis: Volatile Organics, SW, SW-846 8240
Units: ug/kg

Parameters	*Sample I.D.:*	*1511.1 Site D-2 Bldg. 1108*
Chloromethane		<25
Bromomethane		<25
Vinyl chloride		<25
Chloroethane		<25
Methylene chloride		<13
Acetone		<13
Carbon disulfide		<13
1,1-Dichloroethene		<13
1,1-Dichloroethane		<13
1,2-Dichloroethene (Total)		<13
Chloroform		<13
1,2-Dichloroethane		<13
2-Butanone		<13
1,1,1-Trichloroethane		<13
Carbon tetrachloride		<13
Bromodichloromethane		<13
1,1,2,2-Tetrachloroethane		<13
1,2-Dichloropropane		<13
trans-1,3-Dichloropropene		<13
Trichloroethene		<13
Dibromochloromethane		<13
1,1,2-Trichloroethane		<13
Benzene		<13
cis-1,3-Dichloropropene		<13
Bromoform		<13
2-Hexanone		<13
4-Methyl-2-Pentanone		<13
Tetrachloroethene		<13
Toluene		<13
Chlorobenzene		<13
Ethylbenzene		<13
Styrene		<13
Total Xylenes		<13

RECOVERY DATA	QC LIMITS	
1,2-Dichloroethane-d4 (Surrogate)	70-121%	107
Toluene-d8 (Surrogate)	84-138%	92
4-Bromofluorobenzene (Surrogate)	59-113%	86

Analyst & Date of Analysis: UVC 06/03

SAMPLE NO.
1S11.1

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: Princeton Testing Lab Contract: US ARMY FORT MONMOUTH NJ

Lab Code: PTL Case No.: 2817 SAS No.: SDG No.:

Matrix: (Soil/Water) Soil Lab Sample ID: 2817-4

Sample wt/vol: 2.5 (g/mL) g Lab File ID: C7815

Level: (low/med) LOW Date Received: 6/1/94

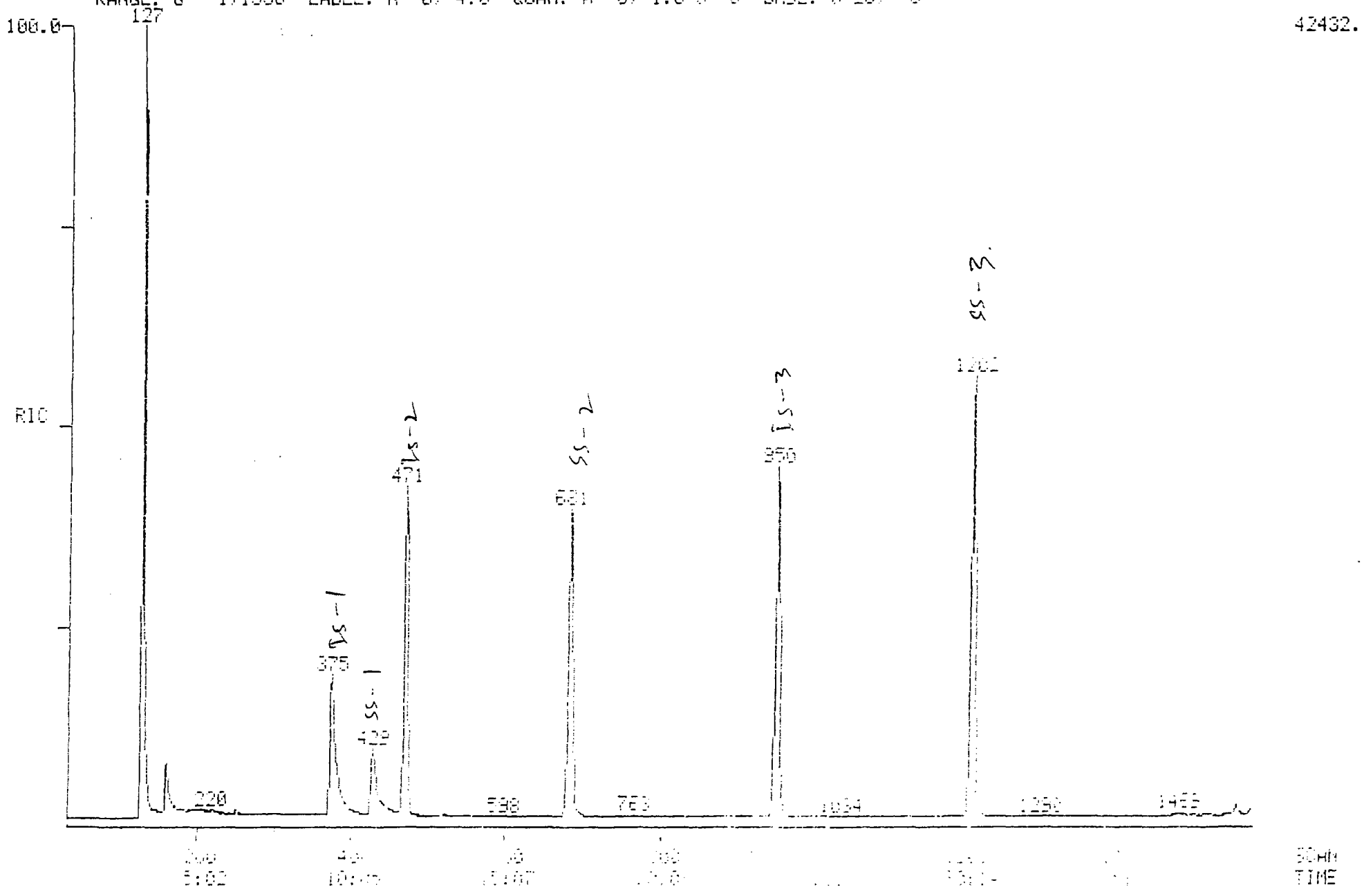
%Moisture: not dec. 30 Date Analyzed: 6/3/94

GC Column: CAP ID: 0.53 mm Dilution Factor: 2.0

Soil Extract Vol: ul Soil Aliquot Vol: ul

Number TICs found: 0 CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	SCAN


RIC
06/03/94 16:37:00
SAMPLE: 2817-001-04 1511.1
CONDS.: EPA METHOD 8240
DATA: C7815 #48
CALI: C7815 #3
SCANS 30 TO 1560
RANGE: G 1.1568 LABEL: N 0. 4.0 QUAN: H 0. 1.0 J 0 BASE: 0 10. 3
100.0
RIC
42432.
127
220
538
763
1034
1250
1455
TIME

Quantitation Report File: C7815

Data: C7815.TI
05/03/94 15:37:00
Sample: 2817-001-04 1511.1
Meas.: EPA METHOD 8240
Formula: 2.5G/5ML Instrument: FINN Weight 0.000
Submitted by: USARMY Analyst: UC Acct No.: 2817-001

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp Fac. From Library Entry

No	Name
1	C101 BROMOCHLOROMETHANE **INT. STD. **
2	C110 1,4-DIFLUOROBENZENE **INT. STD. **
3	C120 CHLOROBENZENE-D5 **INT. STD. **
4	C315 1,2-DICHLOROETHANE-D4 **S. STD. **
5	C305 TOLUENE-D8 **S. STD. **
6	C310 4-BROMOFLUOROBENZENE **S. STD **
7	C010 CHLOROMETHANE **
8	C015 BROMOMETHANE
9	C020 VINYL CHLORIDE *
10	C025 CHLOROETHANE
11	C050 METHYLENE CHLORIDE
12	C251 ACROLIN
13	C035 ACETONE
14	C252 ACRYLONITRILE
15	C040 CARBON DISULFIDE
16	C045 1,1-DICHLOROETHENE *
17	C050 1,1-DICHLOROETHANE **
18	C055 TRANS-1,2-DICHLOROETHENE
19	C060 TRICHLOROFLUOROMETHANE
20	C060 CHLOROFORM *
21	C065 1,2-DICHLOROETHANE
22	C110 2-BUTANONE
23	C115 1,1,1-TRICHLOROETHANE
24	C120 CARBON TETRACHLORIDE
25	C125 VINYL ACETATE
26	C130 BROMO DICHLOROMETHANE
27	C140 1,2-DICHLOROPROPANE *
28	C145 TRANS-1,3 DICHLOROPROPENE
29	C150 TRICHLOROETHENE
30	C155 DIBROMOCHLOROMETHANE
31	C160 1,1,2-TRICHLOROETHANE
32	C165 BENZENE
33	C143 CIS-1,3-DICHLOROPROPENE
34	C175 2-CHLOROETHYL VINYL ETHER
35	C180 BROMOFORM **
36	C220 TETRACHLOROETHENE
37	C210 2-HEXANONE
38	C205 4-METHYL 2-PENTANONE
39	C225 1,1,2,2-TETRACHLOROETHANE **
40	C230 TOLUENE *
41	C235 CHLOROBENZENE **
42	C240 ETHYL BENZENE *
43	C245 STYRENE
44	C250 M+P-XYLENES
45	C253 1,3-DICHLOROBENZENE
46	C254 1,4-DICHLOROBENZENE

No	Name
48	C250 O-XYLENE

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	49	375	9:27	1	1.000	A BB	14141.	50.000 NG	17.08
2	114	471	11:52	2	1.000	A BB	44974	50.000 NG	17.08
3	117	950	23:56	3	1.000	A BB	42238	50.000 NG	17.08
4	55	429	10:48	1	1.144	A BB	11442.	53.417 NG	18.25
5	98	581	17:09	3	0.717	A BB	42985.	45.944 NG	15.70
6	95	1202	30:17	3	1.265	A BB	34115.	43.215 NG	14.77
7	NOT FOUND								
8	NOT FOUND								
9	NOT FOUND								
10	NOT FOUND								
11	NOT FOUND								
12	NOT FOUND								
13	NOT FOUND								
14	NOT FOUND								
15	NOT FOUND								
16	NOT FOUND								
17	NOT FOUND								
18	NOT FOUND								
19	NOT FOUND								
20	NOT FOUND								
21	NOT FOUND								
22	NOT FOUND								
23	NOT FOUND								
24	NOT FOUND								
25	NOT FOUND								
26	NOT FOUND								
27	NOT FOUND								
28	NOT FOUND								
29	NOT FOUND								
30	NOT FOUND								
31	NOT FOUND								
32	NOT FOUND								
33	NOT FOUND								
34	NOT FOUND								
35	NOT FOUND								
36	NOT FOUND								
37	NOT FOUND								
38	NOT FOUND								
39	NOT FOUND								
40	91	694	17:29	3	0.731	A BB	344	0.364 NG	0.12
41	NOT FOUND								
42	NOT FOUND								
43	NOT FOUND								
44	NOT FOUND								
45	NOT FOUND								
46	NOT FOUND								
47	NOT FOUND								
48	NOT FOUND								

PROCEDURE: FILTER/TIC DIAGNOSTIC REPORT 6/03/94 17:37.08

DATA FILE: C7815

FILTER SCAN PARAMETERS

MAX NUMBER TICS:	15
ID TABLE ENTRIES:	528
SCAN TOLERANCE :	2
MIN. RIC HT. [%]:	10
FIRST SCAN :	1
LAST SCAN :	1600
TIC THRESHOLD :	600

METHOD LIBRARY & LISTS

TIC I.S. LIBRARY	LIBRARYLS
NBS SEARCH PROC	SERLIB
PEAK FINDER PROC.	VOME
TCA I.S. LL :	LS
FILE NAME LIST	TCAREF2

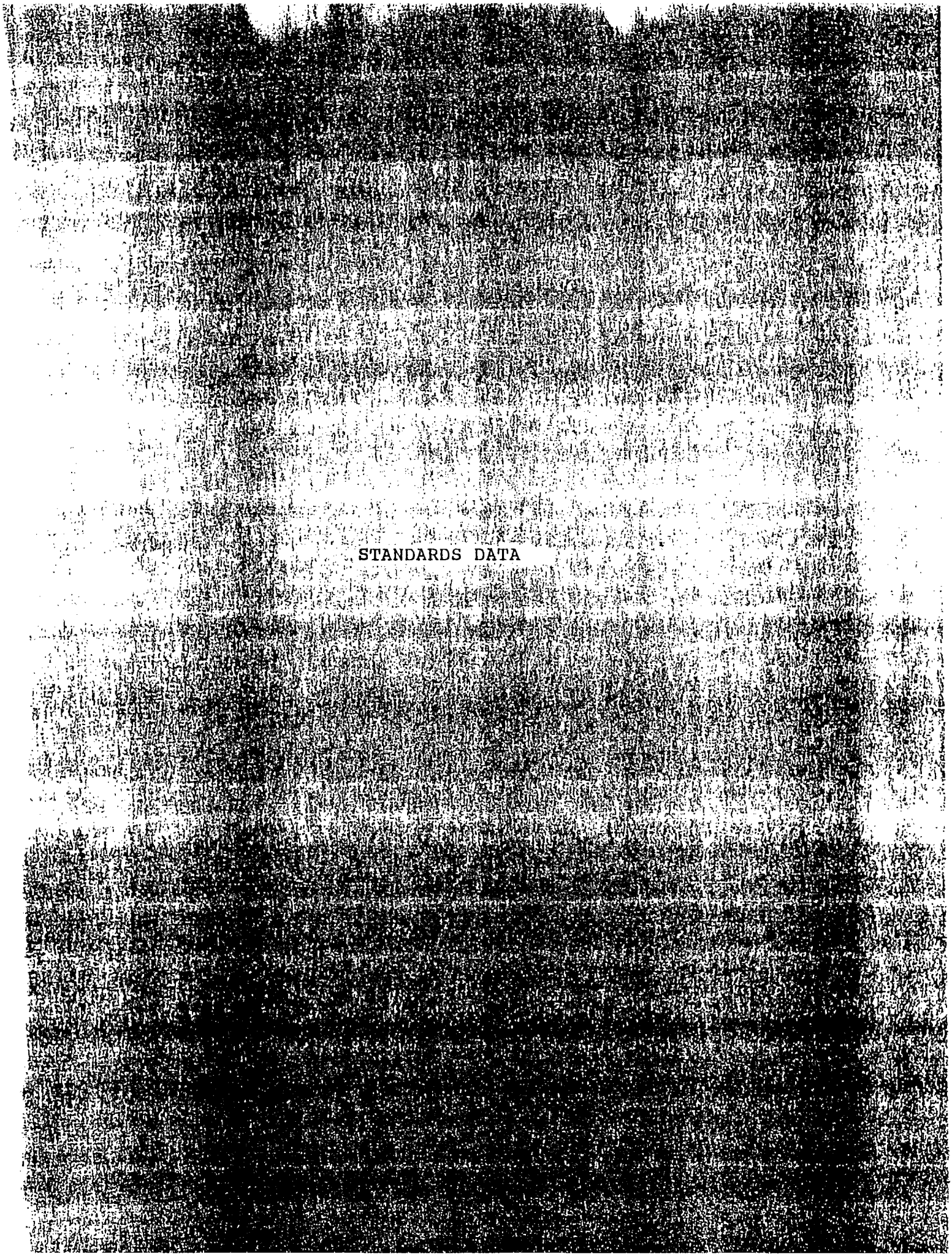
TARGET COMPOUND ANALYSIS.

TARGETS (QUAN LIST)	IS PEAKS	TOTAL TARGET PEAKS
4	3	7

FILTER PROCESSING:

	<-----REJECT PEAKS-----						
TOTAL PEAKS	< 1ST SCAN	> LAST SCAN	< MIN RIC HT	< SCAN TOL	> MAX # PEAKS	TOTAL REJECTS	TOTAL TICS
7	0	0	1	6	0	7	0

0 UNKNOWN PEAKS TO BE IDENTIFIED.


STANDARDS DATA

Initial Calibration Data

Instrument Identifier: FINN
Calibration Date: 04/28/94 8240
5% RSD
1 RF FOR SPCC (**) = 0.30

	Compound	RF 10 (C7444)	RF 20 (C7445)	RF 50 (C7446)	RF 100 (C7447)	RF 200 (C7448)	Mean RF	%RSD
0	CHLOROMETHANE **	0.421	0.421	0.482	0.404	0.410	0.428	7.308
015	BROMOMETHANE	0.500	0.501	0.577	0.493	0.455	0.505	8.769
020	VINYL CHLORIDE *	0.416	0.439	0.393	0.291	0.278	0.364	20.294
025	CHLOROETHANE	0.280	0.287	0.301	0.277	0.236	0.276	8.832
030	METHYLENE CHLORIDE	1.025	1.061	0.969	0.866	0.831	0.950	10.447
051	ACROLIN	0.050	0.059	0.067	0.072	0.076	0.065	16.456
035	ACETONE	0.336	0.219	0.218	0.178	0.164	0.223	30.377
052	ACRYLONITRILE	0.098	0.111	0.146	0.143	0.152	0.130	18.635
040	CARBON DISULFIDE	0.941	0.873	1.210	1.137	1.195	1.071	14.408
045	1,1-DICHLOROETHENE *	0.316	0.299	0.351	0.323	0.279	0.314	8.581
050	1,1-DICHLOROETHANE **	0.755	0.732	0.762	0.739	0.673	0.732	4.805
055	TRANS-1,2-DICHLOROETHEN	0.953	0.875	1.001	0.938	0.881	0.930	5.668
000	TRICHLOROFLUOROMETHA	0.434	0.274	0.323	0.294	0.251	0.315	22.758
060	CHLOROFORM *	0.966	0.972	0.988	1.002	0.924	0.970	3.051
065	1,2-DICHLOROETHANE	0.974	0.933	0.949	0.926	0.895	0.935	3.105
010	2-BUTANONE	0.110	0.106	0.113	0.107	0.113	0.110	2.901
015	1,1,1-TRICHLOROETHANE	0.467	0.476	0.530	0.501	0.477	0.490	5.257
120	CARBON TETRACHLORIDE	0.366	0.384	0.453	0.446	0.446	0.419	9.684
125	VINYL ACETATE	0.573	0.606	0.711	0.710	0.766	0.673	11.984
130	BROMO DICHLOROMETHANE	0.427	0.465	0.525	0.549	0.528	0.499	10.240
040	1,2-DICHLOROPROPANE	0.339	0.330	0.344	0.351	0.388	0.350	6.411
145	TRANS-1,3 DICHLOROPROPE	0.368	0.395	0.465	0.485	0.550	0.452	16.029
150	TRICHLOROETHENE	0.358	0.353	0.379	0.378	0.393	0.372	4.422
155	DIBROMOCHLOROMETHANE	0.312	0.363	0.464	0.478	0.555	0.434	22.286
160	1,1,2-TRICHLOROETHANE	0.297	0.305	0.326	0.318	0.338	0.317	5.131
165	BENZENE	0.867	0.842	0.859	0.848	0.879	0.859	1.708
043	CIS-1,3-DICHLOROPROPENE	0.275	0.312	0.384	0.411	0.476	0.372	21.538
175	2-CHLOROETHYL VINYL ETH	0.079	0.083	0.091	0.092	0.098	0.089	8.624
180	BROMOFORM **	0.194	0.228	0.286	0.357	0.425	0.298	31.611
020	TETRACHLOROETHENE	0.531	0.522	0.575	0.529	0.517	0.535	4.359
210	2-HEXANONE	0.417	0.547	0.563	0.642	0.439	0.522	17.826
205	4-METHYL 2-PENTANONE	0.254	0.231	0.248	0.267	0.289	0.258	8.436
025	1,1,2,2-TETRACHLOROETHA	0.598	0.585	0.580	0.657	0.698	0.624	8.297
230	TOLUENE *	1.267	1.207	1.264	1.250	1.257	1.249	1.951
235	CHLOROBENZENE **	0.918	0.934	0.953	0.943	0.949	0.939	1.479
240	ETHYL BENZENE *	0.402	0.402	0.433	0.430	0.433	0.420	3.902
245	STYRENE	0.872	0.878	0.930	0.979	1.002	0.932	6.266
250	M+P-XYLENES	1.166	1.203	1.221	1.227	1.249	1.213	2.564
253	1,3-DICHLOROBENZENE	0.921	0.880	0.931	0.978	1.021	0.946	5.762
254	1,4-DICHLOROBENZENE	0.947	0.910	0.972	1.031	1.043	0.981	5.728
255	1,2-DICHLOROBENZENE	0.876	0.829	0.871	0.309	0.924	0.762	33.517
250	O-XYLENE	0.590	0.579	0.571	0.597	0.619	0.591	3.129

DATAFILE: CV0603 Calibration Check

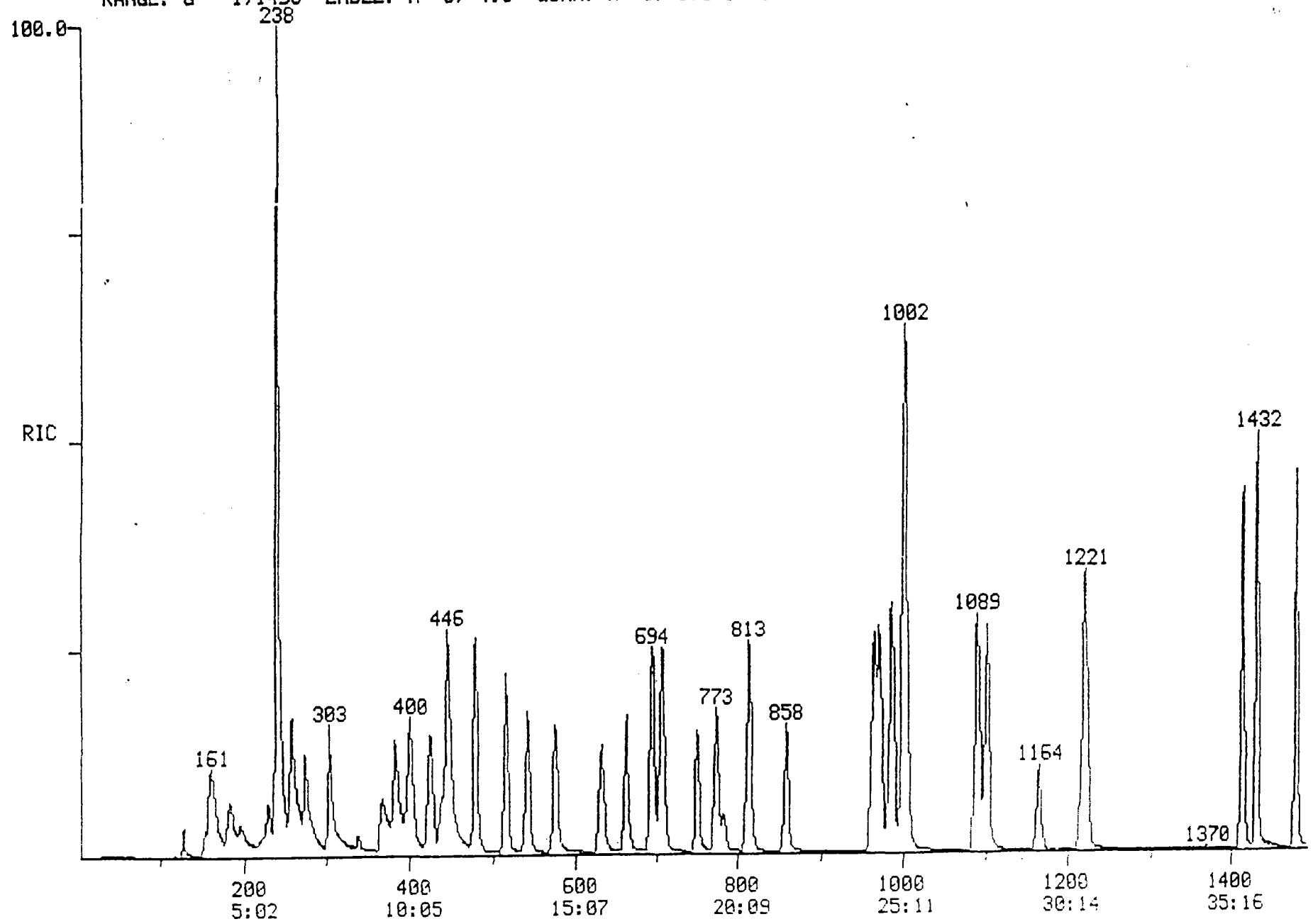
Instrument Identifier: FINN
Calibration Date: 05/16/94
Standard File: CV0603
Date: 06/03/94 Time: 11:59:00
%% D
MIN RF FOR SPCC (**) = 0.300

	Compound	Mean RF(I)	RF(D)	% D
215	1,2-DICHLOROETHANE-D4 *	0.876	0.758	0.000
108	TOLUENE-D8 **S.STD.**	1.217	1.108	0.000
210	4-BROMOFLUOROBENZENE **	1.013	0.935	0.000
10	CHLOROMETHANE **	0.428	0.424	0.859
15	BROMOMETHANE	0.505	0.455	9.933
20	VINYL CHLORIDE *	0.364	0.478	31.418
25	CHLOROETHANE	0.276	0.316	14.410
30	METHYLENE CHLORIDE	0.950	0.954	0.398
31	ACROLEIN	0.065	0.065	0.176
32	ACETONE	0.223	0.231	3.604
33	ACRYLONITRILE	0.130	0.136	4.750
40	CARBON DISULFIDE	1.071	1.581	47.582
45	1,1-DICHLOROETHENE *	0.314	0.369	17.512
50	1,1-DICHLOROETHANE **	0.732	0.375	48.768
55	TRANS-1,2-DICHLOROETHEN	0.930	0.861	7.376
60	TRICHLOROFLUOROMETHA	0.315	0.284	9.775
160	CHLOROFORM *	0.970	0.702	27.700
165	1,2-DICHLOROETHANE	0.935	0.775	17.157
110	2-BUTANONE	0.110	0.097	11.242
115	1,1,1-TRICHLOROETHANE	0.490	0.570	16.355
120	CARBON TETRACHLORIDE	0.419	0.547	30.566
125	VINYL ACETATE	0.673	0.498	26.031
130	BROMO DICHLOROMETHANE	0.499	0.588	17.816
140	1,2-DICHLOROPROPANE	0.350	0.270	22.937
145	TRANS-1,3 DICHLOROPROPE	0.452	0.402	11.147
150	TRICHLOROETHENE	0.372	0.358	3.873
155	DIBROMOCHLOROMETHANE	0.434	0.594	36.907
160	1,1,2-TRICHLOROETHANE	0.317	0.290	8.549
165	BENZENE	0.859	0.722	15.999
143	CIS-1,3-DICHLOROPROPENE	0.372	0.344	7.327
175	2-CHLOROETHYL VINYL ETH	0.089	0.098	10.483
180	BROMOFORM **	0.298	0.527	76.950
220	TETRACHLOROETHENE	0.535	0.607	13.427
210	2-HEXANONE	0.522	0.411	21.231
205	4-METHYL 2-PENTANONE	0.258	0.212	17.923
225	1,1,2,2-TETRACHLOROETHA	0.624	0.698	11.903
230	TOLUENE *	1.249	1.120	10.324
235	CHLOROBENZENE **	0.939	0.941	0.217
240	ETHYL BENZENE *	0.420	0.414	1.355
245	STYRENE	0.932	0.990	6.240
250	M+P-XYLENES	1.213	1.270	4.635
253	1,3-DICHLOROBENZENE	0.946	1.154	21.978
254	1,4-DICHLOROBENZENE	0.981	1.173	19.550
255	1,2-DICHLOROBENZENE	0.762	1.061	39.269
250	O-XYLENE	0.591	0.649	9.732

RIC
04/21/94 12:00:00
SAMPLE: 50 PPB VOA STD
CONDS.: EPA METHOD 8240
RANGE: G 1,1493 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: C7444 #1
CALI: C7444 #3

SCANS 1 TO 1493



'21Quantitation Report File: C7444

TI
00:00
B VOA STD
METHOD 8240

Instrument: FINN Weight: 0.000
Analyst: UC Acct. No.:

* REF AMNT/(REF AREA * RESP FACT)
rom Library Entry

OMOCHLOROMETHANE **INT. STD. **
,4-DIFLUOROBENZENE **INT. STD. **
LOROBENZENE-D5 **INT. STD. **
2-DICHLOROETHANE-D4 **S. STD. **
OLUENE-D8 **S. STD. **
-BROMOFLUOROBENZENE **S. STD. **
HLOROMETHANE **
ROMOMETHANE
INYL CHLORIDE *
HLOROETHANE
ETHYLENE CHLORIDE
CROLIN
CETONE
CRYLONITRILE
CARBON DISULFIDE
,1-DICHLOROETHENE *
,1-DICHLOROETHANE **
RANS-1,2-DICHLOROETHENE
TRICHLOROFLUOROMETHANE
CHLOROFORM *
1,2-DICHLOROETHANE
2-BUTANONE
1,1,1-TRICHLOROETHANE
CARBON TETRACHLORIDE
VINYL ACETATE
BROMO DICHLOROMETHANE
1,2-DICHLOROPROPANE *
TRANS-1,3 DICHLOROPROPENE
TRICHLOROETHENE
DIBROMOCHLOROMETHANE
1,1,2-TRICHLOROETHANE
BENZENE
CIS-1,3-DICHLOROPROPENE
2-CHLOROETHYL VINYL ETHER
BROMOFORM **
TETRACHLOROETHENE
2-HEXANONE
4-METHYL 2-PENTANONE
1,1,2,2-TETRACHLOROETHANE **
TOLUENE *
CHLOROBENZENE **
ETHYL BENZENE *
STYRENE
M+P-XYLENES
1,3-DICHLOROBENZENE
1,4-DICHLOROBENZENE

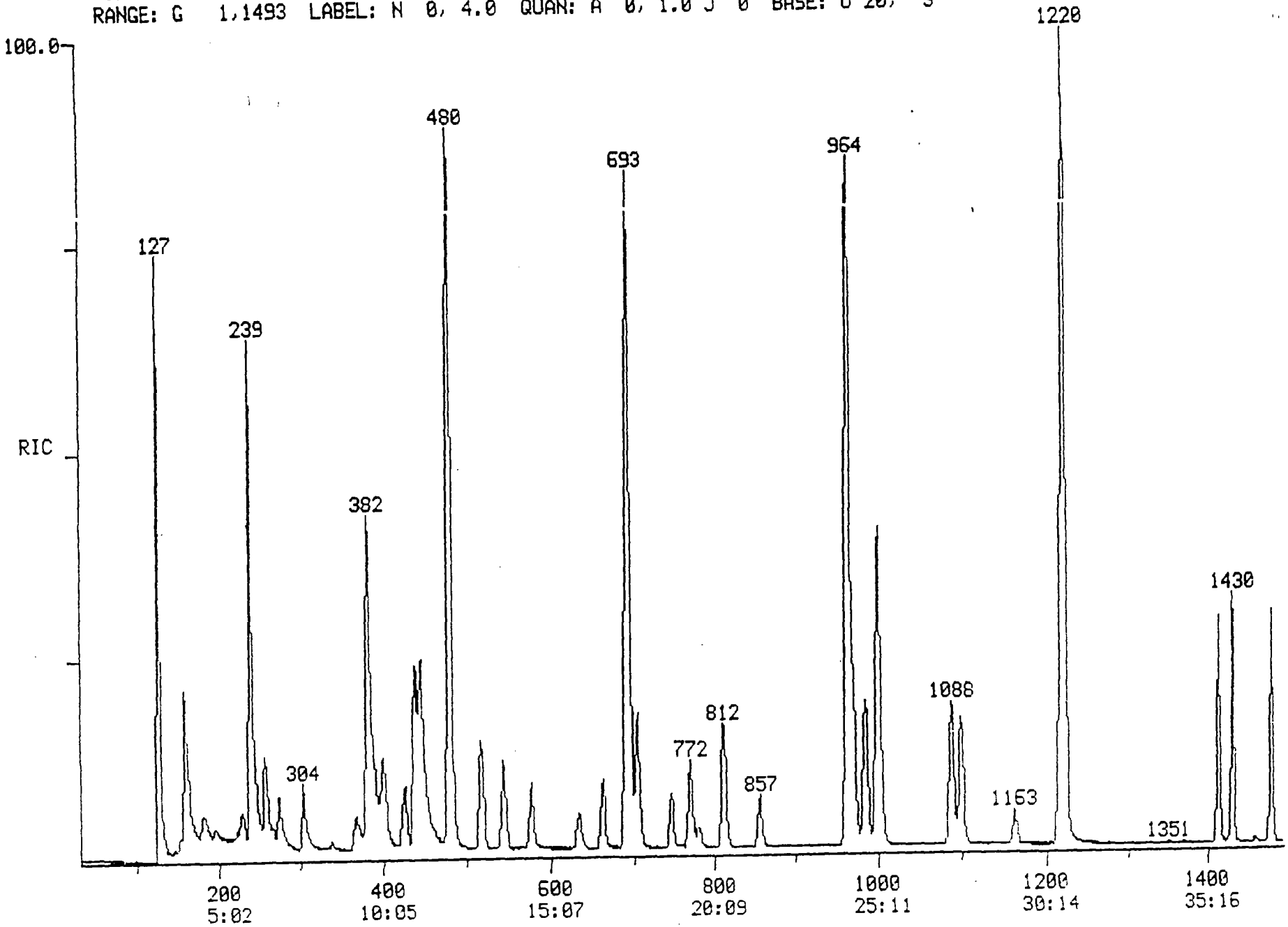
C1441

-XYLENE

Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
382	9:37	1	1.000	A BB	54684.	50.000 NG	2.08
480	12:05	2	1.000	A BB	147027.	50.000 NG	2.08
965	24:18	3	1.000	A BB	124912.	50.000 NG	2.08
438	11:02	1	1.147	A BB	45744.	50.000 NG	2.08
694	17:29	3	0.719	A BB	149892.	50.000 NG	2.08
1221	30:45	3	1.265	A BB	112737.	50.000 NG	2.08
154	3:53	1	0.403	A BB	26332.	50.000 NG	2.08
181	4:34	1	0.474	M YX	31524.	50.000 NG	2.08
158	3:59	1	0.414	M XX	21458.	50.000 NG	2.08
184	4:38	1	0.482	A BB	16419.	50.000 NG	2.08
256	6:27	1	0.670	A BB	52979.	50.000 NG	2.08
219	5:31	1	0.573	A BB	3632.	50.000 NG	2.08
222	5:36	1	0.581	A BB	11896.	50.000 NG	2.08
266	6:42	1	0.696	A BB	7979.	50.000 NG	2.08
257	6:28	1	0.673	A BB	66167.	50.000 NG	2.08
228	5:45	1	0.597	A BB	19163.	50.000 NG	2.08
305	7:41	1	0.798	A BB	41643.	50.000 NG	2.08
274	6:54	1	0.717	A BB	54689.	50.000 NG	2.08
196	4:56	1	0.513	A BB	17653.	50.000 NG	2.08
367	9:15	1	0.961	A BB	54013.	50.000 NG	2.08
448	11:17	1	1.173	A BB	51891.	50.000 NG	2.08
338	8:31	2	0.704	A BB	16500.	50.000 NG	2.08
400	10:05	2	0.833	A BB	77874.	50.000 NG	2.08
424	10:41	2	0.883	A BB	66525.	50.000 NG	2.08
303	7:38	2	0.631	A BB	104500.	50.000 NG	2.08
576	14:31	2	1.200	A BB	77144.	50.000 NG	2.08
543	13:41	2	1.131	A BB	50518.	50.000 NG	2.08
662	16:41	2	1.379	A BB	68259.	50.000 NG	2.08
516	13:00	2	1.075	A BB	55720.	50.000 NG	2.08
858	21:37	2	1.787	A BB	68148.	50.000 NG	2.08
772	19:27	2	1.608	A BB	47830.	50.000 NG	2.08
445	11:13	2	0.927	A BB	126270.	50.000 NG	2.08
749	18:52	2	1.560	A BB	56353.	50.000 NG	2.08
706	17:47	2	1.471	A BB	13312.	50.000 NG	2.08
1164	29:19	2	2.425	M XX	42032.	50.000 NG	2.08
813	20:29	3	0.842	A BB	71819.	50.000 NG	2.08
632	15:55	3	0.655	A BB	70299.	50.000 NG	2.08
782	19:42	3	0.810	A BB	30886.	50.000 NG	2.08
1217	30:39	3	1.261	M XX	72389.	50.000 NG	2.08
706	17:47	3	0.732	A BB	157886.	50.000 NG	2.08
972	24:29	3	1.007	A BB	118932.	50.000 NG	2.08
987	24:52	3	1.023	A BB	53997.	50.000 NG	2.08
1101	27:44	3	1.141	A VB	116066.	50.000 NG	2.08
1002	25:14	3	1.038	A BB	152435.	50.000 NG	2.08
1414	35:37	3	1.465	A BB	116239.	50.000 NG	2.08
1432	36:04	3	1.484	A BB	121338.	50.000 NG	2.08
1480	37:17	3	1.534	A BB	108691.	50.000 NG	2.08
1089	27:26	3	1.128	A BB	71208.	50.000 NG	2.08

RIC
04/21/94 12:46:00
SAMPLE: 10 PPB VOA STD
CONDS.: EPA METHOD 8240
RANGE: G 1,1493 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: C7445 #48
CALI: C7445 #3



A METHOD 8240
ML Instrument: FINN Weight:
: PTL Analyst: UC Acct. No.: 5-PT

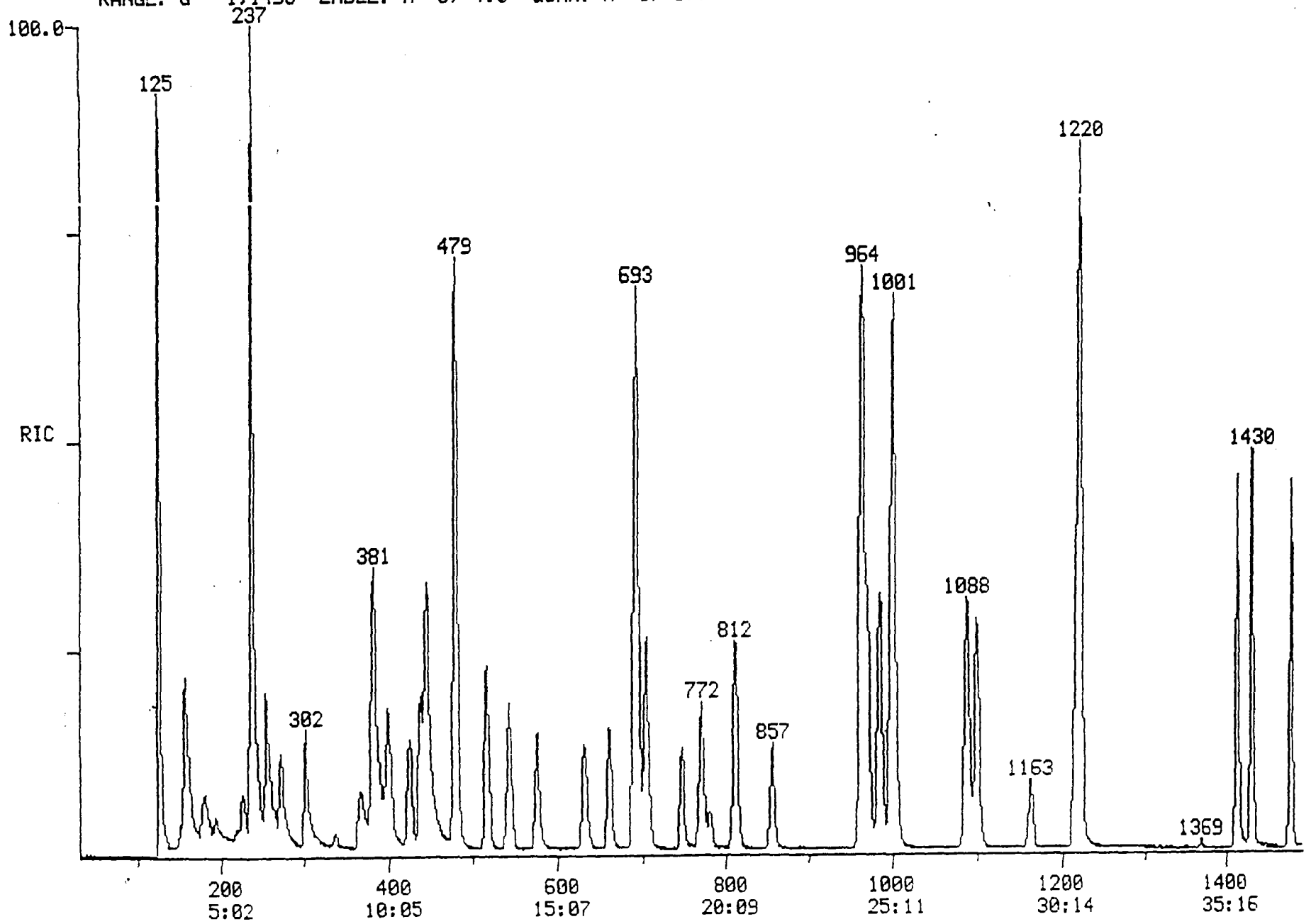
EA * REF AMNT/(REF AREA * RESP FACT)
from Library Entry

BROMOCHLOROMETHANE **INT. STD. **
1,4-DIFLUOROBENZENE **INT. STD. **
CHLOROBENZENE-D5 **INT. STD. **
1,2-DICHLOROETHANE-D4 **S. STD. **
TOLUENE-D8 **S. STD. **
4-BROMOFLUOROBENZENE **S. STD. **
0 CHLOROMETHANE **
BROMOMETHANE
VINYL CHLORIDE *
25 CHLOROETHANE
METHYLENE CHLORIDE
1 ACROLIN
35 ACETONE
52 ACRYLONITRILE
0 CARBON DISULFIDE
45 1,1-DICHLOROETHENE *
50 1,1-DICHLOROETHANE **
55 TRANS-1,2-DICHLOROETHENE
00 TRICHLOROFLUOROMETHANE
060 CHLOROFORM *
065 1,2-DICHLOROETHANE
110 2-BUTANONE
115 1,1,1-TRICHLOROETHANE
120 CARBON TETRACHLORIDE
125 VINYL ACETATE
130 BROMO DICHLOROMETHANE
140 1,2-DICHLOROPROPANE *
145 TRANS-1,3 DICHLOROPROPENE
150 TRICHLOROETHENE
155 DIBROMOCHLOROMETHANE
160 1,1,2-TRICHLOROETHANE
165 BENZENE
143 CIS-1,3-DICHLOROPROPENE
175 2-CHLOROETHYL VINYL ETHER
180 BROMOFORM **
C220 TETRACHLOROETHENE
C210 2-HEXANONE
C205 4-METHYL 2-PENTANONE
C225 1,1,2,2-TETRACHLOROETHANE **
C230 TOLUENE *
C235 CHLOROBENZENE **
C240 ETHYL BENZENE *
C245 STYRENE
C250 M+P-XYLENES
C253 1,3-DICHLOROBENZENE
C254 1,4-DICHLOROBENZENE
C255 1,2-DICHLOROBENZENE

C7445

Name
C250 O-XYLENE

	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	49	382	9:37	1	1.000	A BB	51359.	50.000 NG	7.20
2	114	480	12:05	2	1.000	A BB	142133.	50.000 NG	7.20
3	117	964	24:17	3	1.000	A BB	115161.	50.000 NG	7.20
4	65	438	11:02	1	1.147	A BB	45265.	52.680 NG	7.59
5	98	693	17:27	3	0.719	A BB	142660.	51.617 NG	7.44
6	95	1220	30:44	3	1.266	A BB	102179.	49.154 NG	7.08
7	50	154	3:53	1	0.403	A BB	4320.	8.734 NG	1.26
8	94	181	4:34	1	0.474	M XX	5135.	8.672 NG	1.25
9	62	158	3:59	1	0.414	A BB	4266.	10.584 NG	1.52
10	64	184	4:38	1	0.482	A BB	2873.	9.315 NG	1.34
11	49	256	6:27	1	0.670	A BB	10516.	10.570 NG	1.52
12	56	219	5:31	1	0.573	A BB	506.	7.417 NG	1.07
13	43	223	5:37	1	0.584	A BB	3448.	15.432 NG	2.22
14	53	266	6:42	1	0.696	A BB	997.	6.652 NG	0.96
15	76	257	6:28	1	0.673	A BB	9660.	7.772 NG	1.12
16	96	228	5:45	1	0.597	A BB	3237.	8.994 NG	1.30
17	63	305	7:41	1	0.798	A BB	7746.	9.903 NG	1.43
18	61	274	6:54	1	0.717	A BB	9787.	9.528 NG	1.37
19	101	196	4:56	1	0.513	M XX	4455.	13.435 NG	1.94
20	83	367	9:15	1	0.961	A BB	9917.	9.774 NG	1.41
21	62	448	11:17	1	1.173	A BB	9997.	10.256 NG	1.48
22	43	338	8:31	2	0.704	A BB	3099.	9.714 NG	1.40
23	97	400	10:05	2	0.833	A BB	13253.	8.802 NG	1.27
24	117	425	10:42	2	0.885	A BB	10401.	8.087 NG	1.17
25	43	303	7:38	2	0.631	A BB	16264.	8.050 NG	1.16
26	83	576	14:31	2	1.200	A BB	12111.	8.120 NG	1.17
27	63	543	13:41	2	1.131	A BB	9625.	9.854 NG	1.42
28	75	662	16:41	2	1.379	A BB	10457.	7.923 NG	1.14
29	95	517	13:01	2	1.077	A BB	10173.	9.443 NG	1.36
30	129	857	21:35	2	1.785	A BB	8843.	6.712 NG	0.97
31	97	772	19:27	2	1.608	A BB	8423.	9.108 NG	1.31
32	78	446	11:14	2	0.929	A BB	24620.	10.085 NG	1.45
33	75	749	18:52	2	1.560	A BB	7794.	7.154 NG	1.03
34	63	706	17:47	2	1.471	A BB	2233.	8.676 NG	1.25
35	173	1163	29:18	2	2.423	A BB	5496.	6.763 NG	0.97
36	166	812	20:27	3	0.842	A BB	12230.	9.235 NG	1.33
37	43	633	15:57	3	0.657	A BB	9603.	7.408 NG	1.07
38	43	782	19:42	3	0.811	A BB	5831.	10.239 NG	1.48
39	83	1216	30:38	3	1.261	A BB	13754.	10.304 NG	1.48
40	91	706	17:47	3	0.732	A BB	29168.	10.019 NG	1.44
41	112	971	24:28	3	1.007	A BB	21132.	9.636 NG	1.39
42	106	985	24:49	3	1.022	A BB	9241.	9.281 NG	1.34
43	104	1100	27:43	3	1.141	A BB	20077.	9.381 NG	1.35
44	106	1001	25:13	3	1.038	A BB	26845.	9.551 NG	1.38
45	146	1413	35:36	3	1.466	A BB	21196.	9.889 NG	1.42
46	146	1430	36:01	3	1.483	A BB	21807.	9.747 NG	1.40
47	146	1478	37:14	3	1.533	A BB	20172.	10.065 NG	1.45
48	106	1088	27:24	3	1.129	A BB	13589.	10.350 NG	1.49


SAMPLE: 20 PPB VOA STD
CONDS.: EPA METHOD 8240
RANGE: G 1,1493 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3
100.0
RIC
125
237
302
381
479
693
772
812
857
964
1001
1088
1163
1220
1369
1430
200
5:02
400
10:05
600
15:07
800
20:09
1000
25:11
1200
30:14
1400
35:16

File: C7446

Instrument: FINN
Analyst: UC

Weight: 0.000
Acct. No.: 5-PT

IT/(REF AREA * RESP FACT)
ary Entry

OMETHANE **INT. STD. **
ROBENZENE **INT. STD. **
ENE-D5 **INT. STD. **
ROETHANE-D4 **S. STD. **
**S. STD. **
OROBENZENE **S. STD. **
ANE **
NE
RIDE *
NE
CHLORIDE

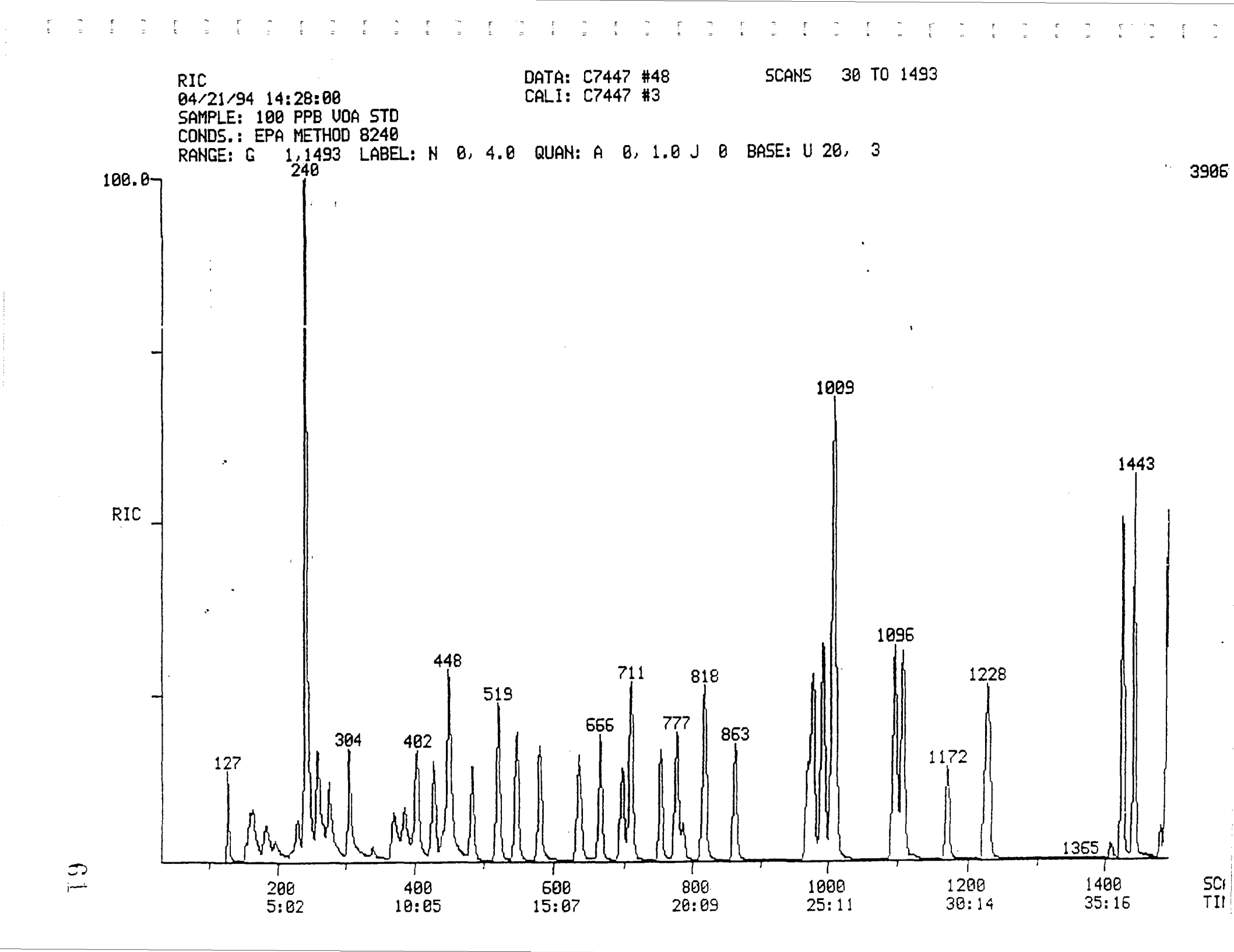
RILE
ISULFIDE
OROETHENE *
OROETHANE **
-DICHLOROETHENE
OROFLUOROMETHANE
M *
LOROETHANE
NE
CHLOROETHANE
TRACHLORIDE
TATE
HLOROMETHANE
LOROPROPANE *
3 DICHLOROPROPENE
OETHENE
HLOROMETHANE
ICHLOROETHANE

DICHLOROPROPENE
ETHYL VINYL ETHER
M **
LOROETHENE
NE
2-PENTANONE
-TETRACHLOROETHANE **
*
ENZENE **
ENZENE *
E
ENES
-DICHLOROBENZENE
ICHLOROBENZENE

e7446

O-XYLENE

Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
381	9:36	1	1.000	A BB	54552.	50.000 NG	4.67
479	12:04	2	1.000	A BB	145073.	50.000 NG	4.67
964	24:17	3	1.000	A BB	120486.	50.000 NG	4.67
437	11:00	1	1.147	A BB	44731.	49.012 NG	4.57
693	17:27	3	0.719	A BB	145760.	50.408 NG	4.71
1220	30:44	3	1.266	A BB	108424.	49.853 NG	4.65
153	3:51	1	0.402	A BB	9178.	17.470 NG	1.63
179	4:31	1	0.470	M XX	10932.	17.381 NG	1.62
156	3:56	1	0.409	M XX	9577.	22.370 NG	2.09
183	4:37	1	0.480	A BB	6249.	19.075 NG	1.78
255	6:25	1	0.669	A BB	23134.	21.886 NG	2.04
217	5:28	1	0.570	A BB	1275.	17.595 NG	1.64
221	5:34	1	0.580	A BB	4771.	20.101 NG	1.88
265	6:41	1	0.696	A BB	2412.	15.151 NG	1.41
256	6:27	1	0.672	A BB	19035.	14.419 NG	1.35
226	5:42	1	0.593	A BB	6509.	17.024 NG	1.59
304	7:39	1	0.798	A BB	15955.	19.204 NG	1.79
272	6:51	1	0.714	A BB	19075.	17.482 NG	1.63
194	4:53	1	0.509	A BB	5961.	16.925 NG	1.58
366	9:13	1	0.961	A BB	21198.	19.670 NG	1.84
447	11:16	1	1.173	A BB	20350.	19.656 NG	1.83
337	8:29	2	0.704	A BB	6117.	18.786 NG	1.75
399	10:03	2	0.833	A BB	27568.	17.939 NG	1.67
423	10:39	2	0.883	A BB	22243.	16.943 NG	1.58
302	7:36	2	0.630	A BB	35160.	17.049 NG	1.59
576	14:31	2	1.203	A BB	26947.	17.701 NG	1.65
542	13:39	2	1.132	A BB	19120.	19.179 NG	1.79
661	16:39	2	1.380	A BB	22882.	16.987 NG	1.59
516	13:00	2	1.077	A BB	20438.	18.587 NG	1.73
857	21:35	2	1.789	A BB	21017.	15.628 NG	1.46
772	19:27	2	1.612	A BB	17687.	18.738 NG	1.75
444	11:11	2	0.927	A BB	48855.	19.606 NG	1.83
748	18:51	2	1.562	A BB	18068.	16.247 NG	1.52
706	17:47	2	1.474	A BB	4765.	18.138 NG	1.69
1164	29:19	2	2.430	A BB	13180.	15.890 NG	1.48
812	20:27	3	0.842	A BB	25119.	18.130 NG	1.69
631	15:54	3	0.655	A BB	26332.	19.416 NG	1.81
781	19:40	3	0.810	A BB	11113.	18.651 NG	1.74
1217	30:39	3	1.262	A BB	28176.	20.176 NG	1.88
706	17:47	3	0.732	A BB	58153.	19.092 NG	1.78
971	24:28	3	1.007	A BB	44979.	19.604 NG	1.83
986	24:50	3	1.023	A BB	19360.	18.585 NG	1.73
1100	27:43	3	1.141	A BB	42274.	18.880 NG	1.76
1001	25:13	3	1.038	A BB	57975.	19.715 NG	1.84
1413	35:36	3	1.466	A BB	42369.	18.895 NG	1.76
1430	36:01	3	1.483	A BB	43848.	18.732 NG	1.75
1478	37:14	3	1.533	A BB	39924.	19.040 NG	1.78
1088	27:24	3	1.129	A BB	27892.	20.304 NG	1.90


RIC
04/21/94 14:28:00
SAMPLE: 100 PPB VOA STD
CONDS.: EPA METHOD 8240
RANGE: G 1,1493 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3
DATA: C7447 #48
CALI: C7447 #3
SCANS 30 TO 1493
100.0
RIC
3906
240
1009
1443
1096
448
711
818
519
1228
666
777
863
304
402
1172
127
1365
200
5:02
400
10:05
600
15:07
800
20:09
1000
25:11
1200
30:14
1400
35:16

tation Report File: C7447

C7447.TI
/94 14:28:00
: 100 PPB VOA STD
: EPA METHOD 8240
la: 5ML Instrument: FINN Weight: 0.000
ted by: PTL Analyst: UC Acct. No.: 5-PT

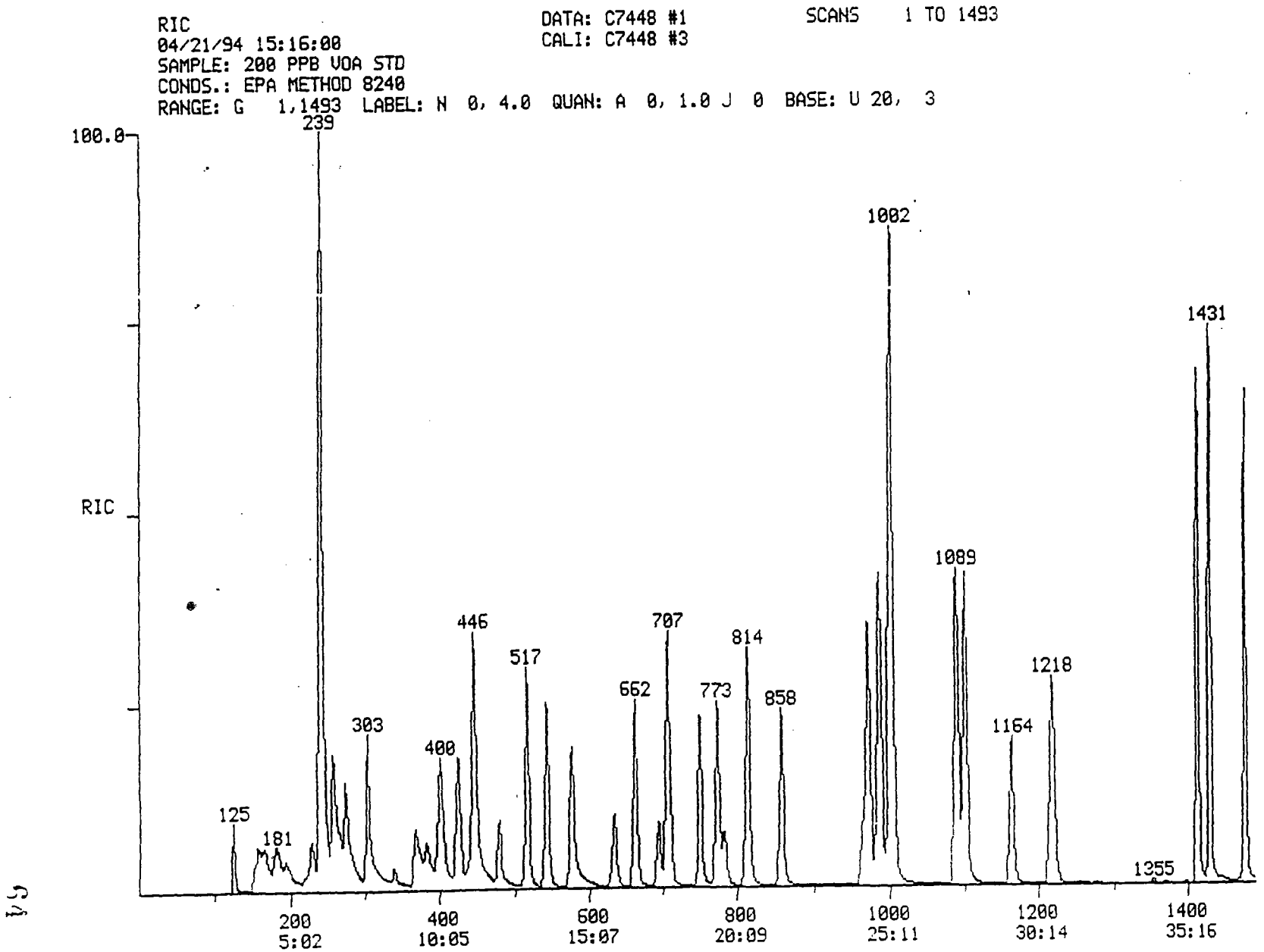
IT=AREA * REF AMNT/(REF AREA * RESP FACT)
fac. from Library Entry

	Name
CI01	BROMOCHLOROMETHANE **INT. STD. **
CI10	1,4-DIFLUOROBENZENE **INT. STD. **
CI20	CHLOROBENZENE-D5 **INT. STD. **
CS15	1,2-DICHLOROETHANE-D4 **S. STD. **
CS05	TOLUENE-D8 **S. STD. **
CS10	4-BROMOFLUOROBENZENE **S. STD. **
C010	CHLOROMETHANE **
C015	BROMOMETHANE
C020	VINYL CHLORIDE *
C025	CHLOROETHANE
C030	METHYLENE CHLORIDE
C251	ACROLIN
C035	ACETONE
C252	ACRYLONITRILE
C040	CARBON DISULFIDE
C045	1,1-DICHLOROETHENE *
C050	1,1-DICHLOROETHANE **
C055	TRANS-1,2-DICHLOROETHENE
C000	TRICHLOROFLUOROMETHANE
C060	CHLOROFORM *
C065	1,2-DICHLOROETHANE
C110	2-BUTANONE
C115	1,1,1-TRICHLOROETHANE
C120	CARBON TETRACHLORIDE
C125	VINYL ACETATE
C130	BROMO DICHLOROMETHANE
C140	1,2-DICHLOROPROPANE *
C145	TRANS-1,3 DICHLOROPROPENE
C150	TRICHLOROETHENE
C155	DIBROMOCHLOROMETHANE
C160	1,1,2-TRICHLOROETHANE
C165	BENZENE
C143	CIS-1,3-DICHLOROPROPENE
C175	2-CHLOROETHYL VINYL ETHER
C180	BROMOFORM **
C220	TETRACHLOROETHENE
C210	2-HEXANONE
C205	4-METHYL 2-PENTANONE
C225	1,1,2,2-TETRACHLOROETHANE **
C230	TOLUENE *
C235	CHLOROBENZENE **
C240	ETHYL BENZENE *
C245	STYRENE
C250	M+P-XYLENES
C253	1,3-DICHLOROBENZENE
C254	1,4-DICHLOROBENZENE

c7447

o	Name
48	C250 O-XYLENE

o	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	49	384	9:40	1	1.000	A BB	47037.	50.000 NG	1.13
2	114	482	12:08	2	1.000	A BB	131679.	50.000 NG	1.13
3	117	971	24:28	3	1.000	A BB	111326.	50.000 NG	1.13
4	65	440	11:05	1	1.146	A BB	45199.	57.437 NG	1.30
5	98	698	17:35	3	0.719	A BB	135263.	50.626 NG	1.15
6	95	1230	30:59	3	1.267	A BB	120115.	59.773 NG	1.36
7	50	155	3:54	1	0.404	A BB	37949.	83.775 NG	1.90
8	94	181	4:34	1	0.471	A BB	46295.	85.366 NG	1.94
9	62	158	3:59	1	0.411	M XX	27370.	74.144 NG	1.68
10	64	184	4:38	1	0.479	A BB	25966.	91.926 NG	2.08
11	49	257	6:28	1	0.669	A BB	81466.	89.385 NG	2.03
12	56	220	5:33	1	0.573	A BB	6748.	107.995 NG	2.45
13	43	223	5:37	1	0.581	A BB	16675.	81.481 NG	1.85
14	53	267	6:44	1	0.695	A BB	13448.	97.970 NG	2.22
15	76	258	6:30	1	0.672	A BB	106871.	93.888 NG	2.13
16	96	228	5:45	1	0.594	A BB	30368.	92.118 NG	2.09
17	63	306	7:42	1	0.797	A BB	69512.	97.031 NG	2.20
18	61	274	6:54	1	0.714	A BB	88227.	93.777 NG	2.13
19	101	196	4:56	1	0.510	A BB	27620.	90.948 NG	2.06
20	83	368	9:16	1	0.958	A BB	94192.	101.369 NG	2.30
21	62	450	11:20	1	1.172	A BB	87023.	97.485 NG	2.21
22	43	339	8:32	2	0.703	A BB	28166.	95.299 NG	2.16
23	97	402	10:08	2	0.834	A BB	131893.	94.554 NG	2.14
24	117	426	10:44	2	0.884	A BB	117278.	98.421 NG	2.23
25	43	304	7:39	2	0.631	A BB	186846.	99.820 NG	2.26
26	83	579	14:35	2	1.201	A BB	144423.	104.517 NG	2.37
27	63	546	13:45	2	1.133	A BB	92185.	101.873 NG	2.31
28	75	666	16:47	2	1.382	A BB	127538.	104.312 NG	2.37
29	95	519	13:04	2	1.077	A BB	99309.	99.501 NG	2.26
30	129	863	21:44	2	1.790	A BB	125702.	102.978 NG	2.34
31	97	777	19:34	2	1.612	A BB	83689.	97.682 NG	2.22
32	78	447	11:16	2	0.927	A BB	223309.	98.732 NG	2.24
33	75	754	19:00	2	1.564	A BB	108120.	107.113 NG	2.43
34	63	711	17:55	2	1.475	M XX	24201.	101.495 NG	2.30
35	173	1172	29:31	2	2.432	A BB	94008.	124.864 NG	2.83
36	166	818	20:36	3	0.842	A BB	117649.	91.902 NG	2.08
37	43	636	16:01	3	0.655	A BB	142927.	114.062 NG	2.59
38	43	787	19:49	3	0.811	A BB	59370.	107.840 NG	2.45
39	83	1226	30:53	3	1.263	A BB	146267.	113.357 NG	2.57
40	91	711	17:55	3	0.732	A BB	278213.	98.858 NG	2.24
41	112	978	24:38	3	1.007	A BB	209920.	99.022 NG	2.25
42	106	993	25:01	3	1.023	A BB	95643.	99.370 NG	2.25
43	104	1108	27:55	3	1.141	A VB	217789.	105.271 NG	2.39
44	106	1009	25:25	3	1.039	A BB	273004.	100.475 NG	2.28
45	146	1425	35:54	3	1.468	A BB	217672.	105.057 NG	2.38
46	146	1443	36:21	3	1.486	M XX	229537.	106.128 NG	2.41
47	146	1491	37:33	3	1.536	M XX	68680.	35.449 NG	0.80
48	106	1096	27:36	3	1.129	A BB	132721.	104.564 NG	2.37


RIC
04/21/94 15:16:00
SAMPLE: 200 PPB VOA STD
CONDS.: EPA METHOD 8240
RANGE: G 1,1493 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3
DATA: C7448 #1
CALI: C7448 #3
SCANS 1 TO 1493
688
100.0
RIC
239
1002
1431
1089
446
517
707
814
662
773
858
303
400
1218
1164
125
181
1355
200
5:02
400
10:05
600
15:07
800
20:09
1000
25:11
1200
30:14
1400
35:16

ntitation Report File: C7448

a: C7448.TI
21/94 15:16:00
ple: 200 PPB VOA STD
ds.: EPA METHOD 8240
mula: 5ML Instrument: FINN Weight: 0.000
mitted by: PTL Analyst: UC Acct. No.: 5-PT

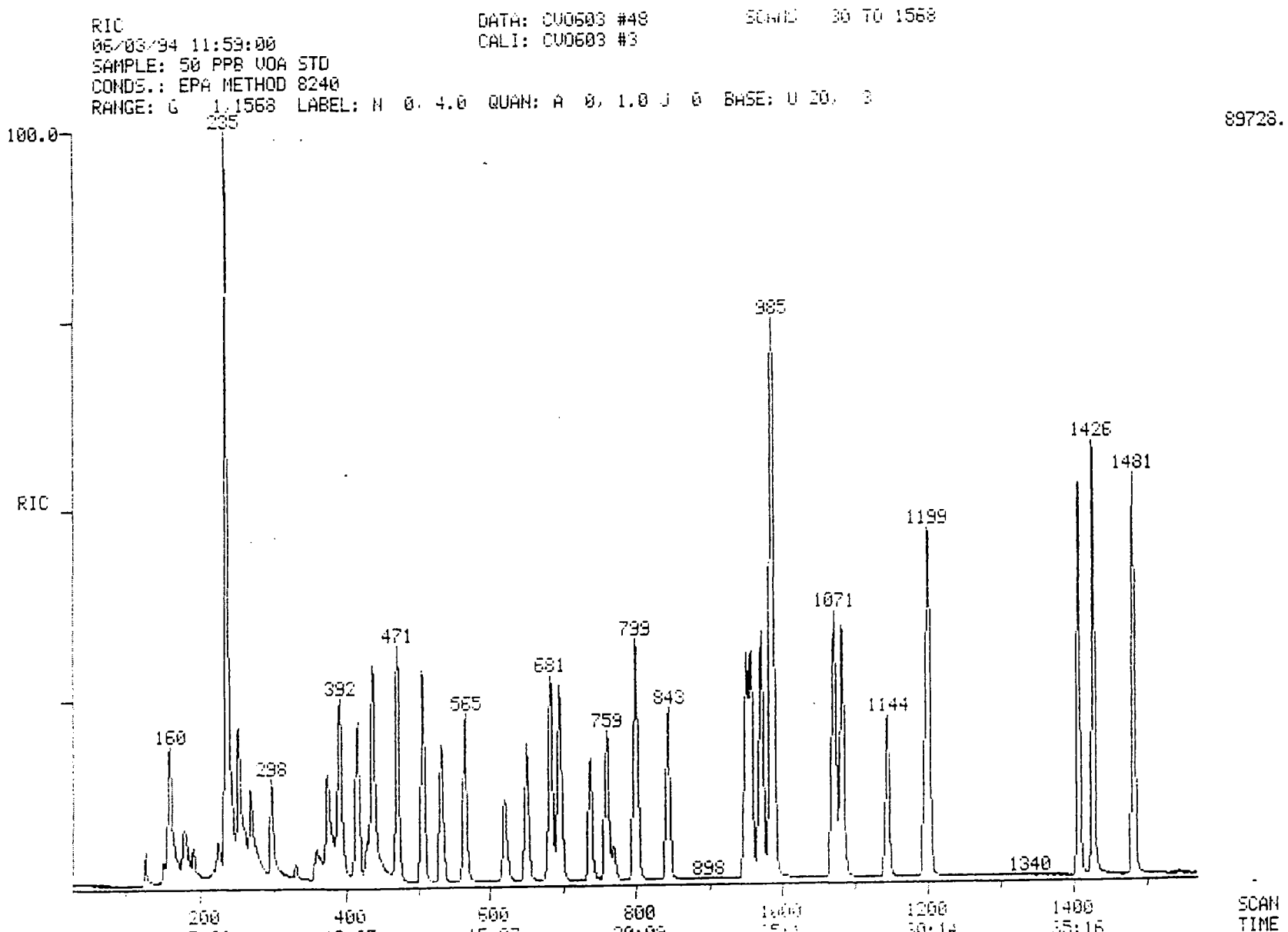
UNT=AREA * REF AMNT/(REF AREA * RESP FACT)
p. fac. from Library Entry

	Name
CI01	BROMOCHLOROMETHANE **INT. STD. **
CI10	1,4-DIFLUOROBENZENE **INT. STD. **
CI20	CHLOROBENZENE-D5 **INT. STD. **
CS15	1,2-DICHLOROETHANE-D4 **S. STD. **
CS05	TOLUENE-D8 **S. STD. **
CS10	4-BROMOFLUOROBENZENE **S. STD. **
C010	CHLOROMETHANE **
C015	BROMOMETHANE
C020	VINYL CHLORIDE *
C025	CHLOROETHANE
C030	METHYLENE CHLORIDE
C251	ACROLIN
C035	ACETONE
C252	ACRYLONITRILE
C040	CARBON DISULFIDE
C045	1,1-DICHLOROETHENE *
C050	1,1-DICHLOROETHANE **
C055	TRANS-1,2-DICHLOROETHENE
C000	TRICHLOROFLUOROMETHANE
C060	CHLOROFORM *
C065	1,2-DICHLOROETHANE
C110	2-BUTANONE
C115	1,1,1-TRICHLOROETHANE
C120	CARBON TETRACHLORIDE
C125	VINYL ACETATE
C130	BROMO DICHLOROMETHANE
C140	1,2-DICHLOROPROPANE *
C145	TRANS-1,3 DICHLOROPROPENE
C150	TRICHLOROETHENE
C155	DIBROMOCHLOROMETHANE
C160	1,1,2-TRICHLOROETHANE
C165	BENZENE
C143	CIS-1,3-DICHLOROPROPENE
C175	2-CHLOROETHYL VINYL ETHER
C180	BROMOFORM **
C220	TETRACHLOROETHENE
C210	2-HEXANONE
C205	4-METHYL 2-PENTANONE
C225	1,1,2,2-TETRACHLOROETHANE **
C230	TOLUENE *
C235	CHLOROBENZENE **
C240	ETHYL BENZENE *
C245	STYRENE
C250	M+P-XYLENES
C253	1,3-DICHLOROBENZENE
C254	1,4-DICHLOROBENZENE
C255	1,2-DICHLOROBENZENE

C7448

No	Name
48	C250 O-XYLENE

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	49	382	9:37	1	1.000	A VB	51054.	50.000 NG	0.57
2	114	480	12:05	2	1.000	A BB	139749.	50.000 NG	0.57
3	117	965	24:18	3	1.000	A BB	121964.	50.000 NG	0.57
4	65	438	11:02	1	1.147	A BB	45370.	53.118 NG	0.61
5	98	694	17:29	3	0.719	A BB	148393.	50.697 NG	0.58
6	95	1220	30:44	3	1.264	A BB	157704.	71.634 NG	0.82
7	50	153	3:51	1	0.401	A BB	83688.	170.210 NG	1.95
8	94	180	4:32	1	0.471	A BB	92842.	157.727 NG	1.81
9	62	156	3:56	1	0.408	M XX	56769.	141.685 NG	1.63
10	64	183	4:37	1	0.479	A BB	48023.	156.636 NG	1.80
11	49	256	6:27	1	0.670	A BB	169507.	171.351 NG	1.97
12	56	218	5:29	1	0.571	A BB	15507.	228.657 NG	2.62
13	43	222	5:36	1	0.581	A BB	33420.	150.458 NG	1.73
14	53	266	6:42	1	0.696	A BB	30966.	207.844 NG	2.38
15	76	256	6:27	1	0.670	A BB	243894.	197.407 NG	2.27
16	96	226	5:42	1	0.592	A BB	56912.	159.049 NG	1.82
17	63	304	7:39	1	0.796	A BB	137334.	176.619 NG	2.03
18	61	273	6:53	1	0.715	A BB	179727.	176.001 NG	2.02
19	101	194	4:53	1	0.508	A BB	51063.	154.915 NG	1.78
20	83	366	9:13	1	0.958	A BB	188531.	186.932 NG	2.14
21	62	448	11:17	1	1.173	A BB	182740.	188.601 NG	2.16
22	43	338	8:31	2	0.704	A BB	62976.	200.773 NG	2.30
23	97	400	10:05	2	0.833	A BB	266449.	179.986 NG	2.07
24	117	424	10:41	2	0.883	A BB	248760.	196.705 NG	2.26
25	43	302	7:36	2	0.629	A BB	428077.	215.488 NG	2.47
26	83	577	14:32	2	1.202	A BB	294912.	201.099 NG	2.31
27	63	543	13:41	2	1.131	A BB	216763.	225.711 NG	2.59
28	75	662	16:41	2	1.379	A BB	306981.	236.576 NG	2.71
29	95	517	13:01	2	1.077	A BB	219373.	207.104 NG	2.38
30	129	858	21:37	2	1.787	A BB	309764.	239.110 NG	2.74
31	97	773	19:28	2	1.610	A BB	188552.	207.369 NG	2.38
32	78	445	11:13	2	0.927	A BB	491306.	204.678 NG	2.35
33	75	749	18:52	2	1.560	A BB	265936.	248.244 NG	2.85
34	63	707	17:49	2	1.473	M XX	54438.	215.118 NG	2.47
35	173	1164	29:19	2	2.425	A BB	237048.	296.670 NG	3.40
36	166	813	20:29	3	0.842	A BB	252130.	179.775 NG	2.06
37	43	634	15:58	3	0.657	A BB	214028.	155.907 NG	1.79
38	43	783	19:43	3	0.811	A BB	140736.	233.338 NG	2.68
39	83	1217	30:39	3	1.261	A BB	340205.	240.664 NG	2.76
40	91	707	17:49	3	0.733	A BB	612876.	198.780 NG	2.28
41	112	973	24:31	3	1.008	A BB	462731.	199.238 NG	2.29
42	106	987	24:52	3	1.023	A BB	210790.	199.903 NG	2.29
43	104	1101	27:44	3	1.141	A VB	488697.	215.614 NG	2.47
44	106	1002	25:14	3	1.038	A BB	609289.	204.682 NG	2.35
45	146	1414	35:37	3	1.465	A BB	497746.	219.280 NG	2.52
46	146	1431	36:03	3	1.483	A BB	508681.	214.679 NG	2.46
47	146	1479	37:15	3	1.533	A BB	450324.	212.164 NG	2.43
48	106	1089	27:26	3	1.128	A BB	301717.	216.976 NG	2.49


RIC
06/03/94 11:53:00
SAMPLE: 50 PPB VOA STD
CONDS.: EPA METHOD 8240
DATA: CV0603 #48
CALI: CV0603 #3
SCANS 30 TO 1568
RANGE: G 1,1568 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3
89728.
100.0
RIC
235
160
298
392
471
565
681
759
799
843
898
985
1071
1144
1199
1340
1426
1481
200
5:02
400
10:05
500
15:07
800
20:09
1200
30:14
1400
35:16
SCAN
TIME

Quantitation Report File: CV0603

Data: CV0603.TI
06/03/94 11:59:00
Sample: 50 PPB VOA STD
Conds.: EPA METHOD 8240
Formula: 5ML Instrument: FINN Weight: 0.000
Submitted by: PTL Analyst: UC Acct. No.:

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name
1	C101 BROMOCHLOROMETHANE **INT. STD. **
2	C110 1,4-DIFLUOROBENZENE **INT. STD. **
3	C120 CHLOROBENZENE-D5 **INT. STD. **
4	CS15 1,2-DICHLOROETHANE-D4 **S. STD. **
5	CS05 TOLUENE-D8 **S. STD. **
6	CS10 4-BROMOFLUOROBENZENE **S. STD. **
7	C010 CHLOROMETHANE **
8	C015 BROMOMETHANE
9	C020 VINYL CHLORIDE *
10	C025 CHLOROETHANE
11	C030 METHYLENE CHLORIDE
12	C251 ACROLIN
13	C035 ACETONE
14	C252 ACRYLONITRILE
15	C040 CARBON DISULFIDE
16	C045 1,1-DICHLOROETHENE *
17	C050 1,1-DICHLOROETHANE **
18	C055 TRANS-1,2-DICHLOROETHENE
19	C000 TRICHLOROFLUOROMETHANE
20	C060 CHLOROFORM *
21	C065 1,2-DICHLOROETHANE
22	C110 2-BUTANONE
23	C115 1,1,1-TRICHLOROETHANE
24	C120 CARBON TETRACHLORIDE
25	C125 VINYL ACETATE
26	C130 BROMO DICHLOROMETHANE
27	C140 1,2-DICHLOROPROPANE *
28	C145 TRANS-1,3 DICHLOROPROPENE
29	C150 TRICHLOROETHENE
30	C155 DIBROMOCHLOROMETHANE
31	C160 1,1,2-TRICHLOROETHANE
32	C165 BENZENE
33	C143 CIS-1,3-DICHLOROPROPENE
34	C175 2-CHLOROETHYL VINYL ETHER
35	C180 BROMOFORM **
36	C220 TETRACHLOROETHENE
37	C210 2-HEXANONE
38	C205 4-METHYL 2-PENTANONE
39	C225 1,1,2,2-TETRACHLOROETHANE **
40	C230 TOLUENE *
41	C235 CHLOROBENZENE **
42	C240 ETHYL BENZENE *
43	C245 STYRENE
44	C250 M+P-XYLENES
45	C253 1,3-DICHLOROBENZENE
46	C254 1,4-DICHLOROBENZENE
47	C255 1,2-DICHLOROBENZENE

CV0603

No	Name
48	C250 O-XYLENE

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	49	375	9:27	1	1.000	A BB	21762.	50.000 NG	2.08
2	114	470	11:50	2	1.000	A BB	73132.	50.000 NG	2.08
3	117	949	23:54	3	1.000	A BB	58537.	50.000 NG	2.08
4	65	429	10:48	1	1.144	A BB	16482.	50.000 NG	2.08
5	98	681	17:09	3	0.718	A BB	64831.	50.000 NG	2.08
6	95	1200	30:14	3	1.264	A BB	54702.	50.000 NG	2.08
7	50	152	3:50	1	0.405	A BB	9216	50.000 NG	2.08
8	94	179	4:31	1	0.477	A BB	14395.	50.000 NG	2.08
9	62	157	3:57	1	0.419	M XX	10388.	50.000 NG	2.08
10	64	182	4:35	1	0.485	A BB	6861.	50.000 NG	2.08
11	49	252	6:21	1	0.672	A BB	20752.	50.000 NG	2.08
12	56	216	5:26	1	0.576	A BB	1398.	50.000 NG	2.08
13	43	220	5:33	1	0.587	A BV	5021.	50.000 NG	2.08
14	53	262	6:36	1	0.699	A BB	2955	50.000 NG	2.08
15	76	253	6:22	1	0.675	A BB	34390.	50.000 NG	2.08
16	96	225	5:40	1	0.600	A BB	8015	50.000 NG	2.08
17	63	300	7:33	1	0.800	A BB	8152.	50.000 NG	2.08
18	51	270	6:48	1	0.720	A BB	18725	50.000 NG	2.08
19	101	192	4:50	1	0.512	A BB	6177	50.000 NG	2.08
20	83	360	9:04	1	0.960	M XX	17639	50.000 NG	2.08
21	62	439	11:04	1	1.171	A BB	16853.	50.000 NG	2.08
22	43	332	8:22	2	0.706	A BB	7087.	50.000 NG	2.08
23	97	392	9:52	2	0.834	A BB	41674.	50.000 NG	2.08
24	117	416	10:29	2	0.885	A BB	39962.	50.000 NG	2.08
25	43	298	7:30	2	0.634	A BB	36386.	50.000 NG	2.08
26	83	565	14:14	2	1.202	A BB	42933.	50.000 NG	2.08
27	63	532	13:24	2	1.132	A BB	19711.	50.000 NG	2.08
28	75	650	16:22	2	1.383	A BB	29365.	50.000 NG	2.08
29	95	506	12:45	2	1.077	A BB	26130.	50.000 NG	2.08
30	129	843	21:14	2	1.794	A BB	43431.	50.000 NG	2.08
31	97	759	19:07	2	1.615	A BB	21151.	50.000 NG	2.08
32	78	437	11:00	2	0.930	A BB	52747	50.000 NG	2.08
33	75	736	18:32	2	1.566	A BB	25143.	50.000 NG	2.08
34	63	694	17:29	2	1.477	A BB	5431.	50.000 NG	2.08
35	173	1144	28:49	2	2.434	A BB	38523.	50.000 NG	2.08
36	166	799	20:08	3	0.842	A BB	35491.	50.000 NG	2.08
37	43	620	15:37	3	0.653	A BB	24033.	50.000 NG	2.08
38	43	769	19:22	3	0.810	A BB	12353.	50.000 NG	2.08
39	83	1196	30:08	3	1.260	A BB	35194.	50.000 NG	2.08
40	91	693	17:27	3	0.730	A BB	65539.	50.000 NG	2.08
41	112	956	24:05	3	1.007	A BB	55077	50.000 NG	2.08
42	106	970	24:26	3	1.022	A BB	24216.	50.000 NG	2.08
43	104	1082	27:15	3	1.140	A VB	57937.	50.000 NG	2.08
44	106	985	24:49	3	1.038	A BB	74285.	50.000 NG	2.08
45	146	1406	35:25	3	1.482	A BB	67523.	50.000 NG	2.08
46	146	1426	35:55	3	1.503	A BB	68610.	50.000 NG	2.08
47	146	1481	37:18	3	1.561	A BB	62066.	50.000 NG	2.08
48	106	1071	26:59	3	1.129	A BB	37944	50.000 NG	2.08

RAW DATA

BROMOFLUOROBENZENE

Tuning Report
04/21/94 10:01:00 + 4:24
Instrument: FINN
#175 to #177 summed
Case Number:

Data: BFB421 # 176
Cali: CALTAB # 3
Analyst: UC
Laboratory:

Base m/z: 95
RIC: 166400.
Acct. No.:
Contract:

			Ion Abundance Criteria				
m/z	Intensity	% RA	Min %	Max %	Mass	Actual	Status
50	6880.	17.6	15.0	40.0	95	17.6	PASS
75	17376.	44.4	30.0	60.0	95	44.4	PASS
95	39104.	100.0	100.0	---	---	100.0	PASS
96	3144.	8.0	5.0	9.0	95	8.0	PASS
173	0.	0.0	---	2.0	174	0.0	PASS
174	25664.	65.6	50.0	---	95	65.6	PASS
175	1790.	4.6	5.0	9.0	174	7.0	PASS
176	24704.	63.2	95.0	101.0	174	96.3	PASS
177	1574.	4.0	5.0	9.0	176	6.4	PASS

Mass List
04/21/94 10:01:00 + 4:24
Sample: 50NG BFB MASS SPECTROMETER TUNE CHECK
Conds.: EPA METHOD 624
#175 to #177 summed

Data: BFB421 # 176
Cali: CALTAB # 3

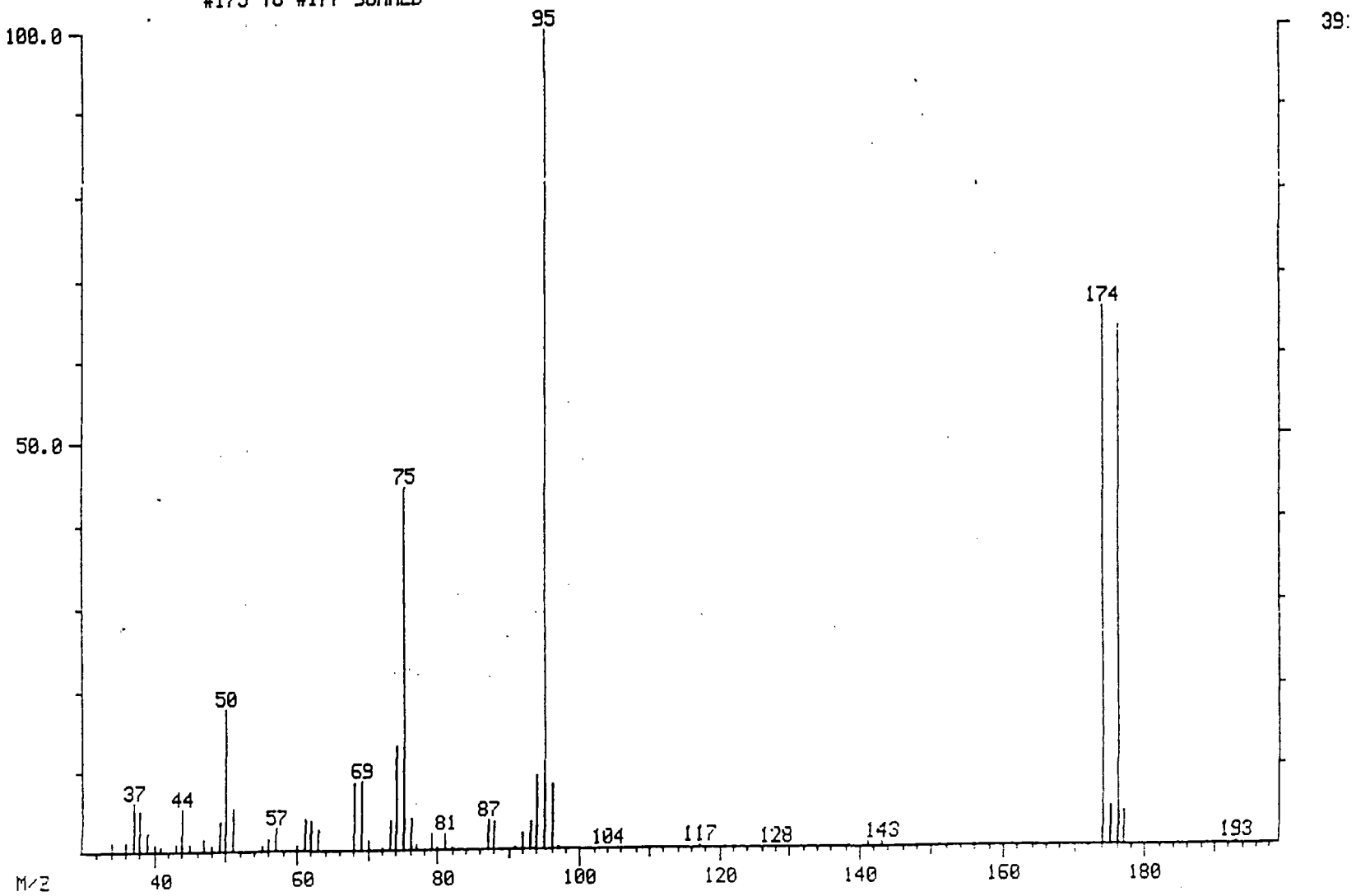
Base m/z: 95
RIC: 166400.

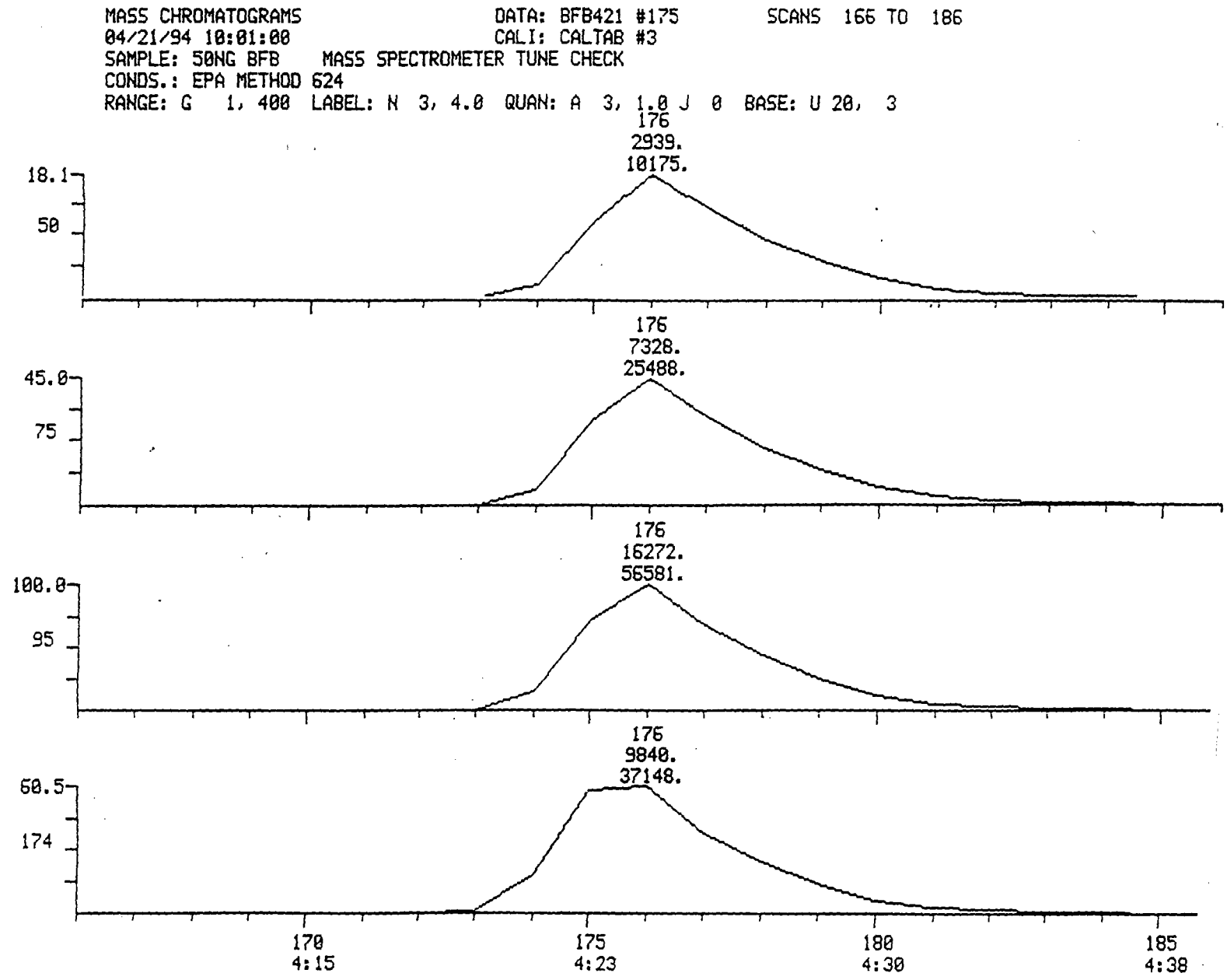
34	0.00	0.	Minima	Min Inten:	0.
193			Maxima	# 0	
Mass	% RA	Inten.	Mass	% RA	Inten.
34?	1.18	463.	128	0.09	37.
36?	1.19	464.	141	0.64	250.
37?	6.13	2396.	143	0.67	263.
38?	4.94	1930.	174	65.63	25664.
39?	2.14	837.	175	4.58	1790.
40?	0.92	359.	176	63.18	24704.
41?	0.66	260.	177	4.03	1574.
43?	0.77	303.	193	0.27	107.
44?	5.24	2048.			
45?	0.97	378.			
47?	1.26	492.			
48?	0.49	190.			
49?	3.72	1456.			
50?	17.59	6880.			
51?	5.34	2088.			
55?	0.56	220.			
56?	1.35	526.			
57?	2.66	1042.			
60?	0.65	253.			
61?	3.91	1528.			
62?	3.52	1376.			
63?	2.56	1000.			
68?	8.23	3220.			
69	8.50	3324.			
70	1.03	402.			
72	0.23	91.			
73	3.53	1380.			
74	13.11	5128.			
75	44.44	17376.			
76	3.74	1464.			
77	0.60	234.			
78	0.05	21.			
79	1.92	751.			
80	0.32	125.			
81	2.04	798.			
82	0.36	141.			
87	3.53	1380.			
88	3.43	1342.			
89	0.04	16.			
91	0.17	66.			
92	2.06	806.			
93	3.20	1252.			
94	9.01	3524.			
95	100.00	39104.			
96	8.04	3144.			
97	0.22	85.			
104	0.05	20.			
117	0.27	107.			
118	0.07	26.			
119	0.04	16.			

MASS SPECTRUM
04/21/94 10:01:00 + 4:24
SAMPLE: 50NG BFB MASS SPECTROMETER TUNE CHECK
CONDS.: EPA METHOD 624
TEMP: 160 DEG. C
#175 TO #177 SUMMED

DATA: BFB421 #176
CALI: CALTAB #3

BASE M/Z: 95
RIC: 166400.




MASS CHROMATOGRAMS
DATA: BFB421 #175
SCANS 166 TO 186
04/21/94 10:01:00
CALI: CALTAB #3
SAMPLE: 50NG BFB MASS SPECTROMETER TUNE CHECK
CONDS.: EPA METHOD 624
RANGE: G 1, 400 LABEL: N 3, 4.0 QUAN: A 3, 1.0 J 0 BASE: U 20, 3
176
2939.
10175.
18.1
50
176
7328.
25488.
45.0
75
176
16272.
56581.
100.0
95
176
9840.
37148.
60.5
174
170
4:15
175
4:23
180
4:30
185
4:38

BROMOFLUOROBENZENE

Tuning Report
06/03/94 11:26:00 + 4:09
Instrument: FINN
#165 to #167 summed
Case Number:

Data: BFB603 # 166
Cali: CALTAB # 3
Analyst: UC
Laboratory:

Base m/z: 95
RIC: 94336.
Acct. No.: 2707-002
Contract:

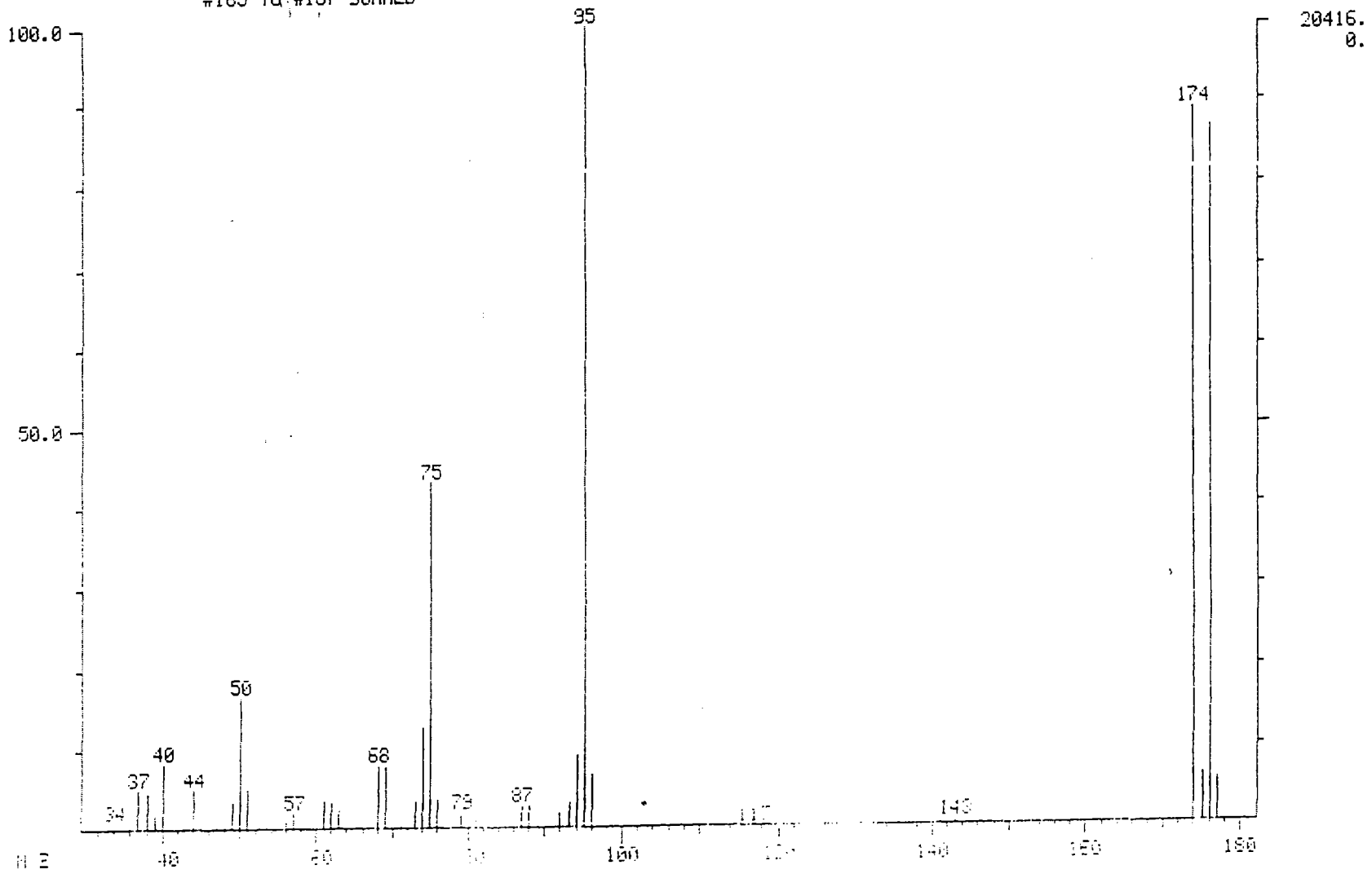
m/z	Intensity	% RA	Ion Abundance Criteria Min %	Max %	Mass	Actual	Status
50	3364.	16.5	15.0	40.0	95	16.5	PASS
75	8784.	43.0	30.0	60.0	95	43.0	PASS
95	20416.	100.0	100.0	---	---	100.0	PASS
96	1376.	6.7	5.0	9.0	95	6.7	PASS
173	0.	0.0	---	2.0	174	0.0	PASS
174	18144.	88.9	50.0	---	95	88.9	PASS
175	1260.	6.2	5.0	9.0	174	6.9	PASS
176	17696.	86.7	95.0	101.0	174	97.5	PASS
177	1126.	5.5	5.0	9.0	176	6.4	PASS

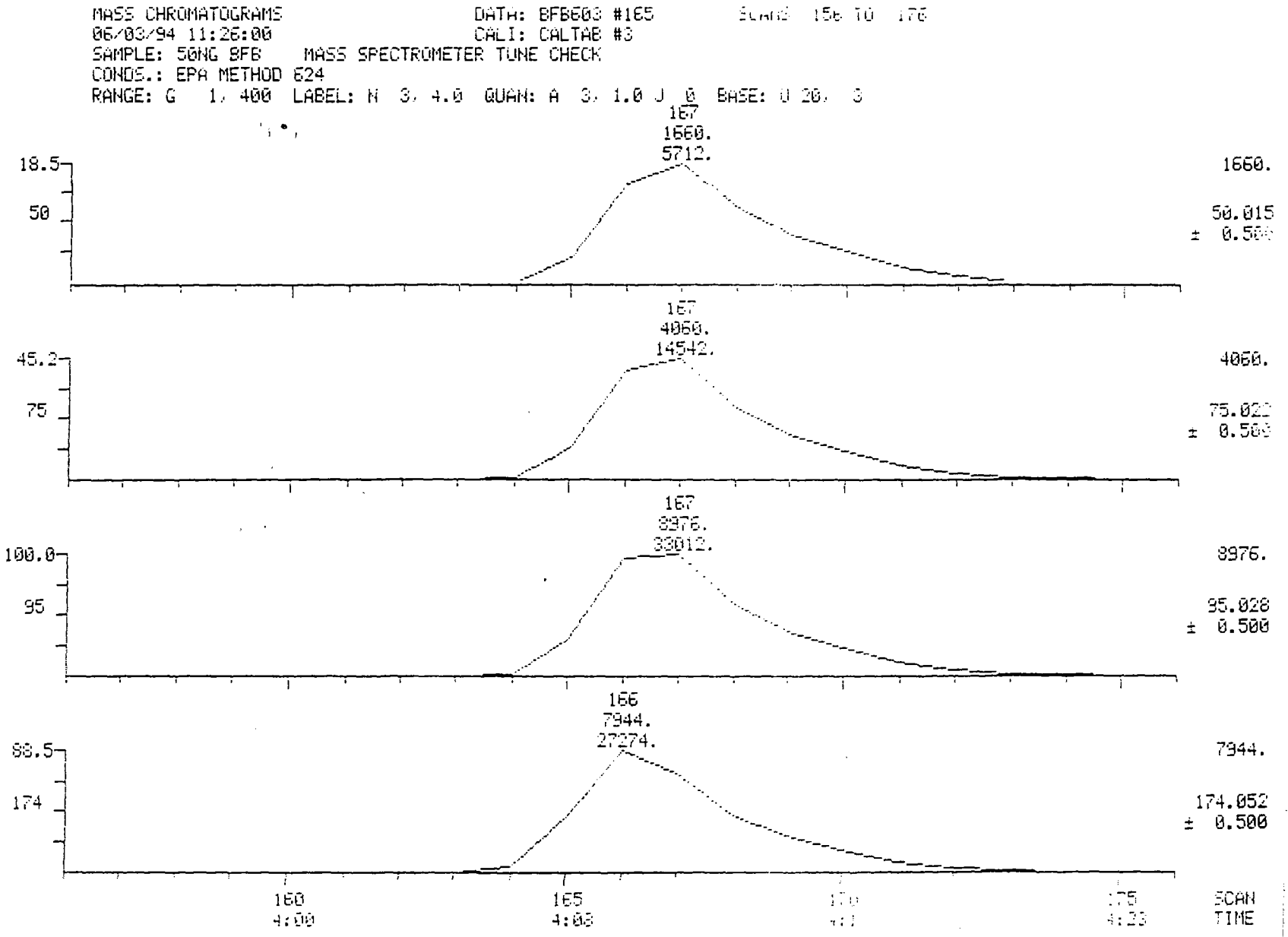
37?	5.06	1034.
38?	4.52	922.
39?	1.53	312.
40?	8.36	1706.
44?	4.88	997
45?	0.52	106.
47?	0.65	133.
48?	0.17	35.
49?	3.34	682.
50?	16.48	3364
51?	4.87	994
56?	0.87	178.
57?	2.01	410.
60?	0.13	26.
61?	3.59	732.
62?	3.20	654.
63?	2.10	429.
68?	7.88	1608.
69	7.85	1602.
72	0.08	16.
73	3.18	649.
74	12.68	2588.
75	43.03	8784.
76	3.52	718.
79	2.00	408.
80	0.24	48.
81	1.98	404.
87	2.88	587.
88	2.72	555.
92	1.98	404.
93	2.99	610.
94	9.21	1880.
95	100.00	20416.
96	6.74	1376.
117	0.07	15.
141	0.57	116.
143	0.61	124.
174	88.87	18144.
175	6.17	1260.
176	86.68	17696.
177	5.52	1126.

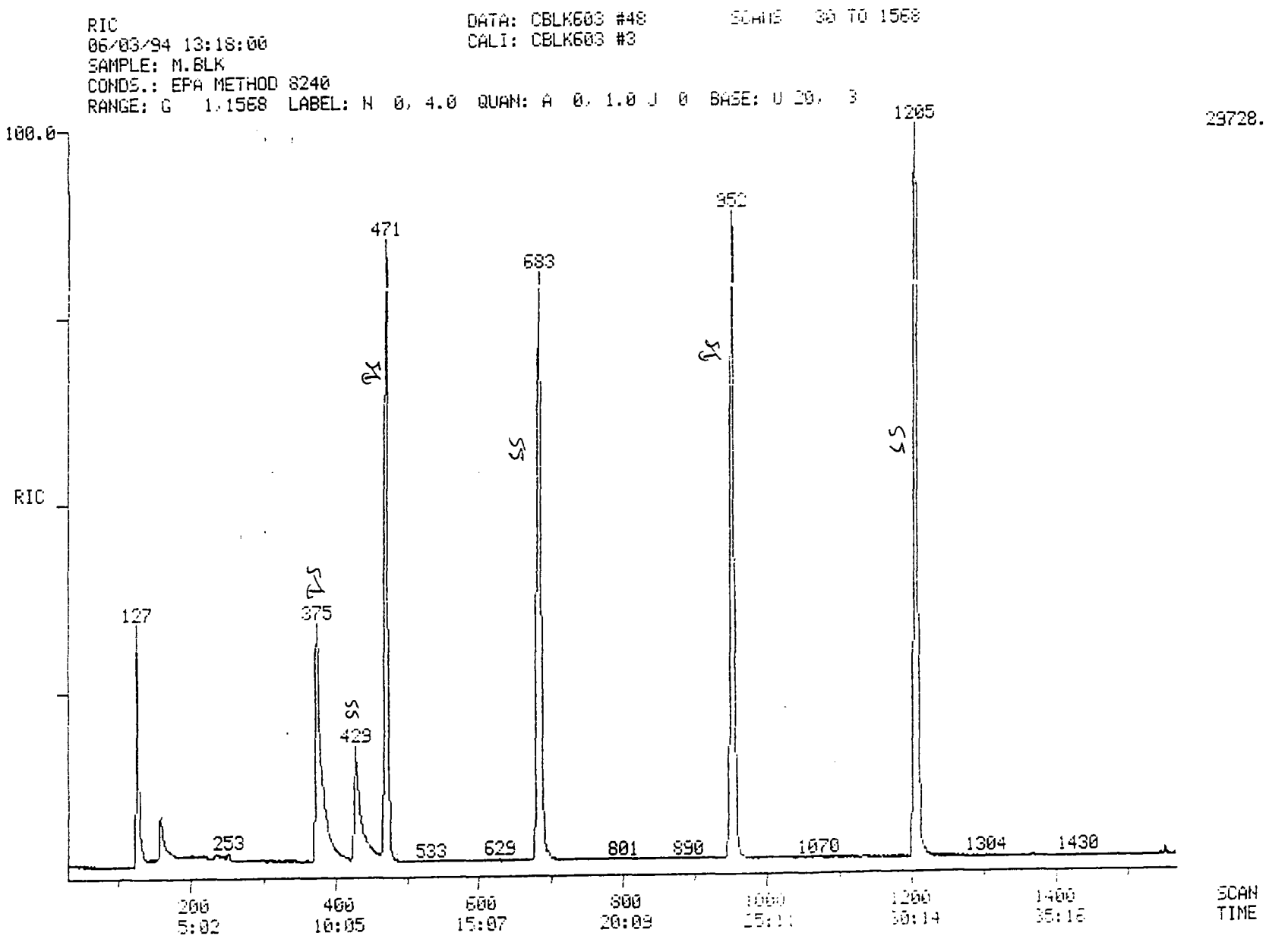
MASS SPECTRUM
06/03/94 11:26:00 + 4:09
SAMPLE: 50NG BFB MASS SPECTROMETER TUNE CHECK
CONDS.: EPA METHOD 624
TEMP: 160 DEG. C
#165 TO #167 SUMMED

DATA: BFB603 #166
CALI: CALTAB #3

BASE M/Z: 95
RIC: 94336.




MASS CHROMATOGRAMS
06/03/94 11:26:00
SAMPLE: 50NG BFB
CONDS.: EPA METHOD 624
RANGE: G 1, 400 LABEL: N 3, 4.0 QUAN: A 3, 1.0 J 0 BASE: U 20, 3
DATA: BFB603 #165
CALI: CALTAB #3
MASS SPECTROMETER TUNE CHECK
167
1660.
5712.
18.5
50
1660.
50.015
± 0.500
167
4060.
14542.
45.2
75
4060.
75.022
± 0.500
167
8976.
33012.
100.0
95
8976.
95.028
± 0.500
166
7944.
27274.
88.5
174
7944.
174.052
± 0.500
160
4:00
165
4:08
175
4:23
SCAN
TIME


RIC
06/03/94 13:18:00
SAMPLE: M.BLK
CONDS.: EPA METHOD 8240
RANGE: G 1.1568 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3
DATA: CBLK603 #48 SCANS 30 TO 1568
CALI: CBLK603 #3
29728.
100.0
RIC
127
253
375
429
471
533
629
683
801
890
952
1070
1205
1304
1430
200
5:02
400
10:05
600
15:07
800
20:09
1200
30:14
1400
35:16
SCAN
TIME

No	Name
48	C250 O-XYLENE

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot	
1	49	375	9:27	1	1.000	A BB	18304.	50.000 NG	16.99	
2	114	471	11:52	2	1.000	A BB	63429.	50.000 NG	16.99	
3	117	952	23:59	3	1.000	A BB	56775.	50.000 NG	16.99	
4	65	429	10:48	1	1.144	A BB	15018.	54.166 NG	18.41	108
5	78	683	17:12	3	0.717	A BB	62425.	49.638 NG	16.87	99
6	95	1206	30:23	3	1.267	A BB	42884.	40.415 NG	13.74	81
7	NOT FOUND									
8	NOT FOUND									
9	NOT FOUND									
10	NOT FOUND									
11	NOT FOUND									
12	NOT FOUND									
13	NOT FOUND									
14	NOT FOUND									
15	NOT FOUND									
16	NOT FOUND									
17	NOT FOUND									
18	NOT FOUND									
19	NOT FOUND									
20	NOT FOUND									
21	NOT FOUND									
22	NOT FOUND									
23	NOT FOUND									
24	NOT FOUND									
25	NOT FOUND									
26	NOT FOUND									
27	NOT FOUND									
28	NOT FOUND									
29	NOT FOUND									
30	NOT FOUND									
31	NOT FOUND									
32	NOT FOUND									
33	NOT FOUND									
34	NOT FOUND									
35	NOT FOUND									
36	NOT FOUND									
37	NOT FOUND									
38	NOT FOUND									
39	NOT FOUND									
40	91	696	17:32	3	0.731	A BB	242.	0.190 NG	0.06	
41	NOT FOUND									
42	NOT FOUND									
43	NOT FOUND									
44	NOT FOUND									
45	NOT FOUND									
46	NOT FOUND									
47	NOT FOUND									
48	NOT FOUND									

48 C250 O-XYLENE

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	49	377	9:30	1	1.000	A BB	22767.	50.000 NG	8.97
2	114	473	11:55	2	1.000	A BB	70578.	50.000 NG	8.97
3	117	951	23:57	3	1.000	A BB	60273.	50.000 NG	8.97
4	65	431	10:51	1	1.143	A BB	17645.	52.901 NG	9.49
5	98	683	17:12	3	0.718	A BB	69002.	51.410 NG	9.22
6	95	1203	30:18	3	1.265	A BB	46155.	41.101 NG	7.37
7	NOT FOUND								
8	NOT FOUND								
9	NOT FOUND								
10	NOT FOUND								
11	49	255	6:25	1	0.676	A BB	3256.	7.147 NG	1.28
12	NOT FOUND								
13	NOT FOUND								
14	NOT FOUND								
15	NOT FOUND								
16	96	227	5:43	1	0.602	A BB	7557.	50.450 NG	9.05
17	NOT FOUND								
18	NOT FOUND								
19	NOT FOUND								
20	NOT FOUND								
21	NOT FOUND								
22	NOT FOUND								
23	NOT FOUND								
24	NOT FOUND								
25	NOT FOUND								
26	NOT FOUND								
27	NOT FOUND								
28	NOT FOUND								
29	95	509	12:49	2	1.076	A BB	28625.	53.816 NG	9.65
30	NOT FOUND								
31	NOT FOUND								
32	78	439	11:04	2	0.928	A BB	54400.	46.879 NG	8.41
33	NOT FOUND								
34	NOT FOUND								
35	NOT FOUND								
36	NOT FOUND								
37	NOT FOUND								
38	NOT FOUND								
39	NOT FOUND								
40	91	696	17:32	3	0.732	A BB	72468.	51.209 NG	9.19
41	112	958	24:08	3	1.007	A BB	60512.	52.705 NG	9.45
42	NOT FOUND								
43	NOT FOUND								
44	NOT FOUND								
45	NOT FOUND								
46	NOT FOUND								
47	NOT FOUND								
48	NOT FOUND								

MAX NUMBER TICS:	15
TABLE ENTRIES:	528
SCAN TOLERANCE	2
MIN RIC HT [%]:	10
FIRST SCAN :	1
LAST SCAN :	1600
IT THRESHOLD :	600

TIC I.S. LIBRARY:	LIBRARYLS
NBS SEARCH PROC :	SERLIB
PEAK FINDER PROC:	VOME
TCA I.S. LL :	LS
FILE NAME LIST :	TCAREF2

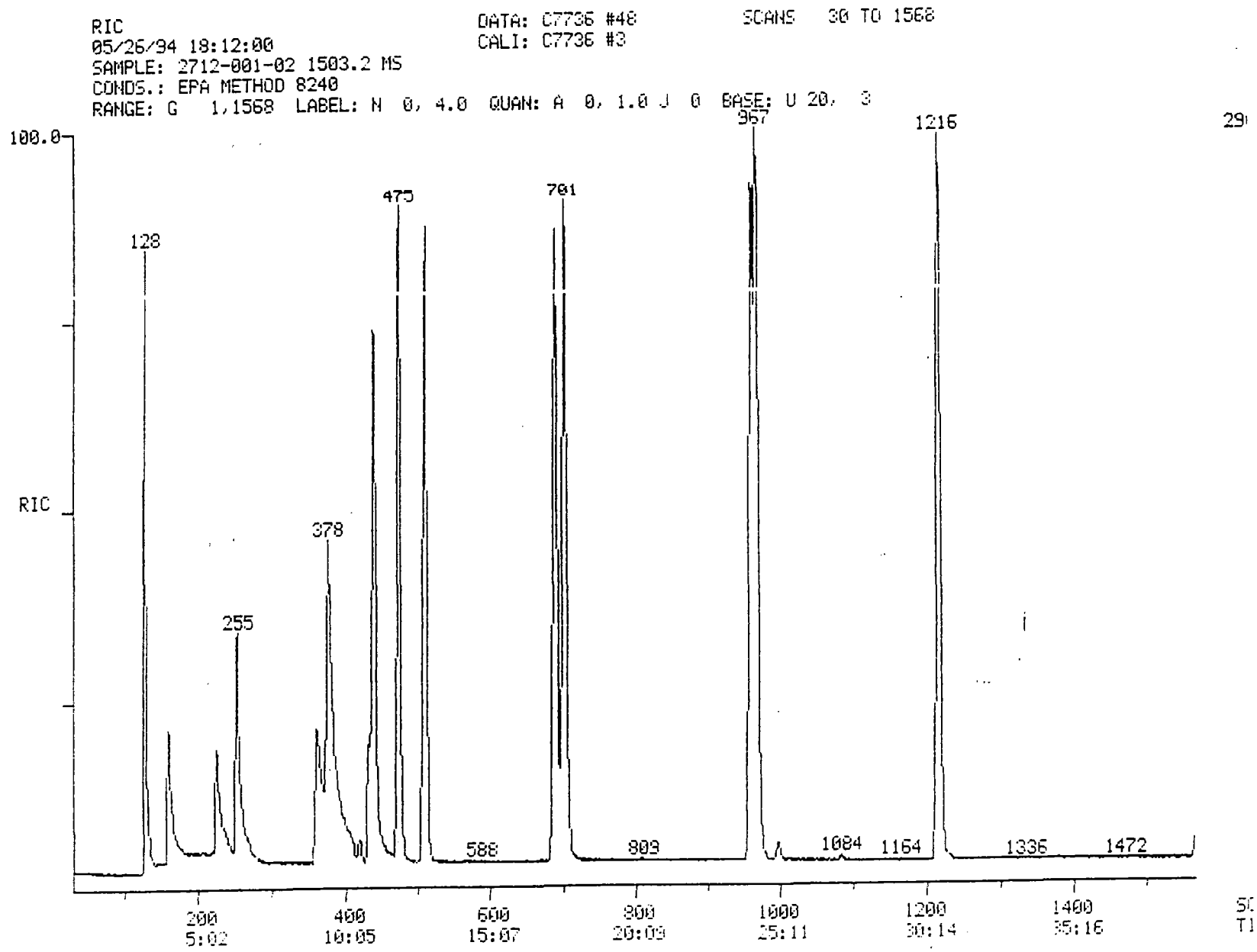
TARGET COMPOUND ANALYSIS:

TARGETS (QUAN LIST)	IS PEAKS	TOTAL TARGET PEAKS
4	3	7

FILTER PROCESSING:

	<-----REJECT PEAKS----->						
TOTAL PEAKS	< 1ST SCAN	> LAST SCAN	< MIN RIC HT	< SCAN TOL	> MAX # PEAKS	TOTAL REJECTS	TOTAL TICS
6	0	0	0	6	0	6	0

10 UNKNOWN PEAKS TO BE IDENTIFIED.


RIC
05/26/94 18:12:00
SAMPLE: 2712-001-02 1503.2 MS
CONDS.: EPA METHOD 8240
RANGE: G 1,1568 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3
DATA: C7736 #48
CALI: C7736 #3
SCANS 30 TO 1568
100.0
RIC
128
255
378
475
588
701
803
967
1084
1164
1216
1336
1472
200
5:02
400
10:05
600
15:07
800
20:09
1000
25:11
1200
30:14
1400
35:16

Quantitation Report File: C7736

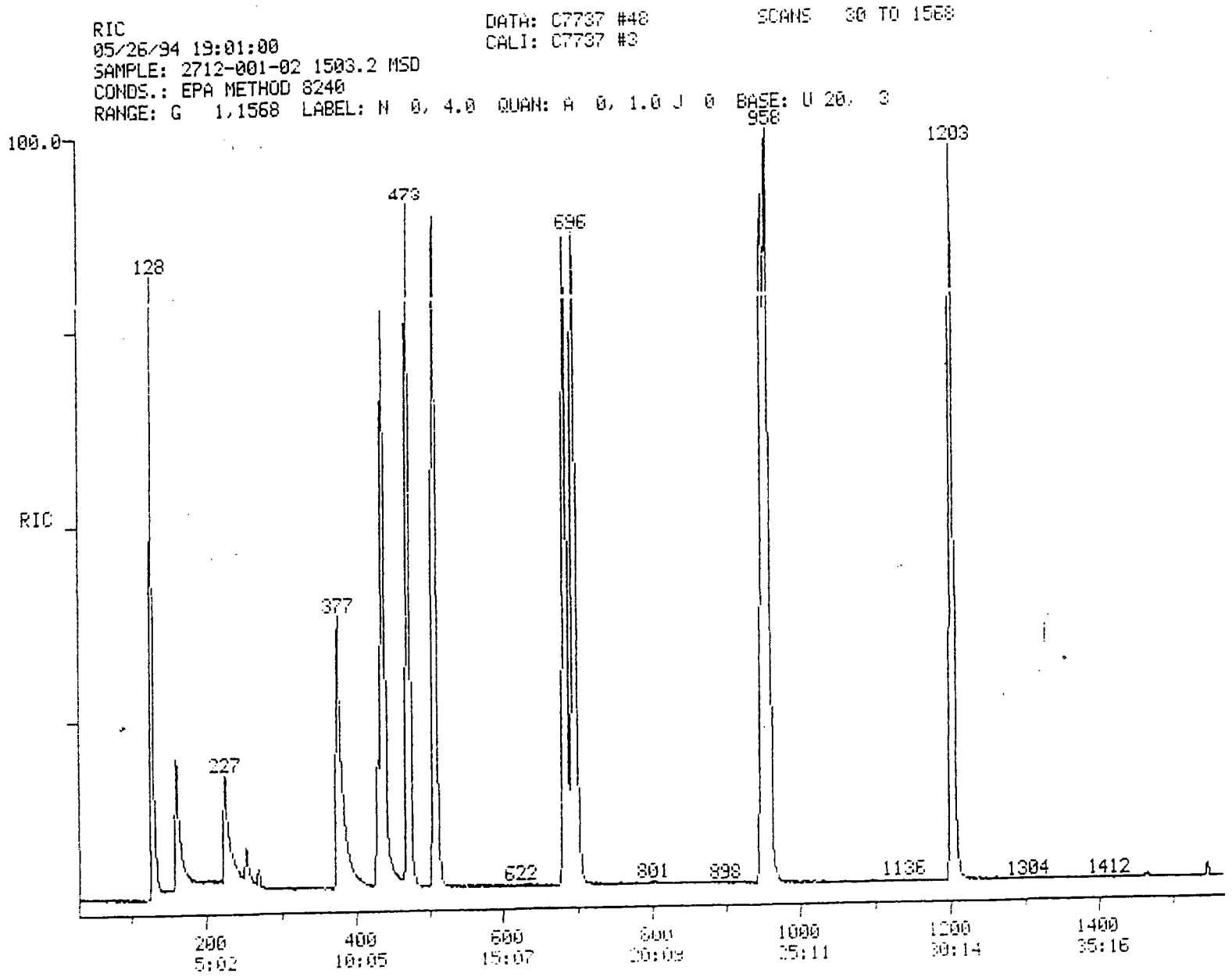
Data: C7736.TI
05/26/94 18:12:00
Sample: 2712-001-02 1503.2 MS
Conds.: EPA METHOD 8240
Formula: 2.5G/5ML Instrument: FINN Weight: 0.000
Submitted by: USARMY Analyst: UC Acct. No.: 2712-001

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name
1	C101 BROMOCHLOROMETHANE **INT. STD. **
2	C110 1,4-DIFLUOROBENZENE **INT. STD. **
3	C120 CHLOROBENZENE-D5 **INT. STD. **
4	CS15 1,2-DICHLOROETHANE-D4 **S. STD. **
5	CS05 TOLUENE-D8 **S. STD. **
6	CS10 4-BROMOFLUOROBENZENE **S. STD. **
7	C010 CHLOROMETHANE **
8	C015 BROMOMETHANE
9	C020 VINYL CHLORIDE *
10	C025 CHLOROETHANE
11	C030 METHYLENE CHLORIDE
12	C251 ACROLIN
13	C035 ACETONE
14	C252 ACRYLONITRILE
15	C040 CARBON DISULFIDE
16	C045 1,1-DICHLOROETHENE *
17	C050 1,1-DICHLOROETHANE **
18	C055 TRANS-1,2-DICHLOROETHENE
19	C000 TRICHLOROFLUOROMETHANE
20	C060 CHLOROFORM *
21	C065 1,2-DICHLOROETHANE
22	C110 2-BUTANONE
23	C115 1,1,1-TRICHLOROETHANE
24	C120 CARBON TETRACHLORIDE
25	C125 VINYL ACETATE
26	C130 BROMO DICHLOROMETHANE
27	C140 1,2-DICHLOROPROPANE *
28	C145 TRANS-1,3 DICHLOROPROPENE
29	C150 TRICHLOROETHENE
30	C155 DIBROMOCHLOROMETHANE
31	C160 1,1,2-TRICHLOROETHANE
32	C165 BENZENE
33	C143 CIS-1,3-DICHLOROPROPENE
34	C175 2-CHLOROETHYL VINYL ETHER
35	C180 BROMOFORM **
36	C220 TETRACHLOROETHENE
37	C210 2-HEXANONE
38	C205 4-METHYL 2-PENTANONE
39	C225 1,1,2,2-TETRACHLOROETHANE **
40	C230 TOLUENE *
41	C235 CHLOROBENZENE **
42	C240 ETHYL BENZENE *
43	C245 STYRENE
44	C250 M+P-XYLENES
45	C253 1,3-DICHLOROBENZENE
46	C254 1,4-DICHLOROBENZENE
47	C255 1,2-DICHLOROBENZENE

No	Name
48	C250 O-XYLENE

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	49	378	9:31	1	1.000	A BB	19670.	50.000 NG	7.38
2	114	475	11:58	2	1.000	A BB	64625.	50.000 NG	7.38
3	117	960	24:11	3	1.000	A BB	59175.	50.000 NG	7.38
4	65	433	10:54	1	1.146	A BB	15721.	54.556 NG	8.05
5	98	688	17:20	3	0.717	A BB	65747.	49.893 NG	7.36
6	95	1216	30:38	3	1.267	A BB	43950.	39.864 NG	5.88
7	NOT FOUND								
8	NOT FOUND								
9	NOT FOUND								
10	NOT FOUND								
11	49	255	6:25	1	0.675	A BB	18282.	46.446 NG	6.85
12	NOT FOUND								
13	NOT FOUND								
14	NOT FOUND								
15	NOT FOUND								
16	96	227	5:43	1	0.601	A BB	7820.	60.426 NG	8.91
17	NOT FOUND								
18	NOT FOUND								
19	NOT FOUND								
20	83	362	9:07	1	0.958	A BB	19748.	68.613 NG	10.12
21	NOT FOUND								
22	NOT FOUND								
23	NOT FOUND								
24	117	420	10:35	2	0.884	A BB	1806.	2.459 NG	0.36
25	NOT FOUND								
26	NOT FOUND								
27	NOT FOUND								
28	NOT FOUND								
29	95	511	12:52	2	1.076	A BB	26423.	54.251 NG	8.00
30	NOT FOUND								
31	NOT FOUND								
32	78	440	11:05	2	0.926	A BB	49243.	46.344 NG	6.84
33	NOT FOUND								
34	NOT FOUND								
35	NOT FOUND								
36	NOT FOUND								
37	NOT FOUND								
38	NOT FOUND								
39	NOT FOUND								
40	91	701	17:39	3	0.730	A BB	71575.	51.516 NG	7.60
41	112	967	24:22	3	1.007	A BB	58345.	51.760 NG	7.64
42	106	997	25:07	3	1.039	A BB	973.	1.952 NG	0.29
43	NOT FOUND								
44	NOT FOUND								
45	NOT FOUND								
46	NOT FOUND								
47	NOT FOUND								
48	NOT FOUND								

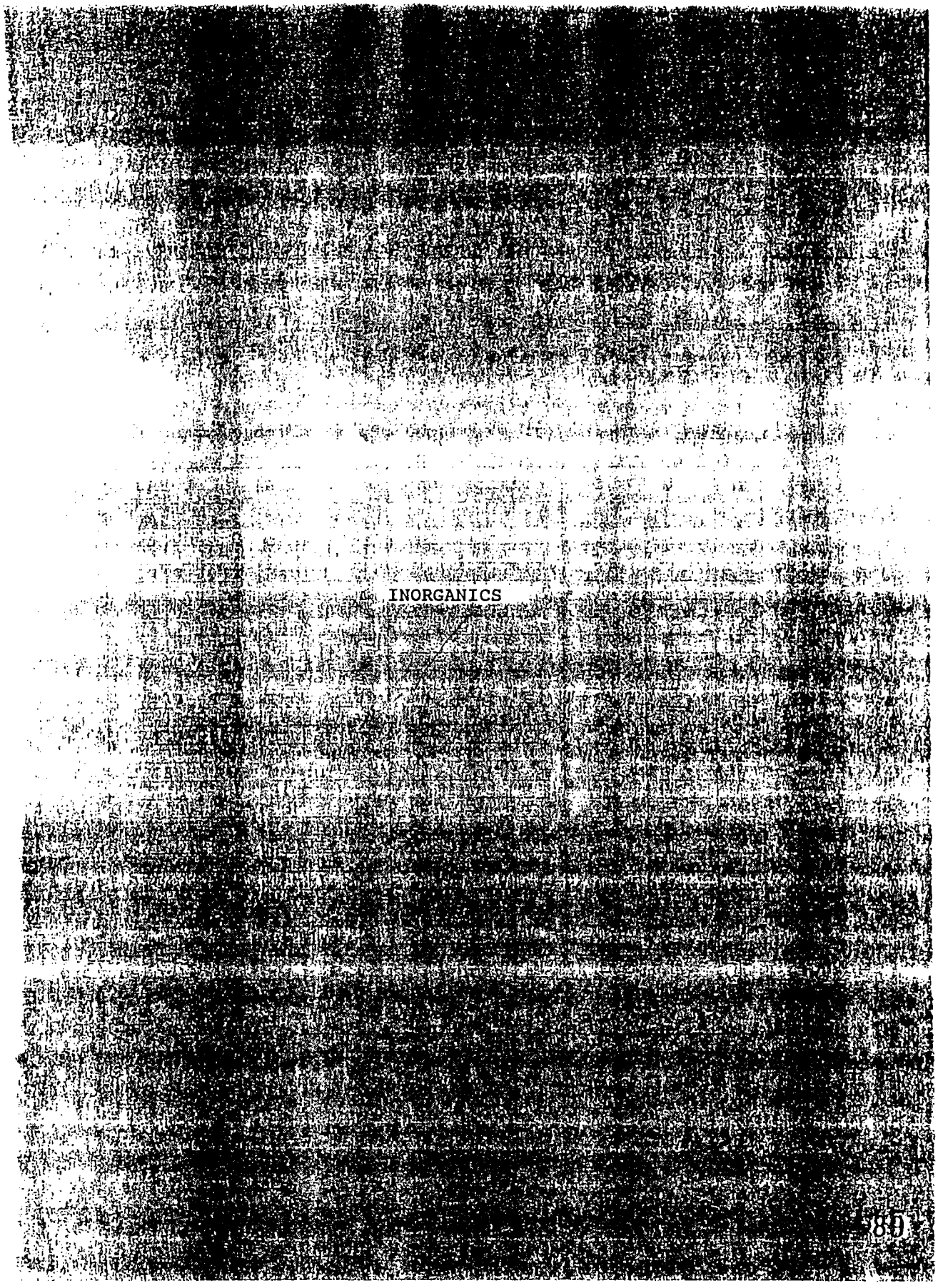

RIC
05/26/94 19:01:00
SAMPLE: 2712-001-02 1503.2 MSD
CONDS.: EPA METHOD 8240
RANGE: G 1,1568 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3
DATA: C7737 #48
CALI: C7737 #3
SCANS 30 TO 1568
100.0
RIC
128
227
377
473
622
696
801
898
958
1135
1203
1304
1412
200
5:02
400
10:05
600
15:07
800
20:09
1000
25:11
1200
30:14
1400
35:16

Quantitation Report File: C7737

Data: C7737.TI
05/26/94 19:01:00
Sample: 2712-001-02 1503.2 MSD
Conds.: EPA METHOD 8240
Formula: 2.5G/5ML Instrument: FINN Weight: 0.000
Submitted by: USARMY Analyst: UC Acct. No.: 2712-001

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name
1	CI01 BROMOCHLOROMETHANE **INT. STD. **
2	CI10 1,4-DIFLUOROBENZENE **INT. STD. **
3	CI20 CHLOROBENZENE-D5 **INT. STD. **
4	CS15 1,2-DICHLOROETHANE-D4 **S. STD. **
5	CS05 TOLUENE-D8 **S. STD. **
6	CS10 4-BROMOFLUOROBENZENE **S. STD. **
7	C010 CHLOROMETHANE **
8	C015 BROMOMETHANE
9	C020 VINYL CHLORIDE *
10	C025 CHLOROETHANE
11	C030 METHYLENE CHLORIDE
12	C251 ACROLIN
13	C035 ACETONE
14	C252 ACRYLONITRILE
15	C040 CARBON DISULFIDE
16	C045 1,1-DICHLOROETHENE *
17	C050 1,1-DICHLOROETHANE **
18	C055 TRANS-1,2-DICHLOROETHENE
19	C000 TRICHLOROFLUOROMETHANE
20	C060 CHLOROFORM *
21	C065 1,2-DICHLOROETHANE
22	C110 2-BUTANONE
23	C115 1,1,1-TRICHLOROETHANE
24	C120 CARBON TETRACHLORIDE
25	C125 VINYL ACETATE
26	C130 BROMO DICHLOROMETHANE
27	C140 1,2-DICHLOROPROPANE *
28	C145 TRANS-1,3 DICHLOROPROPENE
29	C150 TRICHLOROETHENE
30	C155 DIBROMOCHLOROMETHANE
31	C160 1,1,2-TRICHLOROETHANE
32	C165 BENZENE
33	C143 CIS-1,3-DICHLOROPROPENE
34	C175 2-CHLOROETHYL VINYL ETHER
35	C180 BROMOFORM **
36	C220 TETRACHLOROETHENE
37	C210 2-HEXANONE
38	C205 4-METHYL 2-PENTANONE
39	C225 1,1,2,2-TETRACHLOROETHANE **
40	C230 TOLUENE *
41	C235 CHLOROBENZENE **
42	C240 ETHYL BENZENE *
43	C245 STYRENE
44	C250 M+P-XYLENES
45	C253 1,3-DICHLOROBENZENE
46	C254 1,4-DICHLOROBENZENE
47	C255 1,2-DICHLOROBENZENE


INORGANICS

FULL INORGANICS
COMPLETE SDG FILE (CSF)
INVENTORY SHEET

Lab Name: Princeton Testing Lab City/State: Princeton NJ

Case No. 940817 SDG No. 1510.1 SDG Nos. to Follow: — — —

SAS No. — Contract No. Fa M1x1 SOW No. ILM02.0

All documents delivered in the Complete SDG File must be original documents where possible. (Reference Exhibit B, Section II D and Section III V)

		Page Nos. From	Page Nos. To	(Please Check:) Lab	(Please Check:) Region
1.	Inventory Sheet (DC-2) (Do not number)			✓	
2.	Cover Page	—	—	✓	—
3.	Inorganic Analysis Data Sheet (Form I-IN)	—	—	✓	—
4.	Initial & Continuing Calibration Verification (Form IIA-IN)	—	—	✓	—
5.	CRDL Standards For AA and ICP (Form IIB-IN)	—	—	✓	—
6.	Blanks (Form III-IN)	—	—	✓	—
7.	ICP Interference Check Sample (Form IV-IN) N/A	—	—	—	—
8.	Spike Sample Recovery (Form VA-IN)	—	—	✓	—
9.	Post Digest Spike Sample Recovery (Form VB-IN) N/A	—	—	—	—
10.	Duplicates (Form VI-IN)	—	—	✓	—
11.	Laboratory Control Sample (Form VII-IN)	—	—	✓	—
12.	Standard Addition Results (Form VIII-IN) N/A	—	—	—	—
13.	ICP Serial Dilutions (Form IX-IN) N/A	—	—	—	—
14.	Instrument Detection Limits (Form X-IN)	—	—	✓	—
15.	ICP Interelement Correction Factors (Form XIA-IN) N/A	—	—	—	—
16.	ICP Interelement Correction Factors (Form XIB-IN) N/A	—	—	—	—
17.	ICP Linear Ranges (Form XII-IN) N/A	—	—	—	—
18.	Preparation Log (Form XIII-IN)	—	—	✓	—
19.	Analysis Run Log (Form XIV-IN)	—	—	✓	—
20.	ICP Raw Data N/A	—	—	—	—
21.	Furnace AA Raw Data	—	—	✓	—
22.	Mercury Raw Data N/A	—	—	—	—

	Page Nos. From	Page Nos. To	(Please Check:) Lab	(Please Check:) Region
23. Cyanide Raw Data N/A	___	___	___	___
24. Preparation Logs Raw Data	___	___	✓	___
25. Percent Solids Determination Log	___	___	✓	___
26. Traffic Report	___	___	___	___
27. EPA Shipping/Receiving Documents				
Airbill (No. of Shipments ____)	___	___	___	___
Chain-of-Custody Records	___	___	___	___
Sample Tags	___	___	___	___
Sample Log-In Sheet (Lab & DCl)	___	___	___	___
SDG Cover Sheet	___	___	___	___
28. Misc. Shipping/Receiving Records (list all individual records)				
Telephone Logs	___	___	___	___
_____	___	___	___	___
_____	___	___	___	___
29. Internal Lab Sample Transfer Records & Tracking Sheets (describe or list)	___	___	___	___
_____	___	___	___	___
_____	___	___	___	___
30. Internal Original Sample Prep & Analysis Records (describe or list)				
Prep Records _____	___	___	___	___
Analysis Records _____	___	___	___	___
Description _____	___	___	___	___
31. Other Records (describe or list)				
Telephone Communication Log	___	___	___	___
_____	___	___	___	___
_____	___	___	___	___

32. Comments:

_____

_____

Completed by (CLP Lab):

[signature] (Signature) | W. Alan Volk QA/QC Coordinator (Print Name & Title) | 6/29/94 (Date)

Audited by (EPA):

_____ (Signature) | _____ (Print Name & Title) | _____ (Date)

U.S. EPA - CLP
COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: PRINCETON TESTING LABORATORY Contract: _____

Lab Code: _____ Case No.: 940 2817-001 SAS No.: _____ SDG No. _____

SOW No.: _____

EPA Sample No.	Lab Sample ID.
1510.1	2817-001
1510.2	2817-002
1511.1	2817-004
1511.2	2817-003

Were ICP interelement corrections applied? Yes/No _____

Were ICP background corrections applied? Yes/No _____
If yes, were raw data generated before application of background corrections? Yes/No _____

Comments:

The samples were run by GFAA.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Laura Stewart Name: LAURA STEWART

Date: 6/23/94 Title: SUPERVISOR, METALS LAB

PAGE LEFT OUT INTENTIONALLY

PAGE LEFT OUT INTENTIONALLY

1

INORGANIC ANALYSIS DATA SHEET

1511.1 Bu. Khng 1108 | site D-2

Lab Name: PRINCETON TESTING LABORATORY Contract: _____

Lab Code: _____ Case No.: 94028I7-001 SAS No.: _____ SDG No.: ___

Matrix (soil/water): Soil Lab Sample ID: 2817-004

Level (low/med): _____ Date Received: 6/1/94

% Solids: 79.5

Concentration Units (ug/L or mg/kg dry weight): mg/kg

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				
7440-36-0	Antimony				
7440-38-2	Arsenic				
7440-39-3	Barium				
7440-41-7	Beryllium				
7440-43-9	Cadmium				
7440-70-2	Calcium				
7440-47-3	Chromium				
7440-48-4	Cobalt				
7440-50-8	Copper				
7439-89-6	Iron				
7439-92-1	Lead	2.61			F
7439-95-4	Magnesium				
7439-96-5	Manganese				
7439-97-6	Mercury				
7440-02-0	Nickel				
7440-09-7	Potassium				
7782-49-2	Selenium				
7440-22-4	Silver				
7440-23-5	Sodium				
7440-28-0	Thallium				
7440-62-2	Vanadium				
7440-66-6	Zinc				
_____	Cyanide				

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After : _____ Artifacts: _____

Comments: _____

FORM I - IN ILM02.0

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

1511.2 - Blank Bu. Idaho 2cc/11/18

Lab Name: PRINCETON TESTING LABORATORY Contract: _____

Lab Code: _____ Case No.: 9402817-001 SAS No.: _____ SDG No.: ___

Matrix (soil/water): WATER Lab Sample ID: 2817-003

Level (low/med): _____ Date Received: 6/1/94

% Solids: —

Concentration Units (ug/L or m/kg dry weight): ug/L

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				
7440-36-0	Antimony				
7440-38-2	Arsenic				
7440-39-3	Barium				
7440-41-7	Beryllium				
7440-43-9	Cadmium				
7440-70-2	Calcium				
7440-47-3	Chromium				
7440-48-4	Cobalt				
7440-50-8	Copper				
7439-89-6	Iron				
7439-92-1	Lead	~~Cr~~ 4.7			F
7439-95-4	Magnesium				
7439-96-5	Manganese				
7439-97-6	Mercury				
7440-02-0	Nickel				
7440-09-7	Potassium				
7782-49-2	Selenium				
7440-22-4	Silver				
7440-23-5	Sodium				
7440-28-0	Thallium				
7440-62-2	Vanadium				
7440-66-6	Zinc				
_____	Cyanide				

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After : _____ Artifacts: _____

Comments: _____

FORM I - IN ILMO2.0

U. S. EPA - CLP

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: PRINCETON TESTING LABORATORY Contract: _____

Lab Code: _____ Case No.: 940217-001 SAS No.: _____ SDG No.: _____

Initial Calibration Source: Inorganic Ventures

Continuing Calibration Source: Spex 19

Concentration Units: ug/L

(For soils)

Analyte	Initial Calibration True	Found	%R(1)	Continuing Calibration True	Found	%R(1)	Found	%R(1)	M
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Iron									
Lead	15.0	15.4	103.	50.0	52.4	105.	53.1	106.	E
Magnesium									
Manganese									
Mercury									
Nickel									
Potassium									
Selenium									
Silver									
Sodium									
Thallium									
Vanadium									
Zinc									
Cyanide									

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

U. S. EPA - CLP

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: PRINCETON TESTING LABORATORY Contract: _____

Lab Code: _____ Case No.: 9102817-001 SAS No.: _____ SDG No.: _____

Initial Calibration Source: _____

Continuing Calibration Source: _____

Concentration Units: ug/L

(For soils)

Analyte	Initial Calibration True	Found	%R(1)	Continuing Calibration True	Found	%R(1)	Found	%R(1)	M
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Iron									
Lead				50.0	50.1	100.	50.4	101.	P
Magnesium									
Manganese									
Mercury									
Nickel									
Potassium									
Selenium									
Silver									
Sodium									
Thallium									
Vanadium									
Zinc									
Cyanide									

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

U. S. EPA - CLP

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: PRINCETON TESTING LABORATORY Contract: _____

Lab Code: _____ Case No.: 940817-001 SAS No.: _____ SDG No.: _____

Initial Calibration Source: Inorganic Ventures

Continuing Calibration Source: Spex 19

Concentration Units: ug/L

(For WATER)

Analyte	Initial Calibration True	Found	%R(1)	Continuing Calibration True	Found	%R(1)	Found	%R(1)	M
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Iron									
Lead	15.0	15.4	103.	50.0	50.1	100.	50.4	101.	F
Magnesium									
Manganese									
Mercury									
Nickel									
Potassium									
Selenium									
Silver									
Sodium									
Thallium									
Vanadium									
Zinc									
Cyanide									

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

U. S. EPA - CLP

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: PRINCETON TESTING LABORATORY Contract: _____

Lab Code: _____ Case No.: 910287.001 SAS No.: _____ SDG No.: _____

Initial Calibration Source: _____

Continuing Calibration Source: _____

Concentration Units: ug/L

(For Water)

Analyte	Initial Calibration True	Found	%R(1)	Continuing Calibration True	Found	%R(1)	Found	%R(1)	M
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Iron									
Lead				50.0	50.2	100.			E
Magnesium									
Manganese									
Mercury									
Nickel									
Potassium									
Selenium									
Silver									
Sodium									
Thallium									
Vanadium									
Zinc									
Cyanide									

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

U.S. EPA - CLP

2B
CRDL STANDARD FOR AA AND ICP

Lab Name: Paracelsus Testing Lab Contract: _____

Lab Code: _____ Case No.: 940287-001 SAS No.: _____ SDG No.: _____

AA CRDL Standard Source: Baker

ICP CRDL Standard Source: —

Concentration Units: ug/L

(for soils + field blank)

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
	True	Found	%R	True	Initial Found	%R	Final Found	%R
Aluminum								
Antimony								
Arsenic								
Barium								
Beryllium								
Cadmium								
Calcium								
Chromium								
Cobalt								
Copper								
Iron								
Lead	3.0	2.76	92.					
Magnesium								
Manganese								
Mercury								
Nickel								
Potassium								
Selenium								
Silver								
Sodium								
Thallium								
Vanadium								
Zinc								

U.S. EPA - CLP

3
BLANKS

Lab Name: PRINCETON TESTING LABORATORY Contract: _____

Lab Code: _____ Case No.: 940297-001 SAS No.: _____ SDG No.: _____

Preparation Blank Matrix (soil/water): Soil

Preparation Blank Concentration Units (ug/L or mg/kg): mg/kg

(For Soils)

Analyte	Initial Calibr. Bank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum											
Antimony											
Arsenic											
Barium											
Beryllium											
Cadmium											
Calcium											
Chromium											
Cobalt											
Copper											
Iron											
Lead	0.51	U	0.57	U	0.57	U	0.57	U	0.117	B	E
Magnesium											
Manganese											
Mercury											
Nickel											
Potassium											
Selenium											
Silver											
Sodium											
Thallium											
Vanadium											
Zinc											
Cyanide											

U.S. EPA - CLP

3
BLANKS

Lab Name: PRINCETON TESTING LABORATORY Contract: _____

Lab Code: _____ Case No.: 940217-001 SAS No.: _____ SDG No.: _____

Preparation Blank Matrix (soil/water): ~~soil~~

Preparation Blank Concentration Units (ug/L or mg/kg): _____

(For soils)

Analyte	Initial Calibr. Bank (ug/L)	C	Continuing Calibration Blank (ug/L) x 4	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum											
Antimony											
Arsenic											
Barium											
Beryllium											
Cadmium											
Calcium											
Chromium											
Cobalt											
Copper											
Iron											
Lead			0.51	U							F
Magnesium											
Manganese											
Mercury											
Nickel											
Potassium											
Selenium											
Silver											
Sodium											
Thallium											
Vanadium											
Zinc											
Cyanide											

U.S. EPA - CLP

3
BLANKS

Lab Name: Princeton Testing Lab Contract: _____

Lab Code: _____ Case No.: 940217-001 SAS No.: _____ SDG No.: _____

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): ug/L

(FOR WATER)

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prep-aration Blank	C	M
Aluminum											
Antimony											
Arsenic											
Barium											
Beryllium											
Cadmium											
Calcium											
Chromium											
Cobalt											
Copper											
Iron											
Lead	0.51	U	0.51	U	0.51	U	0.51	U	0.51	U	E
Magnesium											
Manganese											
Mercury											
Nickel											
Potassium											
Selenium											
Silver											
Sodium											
Thallium											
Vanadium											
Zinc											
Cyanide											

U.S. EPA - CLP

5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.: 1511.1

Lab Name: Princeton Testing Lab Contract: _____

Lab Code: _____ Case No.: 940217-001 SAS No.: _____ SDG No.: _____

Matrix (soil/water): Soil Level (low/med): _____

% Solids for Sample: 79.5

Concentration Units (ug/L or mg/kg dry weight): mg/kg

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Iron									
Lead		6.40		2.61		4.0	95.		E
Magnesium									
Manganese									
Mercury									
Nickel									
Potassium									
Selenium									
Silver									
Sodium									
Thallium									
Vanadium									
Zinc									
Cyanide									

Comments:

U.S. EPA - CLP

5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.: 1511.2

Lab Name: Pinnacle Testing Lab Contract: _____

Lab Code: _____ Case No.: 940217-001 SAS No.: _____ SDG No.: _____

Matrix (soil/water): WATER Level (low/med): _____

% Solids for Sample: ____

Concentration Units (ug/L or mg/kg dry weight): ~~ug~~ ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Iron									
Lead		82.0		4.7		80.0	97.		F
Magnesium									
Manganese									
Mercury									
Nickel									
Potassium									
Selenium									
Silver									
Sodium									
Thallium									
Vanadium									
Zinc									
Cyanide									

Comments:

U.S. EPA - CLP

6
DUPLICATES

EPA SAMPLE NO.

1511.1

Lab Name: PRINCETON TESTING LABORATORY Contract: _____

Lab Code: _____ Case No.: 9402817-001 SAS No.: _____ SDG No.: _____

Matrix (soil/water): Soil Level (low/med): _____

% Solids for sample: 79.5

Concentration Units (ug/L or mg/kg dry weight): mg/kg

Analyte	Control Limit	Sample (S)	C	Duplicate D	C	RPD	Q	M
Aluminum								
Antimony								
Arsenic								
Barium								
Beryllium								
Cadmium								
Calcium								
Chromium								
Cobalt								
Copper								
Iron								
Lead	20%	2.61		2.43		7%		E
Magnesium								
Manganese								
Mercury								
Nickel								
Potassium								
Selenium								
Silver								
Sodium								
Thallium								
Vanadium								
Zinc								
Cyanide								

Comments:

U.S. EPA - CLP

6 DUPLICATES

EPA SAMPLE NO.: 1511.2

Lab Name: Princeton Testing Lab Contract: _____

Lab Code: _____ Case No.: 94128F7-001 SAS No.: _____ SDG No.: _____

Matrix (soil/water): WATER Level (low/med): _____

% Solids for Sample: — % Solids for Duplicate: —

Concentration Units (ug/L or mg/kg dry weight): ug/L

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum								
Antimony								
Arsenic								
Barium								
Beryllium								
Cadmium								
Calcium								
Chromium								
Cobalt								
Copper								
Iron								
Lead	3 ug/L	4.74		2.17		74%		E
Magnesium								
Manganese								
Mercury								
Nickel								
Potassium								
Selenium								
Silver								
Sodium								
Thallium								
Vanadium								
Zinc								
Cyanide								

U.S. EPA - CLP

7

LABORATORY CONTROL SAMPLE

Lab Name: Princeton Testing Lab Contract: _____

Lab Code: _____ Case No.: 940287-001 SAS No.: _____ SDG No.: _____

Solid LCS Source: _____

Aqueous LCS Source: Baker LCS

(Forsoils)

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/kg) True	Found	C	Limits		%R
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Iron									
Lead	40.0	38.0	95.						
Magnesium									
Manganese									
Mercury									
Nickel									
Potassium									
Selenium									
Silver									
Sodium									
Thallium									
Vanadium									
Zinc									
Cyanide									

U.S. EPA - CLP

7

LABORATORY CONTROL SAMPLE

Lab Name: Pinnacle Testing Lab Contract: _____

Lab Code: _____ Case No.: 940281Z001 SAS No.: _____ SDG No.: _____

Solid LCS Source: _____

Aqueous LCS Source: Baker LCS

(FORMAT6A)

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/kg) True	Found	C	Limits		%R
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Iron									
Lead	40.0	38.2	96.						
Magnesium									
Manganese									
Mercury									
Nickel									
Potassium									
Selenium									
Silver									
Sodium									
Thallium									
Vanadium									
Zinc									
Cyanide									

U.S. EPA - CLP

10
INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: Paragon Testing Lab Contract: _____

Lab Code: _____ Case No.: 940287-W1 SAS No.: _____ SDG No.: _____

ICP ID Number: _____ Date: 5/15/94

Flame AA ID Number: _____

Furnace AA ID Number: AE5100

Analyte	Wavelength (nm)	Background	CRDL (ug/L)	IDL (ug/L)	M
Aluminum			200		
Antimony			60		
Arsenic			10		
Barium			200		
Beryllium			5		
Cadmium			5		
Calcium			5000		
Chromium			10		
Cobalt			50		
Copper			25		
Iron			100		
Lead	283.3	BZ	3	0.51	F
Magnesium			5000		
Manganese			15		
Mercury			0.2		
Nickel			40		
Potassium			5000		
Selenium			5		
Silver			10		
Sodium			5000		
Thallium			10		
Vanadium			50		
Zinc			20		

Comments:

_____

_____

_____

_____

U.S. EPA - CLP
13
PREPARATION LOG

Lab Name: Paragon Testing Lab Contract: _____

Lab Code: _____ Case No.: 940367-001 SAS No.: _____ SDG No.: _____

Method: E

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
1510.1	6/2/94	1.00	100 ml
1510.2	6/2/94	1.00	100
1511.1	6/2/94	1.00	100
1511.2	6/2/94	10 ml	10 ml

U.S. EPA - CLP

14

ANALYSIS RUN LOG

Lab Name: Paragon Testing Lab Contract: _____

Lab Code: _____ Case No.: 940287-001 SAS No.: _____ SDG No.: _____

Instrument ID Number: PE5100 Method: E

Start Date: 6/2/94 End Date: 6/3/94

EPA Sample No.	D/F	Time	% R	Analytes	
50	1	2238		X	
53	1	2245		X	
525	1	2251		X	
550	1	2258		X	
575	1	2304		X	
5100	1	2310		X	
ICV	1	2318		X	
ICB	1	2324		X	
ICBA	1	2330	101		
CCV	1	2337		X	
CCB	1	2343		X	
CRA	1	2350		X	
PBW	1	2356		X	
PBWA	1	0003	103		
LCSW	1	0009		X	
LCSWA	1	0016	102		
2817-001	1	0023		X	
2817-4A	1	0029	92.3		
2817-4D	1	0036		X	
2817-4DA	1	0043	92.3		
2817-4S	1	0049		X	
CCV	1	0056		X	
CCB	1	0102		X	
2817-1	1	0109		X	
2817-1A	1	0116	91.6	X	Peaks Integrated Before CCV
2817-2	1	0122		X	
2817-2A	1	0129	92.8	X	
PBW	1	0135		X	
PRINTER	JAMMED				
CCV	1	0841		X	
CCB	1	0847		X	
2817-1	1	0854		X	
2817-1A	1	0901	92.6		

FORM XIV - IN ILM02.0

U.S. EPA - CLP

14

ANALYSIS RUN LOG

Lab Name: Paiute Testing Lab Contract: _____

Lab Code: _____ Case No.: 940828Z001 SAS No.: _____ SDG No.: _____

Instrument ID Number: PE5100 Method: E

Start Date: 6/1/94 End Date: 6/3/94

EPA Sample No.	D/F	Time	% R	Analytes
(65)				AL SB SS AA BA BE CD CA CR CO CU FE PB MG MN HG NI K SE AG NA TL V ZN CN
2817-02	1	0907		X
2817-2D	1	0914		
PBW	1	0921		X
PBWA	1	0927	100.	
LCSW	1	0934		X
LCSW A	1	0940	106.	
CCV	1	0946		X
CCB	1	0952		X
2817-3	1	0959		X
2817-3A	1	1006	105.	
2817-3D	1	1012		X
2817-3DA	1	1018	104.	
2817-3S	1	1025		X
2817-3SA	1	1031	119.	
CCV	1	1038		X
CCB	1	1044		X

FORM XIV - IN IILM02.0

Element File: PB.GEL Element: Pb Wavelength: 283.3
Date: 06/02/94 Time: 22:35 Slit: 0.70
Data File: ID/AS File: PB020694.IDX Lamp Current: 10
Technique: HGA Calib. Type: Nonlinear Energy: 81
Remark 1: STND PREP DATE : 6/2/94
Remark 2: STND PREP TIME : 5:30 PM
Remark 3: PROJECTS : 2817

Pb ID: Blank **S0** Seq. No.: 00018 A/S Pos.: 9 Date: 06/02/94

uL dispensed: 4 from 0, 5 from 35, 20 from 0
Replicate 1 Time: 22:38
Peak Area (A-s): 0.007 Peak Height (A): 0.009
Background Pk Area (A-s): 0.110 Background Pk Height (A): 0.041
Blank Corrected Pk Area (A-s): -0.000
Concentration (ug/L): -0.003

uL dispensed: 4 from 0, 5 from 35, 20 from 0
Replicate 2 Time: 22:41
Peak Area (A-s): 0.007 Peak Height (A): 0.010
Background Pk Area (A-s): 0.113 Background Pk Height (A): 0.043
Blank Corrected Pk Area (A-s): -0.000
Concentration (ug/L): -0.003

Mean Conc (ug/L): -0.003 SD: 0.001 RSD(%): 2.89

Autozero performed.

Pb ID: Standard 1 **S3** Seq. No.: 00017 A/S Pos.: 20 Date: 06/02/94

uL dispensed: 4 from 0, 5 from 35, 20 from 30
Replicate 1 Time: 22:45
Peak Area (A-s): 0.029 Peak Height (A): 0.050
Background Pk Area (A-s): 0.121 Background Pk Height (A): 0.044
Blank Corrected Pk Area (A-s): 0.022
Concentration (ug/L): 3.03

uL dispensed: 4 from 0, 5 from 35, 20 from 30
Replicate 2 Time: 22:48
Peak Area (A-s): 0.030 Peak Height (A): 0.049
Background Pk Area (A-s): 0.118 Background Pk Height (A): 0.041
Blank Corrected Pk Area (A-s): 0.023
Concentration (ug/L): 3.17

Mean Conc (ug/L): 3.10 SD: 0.100 RSD(%): 3.22

Pb ID: Standard 2 S15 Seq. No.: 00020 A/S Pos.: 31 Date: 06/02/94 ②

uL dispensed: 4 from 0, 5 from 35, 20 from 31
Replicate 1 Time: 22:51
Peak Area (A-s): 0.188 Peak Height (A): 0.297
Background Pk Area (A-s): 0.166 Background Pk Height (A): 0.093
Blank Corrected Pk Area (A-s): 0.181
Concentration (ug/L): 23.72

uL dispensed: 4 from 0, 5 from 35, 20 from 31
Replicate 2 Time: 22:54
Peak Area (A-s): 0.170 Peak Height (A): 0.297
Background Pk Area (A-s): 0.169 Background Pk Height (A): 0.094
Blank Corrected Pk Area (A-s): 0.183
Concentration (ug/L): 23.97

Mean Conc (ug/L): 23.84 SD: 0.176 RSD(%): 0.74

Standard number 2 applied. [25.00]
Correlation coefficient: 1.00000 Slope: 0.0077

Pb ID: Standard 3 S50 Seq. No.: 00021 A/S Pos.: 32 Date: 06/02/94

uL dispensed: 4 from 0, 5 from 35, 20 from 32
Replicate 1 Time: 22:58
Peak Area (A-s): 0.344 Peak Height (A): 0.507
Background Pk Area (A-s): 0.210 Background Pk Height (A): 0.161
Blank Corrected Pk Area (A-s): 0.337
Concentration (ug/L): 48.66

uL dispensed: 4 from 0, 5 from 35, 20 from 32
Replicate 2 Time: 23:01
Peak Area (A-s): 0.341 Peak Height (A): 0.526
Background Pk Area (A-s): 0.213 Background Pk Height (A): 0.168
Blank Corrected Pk Area (A-s): 0.334
Concentration (ug/L): 48.11

Mean Conc (ug/L): 48.38 SD: 0.389 RSD(%): 0.80

Standard number 3 applied. [50.00]
Correlation coefficient: 1.00000 Slope: 0.0077

Pb ID: Standard 4 S75 Seq. No.: 00022 A/S Pos.: 33 Date: 06/02/94

uL dispensed: 4 from 0, 5 from 35, 20 from 33
Replicate 1 Time: 23:04
Peak Area (A-s): 0.485 Peak Height (A): 0.714
Background Pk Area (A-s): 0.269 Background Pk Height (A): 0.245
Blank Corrected Pk Area (A-s): 0.478
Concentration (ug/L): 67.08

uL dispensed: 4 from 0, 5 from 35, 20 from 33
Replicate 2 Time: 23:07
Peak Area (A-s): 0.478 Peak Height (A): 0.712
Background Pk Area (A-s): 0.268 Background Pk Height (A): 0.245
Blank Corrected Pk Area (A-s): 0.471
Concentration (ug/L): 66.13

Mean Conc (ug/L): 93.48 SD: 0.134 RSD(%): 0.15 (3)

Standard number 4 applied. [75.00]
Correlation coefficient: 0.99992 Slope: 0.0077

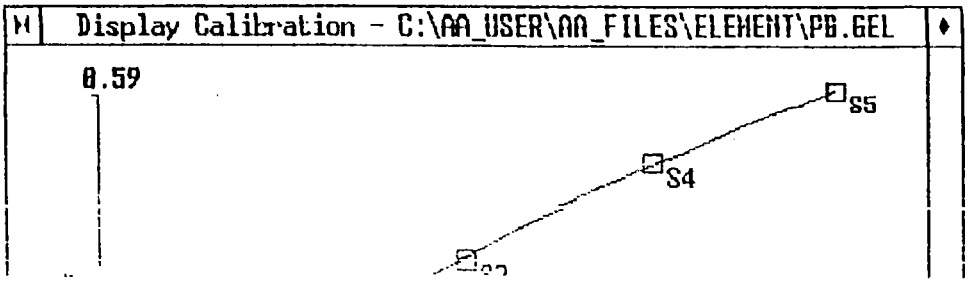
S5 ID: Standard 5 S100 Seq. No.: 00023 A/S Pos.: 34 Date: 06/02/94

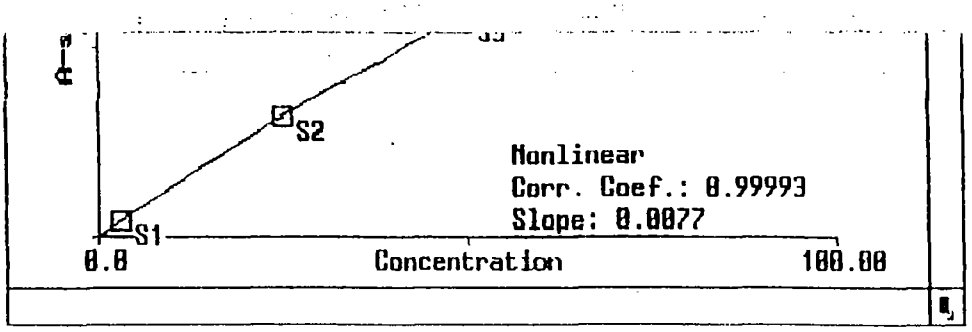
uL dispensed: 4 from 0, 5 from 35, 20 from 34
Replicate 1 Time: 23:10
Peak Area (A-s): 0.593 Peak Height (A): 0.630
Background Pk Area (A-s): 0.307 Background Pk Height (A): 0.301
Blank Corrected Pk Area (A-s): 0.591
Concentration (ug/L): 99.43

uL dispensed: 4 from 0, 5 from 35, 20 from 34
Replicate 2 Time: 23:14
Peak Area (A-s): 0.582 Peak Height (A): 0.641
Background Pk Area (A-s): 0.308 Background Pk Height (A): 0.307
Blank Corrected Pk Area (A-s): 0.585
Concentration (ug/L): 97.94

Mean Conc (ug/L): 98.68 SD: 1.036 RSD(%): 1.07

Standard number 5 applied. [100.00]
Correlation coefficient: 0.99993 Slope: 0.0077





④

15 ID: ICV IV 15 PPB Seq. No.: 00024 A/S Pos.: 1 Date: 06/02/94

ICV

uL dispensed: 4 from 0, 5 from 35, 20 from 1
Replicate 1 Time: 23:19
Peak Area (A-s): 0.122 Peak Height (A): 0.187
Background Pk Area (A-s): 0.148 Background Pk Height (A): 0.061
Blank Corrected Pk Area (A-s): 0.115
Concentration (ug/L): 15.49 Corrected Conc (ug/L): 15.49

uL dispensed: 4 from 0, 5 from 35, 20 from 1
Replicate 2 Time: 23:21
Peak Area (A-s): 0.120 Peak Height (A): 0.185
Background Pk Area (A-s): 0.143 Background Pk Height (A): 0.052
Blank Corrected Pk Area (A-s): 0.111
Concentration (ug/L): 15.27 Corrected Conc (ug/L): 15.27

Mean Conc (ug/L): 15.38 SD: 0.157 RSD(%): 1.02
Corrected Conc (ug/L): 15.38

16 ID: ICB Seq. No.: 00025 A/S Pos.: 2 Date: 06/02/94

ICB

uL dispensed: 4 from 0, 5 from 35, 20 from 2
Replicate 1 Time: 23:24
Peak Area (A-s): 0.006 Peak Height (A): 0.008
Background Pk Area (A-s): 0.123 Background Pk Height (A): 0.047
Blank Corrected Pk Area (A-s): -0.001
Concentration (ug/L): -0.07 Corrected Conc (ug/L): -0.07

uL dispensed: 4 from 0, 5 from 35, 20 from 2
Replicate 2 Time: 23:27
Peak Area (A-s): 0.005 Peak Height (A): 0.008

Background Pk Area (A-s): 0.124 Background Pk Height (A): 0.048
Blank Corrected Pk Area (A-s): -0.002
Concentration (ug/L): -0.25 Corrected Conc (ug/L): -0.25

Mean Conc (ug/L): -0.16 SD: 0.124 RSD(%): 78.57
Corrected Conc (ug/L): -0.16

ICB A

Background Pk Area (A-s): 0.129 Background Pk Height (A): 0.069
Blank Corrected Pk Area (A-s): 0.147
Concentration (ug/L): 20.04 Corrected Conc (ug/L): 20.04

uL dispensed: 5 from 35, 4 from 34, 20 from 2
Replicate 2 Time: 23:34
Peak Area (A-s): 0.154 Peak Height (A): 0.227
Background Pk Area (A-s): 0.130 Background Pk Height (A): 0.069
Blank Corrected Pk Area (A-s): 0.147
Concentration (ug/L): 20.00 Corrected Conc (ug/L): 20.00

Mean Conc (ug/L): 20.02 SD: 0.028 RSD(%): 0.14
Corrected Conc (ug/L): 20.02

Recovery is 100.1%

Pb ID: CCV SPX19 50PPB Seq. No.: 00027 A/S Pos.: 3 Date: 06/02/94

CCV

uL dispensed: 4 from 0, 5 from 35, 20 from 3
Replicate 1 Time: 23:37
Peak Area (A-s): 0.361 Peak Height (A): 0.546
Background Pk Area (A-s): 0.230 Background Pk Height (A): 0.169
Blank Corrected Pk Area (A-s): 0.354
Concentration (ug/L): 52.53 Corrected Conc (ug/L): 52.53

uL dispensed: 4 from 0, 5 from 35, 20 from 3
Replicate 2 Time: 23:40
Peak Area (A-s): 0.359 Peak Height (A): 0.536
Background Pk Area (A-s): 0.227 Background Pk Height (A): 0.165
Blank Corrected Pk Area (A-s): 0.353
Concentration (ug/L): 52.33 Corrected Conc (ug/L): 52.33

Mean Conc (ug/L): 52.43 SD: 0.145 RSD(%): 0.28
Corrected Conc (ug/L): 52.43

Pb ID: CCB CCB Seq. No.: 00028 A/S Pos.: 4 Date: 06/02/94

uL dispensed: 4 from 0, 5 from 35, 20 from 4
Replicate 1 Time: 23:43
Peak Area (A-s): 0.005 Peak Height (A): 0.008
Background Pk Area (A-s): 0.128 Background Pk Height (A): 0.048
Blank Corrected Pk Area (A-s): -0.002
Concentration (ug/L): -0.23 Corrected Conc (ug/L): -0.23

uL dispensed: 4 from 0, 5 from 35, 20 from 4
Replicate 2 Time: 23:47
Peak Area (A-s): 0.005 Peak Height (A): 0.007
Background Pk Area (A-s): 0.128 Background Pk Height (A): 0.049
Blank Corrected Pk Area (A-s): -0.001
Concentration (ug/L): -0.17 Corrected Conc (ug/L): -0.17

Mean Conc (ug/L): -0.20 SD: 0.039 RSD(%): 19.56
Corrected Conc (ug/L): -0.20

Pb ID: LOW CHECK 3 PPB Seq. No.: 00029 A/S Pos.: 5 Date: 06/02/94

CRA

uL dispensed: 4 from 0, 5 from 35, 20 from 5
Replicate 1 Time: 23:50
Peak Area (A-s): 0.028 Peak Height (A): 0.045
Background Pk Area (A-s): 0.135 Background Pk Height (A): 0.050
Blank Corrected Pk Area (A-s): 0.021
Concentration (ug/L): 2.73 Corrected Conc (ug/L): 2.73

uL dispensed: 4 from 0, 5 from 35, 20 from 5
Replicate 2 Time: 23:53
Peak Area (A-s): 0.028 Peak Height (A): 0.043
Background Pk Area (A-s): 0.129 Background Pk Height (A): 0.047
Blank Corrected Pk Area (A-s): 0.021
Concentration (ug/L): 2.78 Corrected Conc (ug/L): 2.78

Mean Conc (ug/L): 2.76 SD: 0.038 RSD(%): 1.38
Corrected Conc (ug/L): 2.76

Pb ID: PREP BL 0206948 Seq. No.: 00030 A/S Pos.: 6 Date: 06/02/94

PBW

uL dispensed: 4 from 0, 5 from 35, 20 from 6
Replicate 1 Time: 23:56
Peak Area (A-s): 0.015 Peak Height (A): 0.026
Background Pk Area (A-s): 0.134 Background Pk Height (A): 0.048
Blank Corrected Pk Area (A-s): 0.008
Concentration (ug/L): 1.08 Corrected Conc (ug/L): 108.

uL dispensed: 4 from 0, 5 from 35, 20 from 6
Replicate 2 Time: 00:00
Peak Area (A-s): 0.017 Peak Height (A): 0.025
Background Pk Area (A-s): 0.136 Background Pk Height (A): 0.049
Blank Corrected Pk Area (A-s): 0.010
Concentration (ug/L): 1.26 Corrected Conc (ug/L): 126.

Mean Conc (ug/L): 1.17 SD: 0.125 RSD(%): 10.69
Corrected Conc (ug/L): 117.

Pb ID: PREP BL 0206948 Seq. No.: 00031 A/S Pos.: 6 Date: 06/03/94

PBW A

uL dispensed: 5 from 35, 4 from 34, 20 from 6
Replicate 1 Time: 00:03
Peak Area (A-s): 0.164 Peak Height (A): 0.251
Background Pk Area (A-s): 0.130 Background Pk Height (A): 0.075
Blank Corrected Pk Area (A-s): 0.157
Concentration (ug/L): 21.55 Corrected Conc (ug/L): 2155.

uL dispensed: 5 from 35, 4 from 34, 20 from 6
Replicate 2 Time: 00:06
Peak Area (A-s): 0.166 Peak Height (A): 0.247
Background Pk Area (A-s): 0.131 Background Pk Height (A): 0.075
Blank Corrected Pk Area (A-s): 0.159
Concentration (ug/L): 21.83 Corrected Conc (ug/L): 2183.

Mean Conc (ug/L): 21.69 SD: 0.200 RSD(%): 0.92
Corrected Conc (ug/L): 2169.

Pb ID: LCS 020694 S 1 Seq. No.: 00032 A/S Pos.: 7 Date: 06/03/94

LCSW

⑦

uL dispensed: 4 from 0, 5 from 35, 20 from 7
Replicate 1 Time: 00:09
Peak Area (A-s): 0.276 Peak Height (A): 0.430
Background Pk Area (A-s): 0.202 Background Pk Height (A): 0.131
Blank Corrected Pk Area (A-s): 0.259
Concentration (ug/L): 38.40 Corrected Conc (ug/L): 3840.

uL dispensed: 4 from 0, 5 from 35, 20 from 7
Replicate 2 Time: 00:13
Peak Area (A-s): 0.271 Peak Height (A): 0.426
Background Pk Area (A-s): 0.173 Background Pk Height (A): 0.129
Blank Corrected Pk Area (A-s): 0.264
Concentration (ug/L): 37.70 Corrected Conc (ug/L): 3770.

Mean Conc (ug/L): 38.05 SD: 0.498 RSD(%): 1.31
Corrected Conc (ug/L): 3805.

Pb ID: LCS 020694 S 2 Seq. No.: 00033 A/S Pos.: 7 Date: 06/03/94

LCSWA

uL dispensed: 5 from 35, 4 from 34, 20 from 7
Replicate 1 Time: 00:16
Peak Area (A-s): 0.399 Peak Height (A): 0.580
Background Pk Area (A-s): 0.204 Background Pk Height (A): 0.182
Blank Corrected Pk Area (A-s): 0.292
Concentration (ug/L): 57.35 Corrected Conc (ug/L): 5935.

uL dispensed: 5 from 35, 4 from 34, 20 from 7
Replicate 2 Time: 00:19
Peak Area (A-s): 0.389 Peak Height (A): 0.574
Background Pk Area (A-s): 0.203 Background Pk Height (A): 0.178
Blank Corrected Pk Area (A-s): 0.382
Concentration (ug/L): 57.44 Corrected Conc (ug/L): 5744.

Mean Conc (ug/L): 58.40 SD: 1.352 RSD(%): 2.31
Corrected Conc (ug/L): 5840.

Recovery is 101.7%

Pb ID: 2817 04 Sample 1511.1 Seq. No.: 00034 A/S Pos.: 8 Date: 06/03/94

uL dispensed: 4 from 0, 5 from 35, 20 from 8
Replicate 1 Time: 00:23

Peak Area (A-s): 0.144 Peak Height (A): 0.215
Background Pk Area (A-s): 1.043 Background Pk Height (A): 0.290
Blank Corrected Pk Area (A-s): 0.137
Concentration (ug/L): 18.67 Corrected Conc (ug/L): 1867.

uL dispensed: 4 from 0, 5 from 35, 20 from 8
Replicate 2 Time: 00:26
Peak Area (A-s): 0.142 Peak Height (A): 0.212
Background Pk Area (A-s): 1.026 Background Pk Height (A): 0.286
Blank Corrected Pk Area (A-s): 0.135
Concentration (ug/L): 18.51 Corrected Conc (ug/L): 1851.

Corrected Conc (ug/L): 1848.

(8)

Pb ID: 2817 04 1151.1 A Seq. No.: 00035 A/S Pos.: 8 Date: 06/03/94

uL dispensed: 5 from 35, 4 from 34, 20 from 8
Replicate 1 Time: 00:29
Peak Area (A-s): 0.266 Peak Height (A): 0.379
Background Pk Area (A-s): 0.973 Background Pk Height (A): 0.272
Blank Corrected Pk Area (A-s): 0.259
Concentration (ug/L): 36.87 Corrected Conc (ug/L): 3687.

uL dispensed: 5 from 35, 4 from 34, 20 from 8
Replicate 2 Time: 00:33
Peak Area (A-s): 0.267 Peak Height (A): 0.378
Background Pk Area (A-s): 1.007 Background Pk Height (A): 0.277
Blank Corrected Pk Area (A-s): 0.260
Concentration (ug/L): 37.03 Corrected Conc (ug/L): 3703.

Mean Conc (ug/L): 36.95 SD: 0.111 RSD(%): 0.30
Corrected Conc (ug/L): 3695.

Recovery is 92.3%

Pb ID: 2817 04 DUP Seq. No.: 00036 A/S Pos.: 9 Date: 06/03/94

1151.1 D

uL dispensed: 4 from 0, 5 from 35, 20 from 9
Replicate 1 Time: 00:36
Peak Area (A-s): 0.149 Peak Height (A): 0.225
Background Pk Area (A-s): 1.013 Background Pk Height (A): 0.284
Blank Corrected Pk Area (A-s): 0.142
Concentration (ug/L): 19.29 Corrected Conc (ug/L): 1929.

uL dispensed: 4 from 0, 5 from 35, 20 from 9
Replicate 2 Time: 00:39
Peak Area (A-s): 0.149 Peak Height (A): 0.223
Background Pk Area (A-s): 1.005 Background Pk Height (A): 0.282
Blank Corrected Pk Area (A-s): 0.142
Concentration (ug/L): 19.32 Corrected Conc (ug/L): 1932.

Mean Conc (ug/L): 19.30 SD: 0.020 RSD(%): 0.11
Corrected Conc (ug/L): 1930.

Pb ID: 2817 04 DUP Seq. No.: 00037 A/S Pos.: 9 Date: 06/03/94

1151.1 D A

uL dispensed: 5 from 35, 4 from 34, 20 from 9
Replicate 1 Time: 00:43
Peak Area (A-s): 0.272 Peak Height (A): 0.391
Background Pk Area (A-s): 0.982 Background Pk Height (A): 0.279
Blank Corrected Pk Area (A-s): 0.268
Concentration (ug/L): 37.85 Corrected Conc (ug/L): 3785.

uL dispensed: 5 from 35, 4 from 34, 20 from 9
Replicate 2 Time: 00:46
Peak Area (A-s): 0.[illegible] Background Pk Height (A): 0.280
Concentration (ug/L): 37.89 Corrected Conc (ug/L): 3789

Mean Conc (ug/L): 37.88 SD: 0.018 RSD(%): 0.05

Corrected Conc (ug/L): 3788.

Recovery is 92.9%

Pb ID: 2817 04 MS 1151.1 S Seq. No.: 00038 A/S Pos.: 10 Date: 06/03/94

uL dispensed: 4 from 0, 5 from 35, 20 from 10

Replicate 1 Time: 09:49

Peak Area (A-s): 0.352 Peak Height (A): 0.543

Background Pk Area (A-s): 0.249 Background Pk Height (A): 0.168

Blank Corrected Pk Area (A-s): 0.345

Concentration (ug/L): 50.97 Corrected Conc (ug/L): 5097.

uL dispensed: 4 from 0, 5 from 35, 20 from 10

Replicate 2 Time: 09:57

Peak Area (A-s): 0.351 Peak Height (A): 0.548

Background Pk Area (A-s): 0.240 Background Pk Height (A): 0.171

Blank Corrected Pk Area (A-s): 0.344

Concentration (ug/L): 50.78 Corrected Conc (ug/L): 5078.

Mean Conc (ug/L): 50.87 SD: 0.13 RSD(%): 0.27

Corrected Conc (ug/L): 5087.

Pb ID: CCV CCV Seq. No.: 00039 A/S Pos.: 11 Date: 06/03/94

uL dispensed: 4 from 0, 5 from 35, 20 from 11

Replicate 1 Time: 09:55

Peak Area (A-s): 0.364 Peak Height (A): 0.555

Background Pk Area (A-s): 0.244 Background Pk Height (A): 0.172

Blank Corrected Pk Area (A-s): 0.357

Concentration (ug/L): 53.08 Corrected Conc (ug/L): 53.08

uL dispensed: 4 from 0, 5 from 35, 20 from 11

Replicate 2 Time: 10:07

Peak Area (A-s): 0.364 Peak Height (A): 0.550

Background Pk Area (A-s): 0.237 Background Pk Height (A): 0.168

Blank Corrected Pk Area (A-s): 0.357

Concentration (ug/L): 53.07 Corrected Conc (ug/L): 53.07

Mean Conc (ug/L): 53.07 SD: 0.008 RSD(%): 0.01

Corrected Conc (ug/L): 53.07

Pb ID: CCB 1 CCB Seq. No.: 00040 A/S Pos.: 12 Date: 06/03/94

uL dispensed: 4 from 0, 5 from 35, 20 from 12

Replicate 1 Time: 01:03

Peak Area (A-s): 0.003 Peak Height (A): 0.005

Background Pk Area (A-s): 0.129 Background Pk Height (A): 0.049

Blank Corrected Pk Area (A-s): -0.004

Concentration (ug/L): -0.54 Corrected Conc (ug/L): -0.54

uL dispensed: 4 from 0, 5 from 35, 20 from 12

Time: 01:11

Peak Height (A):

Background Pk Area (A-s): 0.135 Background Pk Height (A): 0.053
Blank Corrected Pk Area (A-s): -0.003
Concentration (ug/L): -0.38 Corrected Conc (ug/L): -0.38

Mean Conc (ug/L): -0.46 SD: 0.115 RSD(%): 25.05
Corrected Conc (ug/L): -0.46

Pb ID: 2817 01 Seq. No.: 0004 A/S Pos.: 13 Date: 06/03/94

Printer jammed before next CCV

... dispensed: 4 from 0, 5 from 35, 20 from 13
Replicate 1 Time: 01:09
Peak Area (A-s): 0.179 Peak Height (A): 0.275
Background Pk Area (A-s): 0.733 Background Pk Height (A): 0.224
Blank Corrected Pk Area (A-s): 0.172
Concentration (ug/L): 23.71 Corrected Conc (ug/L): 2371.

See Rerun

L dispensed: 4 from 0, 5 from 35, 20 from 13
Replicate 2 Time: 01:13
Peak Area (A-s): 0.178 Peak Height (A): 0.268
Background Pk Area (A-s): 0.739 Background Pk Height (A): 0.225
Blank Corrected Pk Area (A-s): 0.171
Concentration (ug/L): 23.54 Corrected Conc (ug/L): 2354.

Mean Conc (ug/L): 23.62 SD: 0.123 RSD(%): 0.52
Corrected Conc (ug/L): 2362.

Pb ID: 2817 03 Seq. No.: 0005 A/S Pos.: 15 Date: 06/03/94

uL dispensed: 5 from 35, 4 from 34, 20 from 13
Replicate 1 Time: 01:16
Peak Area (A-s): 0.300 Peak Height (A): 0.447
Background Pk Area (A-s): 0.727 Background Pk Height (A): 0.215
Blank Corrected Pk Area (A-s): 0.293
Concentration (ug/L): 42.25 Corrected Conc (ug/L): 4225.

uL dispensed: 5 from 35, 4 from 34, 20 from 13
Replicate 2 Time: 01:19
Peak Area (A-s): 0.295 Peak Height (A): 0.444
Background Pk Area (A-s): 0.730 Background Pk Height (A): 0.216
Blank Corrected Pk Area (A-s): 0.289
Concentration (ug/L): 41.64 Corrected Conc (ug/L): 4164.

Mean Conc (ug/L): 41.94 SD: 0.425 RSD(%): 1.01
Corrected Conc (ug/L): 4194.

Recovery is 91.6%

Pb ID: 2817 02 Seq. No.: 0004 A/S Pos.: 14 Date: 06/03/94

uL dispensed: 4 from 0, 5 from 35, 20 from 13
Replicate 1 Time: 01:22
Peak Area (A-s): 0.183 Peak Height (A): 0.276
Background Pk Area (A-s): 0.819 Background Pk Height (A): 0.241
Blank Corrected Pk Area (A-s): 0.179
Concentration (ug/L): 24.17 Corrected Conc (ug/L): 2417.

Replicate 2 Time: 01:26
Peak Area (A-s): 0.182 Peak Height (A): 0.277
Background Pk Area (A-s): 0.820 Background Pk Height (A): 0.245
Blank Corrected Pk Area (A-s): 0.175
Concentration (ug/L): 24.12 Corrected Conc (ug/L): 2412.

Mean Conc (ug/L): 24.13 SD: 0.021 RSD(%): 0.09
Corrected Conc (ug/L): 2413.

See below

Pb ID: 2817 02 Seq. No.: 00044 A/S Pos.: 14 Date: 06/03/94

uL dispensed: 5 from 35, 4 from 34, 20 from 14
Replicate 1 Time: 01:29
Peak Area (A-s): 0.303 Peak Height (A): 0.439
Background Pk Area (A-s): 0.791 Background Pk Height (A): 0.231
Blank Corrected Pk Area (A-s): 0.296
Concentration (ug/L): 42.74 Corrected Conc (ug/L): 4274.

uL dispensed: 5 from 35, 4 from 34, 20 from 14
Replicate 2 Time: 01:32
Peak Area (A-s): 0.302 Peak Height (A): 0.437
Background Pk Area (A-s): 0.805 Background Pk Height (A): 0.236
Blank Corrected Pk Area (A-s): 0.295
Concentration (ug/L): 42.66 Corrected Conc (ug/L): 4266.

Mean Conc (ug/L): 42.70 SD: 0.058 RSD(%): 0.14
Corrected Conc (ug/L): 4270.

Recovery is 92.8%

Pb ID: PREP BL020694AU Seq. No.: 00045 A/S Pos.: 15 Date: 06/03/94

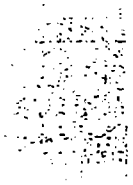
uL dispensed: 4 from 0, 5 from 35, 20 from 15
Replicate 1 Time: 01:35
Peak Area (A-s): 0.008 Peak Height (A): 0.011
Background Pk Area (A-s): 0.138 Background Pk Height (A): 0.054
Blank Corrected Pk Area (A-s): 0.001
Concentration (ug/L): 0.18 Corrected Conc (ug/L): 0.18

uL dispensed: 4 from 0, 5 from 35, 20 from 15
Replicate 2 Time: 01:39
Peak Area (A-s): 0.007 Peak Height (A): 0.011
Background Pk Area (A-s): 0.152 Background Pk Height (A): 0.057
Blank Corrected Pk Area (A-s): 0.000

Concentration (ug/L): 0.04 Corrected Conc (ug/L): 0.04

Mean Conc (ug/L): 0.11 SD: 0.100 RSD(%): 93.31
Corrected Conc (ug/L): 0.11

: 06/03/94 ← printer jam



Pb ID: CCV Seq. No.: 00048 A/S Pos.: 11 Date: 06/03/94

mL dispensed: 4 from 0, 5 from 35, 20 from 11

(13)

CCV RK CCV

Replicate 1 — Time: 08:41
Peak Area (A-s): 0.343 — Peak Height (A): 0.523
Background Pk Area (A-s): 0.224 — Background Pk Height (A): 0.174
Blank Corrected Pk Area (A-s): 0.336
Concentration (ug/L): 49.45 — Corrected Conc (ug/L): 49.45

uL dispensed: 4 from 0, 5 from 35, 20 from 12
Replicate 2 — Time: 08:44
Peak Area (A-s): 0.350 — Peak Height (A): 0.514
Background Pk Area (A-s): 0.235 — Background Pk Height (A): 0.172
Blank Corrected Pk Area (A-s): 0.345
Concentration (ug/L): 50.72 — Corrected Conc (ug/L): 50.72

Mean Conc (ug/L): 50.08 — SD: 0.896 — RSD(%): 1.79
Corrected Conc (ug/L): 50.08

Pb ID: CCB CCB Seq. No.: 00047 A/S Pos.: 12 Date: 06/03/94

uL dispensed: 4 from 0, 5 from 35, 20 from 12
Replicate 1 — Time: 08:47
Peak Area (A-s): 0.003 — Peak Height (A): 0.006
Background Pk Area (A-s): 0.125 — Background Pk Height (A): 0.048
Blank Corrected Pk Area (A-s): -0.004
Concentration (ug/L): -0.48 — Corrected Conc (ug/L): -0.48

uL dispensed: 4 from 0, 5 from 35, 20 from 12
Replicate 2 — Time: 08:51
Peak Area (A-s): 0.005 — Peak Height (A): 0.007
Background Pk Area (A-s): 0.130 — Background Pk Height (A): 0.049
Blank Corrected Pk Area (A-s): -0.002
Concentration (ug/L): -0.28 — Corrected Conc (ug/L): -0.28

Mean Conc (ug/L): -0.38 — SD: 0.141 — RSD(%): 37.31
Corrected Conc (ug/L): -0.38

Pb ID: 201.01 ISIS.1 Seq. No.: 00050 A/S Pos.: 13 Date: 06/03/94

uL dispensed: 4 from 0, 5 from 35, 20 from 12
Replicate 1 — Time: 08:54

PAGE LEFT OUT INTENTIONALLY

uL dispensed: 4 from 0, 5 from 35, 20 from 14
Replicate 2 Time: 09:11
Peak Area (A-s): 0.175 Peak Height (A): 0.268
Background Pk Area (A-s): 0.758 Background Pk Height (A): 0.224
Blank Corrected Pk Area (A-s): 0.168
Concentration (ug/L): 23.11 Corrected Conc (ug/L): 2311.

Mean Conc (ug/L): 23.07 SD: 0.052 RSD(%): 0.23
Corrected Conc (ug/L): 2307.

Pb ID: 2817 02 Seq. No.: 00053 A/S Pos.: 14 Date: 06/03/94

1510.2 A

uL dispensed: 5 from 35, 4 from 34, 20 from 14
Replicate 1 Time: 09:14
Peak Area (A-s): 0.295 Peak Height (A): 0.438
Background Pk Area (A-s): 0.765 Background Pk Height (A): 0.218
Blank Corrected Pk Area (A-s): 0.288
Concentration (ug/L): 41.57 Corrected Conc (ug/L): 4157.

uL dispensed: 5 from 35, 4 from 34, 20 from 14
Replicate 2 Time: 09:17
Peak Area (A-s): 0.295 Peak Height (A): 0.426
Background Pk Area (A-s): 0.787 Background Pk Height (A): 0.225
Blank Corrected Pk Area (A-s): 0.288
Concentration (ug/L): 41.47 Corrected Conc (ug/L): 4147.

Mean Conc (ug/L): 41.52 SD: 0.075 RSD(%): 0.18
Corrected Conc (ug/L): 4152.

Recovery is 92.2%

Pb ID: PREP BL020694AQ Seq. No.: 00054 A/S Pos.: 15 Date: 06/03/94

PBW (For Aqueous)

uL dispensed: 4 from 0, 5 from 35, 20 from 15
Replicate 1 Time: 09:21
Peak Area (A-s): 0.007 Peak Height (A): 0.010
Background Pk Area (A-s): 0.162 Background Pk Height (A): 0.060
Blank Corrected Pk Area (A-s): -0.000
Concentration (ug/L): -0.03 Corrected Conc (ug/L): -0.03

uL dispensed: 4 from 0, 5 from 35, 20 from 15
Replicate 2 Time: 09:24
Peak Area (A-s): 0.008 Peak Height (A): 0.011
Background Pk Area (A-s): 0.143 Background Pk Height (A): 0.052
Blank Corrected Pk Area (A-s): 0.000
Concentration (ug/L): 0.06 Corrected Conc (ug/L): 0.06

Mean Conc (ug/L): 0.01 SD: 0.060 RSD(%): 474.71
Corrected Conc (ug/L): 0.01

Pb ID: PREP BL020694AQ Seq. No.: 00055 A/S Pos.: 15 Date: 06/03/94

PBW A

uL dispensed: 5 from 35, 4 from 34, 20 from 15
Replicate 1 Time: 09:27
Peak Area (A-s): 0.[illegible] Peak Height (A): [illegible]
Background Pk Area (A-s): [illegible] Background Pk Height (A): 0.[illegible]
Blank Corrected Pk Area (A-s): [illegible]

Concentration (ug/L): 19.81 Corrected Conc (ug/L): 19.81

uL dispensed: 5 from 35, 4 from 34, 20 from 15
Replicate 2 Time: 09:30
Peak Area (A-s): 0.156 Peak Height (A): 0.242
Background Pk Area (A-s): 0.144 Background Pk Height (A): 0.080
Blank Corrected Pk Area (A-s): 0.149
Concentration (ug/L): 20.30 Corrected Conc (ug/L): 20.30

Mean Conc (ug/L): 20.06 SD: 0.342 RSD(%): 1.70
Corrected Conc (ug/L): 20.06

Recovery is 100.2%

Pb ID: LCS 020694 AQ Seq. No.: 00056 A/S Pos.: 16 Date: 06/03/94

LCSW

uL dispensed: 4 from 0, 5 from 35, 20 from 16
Replicate 1 Time: 09:34
Peak Area (A-s): 0.273 Peak Height (A): 0.435
Background Pk Area (A-s): 0.202 Background Pk Height (A): 0.144
Blank Corrected Pk Area (A-s): 0.251
Concentration (ug/L): 37.99 Corrected Conc (ug/L): 37.99

uL dispensed: 4 from 0, 5 from 35, 20 from 16
Replicate 2 Time: 09:37
Peak Area (A-s): 0.276 Peak Height (A): 0.429
Background Pk Area (A-s): 0.214 Background Pk Height (A): 0.140
Blank Corrected Pk Area (A-s): 0.269
Concentration (ug/L): 38.44 Corrected Conc (ug/L): 38.44

Mean Conc (ug/L): 38.22 SD: 0.319 RSD(%): 0.83
Corrected Conc (ug/L): 38.22

Pb ID: LCS 020694 AQ Seq. No.: 00057 A/S Pos.: 16 Date: 06/03/94

LCSW A

uL dispensed: 5 from 35, 4 from 34, 20 from 16
Replicate 1 Time: 09:40
Peak Area (A-s): 0.403 Peak Height (A): 0.610
Background Pk Area (A-s): 0.217 Background Pk Height (A): 0.207
Blank Corrected Pk Area (A-s): 0.396
Concentration (ug/L): 60.05 Corrected Conc (ug/L): 60.05

uL dispensed: 5 from 35, 4 from 34, 20 from 16
Replicate 2 Time: 09:43
Peak Area (A-s): 0.397 Peak Height (A): 0.596
Background Pk Area (A-s): 0.215 Background Pk Height (A): 0.201
Blank Corrected Pk Area (A-s): 0.390
Concentration (ug/L): 58.94 Corrected Conc (ug/L): 58.94

Mean Conc (ug/L): 59.50 SD: 0.789 RSD(%): 1.33
Corrected Conc (ug/L): 59.50

Recovery is 106.4%

Pb ID: [redacted] CCV Seq. No.: [redacted] A/S Pos.: [redacted] Date: 06/03/94

uL dispensed: 4 from 0, 5 from 35, 20 from 17
Replicate 1 Time: 09:46
Peak Area (A-s): 0.350 Peak Height (A): 0.513
Background Pk Area (A-s): 0.239 Background Pk Height (A): 0.172
Blank Corrected Pk Area (A-s): 0.343
Concentration (ug/L): 50.68 Corrected Conc (ug/L): 50.68

uL dispensed: 4 from 0, 5 from 35, 20 from 17
Replicate 2 Time: 09:50
Peak Area (A-s): 0.347 Peak Height (A): 0.512
Background Pk Area (A-s): 0.245 Background Pk Height (A): 0.172
Blank Corrected Pk Area (A-s): 0.340

Concentration (ug/L): 50.09 Corrected Conc (ug/L): 50.09

Mean Conc (ug/L): 50.39 SD: 0.418 RSD(%): 0.83
Corrected Conc (ug/L): 50.39

Pb ID: CCB CCB Seq. No.: 00057 A/S Pos.: 18 Date: 06/03/94

uL dispensed: 4 from 0, 5 from 35, 20 from 18
Replicate 1 Time: 09:53
Peak Area (A-s): 0.003 Peak Height (A): 0.005
Background Pk Area (A-s): 0.133 Background Pk Height (A): 0.050
Blank Corrected Pk Area (A-s): -0.004
Concentration (ug/L): -0.54 Corrected Conc (ug/L): -0.54

uL dispensed: 4 from 0, 5 from 35, 20 from 18
Replicate 2 Time: 09:56
Peak Area (A-s): 0.004 Peak Height (A): 0.005
Background Pk Area (A-s): 0.132 Background Pk Height (A): 0.052
Blank Corrected Pk Area (A-s): -0.003
Concentration (ug/L): -0.42 Corrected Conc (ug/L): -0.42

Mean Conc (ug/L): -0.48 SD: 0.084 RSD(%): 17.48
Corrected Conc (ug/L): -0.48

Pb ID: 2017-03 1511.2 Seq. No.: 00060 A/S Pos.: 19 Date: 06/03/94

uL dispensed: 4 from 0, 5 from 35, 20 from 19

Replicate 1 Time: 09:57
Peak Area (A-s): 0.041 Peak Height (A): 0.071
Background Pk Area (A-s): 0.145 Background Pk Height (A): 0.050
Blank Corrected Pk Area (A-s): 0.038
Concentration (ug/L): 4.47 Corrected Conc (ug/L): 4.47

APPENDIX G

GROUNDWATER ANALYTICAL DATA PACKAGE

EMSL

environmental

materials

asbestos

New Jersey

Corporate Office &
Main Laboratory
108 Haddon Avenue
Westmont, NJ 08108
(609) 858-4800

3 Cooper Street
Westmont, NJ 08108
(609) 858-9573

1056 Stelton Road
Piscataway, NJ 08854
(908) 981-0550

New York

208 Stonehenge Lane
Carle Place, NY 11514
(516) 997-7251

Georgia

1600 Roswell Street, SE
Suite One
Smyrna, GA 30080
(404) 333-6066

Florida

1878 Adams Avenue
Melbourne, FL 32935
(407) 253-4224

Michigan

212 S. Wagner Road
Ann Arbor, MI 48103
(313) 668-6810

California

1720 S. Amphlett Boulevard
Suite 130
San Mateo, CA 94402
(415) 570-5401

ANALYTICAL SERVICES

001

ANALYTICAL DATA REPORT
FOR
U.S. ARMY, FORT MONMOUTH
SELFM-PW-EV
Building 173
Fort Monmouth, NJ 07703

PROJECT : **94513093229**

EMSL Project: # 9508319

Field Sample No. & Location	Laboratory Sample ID	Matrix	Date & Time of Collection	Date Received
1836.1 Bldg. 1108 MW1-2931785	**95-23343**	**Aqueous**	**5/19/95 @ 1249**	**5/22/95**
Trip Blank	**95-23340**	**Aqueous**	**5/19/95 @ 0615**	**5/22/95**
Field Blank	**95-23341**	**Aqueous**	**5/19/95 @ 1533**	**5/22/95**

Laboratory Name: EMSL ANALYTICAL, INC.

Certification No.: NJDEP No. 04653
PADER No. 68-367
NY-ELAP No. 10896

Supervisor/Manager Signature: Paul Laraia

Printed Name: Paul V. Laraia

Date: 06-26-95

REPORT NARRATIVE

All initial runs for the Ft. Monmouth P.O. #IJO #95-0091/SAI were analyzed within hold. The samples were taken by EMSL between the dates of 5/18/95 thru 5/25/95.

There was a problem with the water used for the field and trip blanks. On certain days the field crew used DI water from the incorrect system resulting in low level contamination of Toluene, 2-Chlorotoluene and sometimes Chlorobenzene. However the resultant concentrations of these compounds were very low and the samples accompanying these field and trip blanks did not show these compounds to be present.

EMSL

TABLE OF CONTENTS

SAMPLE DATA SUMMARY PACKAGE

EMSL

Date of Report: 06/23/95
Project Number: 09508319
Lab ID: 95-0023343
Date Collected: 05/19/95 12:49
Collected By: Client
Date Received: 05/22/95 07:00

Attention: Charles Appleby
U.S. Army - Fort Monmouth
SELFM-PW-EV
Building 173
Fort Monmouth NJ 07703

Client Project: 94513093229

Client Designation: Bldg.1108 MW1-2931785
NJDEP#
FMETL # 1836.1

	Conc.	Unit
ORGANIC		
Semi-Volatiles		
BN by 625 with Library Search	see attached	ug/l
Volatiles		
Volatiles by 524.2 w/ Library Search	see attached	ug/l

US Army Fort Monmouth, NJ Bldg 1108 1B FMETL # 1836.1

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.: 9523343B NJDEP Bldg 1108 MDI-2931785

C05

Lab Name: EMSL ANALYTICAL Contract:

Project No.: Site: Location: Group:

Matrix: (soil/water) WATER Lab Sample ID: 9523343B

Sample wt/vol: 1000.0 (g/mL ML Lab File ID: B7814.D

Level: (low/med) Date Received: 5/22/95

% Moisture: decanted: (Y/N): N Date Extracted: 5/26/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 6/3/95

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
62-75-9	N-nitrosodimethylamine	2	U
111-44-4	bis(2-Chloroethyl)ether	1	U
541-73-1	1,3-Dichlorobenzene	2	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	2	U
108-60-1	bis(2-chloroisopropyl)ether	5	U
621-64-7	N-Nitroso-Di-n-propylamine	2	U
67-72-1	Hexachloroethane	1	U
98-95-3	Nitrobenzene	2	U
78-59-1	Isophorone	1	U
111-91-1	bis(2-Chloroethoxy)methane	3	U
120-82-1	1,2,4-Trichlorobenzene	2	U
91-20-3	Naphthalene	2	U
87-68-3	Hexachlorobutadiene	2	U
77-47-4	Hexachlorocyclopentadiene	12	U
91-58-7	2-Chloronaphthalene	1	U
131-11-3	Dimethylphthalate	1	U
208-96-8	Acenaphthylene	5	U
606-20-2	2,6-Dinitrotoluene	2	U
83-32-9	Acenaphthene	3	U
121-14-2	2,4-Dinitrotoluene	3	U
84-66-2	Diethylphthalate	1	U
86-73-7	Fluorene	3	U
7005-72-3	4-Chlorophenyl-phenylether	3	U
86-30-6	n-Nitrosodiphenylamine	6	U
122-66-7	1,2-Diphenylhydrazine(as azo)	6	U
101-55-3	4-Bromophenyl-phenylether	2	U
118-74-1	Hexachlorobenzene	2	U
85-01-08	Phenanthrene	2	U
120-12-7	Anthracene	2	U
84-74-2	Di-n-butylphthalate	5	U
206-44-0	Fluoranthene	1	U
92-87-5	Benzidine	1	U

US Army Fort Monmouth, NJ Bldg 1108 FMETC # 1836-1

1B

SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

9523343B DSDP Bldg 1108 MW1-2931785

006

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Matrix: (soil/water) WATER Lab Sample ID: 9523343B

Sample wt/vol: 1000.0 (g/mL ML Lab File ID: B7814.D

Level: (low/med) _____ Date Received: 5/22/95

% Moisture: _____ decanted: (Y/N): N Date Extracted: 5/26/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 6/3/95

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
129-00-0	Pyrene	2	U
85-68-7	Butylbenzylphthalate	9	U
56-55-3	Benzo[a]anthracene	2	U
91-94-1	3,3'-Dichlorobenzidine	15	U
218-01-9	Chrysene	2	U
117-81-7	bis(2-Ethylhexyl)phthalate	4	U
117-84-0	Di-n-octylphthalate	2	U
205-99-2	Benzo[b]fluoranthene	1	U
207-08-9	Benzo[k]fluoranthene	2	U
50-32-8	Benzo[a]pyrene	2	U
193-39-5	Indeno[1,2,3-cd]pyrene	2	U
53-70-3	Dibenz[a,h]anthracene	3	U
191-24-2	Benzo[g,h,i]perylene	2	U

US Army Fort Monmouth, NJ Bldg 1108 FMETL # 1336.1

1F C

SAMPLE NO. 007

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

9523343B USDEP
Bldg 1108 MW1-20'-25'

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Matrix: (soil/water) WATER Lab Sample ID: 9523343B

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: B7814.D

Level: (low/med) _____ Date Received: 5/22/95

% Moisture: 0 decanted: (Y/N) N Date Extracted: 5/26/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 6/3/95

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

Number TICs found: 0 Concentration Units: (ug/L or ug/Kg) ug/L

CAS Number	Compound Name	RT	Est. Conc	Q
1.	NONE FOUND			
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

US Army Fort Monmouth, NJ Bldg 1168 FMETL # 1836-1

008

1A
VOLATILE ORGANIC ANALYSIS DATA SHEET
EPA 524.2

NJDEP # Bldg. 1108 MMO1-293178S

Lab Name: EMSL ANALYTICAL
Matrix (soil/water): WATER
Sample wt/vol: 25 mL
Level (low/med): LOW
% Moisture: not dec.: NA
GC Column: DB-624 x 75m ID: 0.53mm
Soil Extract Volume: NA

Lab Sample ID: 9523343
Lab File ID: C8334.D
Date Received: 05/22/95
Date Analyzed: 06/02/95
Dilution Factor: 1
Soil Aliquot Volume: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	COMMENT
75-71-8	Dichlorodifluoromethane	.50	U
74-87-3	Chloromethane	.50	U
74-83-9	Bromomethane	.50	U
75-01-4	Vinyl Chloride	.50	U
75-00-3	Chloroethane	.50	U
75-69-4	Trichlorofluoromethane	.50	U
75-09-2	Methylene Chloride	1.4	B
156-60-65	trans-1,2-Dichloroethene	.50	U
75-35-4	1,1-Dichloroethene	.50	U
75-34-3	1,1-Dichloroethane	.50	U
594-20-7	2,2-Dichloropropane	.50	U
74-97-1	Bromochloromethane	.50	U
156-59-2	cis-1,2-Dichloroethene	.50	U
67-66-3	Chloroform	.50	U
563-58-6	1,1-Dichloropropene	.50	U
107-06-[illegible]	1,2-Dichloroethane	.50	U
71-55-6	1,1,1-Trichloroethane	.50	U
74-95-3	Dibromomethane	.50	U
56-23-1	Carbon Tetrachloride	.50	U
75-27-4	Bromodichloromethane	.50	U
78-87-1	1,2-Dichloropropane	.50	U
10061-01-1	cis-1,3-Dichloropropene	.50	U
142-28-9	1,3-Dichloropropane	.50	U
79-01-6	Trichloroethene	.50	U
124-48-1	Dibromochloromethane	.50	U
79-00-1	1,1,2-Trichloroethane	.50	U
71-43-2	Benzene	.50	U
10061-02-6	trans-1,3-Dichloropropene	.50	U
75-25-2	Bromoform	.50	U
630-20-6	1,1,1,2-Tetrachloroethane	.50	U
127-18-4	Tetrachloroethene	.50	U
79-34-1	1,1,2,2-Tetrachloroethane	.50	U
108-88-3	Toluene	.50	U
106-93-4	1,2-Dibromoethane	.50	U
108-90-7	Chlorobenzene	.50	U
100-41-4	Ethylbenzene	.50	U
1330-29-7	Xylene(total)	.50	U

U= Not Detected

US Army Fort Monmouth, NJ Bldg 1108 FMETC #18361

1A

VOLATILE ORGANIC ANALYSIS DATA SHEET
EPA 524.2

NJDEP# Bldg. 1108 MUI-2931785

Lab Name: _EMSL ANALYTICAL_____ Lab Sample ID: _9523343_____
Matrix (soil/water): _WATER_____ Lab File ID: ___C8334.D_____
Sample wt/vol: _25_mL_____ Date Received: _05/22/95_____
Level (low/med): _LOW_____ Date Analyzed: _06/02/95_____
% Moisture: not dec.: _NA_____ Dilution Factor: __1_____
GC Column: _DB-624 x 75m_ ID: _0.53mm_ Soil Aliquot Volume: ____NA____
Soil Extract Volume: ___NA____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) _ug/L__	COMMENT
100-42-1	Styrene	.50	U
98-82-8	Isopropylbenzene	.50	U
108-86-1	Bromobenzene	.50	U
96-18-4	1,2,3-Trichloropropane	.50	U
103-65-1	n-Propylbenzene	.50	U
95-49-8	2-Chlorotoluene	.50	U
106-43-4	4-Chlorotoluene	.50	U
108-67-8	1,3,5-Trimethylbenzene	.50	U
98-06-6	tert-Butylbenzene	.50	U
95-63-6	1,2,4-Trimethylbenzene	.50	U
135-98-8	sec-Butylbenzene	.50	U
541-73-1	1,3-Dichlorobenzene	.50	U
106-46-7	1,4-Dichlorobenzene	.50	U
99-87-6	4-Isopropyltoluene	.50	U
95-50-1	1,2-Dichlorobenzene	.50	U
104-51-8	n-Butylbenzene	.50	U
96-12-8	1,2-Dibromo-3-chloropropane	.50	U
120-82-1	1,2,4-Trichlorobenzene	.50	U
87-68-3	Hexachlorobutadiene	.50	U
91-20-3	Naphthalene	.50	U
87-61-6	1,2,3-Trichlorobenzene	.50	U

COMMENT
U= Not Detected

FMETL# 1836.1 009a

BLDG.#: 1168 MW#: 1 NJDEPE WELL ID # [redacted] 2931785

U.S. ARMY FORT MONMOUTH, NJ

MONITORING WELL SAMPLING DATASHEET

DATE: 5-19-95

IJO#95-0091

SAMPLING CONTRACTOR: EMSL Analytical Services Inc.

LABORATORY: EMSL Analytical Services, NJDEP CERT #:

SAMPLERS NAMES: Tom Baxter Susan Pallonis

WEATHER CONDITIONS: Cool, damp, breezy

ELEVATION OF CASING SURVEY MARK: ____.____

TOTAL DEPTH OF WELL FROM TOP OF SURVEYORS MARK: 15.00 FT

DEPTH FROM SURVEYORS MARK TO SCREEN: ____.____ FT

LENGTH OF SCREENED SECTION: ____ FT.

DEPTH TO WATER PRIOR TO PURGING AND SAMPLING: 6.99 FT

ELEVATION OF GW PRIOR TO PURGING: ____.____ FT

THICKNESS OF LNAPL PRIOR TO PURGING: ____.____ FT

PID/Hnu READING IMMEDIATELY AFTER THE WELL CAP IS REMOVED: 340 PPM 1100am D.O. 4.3 ppm

pH: 6.46 TEMP: 52.7 °F SPECIFIC CONDUCTIVITY: 159 µs/cm

DEPTH OF WELL: ____.____ FT

HEIGHT OF WATER: ____.____ FT

EVACUATED GAL. H2O: 16 GAL (8.01 X .65 X 3 = 15.6195)

PURGING START TIME: 1100 END TIME: 1237

PURGE METHOD: (FLOW RATE OF <0.5 GPM TO >5.0 GPM) Pump

PURGE RATE (<0.5 GPM): 2 GPM

TOTAL VOLUME PURGED: 16 GAL.

DEPTH TO WATER AFTER PURGING AND BEFORE SAMPLING: 12.12 FT

DISSOLVED OXYGEN: 3.6 ppm pH: 6.36 TEMP: 55.9 °F

SPECIFIC CONDUCTIVITY: 154 µs/cm

SAMPLING METHOD: DEDICATED, DECONTAMINATED (IAW NJDEP FSPM 1992) TEFLON® BAILER

START TIME OF SAMPLING: 1243 END TIME: 1249

DISSOLVED OXYGEN: 3.7 ppm pH: 5.86 TEMP: 55.7 °F

SPECIFIC CONDUCTIVITY: 156 µs/cm

COMMENTS: On site 1055 hrs flush surface well, Install Bushing Assy. Slow Recharge. Inside well cap [illegible]

Vern McCook

EMSL

Date of Report: 06/23/95
Project Number: 09508317
Lab ID: 95-0023340
Date Collected: 05/19/95 16:31
Collected By: Client
Date Received: 05/22/95 07:00

Attention: Charles Appleby
U.S. Army - Fort Monmouth
SELFM-PW-EV
Building 173
Fort Monmouth NJ 07703

Client Project: 94518093636

Client Designation: Trip Blank Bldg 1108
FMETL #1835.2

	Conc.	Unit
ORGANIC		
Volatiles		
Volatiles by 524.2 w/ Library Search	see attached	ug/l

US Army Fort Monmouth, NJ Bldg 1108 EMETL #1835.2

1A
VOLATILE ORGANIC ANALYSIS DATA SHEET
EPA 524.2

Lab Name: EMSL ANALYTICAL
Matrix (soil/water): WATER
Sample wt/vol: 25 mL
Level (low/med): LOW
% Moisture: not dec.: NA
GC Column: DB-624 x 75m ID: 0.53mm
Soil Extract Volume: NA

Lab Sample ID: 9523340 TRIP BLANK
Lab File ID: C8331.D
Date Received: 05/22/95
Date Analyzed: 06/02/95
Dilution Factor: 1
Soil Aliquot Volume: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	COMMENT
75-71-8	Dichlorodifluoromethane	.50	U
74-87-3	Chloromethane	.50	U
74-83-9	Bromomethane	.50	U
75-01-4	Vinyl Chloride	.50	U
75-00-3	Chloroethane	.50	U
75-69-4	Trichlorofluoromethane	.50	U
75-09-2	Methylene Chloride	6.4	B
156-60-65	trans-1,2-Dichloroethene	.50	U
75-35-4	1,1-Dichloroethene	.50	U
75-34-3	1,1-Dichloroethane	.50	U
594-20-7	2,2-Dichloropropane	.50	U
74-97-1	Bromochloromethane	.50	U
156-59-2	cis-1,2-Dichloroethene	.50	U
67-66-3	Chloroform	.50	U
563-58-6	1,1-Dichloropropene	.50	U
107-06-2	1,2-Dichloroethane	.50	U
71-55-6	1,1,1-Trichloroethane	.50	U
74-95-3	Dibromomethane	.50	U
56-23-1	Carbon Tetrachloride	.50	U
75-27-4	Bromodichloromethane	.50	U
78-87-1	1,2-Dichloropropane	.50	U
10061-01-1	cis-1,3-Dichloropropene	.50	U
142-28-9	1,3-Dichloropropane	.50	U
79-01-6	Trichloroethene	.50	U
124-48-1	Dibromochloromethane	.50	U
79-00-1	1,1,2-Trichloroethane	.50	U
71-43-2	Benzene	.50	U
10061-02-6	trans-1,3-Dichloropropene	.50	U
75-25-2	Bromoform	.50	U
630-20-6	1,1,1,2-Tetrachloroethane	.50	U
127-18-4	Tetrachloroethene	.50	U
79-34-1	1,1,2,2-Tetrachloroethane	.50	U
108-88-3	Toluene	.80	
106-93-4	1,2-Dibromoethane	.50	U
108-90-7	Chlorobenzene	.50	U
100-41-4	Ethylbenzene	.50	U
1330-29-7	Xylene(total)	.50	U

U= Not Detected

US Army Fort Monmouth, NJ, Bldg 1108 FIELD #1835.2

1A

VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA 524.2

TRIP BLANK

Lab Name: EMSL ANALYTICAL
Matrix (soil/water): WATER
Sample wt/vol: 25 mL
Level (low/med): LOW
% Moisture: not dec.: NA
GC Column: DB-624 x 75m ID: 0.53mm
Soil Extract Volume: NA

Lab Sample ID: 9523340
Lab File ID: C8331.D
Date Received: 05/22/95
Date Analyzed: 06/02/95
Dilution Factor: 1
Soil Aliquot Volume: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	COMMENT
100-42-1	Styrene	.50	U
98-82-8	Isopropylbenzene	.50	U
108-86-1	Bromobenzene	.50	U
96-18-4	1,2,3-Trichloropropane	.50	U
103-65-1	n-Propylbenzene	.50	U
95-49-8	2-Chlorotoluene	.60	
106-43-4	4-Chlorotoluene	.50	U
108-67-8	1,3,5-Trimethylbenzene	.50	U
98-06-6	tert-Butylbenzene	.50	U
95-63-6	1,2,4-Trimethylbenzene	.50	U
135-98-8	sec-Butylbenzene	.50	U
541-73-1	1,3-Dichlorobenzene	.50	U
106-46-7	1,4-Dichlorobenzene	.50	U
99-87-6	4-Isopropyltoluene	.50	U
95-50-1	1,2-Dichlorobenzene	.50	U
104-51-8	n-Butylbenzene	.50	U
96-12-8	1,2-Dibromo-3-chloropropane	.50	U
120-82-1	1,2,4-Trichlorobenzene	.50	U
87-68-3	Hexachlorobutadiene	.50	U
91-20-3	Naphthalene	.50	U
87-61-6	1,2,3-Trichlorobenzene	.50	U

COMMENT
U= Not Detected

EMSL

Date of Report: 06/23/95
Project Number: 09508317
Lab ID: 95-0023341
Date Collected: 05/19/95 15:33
Collected By: Client
Date Received: 05/22/95 07:00

Attention: Charles Appleby
U.S. Army - Fort Monmouth
SELFM-PW-EV
Building 173
Fort Monmouth NJ 07703

Client Project: 94518093636

Client Designation: Field Blank

Bldg 1108
FMGTL #1835.3

	Conc.	Unit
ORGANIC		
Semi-Volatiles		
BN by 625 with Library Search	see attached	ug/l
Volatiles		
Volatiles by 524.2 w/ Library Search	see attached	ug/l

US Army Fort Monmouth, NJ, Bldg 1108 FMETL # 1835.3

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

9523341B
Field Blank

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Matrix: (soil/water) WATER Lab Sample ID: 9523341B

Sample wt/vol: 1000.0 (g/mL ML Lab File ID: B7812.D

Level: (low/med) _____ Date Received: 5/22/95

% Moisture: _____ decanted: (Y/N): N Date Extracted: 5/26/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 6/3/95

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
62-75-9	N-nitrosodimethylamine	2	U
111-44-4	bis(2-Chloroethyl)ether	1	U
541-73-1	1,3-Dichlorobenzene	2	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	2	U
108-60-1	bis(2-chloroisopropyl)ether	5	U
621-64-7	N-Nitroso-Di-n-propylamine	2	U
67-72-1	Hexachloroethane	1	U
98-95-3	Nitrobenzene	2	U
78-59-1	Isophorone	1	U
111-91-1	bis(2-Chloroethoxy)methane	3	U
120-82-1	1,2,4-Trichlorobenzene	2	U
91-20-3	Naphthalene	2	U
87-68-3	Hexachlorobutadiene	2	U
77-47-4	Hexachlorocyclopentadiene	12	U
91-58-7	2-Chloronaphthalene	1	U
131-11-3	Dimethylphthalate	1	U
208-96-8	Acenaphthylene	5	U
606-20-2	2,6-Dinitrotoluene	2	U
83-32-9	Acenaphthene	3	U
121-14-2	2,4-Dinitrotoluene	3	U
84-66-2	Diethylphthalate	1	U
86-73-7	Fluorene	3	U
7005-72-3	4-Chlorophenyl-phenylether	3	U
86-30-6	n-Nitrosodiphenylamine	6	U
122-66-7	1,2-Diphenylhydrazine(as azo)	6	U
101-55-3	4-Bromophenyl-phenylether	2	U
118-74-1	Hexachlorobenzene	2	U
85-01-08	Phenanthrene	2	U
120-12-7	Anthracene	2	U
84-74-2	Di-n-butylphthalate	5	U
206-44-0	Fluoranthene	1	U
92-87-5	Benzidine	1	U

US Army Fort Monmouth, NJ, Bldg 1108, FMETC # 1835.3

1B

SAMPLE NO. 5

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

9523341B
Field Blank

Lab Name: EMSL ANALYTICAL Contract:

Project No.: Site: Location: Group:

Matrix: (soil/water) WATER Lab Sample ID: 9523341B

Sample wt/vol: 1000.0 (g/mL ML Lab File ID: B7812.D

Level: (low/med) Date Received: 5/22/95

% Moisture: decanted: (Y/N): N Date Extracted: 5/26/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 6/3/95

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
129-00-0	Pyrene	2	U
85-68-7	Butylbenzylphthalate	9	U
56-55-3	Benzo[a]anthracene	2	U
91-94-1	3,3'-Dichlorobenzidine	15	U
218-01-9	Chrysene	2	U
117-81-7	bis(2-Ethylhexyl)phthalate	4	U
117-84-0	Di-n-octylphthalate	2	U
205-99-2	Benzo[b]fluoranthene	1	U
207-08-9	Benzo[k]fluoranthene	2	U
50-32-8	Benzo[a]pyrene	2	U
193-39-5	Indeno[1,2,3-cd]pyrene	2	U
53-70-3	Dibenz[a,h]anthracene	3	U
191-24-2	Benzo[g,h,i]perylene	2	U

US Army Fort Monmouth, NJ, Bldg 1108, FMETC #1835.3

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.
9523341B
Field Blank

Lab Name: EMSL ANALYTICAL Contract:

Project No.: Site: Location: Group:

Matrix: (soil/water) WATER Lab Sample ID: 9523341B

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: B7812.D

Level: (low/med) Date Received: 5/22/95

% Moisture: 0 decanted: (Y/N) N Date Extracted: 5/26/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 6/3/95

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 1 Concentration Units: (ug/L or ug/Kg) ug/L

CAS Number	Compound Name	RT	Est. Conc	Q
1.	Unknown	29.88	7	J
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

US Army Fort Monmouth, NJ Bldg 1108 FMETL #18353 n-7

1A
VOLATILE ORGANIC ANALYSIS DATA SHEET
EPA 524.2

Field Blank

Lab Name: EMSL ANALYTICAL
Matrix (soil/water): WATER
Sample wt/vol: 25 mL
Level (low/med): LOW
% Moisture: not dec.: NA
GC Column: DB-624 x 75m ID: 0.53mm
Soil Extract Volume: NA

Lab Sample ID: 9523341
Lab File ID: C8332.D
Date Received: 05/22/95
Date Analyzed: 06/02/95
Dilution Factor: 1
Soil Aliquot Volume: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	COMMENT
75-71-8	Dichlorodifluoromethane	.50	U
74-87-3	Chloromethane	.50	U
74-83-9	Bromomethane	.50	U
75-01-4	Vinyl Chloride	.50	U
75-00-3	Chloroethane	.50	U
75-69-4	Trichlorofluoromethane	.50	U
75-09-2	Methylene Chloride	6.3	B
156-60-65	trans-1,2-Dichloroethene	.50	U
75-35-4	1,1-Dichloroethene	.50	U
75-34-3	1,1-Dichloroethane	.50	U
594-20-7	2,2-Dichloropropane	.50	U
74-97-1	Bromochloromethane	.50	U
156-59-2	cis-1,2-Dichloroethene	.50	U
67-66-3	Chloroform	.50	U
563-58-6	1,1-Dichloropropene	.50	U
107-06-2	1,2-Dichloroethane	.50	U
71-55-6	1,1,1-Trichloroethane	.50	U
74-95-3	Dibromomethane	.50	U
56-23-1	Carbon Tetrachloride	.50	U
75-27-4	Bromodichloromethane	.50	U
78-87-1	1,2-Dichloropropane	.50	U
10061-01-1	cis-1,3-Dichloropropene	.50	U
142-28-9	1,3-Dichloropropane	.50	U
79-01-6	Trichloroethene	.50	U
124-48-1	Dibromochloromethane	.50	U
79-00-1	1,1,2-Trichloroethane	.50	U
71-43-2	Benzene	.50	U
10061-02-6	trans-1,3-Dichloropropene	.50	U
75-25-2	Bromoform	.50	U
630-20-6	1,1,1,2-Tetrachloroethane	.50	U
127-18-4	Tetrachloroethene	.50	U
79-34-1	1,1,2,2-Tetrachloroethane	.50	U
108-88-3	Toluene	.50	U
106-93-4	1,2-Dibromoethane	.50	U
108-90-7	Chlorobenzene	.50	U
100-41-4	Ethylbenzene	.50	U
1330-29-7	Xylene(total)	.50	U

U= Not Detected

US Army Fort Monmouth, NJ, Bldg 1168, FMETL #1835.3 C18

1A

VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA 524.2

Field Blank

Lab Name: EMSL ANALYTICAL
Matrix (soil/water): WATER
Sample wt/vol: 25 mL
Level (low/med): LOW
% Moisture: not dec.: NA
GC Column: DB-624 x 75m ID: 0.53mm
Soil Extract Volume: NA

Lab Sample ID: 9523341
Lab File ID: C8332.D
Date Received: 05/22/95
Date Analyzed: 06/02/95
Dilution Factor: 1
Soil Aliquot Volume: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	COMMENT
100-42-1	Styrene	.50	U
98-82-8	Isopropylbenzene	.50	U
108-86-1	Bromobenzene	.50	U
96-18-4	1,2,3-Trichloropropane	.50	U
103-65-1	n-Propylbenzene	.50	U
95-49-8	2-Chlorotoluene	.50	U
106-43-4	4-Chlorotoluene	.50	U
108-67-8	1,3,5-Trimethylbenzene	.50	U
98-06-6	tert-Butylbenzene	.50	U
95-63-6	1,2,4-Trimethylbenzene	.50	U
135-98-8	sec-Butylbenzene	.50	U
541-73-1	1,3-Dichlorobenzene	.50	U
106-46-7	1,4-Dichlorobenzene	.50	U
99-87-6	4-Isopropyltoluene	.50	U
95-50-1	1,2-Dichlorobenzene	.50	U
104-51-8	n-Butylbenzene	.50	U
96-12-8	1,2-Dibromo-3-chloropropane	.50	U
120-82-1	1,2,4-Trichlorobenzene	.50	U
87-68-3	Hexachlorobutadiene	.50	U
91-20-3	Naphthalene	.50	U
87-61-6	1,2,3-Trichlorobenzene	.50	U

COMMENT
U= Not Detected

EMSL

LABORATORY DELIVERABLES

THIS FORM MUST BE COMPLETED BY THE LABORATORY OR ENVIRONMENTAL CONSULTANT AND ACCOMPANY ALL DATA SUBMISSIONS

The following laboratory deliverables shall be included in the data submission. All deviations from the accepted methodology and procedures, or performance values outside acceptable ranges shall be summarized in the Non-Conformance Summary. The proposed "Technical Requirements for Site Remediation" rules, which appeared in the May 4, 1992 New Jersey Register, provides further details. The document shall be bound and paginated, contain a table of contents, and all pages shall be legible. Incomplete packages will be returned or held without review until the data package is completed.

It is recommended that the analytical results summary sheets listing all targeted and non-targeted compounds with the method detection limits be included in one section of the data package and in the main body of the report.

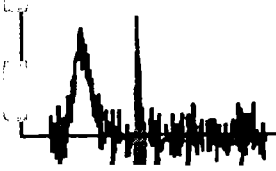
		Check If Complete
1.	Cover Page, Title Page listing Lab Certification #, facility name, address & date of report.	X
2.	Table of Contents	X
3.	Summary Sheets listing analytical results for all targeted and non-targeted compounds.	X
4.	Summary Table cross-referencing field ID #'s vs. Lab ID #'s.	X
5.	Document bound, paginated and legible.	X
6.	Chain of Custody	X
7.	Methodology Summary	X
8.	Laboratory Chronicle and Holding Time Check.	X
9.	Results submitted on a dry weight basis (if applicable).	X
10	Method Detection Limits.	X
11	Lab certified by NJDEP for parameters or appropriate category of parameters or a member of the USEP CLP.	X
12	Non-Conformance Summary	X

Paul Craig

Laboratory Manager or Environmental Consultant's Signature

06-26-95

Date



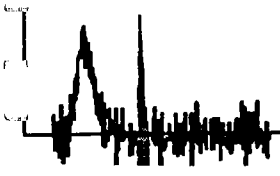
EMSL

QUALITY ASSURANCE/QUALITY CONTROL (QA/QC)

A. Checklist which must be attached to the Summary

The following information must be reported in the Closure Plan Implementation Summary for all laboratory analyses performed in the compliance with the site assessment requirements:

Page #		
1	1.	Name and address of the facility.
1	2.	Name of the laboratory performing the sample analysis.
1	3.	NJDEP certification number assigned to the laboratory pursuant to N.J.A.C. 7:18.
1	4.	Laboratory sample identification number.
1	5.	Customer sample identification number corresponding to the laboratory sample identification.
1	6.	Sample Location (also on the site diagram).
1	7.	Matrix of the sample analyzed (i.e., water or sediments; including soil, sediment, and sludges). All sediment results must be reported on a dry weight basis.
27-28	8.	The reference for the method used (e.g., EPA Method 625, 40 CFR Part 136).
1	9.	The signature of the person completing the report form.
1	10.	The dates the laboratory report form was prepared, as well as the dates the sample were collected, submitted and analyzed.
29	11.	A list of all parameters (constituents and conditions) for which the analyses were performed.
3-18	12.	Sample results and corresponding units for each parameter.



EMSL

CHAIN OF CUSTODY AND PRESERVATION CHECKLIST

U.S. ARMY FORT MONMOUTH

9508319

P.O. #: IJO # 95-0091 / SAI

Chain of Custody

Project #: 94513093JF	Sampler: EMSL (Baxter)	Date / Time: 5/19/95 1249	Analysis Parameters
Customer: Charles Appleby SELFM-RQ-EV	Site Name: Bldg 1103 MW Sampling		Start: — Finish: —
Phone: 908-532-4604			Preservation Method

Lab Sample ID Number	Date/Time		Customer Sample Location/ID Number	Sample Matrix	# of Bottles	VOA 524.2	BN 625	Xylene & Chloroform (Meth 625)	Remarks
1836.1	5/19/95	1249	Bldg 1103 MW1-293178	aq	5	X	X	23343	Samples Kept <4°C
1835.2	5/19/95	0615	FB	aq	3	X		23340	
1835.3	5/19/95	1533	FB	aq	5	X	X	23341	

Relinquished By (signature)	Date / Time	Received By (signature)	Shipped By:
	5/19/95 1305		EMSL
Relinquished By (signature)	Date / Time	Received For Lab by (signature):	Date / Time
	5/19/95 1915		5/22 0700

Note: A drawing depicting sample location should be attached or drawn on the reverse side of this chain of custody. on Back

Enviornmental Laboratory

200


Bldg. 1107
Bldg. 1108
MW1-29 31785
Arts & Crafts CTR.
E W

To be completed upon sample receipt

[illegible]

. Place an X in box if okay.
. Record actual pH if outside
acceptable range
. Record temperature of cool blank
or note NOT if samples are cooled.
Record corrective action in remarks.

pH≤2												>9	≥12	deg.C	SAMPLES	
[illegible]	NH3	TKN	TOX	VOA*	PHENOL	TOC	PHC	O&G	METALS	HARD	TPO4	NO2&3	SO2	TCN	TEMP	EMSL #	REMARKS
[illegible]	H2SO4	H2SO4	H2SO4	HCL	H2SO4	H2SO4	H2SO4	H2SO4	HNO3	HNO3	H2SO4	H2SO4	NaOH ZNAC	NaOH			
				Y											4	23347	

[illegible] RECEIVED WITH NO HEADSPACE AND SEPTUM WAS TEFLON SIDE DOWN EXCEPT WHERE NOTED

EMSL ANALYTICAL, INC.

INTERNAL CHAIN OF CUSTODY

EMSL LAB ID NO. 95-23343, 95-23340, 95-23341 PROJECT NO. 9508319

SAMPLE/CONTAINERS PARAMETERS

DATE	TIME	ANALYSIS	NAME (PRINT)	SIGNATURE
5/26/95		BN Extraction Prep	Charles Bartolone	Charles Bartolone

INTERNAL CUSTODY

026

Project #: 9508319

Lab ID #'s: 95-23343, 95-23340
95-23341

Analyst

	Name (please print)	Signature	Date
1. Base/Neutrals	Scott Van Etten		6/3/95
2. Acids			
3. Pesticides			
4. Herbicides			
5. PCB's			
6. Metals:			
Flame			
Furnace			
ICP			
7. Volatiles:			
GC			
GC/MS	Scott Kessler	S. Ke	6/2/95
8. TOC			
9. TOX			
10. Phenols (Total)			
11. Cyanide (Total)			
12. TPH -IR			
13. Mercury			
14. Other			
15. Other			
16. Other			

METHODOLOGY SUMMARY

METHODOLOGY SUMMARY

EPA Method 524.2 - Aqueous

This is a purge and trap gas chromatograph/mass spectrometer (GC/MS) method. The organic compounds are separated by the gas chromatograph and detected using the mass spectrometer.

An HP5890/5970 GC/MS was used with a capiullary column (DB-624 0.53 mn ID).

Method detection limits are as stated.

Semivolatiles by GC/MS - Aqueous

EPA Method 625 - This is a gas chromatograph/mass spectrometer (GC/MS) method applicable to the determination of a number of organic compounds that are partitioned in an organic solvent and amenable to gas chromatography. Reference is Federal Register, Vol. 40, No. 136, July, 1988.

An HP5890/5970B GC/MS is used with a DB-5 fused silica capillary column.

If tentatively identified compounds are requested, a computer program analyzes the non-priority pollutant/HSL/TCL compounds with standard mass spectra found in the latest version of the NIH/NBS/EPA mass spectral library.

Method detection limits are as stated.

EMSL

LABORATORY CHRONICLE

Lab ID: **95-23343, 95-23340, 95-23341** Client: **U.S. Army Fort Monmouth**

		I DATE	II	Hold Time
Date Sampled	**5/19/95**			
Receipt/Refrigeration	**5/19/95**			
Extractions				
1. Semivolatile Organics	**5/26/95**			**7 days**
Analyses				
1. Volatile Organics	**6/2/95**			**14 days**
2. Semivolatile Organics	**6/3/95**			**40 days**

QC Supervisor
Review & Approval

(Signature) Peter B. Panton
(Printed Name) Peter B. Panton
(Date) 06/25/95

NOTE: If fractions are re-extracted and re-analyzed because the initial endeavors failed to meet the required Quality Control Criteria, the dates of re-extraction and/or re-analysis will be entered in Column II Additionally.

EMSL

GC/MS ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY FORMAT

		No	Yes
1.	Chromatograms Labeled/Compounds Identified (Field Samples and Method Blanks)		X
2.	GC/MS Tune Specifications		
	a. BFB Meet Criteria		X
	b. DFTPP Meet Criteria		X
3.	GC/MS Tuning Frequency - Performed every 24 hours for 600 series and 12 hours for 8000 series.		X
4,	GC/MS Calibration - Initial Calibration performed within 30 days before sample analysis and continuing calibration performed within 24 hours of. sample analysis for 600 series and 12 hours for 8000 series.		X
5.	GC/MS Calibration - Initial Requirements		
	a. Calibration Check Compounds		X
	b. System Performance Check Compounds		X
6.	Blank Contamination - If yes, list compounds and concentrations in each blank:		X
	a. VOA Fraction **Methylene Chloride 4.7 ppb.**		
	b. B/N Fraction		
	c. Acid Fraction		
7.	Surrogate Recoveries Meet Criteria		X
	If not met, list those compounds and their recoveries which fall outside the acceptable range:		
	a. VOA Fraction		
	b. B/N Fraction		
	c. Acid Fraction		
	If not met, were the calculations checked and the results qualified as "estimated"?		
8.	Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria (If not met, list those compounds and their recoveries which fall outside the acceptable range)	X	
	a. VOA Fraction **Methylene Chloride MS/MSD 69%/70%; Xylene (para & meta) MS 65% RPD 32; Xylene (ortho) MS 70% RPD 30; Styrene MS/MSD 21%/39% RPD 62; 1,1,2,2-Tetrachloroethane MS/MSD 122%/124%.**		
	b. B/N Fraction		
	c. Acid Fraction		
9.	Internal Standard Area/Retention Time Shift Meet Criteria		X

EMSL

GC/MS ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY FORMAT, cont.

		No	Yes
10.	Extraction Holding Time Met		X

If not met, list number of days exceeded for each sample:

_____

_____

		No	Yes
11.	Analysis Holding Time Met		X

If not met, list number of days exceeded for each sample:

_____

_____

12. Definitions:
U=Not Detected. J=Detected, but below report detection limit.
B=Compound found in blank. E=Estimated concentration. NA=Not Applicable

Additional Comments: _____

_____

Laboratory Manager Paul Lorain Date: 06-26-95

EMSL

GC/MS VOLATILE ORGANIC DATA PACKAGE

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: EMSL ANALYTICAL Contract: _____

Lab Code: ____ Case No.: _____ SAS No.: _____ SDG No.: _____

Lab File ID: C8236.D BFB Injection Date: 05/26/95

Instrument ID: 5972-INSTRUMENT-1 BFB Injection Time: 0953

GC Column DB-62 ID: 0.53 (mm) Heated Purge: (Y / N) _____

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	21.8
75	30.0 - 60.0% of mass 95	52.3
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	57.2
175	5.0 - 9.0% of mass 174	4.2 (7.4)1
176	95.0 - 101.0% of mass 174	55.4 (96.9)1
177	5.0 - 9.0% of mass 176	3.2 (5.8)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01		4 PPB STANDARD	C8237.D	05/26/95	1035
02		10 PPB STANDARD	C8238.D	05/26/95	1117
03		20 PPB STANDARD	C8239.D	05/26/95	1151
04		30 PPB STANDARD	C8240.D	05/26/95	1226
05		40 PPB STANDARD	C8241.D	05/26/95	1300
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

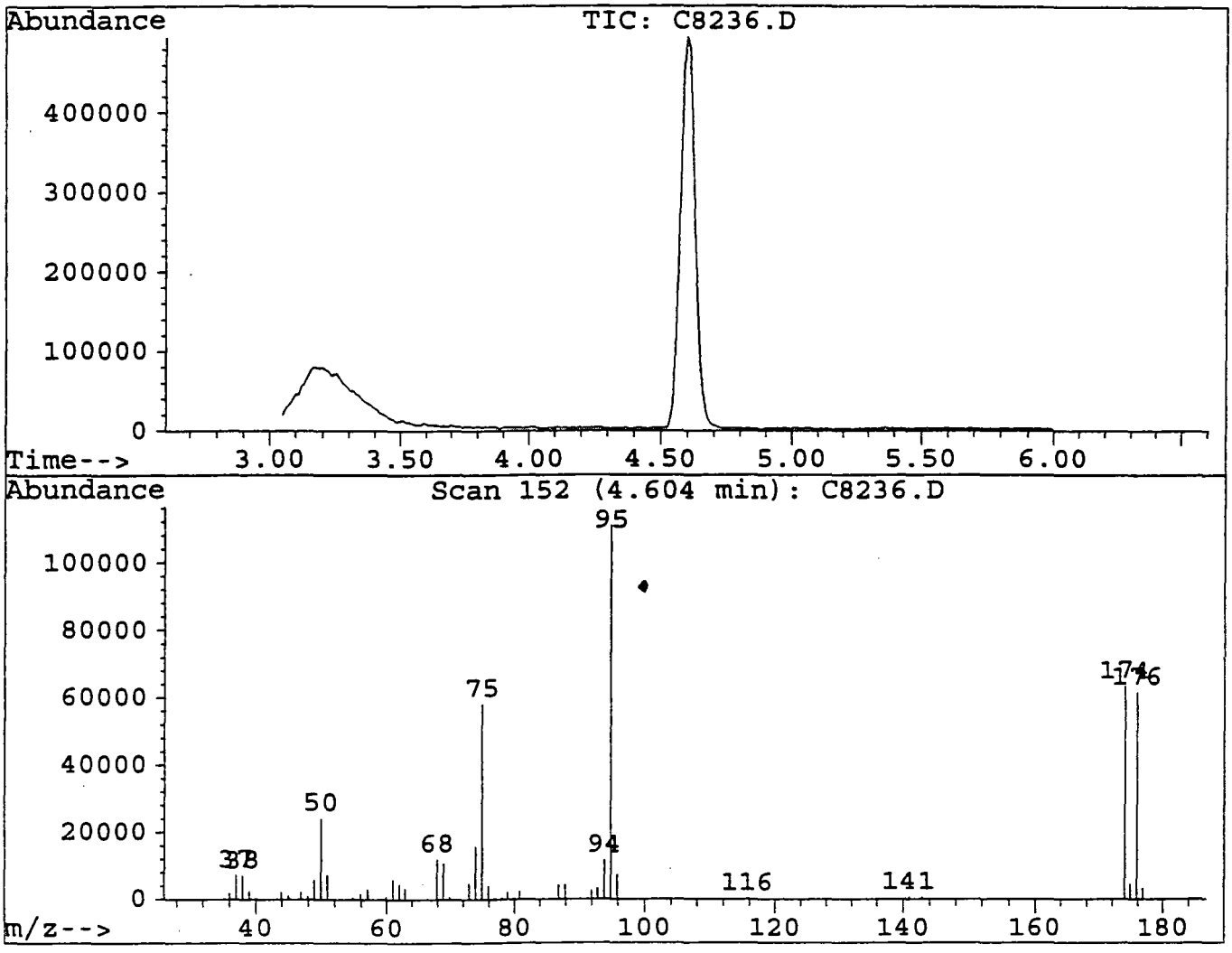
CLPBFB

024

Data File : D:\HPCHEM\1\DATA\C8236.D
Acq On : 26 May 95 9:53 am
Sample : BFB TUNE
Misc : 25 NG INJECTION

Vial: 1
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics



Peak Apex is scan: 152

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	21.8	24232	PASS
75	95	30	60	52.3	58152	PASS
95	95	100	100	100.0	111200	PASS
96	95	5	9	6.8	7580	PASS
173	174	0	2	0.0	0	PASS
174	95	50	100	57.2	63568	PASS
175	174	5	9	7.4	4678	PASS
176	174	95	101	96.9	61624	PASS
177	176	5	9	5.8	3577	PASS

can 152 (4.604 min): C8236.D
BFB TUNE

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	1948	50.95	7307	72.95	4912	92.05	2865
37.00	7455	54.75	959	73.95	15989	92.95	3574
38.00	7055	55.95	1728	74.95	58152	93.95	11832
39.00	2560	57.00	3162	75.95	4270	94.95	111200
40.00	629	59.90	1118	76.95	625	95.95	7580
43.90	2201	61.00	6169	78.00	812	115.75	506
45.00	1268	62.00	4780	78.90	2214	140.90	844
46.95	2491	62.90	3458	79.90	782	142.80	807
47.95	1002	67.95	12140	80.80	2619	173.95	63568
48.95	6125	68.95	11009	86.90	4356	174.85	4678
49.95	24232	69.95	836	87.95	4439	175.85	61624

Scan 152 (4.604 min): C8236.D
BFB TUNE

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
176.85	3577						

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Fri May 26 16:05:53 1995
Response via : Initial Calibration

Calibration Files
4 =C8237.D 10 =C8238.D 20 =C8239.D
30 =C8240.D 40 =C8241.D

		Compound	4	10	20	30	40	Avg	%RSD
1)		Fluorobenzene	----------ISTD----------						
2)	M	Dichlorodifluorometha	0.410	0.422	0.387	0.385	0.379	0.396	4.69
3)	M	Chloromethane	0.227	0.249	0.227	0.232	0.232	0.233	3.89
4)	M	Vinyl chloride	0.262	0.275	0.259	0.260	0.259	0.263	2.58
5)	M	Bromomethane	0.193	0.197	0.170	0.166	0.164	0.178	8.95
6)	M	Chloroethane	0.164	0.171	0.161	0.152	0.122	0.154	12.48
7)	M	Trichlorofluoromethan	0.583	0.600	0.585	0.589	0.581	0.588	1.25
8)	M	1,1-Dichloroethene	0.255	0.266	0.258	0.257	0.254	0.258	1.92
9)	M	Methylene chloride		0.352	0.271	0.240	0.232	0.274	19.95
10)	M	trans-1,2-Dichloroeth	0.274	0.279	0.270	0.271	0.270	0.273	1.39
11)		Hexane						0.000#	-1.00
12)	M	1,1-Dichloroethane	0.547	0.545	0.539	0.543	0.552	0.545	0.89
13)	M	2,2-Dichloropropane	0.561	0.546	0.527	0.525	0.514	0.534	3.50
14)	M	cis-1,2-Dichloroethen	0.263	0.262	0.253	0.251	0.256	0.257	2.11
15)		2-Butanone						0.000#	-1.00
16)	M	Bromochloromethane	0.089	0.088	0.089	0.089	0.094	0.090	2.82
17)	M	Chloroform	0.511	0.509	0.507	0.507	0.524	0.512	1.38
18)	M	1,1,1-Trichloroethane	0.573	0.566	0.561	0.564	0.567	0.566	0.77
19)	M	Carbon tetrachloride	0.537	0.520	0.520	0.526	0.526	0.526	1.35
20)	M	1,1-Dichloropropene	0.498	0.506	0.486	0.494	0.488	0.495	1.59
21)	M	Benzene	0.874	0.885	0.858	0.866	0.870	0.871	1.14
22)	M	1,2-Dichloroethane	0.206	0.210	0.214	0.214	0.225	0.214	3.36
23)	M	Trichloroethene	0.387	0.388	0.383	0.386	0.386	0.386	0.51
24)	M	1,2-Dichloropropane	0.282	0.281	0.283	0.286	0.293	0.285	1.76
25)	M	Dibromomethane	0.112	0.113	0.112	0.117	0.124	0.115	4.28
26)	M	Bromodichloromethane	0.388	0.385	0.398	0.397	0.412	0.396	2.72
27)	M	cis-1,3-Dichloroprope	0.338	0.335	0.343	0.340	0.356	0.342	2.38
28)	M	Toluene	0.646	0.605	0.610	0.613	0.619	0.619	2.61
29)	M	trans-1,3-Dichloropro	0.226	0.229	0.236	0.239	0.252	0.236	4.31
30)	M	1,1,2-Trichloroethane	0.107	0.107	0.109	0.110	0.118	0.110	4.12
31)	M	Tetrachloroethene	0.395	0.386	0.380	0.388	0.389	0.388	1.40
32)	M	1,3-Dichloropropane	0.217	0.213	0.221	0.218	0.226	0.219	2.24
33)	M	Dibromochloromethane	0.208	0.205	0.215	0.216	0.231	0.215	4.72
34)	M	1,2-Dibromomethane	0.145	0.145	0.153	0.153	0.166	0.152	5.54
35)	M	Chlorobenzene	0.650	0.638	0.636	0.640	0.657	0.644	1.38
36)	M	1,1,1,2-Tetrachloroet	0.256	0.247	0.253	0.257	0.265	0.256	2.62
37)	M	Ethylbenzene	1.316	1.279	1.288	1.308	1.320	1.302	1.38
38)	M	Xylene (para & meta)	0.479	0.463	0.465	0.465	0.466	0.468	1.38
39)	M	Xylene (Ortho)	0.417	0.409	0.412	0.413	0.418	0.414	0.93
40)	M	Styrene	0.634	0.626	0.639	0.643	0.663	0.641	2.12
41)	M	Bromoform	0.098	0.099	0.107	0.106	0.117	0.105	7.26
42)	M	Isopropylbenzene	1.330	1.302	1.317	1.350	1.352	1.330	1.60
43)	S	4-Bromofluorobenzene	0.498	0.480	0.493	0.500	0.522	0.499	3.05

(#) = Out of Range

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Fri May 26 16:05:53 1995
Response via : Initial Calibration

Calibration Files
4 =C8237.D 10 =C8238.D 20 =C8239.D
30 =C8240.D 40 =C8241.D

		Compound	4	10	20	30	40	Avg	%RSD
44)	M	Bromobenzene	0.236	0.232	0.239	0.242	0.251	0.240	3.08
45)	M	1,1,2,2-Tetrachloroet	0.110	0.112	0.121	0.120	0.127	0.118	6.04
46)	M	1,2,3-Trichloropropan	0.143	0.138	0.144	0.141	0.150	0.143	2.93
47)	M	n-Propylbenzene	1.736	1.684	1.719	1.754	1.761	1.731	1.79
48)	M	2-Chlorotoluene	0.967	0.923	0.956	0.968	0.988	0.960	2.50
49)	M	4-Chlorotoluene	1.153	1.113	1.108	1.151	1.176	1.140	2.54
50)	M	1,3,5-Trimethylbenzen	1.107	1.066	1.095	1.117	1.122	1.101	2.04
51)	M	tert-Butylbenzene	1.149	1.111	1.135	1.158	1.157	1.142	1.71
52)	M	1,2,4-Trimethylbenzen	1.012	0.993	1.014	1.002	1.025	1.009	1.21
53)	M	sec-Butylbenzene	1.707	1.634	1.688	1.722	1.715	1.693	2.10
54)	M	1,3-Dichlorobenzene	0.481	0.468	0.490	0.495	0.511	0.489	3.28
55)	M	4-Isopropyltoluene	1.257	1.228	1.267	1.280	1.290	1.264	1.88
56)	M	1,4-Dichlorobenzene	0.483	0.464	0.482	0.487	0.510	0.485	3.39
57)	S	1,2-Dichlorobenzene-d	0.223	0.219	0.228	0.230	0.238	0.228	3.15
58)	M	1,2-Dichlorobenzene	0.371	0.351	0.359	0.366	0.374	0.364	2.53
59)	M	n-Butylbenzene	1.362	1.297	1.353	1.381	1.382	1.355	2.55
60)	M	1,2-Dibromo-3-chlorop	0.027	0.027	0.030	0.031	0.034	0.030	10.29
61)	M	1,2,4-Trichlorobenzen	0.254	0.256	0.266	0.271	0.293	0.268	5.88
62)	M	Hexachlorobutadiene	0.317	0.304	0.330	0.331	0.334	0.323	3.81
63)	M	Naphthalene	0.219	0.220	0.225	0.233	0.262	0.232	7.66
64)	M	1,2,3-Trichlorobenzen	0.183	0.175	0.184	0.186	0.207	0.187	6.31
65)		Methyl-tert butyl eth	0.289	0.286	0.292	0.288	0.306	0.292	2.82
66)		tert-Butyl Alcohol		0.004	0.005	0.005	0.005	0.004	8.73

(#) = Out of Range

Quantitation Report

Data File : d:\hpchem\1\data\c8237.d
Acq On : 26 May 95 10:35 am
Sample : 4 PPB STANDARD
Misc :
Quant Time: May 26 15:22 1995

Vial: 2
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Fri May 26 16:05:53 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	11.84	96	695393	5.00	ug/L	-0.09
System Monitoring Compounds						%Recovery
43) 4-Bromofluorobenzene	19.10	95	138448	2.12	ug/L	42.31%
57) 1,2-Dichlorobenzene-d4	21.88	152	62134	1.72	ug/L	34.47%
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.28	85	227954	3.55	ug/L	92
3) Chloromethane	3.65	50	126260	3.35	ug/L	100
4) Vinyl chloride	3.86	62	145560	3.46	ug/L	97
5) Bromomethane	4.54	94	107256	3.74	ug/L	100
6) Chloroethane	4.76	64	91319	3.57	ug/L	90
7) Trichlorofluoromethane	5.35	101	324396	3.90	ug/L	91
8) 1,1-Dichloroethene	6.42	96	141941	3.68	ug/L	98
9) Methylene chloride	7.41	84	319236	9.50	ug/L	100
10) trans-1,2-Dichloroethene	7.97	96	152530	3.73	ug/L	94
12) 1,1-Dichloroethane	8.76	63	304419	3.74	ug/L	95
13) 2,2-Dichloropropane	9.82	77	311983	4.42	ug/L	99
14) cis-1,2-Dichloroethene	9.82	96	146539	3.80	ug/L	99
16) Bromochloromethane	10.24	128	49545	3.27	ug/L	88
17) Chloroform	10.40	83	284036	3.95	ug/L	99
18) 1,1,1-Trichloroethane	10.73	97	318569	4.20	ug/L	98
19) Carbon tetrachloride	11.03	117	299000	4.01	ug/L	97
20) 1,1-Dichloropropene	11.01	75	277299	3.91	ug/L	96
21) Benzene	11.35	78	486262	3.81	ug/L	99
22) 1,2-Dichloroethane	11.36	62	114527	4.02	ug/L	98
23) Trichloroethene	12.48	95	215417	3.81	ug/L	92
24) 1,2-Dichloropropane	12.83	63	156823	3.58	ug/L	99
25) Dibromomethane	13.02	93	62165	3.54	ug/L	95
26) Bromodichloromethane	13.30	83	215761	3.85	ug/L	95
27) cis-1,3-Dichloropropene	14.06	75	187920	3.78	ug/L	99
28) Toluene	14.64	92	359379	4.19	ug/L	98
29) trans-1,3-Dichloropropene	14.99	75	125469	3.72	ug/L	96
30) 1,1,2-Trichloroethane	15.30	83	59496	3.61	ug/L	98
31) Tetrachloroethene	15.60	166	219930	3.61	ug/L	90
32) 1,3-Dichloropropane	15.58	76	120535	3.72	ug/L	100
33) Dibromochloromethane	15.99	129	115733	3.36	ug/L	99
34) 1,2-Dibromomethane	16.19	107	80701	3.46	ug/L	99
35) Chlorobenzene	17.07	112	361810	3.72	ug/L	96
36) 1,1,1,2-Tetrachloroethane	17.20	131	142326	3.50	ug/L	95
37) Ethylbenzene	17.26	91	732369	4.06	ug/L	98
38) Xylene (para & meta)	17.47	106	533017	7.95	ug/L	92
39) Xylene (Ortho)	18.17	106	231743	3.89	ug/L	90
40) Styrene	18.18	104	352838	3.78	ug/L	87

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c8237.d
Acq On : 26 May 95 10:35 am
Sample : 4 PPB STANDARD
Misc :
Quant Time: May 26 15:22 1995

Vial: 2
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Fri May 26 16:05:53 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
41)	Bromoform	18.51	173	54547	3.31	ug/L		97
42)	Isopropylbenzene	18.83	105	739665	3.93	ug/L		89
44)	Bromobenzene	19.38	156	131056	3.44	ug/L	#	86
45)	1,1,2,2-Tetrachloroethane	19.32	83	61247	3.65	ug/L		98
46)	1,2,3-Trichloropropane	19.40	75	79406	3.74	ug/L		97
47)	n-Propylbenzene	19.56	91	965762	4.01	ug/L		99
48)	2-Chlorotoluene	19.73	91	538039	4.23	ug/L		92
49)	4-Chlorotoluene	19.91	91	641340	4.20	ug/L	m	96
50)	1,3,5-Trimethylbenzene	19.88	105	616118	4.04	ug/L		96
51)	tert-Butylbenzene	20.48	119	639160	3.80	ug/L		88
52)	1,2,4-Trimethylbenzene	20.57	105	562733	3.89	ug/L		91
53)	sec-Butylbenzene	20.88	105	949602	3.96	ug/L		97
54)	1,3-Dichlorobenzene	21.08	146	267522	3.41	ug/L		98
55)	4-Isopropyltoluene	21.14	119	699174	3.73	ug/L		95
56)	1,4-Dichlorobenzene	21.23	146	268966	3.43	ug/L	m	96
58)	1,2-Dichlorobenzene	21.91	146	206476	3.45	ug/L		95
59)	n-Butylbenzene	21.89	91	757856	3.95	ug/L		95
60)	1,2-Dibromo-3-chloropropan	23.32	75	15013	3.81	ug/L		81
61)	1,2,4-Trichlorobenzene	24.89	180	141353	3.40	ug/L		93
62)	Hexachlorobutadiene	25.23	225	176270	4.13	ug/L		97
63)	Naphthalene	25.35	128	122077	3.12	ug/L		100
64)	1,2,3-Trichlorobenzene	25.82	180	101707	3.60	ug/L		99
65)	Methyl-tert butyl ether	8.01	73	160639	4.38	ug/L	#	100
66)	tert-Butyl Alcohol	7.72	59	2491	0.68	ug/L	m	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c8238.d
Acq On : 26 May 95 11:17 am
Sample : 10 PPB STANDARD
Misc :
Quant Time: May 26 15:59 1995

Vial: 3
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Fri May 26 16:05:53 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	11.84	96	770985	5.00	ug/L		-0.09
System Monitoring Compounds							%Recovery
43) 4-Bromofluorobenzene	19.09	95	370331	5.10	ug/L		102.07%
57) 1,2-Dichlorobenzene-d4	21.88	152	169129	4.23	ug/L		84.62%
Target Compounds							Qvalue
2) Dichlorodifluoromethane	3.28	85	650612	9.13	ug/L		100
3) Chloromethane	3.64	50	383966	9.18	ug/L		96
4) Vinyl chloride	3.87	62	423851	9.09	ug/L		98
5) Bromomethane	4.52	94	303978	9.57	ug/L		93
6) Chloroethane	4.76	64	264421	9.32	ug/L		94
7) Trichlorofluoromethane	5.34	101	924458	10.04	ug/L		100
8) 1,1-Dichloroethene	6.42	96	410654	9.60	ug/L		96
9) Methylene chloride	7.41	84	542259	14.55	ug/L	m	99
10) trans-1,2-Dichloroethene	7.97	96	429522	9.48	ug/L		100
12) 1,1-Dichloroethane	8.76	63	840489	9.32	ug/L		97
13) 2,2-Dichloropropane	9.83	77	841576	10.74	ug/L		96
14) cis-1,2-Dichloroethene	9.83	96	403406	9.42	ug/L		98
16) Bromochloromethane	10.24	128	135650	8.08	ug/L	#	88
17) Chloroform	10.40	83	785334	9.85	ug/L		99
18) 1,1,1-Trichloroethane	10.73	97	873470	10.39	ug/L		99
19) Carbon tetrachloride	11.03	117	801421	9.70	ug/L		100
20) 1,1-Dichloropropene	11.01	75	780145	9.93	ug/L		96
21) Benzene	11.35	78	1364187	9.64	ug/L		99
22) 1,2-Dichloroethane	11.36	62	323971	10.26	ug/L		99
23) Trichloroethene	12.48	95	597831	9.52	ug/L		92
24) 1,2-Dichloropropane	12.83	63	432807	8.91	ug/L		99
25) Dibromomethane	13.03	93	174304	8.95	ug/L		99
26) Bromodichloromethane	13.29	83	593524	9.55	ug/L		96
27) cis-1,3-Dichloropropene	14.06	75	516054	9.37	ug/L		96
28) Toluene	14.64	92	932739	9.81	ug/L		100
29) trans-1,3-Dichloropropene	14.98	75	353858	9.46	ug/L		95
30) 1,1,2-Trichloroethane	15.30	83	165554	9.05	ug/L		98
31) Tetrachloroethene	15.61	166	594723	8.81	ug/L		97
32) 1,3-Dichloropropane	15.58	76	328378	9.15	ug/L		99
33) Dibromochloromethane	15.99	129	315396	8.25	ug/L		98
34) 1,2-Dibromomethane	16.19	107	223316	8.62	ug/L		93
35) Chlorobenzene	17.07	112	983363	9.11	ug/L		94
36) 1,1,1,2-Tetrachloroethane	17.20	131	380569	8.45	ug/L	m	0
37) Ethylbenzene	17.26	91	1971808	9.86	ug/L		99
38) Xylene (para & meta)	17.47	106	1428718	19.21	ug/L		96
39) Xylene (Ortho)	18.17	106	630244	9.53	ug/L		96
40) Styrene	18.19	104	965656	9.34	ug/L		94

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c8238.d
Acq On : 26 May 95 11:17 am
Sample : 10 PPB STANDARD
Misc :
Quant Time: May 26 15:59 1995

Vial: 3
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Fri May 26 16:05:53 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
41)	Bromoform	18.51	173	153005	8.38	ug/L	m	0
42)	Isopropylbenzene	18.83	105	2008385	9.63	ug/L	m	45
44)	Bromobenzene	19.38	156	357587	8.46	ug/L		94
45)	1,1,2,2-Tetrachloroethane	19.32	83	171968	9.24	ug/L		97
46)	1,2,3-Trichloropropane	19.40	75	213285	9.05	ug/L		98
47)	n-Propylbenzene	19.57	91	2596029	9.72	ug/L		97
48)	2-Chlorotoluene	19.73	91	1422833	10.08	ug/L		95
49)	4-Chlorotoluene	19.91	91	1716410	10.14	ug/L	m	98
50)	1,3,5-Trimethylbenzene	19.89	105	1643038	9.71	ug/L		98
51)	tert-Butylbenzene	20.48	119	1713787	9.19	ug/L		90
52)	1,2,4-Trimethylbenzene	20.56	105	1530473	9.54	ug/L		94
53)	sec-Butylbenzene	20.88	105	2518935	9.48	ug/L		98
54)	1,3-Dichlorobenzene	21.08	146	722076	8.30	ug/L		96
55)	4-Isopropyltoluene	21.14	119	1893823	9.12	ug/L		95
56)	1,4-Dichlorobenzene	21.24	146	715067	8.22	ug/L	m	94
58)	1,2-Dichlorobenzene	21.91	146	541575	8.16	ug/L		95
59)	n-Butylbenzene	21.89	91	2000405	9.41	ug/L		96
60)	1,2-Dibromo-3-chloropropan	23.31	75	41781	9.56	ug/L		95
61)	1,2,4-Trichlorobenzene	24.89	180	394479	8.55	ug/L		99
62)	Hexachlorobutadiene	25.23	225	469504	9.93	ug/L		98
63)	Naphthalene	25.34	128	339645	7.82	ug/L		100
64)	1,2,3-Trichlorobenzene	25.81	180	269640	8.61	ug/L		95
65)	Methyl-tert butyl ether	7.99	73	440628	10.83	ug/L	#	100
66)	tert-Butyl Alcohol	7.72	59	12035	2.96	ug/L		100

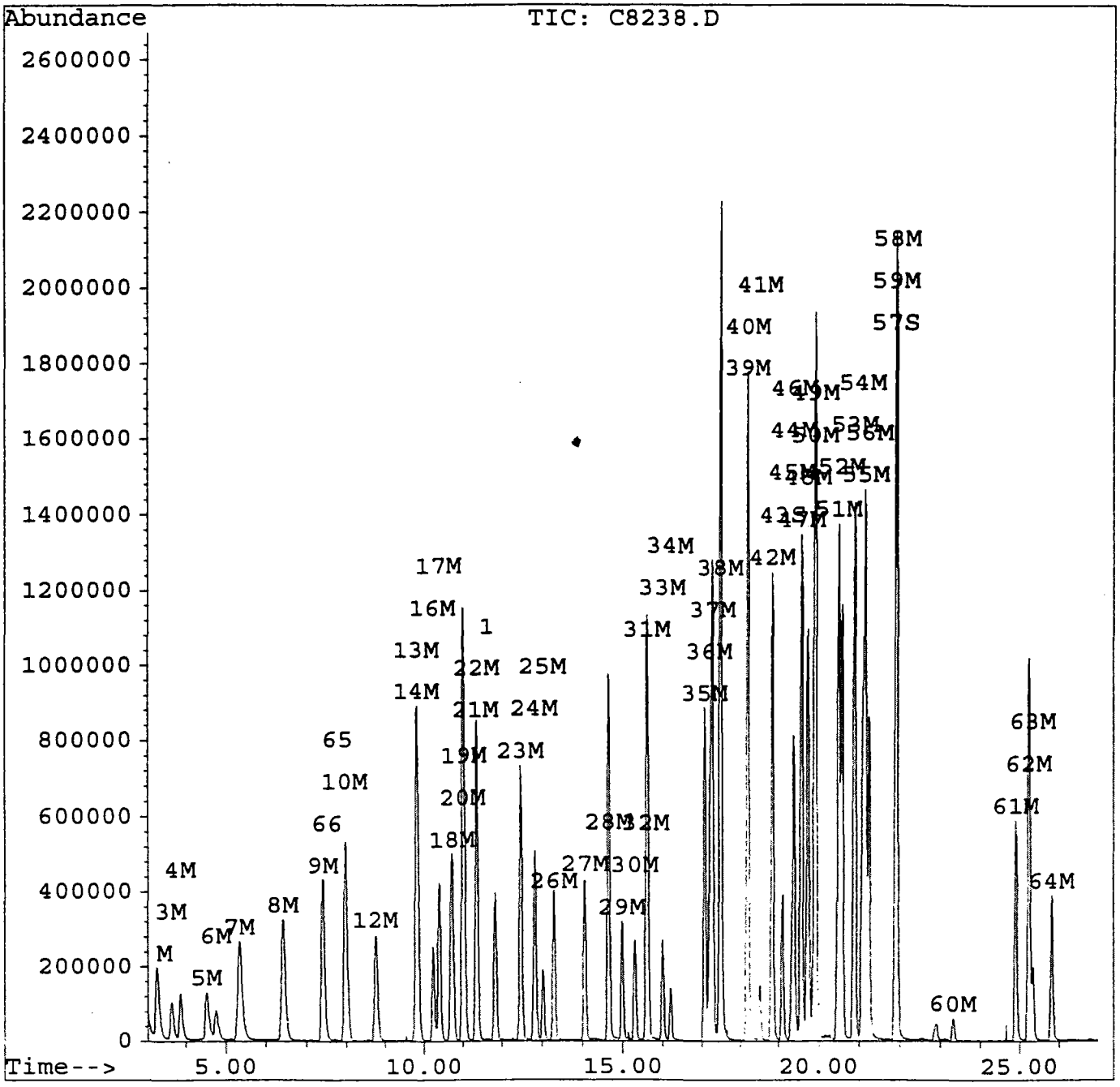
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c8238.d
Acq On : 26 May 95 11:17 am
Sample : 10 PPB STANDARD
Misc :
Quant Time: May 26 15:59 1995

Vial: 3
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Fri May 26 16:05:53 1995
Response via : Multiple Level Calibration



Quantitation Report

Data File : d:\hpchem\1\data\c8239.d
Acq On : 26 May 95 11:51 am
Sample : 20 PPB STANDARD
Misc :
Quant Time: May 26 15:53 1995

Vial: 4
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Fri May 26 16:05:53 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	11.84	96	715239	5.00	ug/L		-0.09
System Monitoring Compounds							%Recovery
43) 4-Bromofluorobenzene	19.10	95	705539	10.48	ug/L		209.62%
57) 1,2-Dichlorobenzene-d4	21.88	152	325789	8.79	ug/L		175.71%
Target Compounds							Qvalue
2) Dichlorodifluoromethane	3.29	85	1105977	16.74	ug/L		99
3) Chloromethane	3.66	50	650013	16.75	ug/L		99
4) Vinyl chloride	3.89	62	740002	17.11	ug/L		100
5) Bromomethane	4.52	94	485674	16.48	ug/L		93
6) Chloroethane	4.74	64	459311	17.45	ug/L		92
7) Trichlorofluoromethane	5.35	101	1674654	19.60	ug/L		95
8) 1,1-Dichloroethene	6.43	96	738739	18.61	ug/L		98
9) Methylene chloride	7.40	84	775969	22.45	ug/L		96
10) trans-1,2-Dichloroethene	7.98	96	771488	18.36	ug/L		100
12) 1,1-Dichloroethane	8.76	63	1541660	18.42	ug/L		99
13) 2,2-Dichloropropane	9.84	77	1507599	20.74	ug/L		95
14) cis-1,2-Dichloroethene	9.83	96	723609	18.22	ug/L		95
16) Bromochloromethane	10.24	128	255840	16.43	ug/L	#	87
17) Chloroform	10.40	83	1450799	19.62	ug/L	m	0
18) 1,1,1-Trichloroethane	10.72	97	1604334	20.57	ug/L	m	0
19) Carbon tetrachloride	11.03	117	1488607	19.42	ug/L		99
20) 1,1-Dichloropropene	11.01	75	1391827	19.09	ug/L		99
21) Benzene	11.36	78	2454890	18.69	ug/L		98
22) 1,2-Dichloroethane	11.36	62	611769	20.89	ug/L		98
23) Trichloroethene	12.48	95	1094910	18.80	ug/L		90
24) 1,2-Dichloropropane	12.84	63	809803	17.96	ug/L		99
25) Dibromomethane	13.03	93	321601	17.80	ug/L		98
26) Bromodichloromethane	13.30	83	1137821	19.73	ug/L		96
27) cis-1,3-Dichloropropene	14.05	75	981011	19.20	ug/L		95
28) Toluene	14.64	92	1745202	19.79	ug/L		98
29) trans-1,3-Dichloropropene	14.98	75	675693	19.48	ug/L	m	53
30) 1,1,2-Trichloroethane	15.30	83	312764	18.44	ug/L		95
31) Tetrachloroethene	15.61	166	1088014	17.38	ug/L		97
32) 1,3-Dichloropropane	15.59	76	630863	18.95	ug/L		96
33) Dibromochloromethane	16.00	129	614117	17.31	ug/L		97
34) 1,2-Dibromomethane	16.20	107	438464	18.25	ug/L		97
35) Chlorobenzene	17.06	112	1819994	18.18	ug/L		94
36) 1,1,1,2-Tetrachloroethane	17.20	131	725017	17.35	ug/L	m	0
37) Ethylbenzene	17.26	91	3685485	19.86	ug/L		98
38) Xylene (para & meta)	17.47	106	2660124	38.56	ug/L		90
39) Xylene (Ortho)	18.17	106	1177400	19.20	ug/L		88
40) Styrene	18.19	104	1828264	19.06	ug/L		91

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c8239.d
Acq On : 26 May 95 11:51 am
Sample : 20 PPB STANDARD
Misc :
Quant Time: May 26 15:53 1995

Vial: 4
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Fri May 26 16:05:53 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
41)	Bromoform	18.50	173	304765	18.00	ug/L	m	0
42)	Isopropylbenzene	18.83	105	3768696	19.48	ug/L	m	45
44)	Bromobenzene	19.37	156	682381	17.40	ug/L	#	89
45)	1,1,2,2-Tetrachloroethane	19.32	83	345604	20.02	ug/L		97
46)	1,2,3-Trichloropropane	19.39	75	411958	18.84	ug/L		97
47)	n-Propylbenzene	19.57	91	4919179	19.86	ug/L		98
48)	2-Chlorotoluene	19.72	91	2734593	20.88	ug/L		93
49)	4-Chlorotoluene	19.91	91	3170150	20.18	ug/L		92
50)	1,3,5-Trimethylbenzene	19.89	105	3133027	19.95	ug/L		97
51)	tert-Butylbenzene	20.48	119	3247650	18.76	ug/L		89
52)	1,2,4-Trimethylbenzene	20.56	105	2901790	19.49	ug/L		97
53)	sec-Butylbenzene	20.88	105	4827977	19.58	ug/L		99
54)	1,3-Dichlorobenzene	21.08	146	1403188	17.40	ug/L		97
55)	4-Isopropyltoluene	21.15	119	3624786	18.82	ug/L		95
56)	1,4-Dichlorobenzene	21.24	146	1378003	17.08	ug/L	m	96
58)	1,2-Dichlorobenzene	21.91	146	1028245	16.71	ug/L		97
59)	n-Butylbenzene	21.89	91	3870404	19.62	ug/L		97
60)	1,2-Dibromo-3-chloropropan	23.31	75	87006	21.47	ug/L		87
61)	1,2,4-Trichlorobenzene	24.89	180	759956	17.76	ug/L		99
62)	Hexachlorobutadiene	25.23	225	943039	21.49	ug/L		97
63)	Naphthalene	25.33	128	643210	15.97	ug/L		100
64)	1,2,3-Trichlorobenzene	25.81	180	527272	18.16	ug/L		99
65)	Methyl-tert butyl ether	8.01	73	836258	22.17	ug/L	#	100
66)	tert-Butyl Alcohol	7.73	59	26154	6.93	ug/L		100

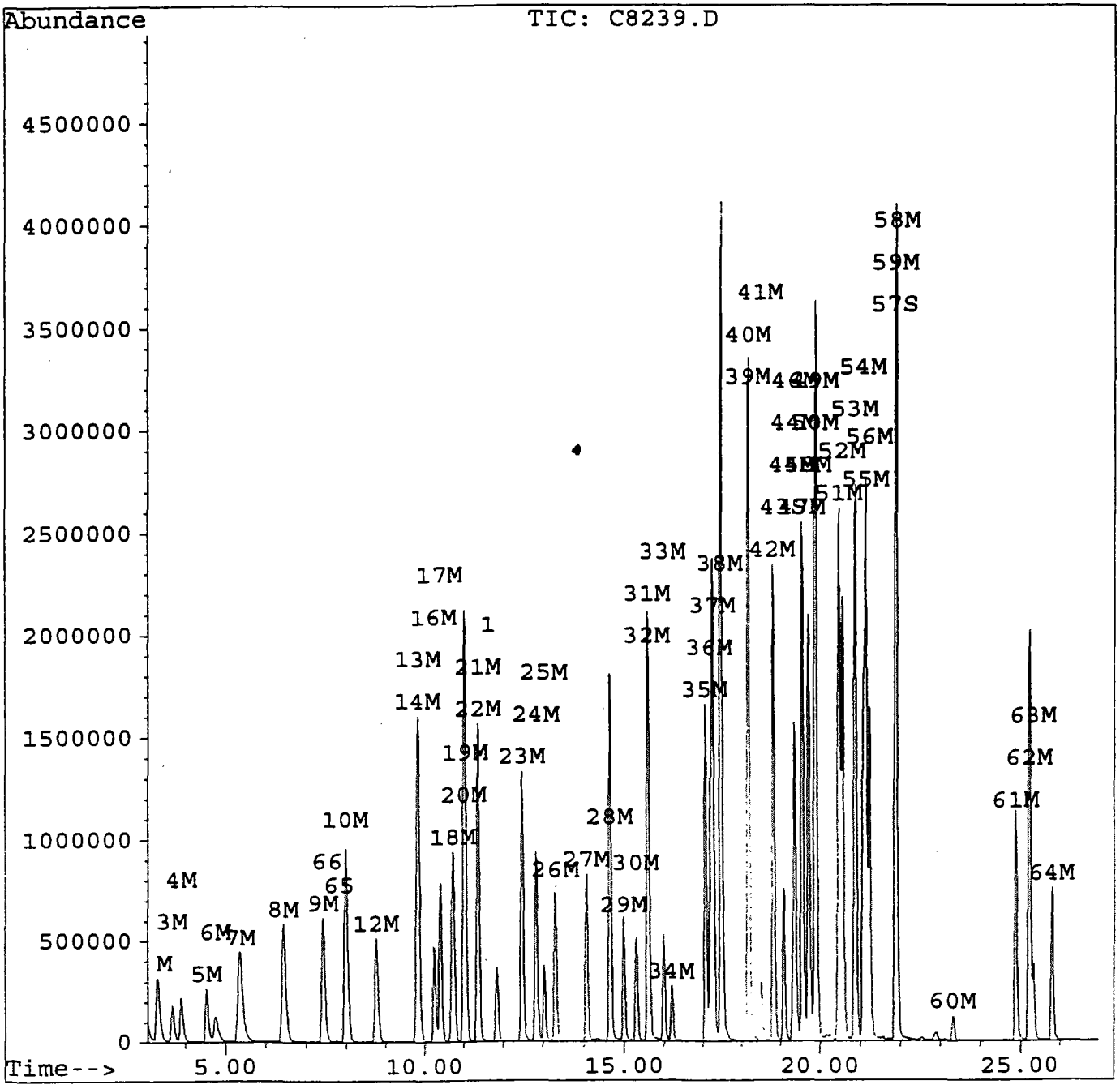
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c8239.d
Acq On : 26 May 95 11:51 am
Sample : 20 PPB STANDARD
Misc :
Quant Time: May 26 15:53 1995

Vial: 4
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Fri May 26 16:05:53 1995
Response via : Multiple Level Calibration



Quantitation Report

Data File : d:\hpchem\1\data\c8240.d
Acq On : 26 May 95 12:26 pm
Sample : 30 PPB STANDARD
Misc :
Quant Time: May 26 15:31 1995

Vial: 5
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Fri May 26 16:05:53 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	11.83	96	707858	5.00	ug/L		-0.10
System Monitoring Compounds							%Recovery
43) 4-Bromofluorobenzene	19.09	95	1062620	15.95	ug/L		319.00%
57) 1,2-Dichlorobenzene-d4	21.88	152	489408	13.34	ug/L		266.70%
Target Compounds							Qvalue
2) Dichlorodifluoromethane	3.29	85	1634270	24.99	ug/L		98
3) Chloromethane	3.66	50	984170	25.63	ug/L		100
4) Vinyl chloride	3.88	62	1106079	25.84	ug/L		100
5) Bromomethane	4.50	94	702972	24.10	ug/L		92
6) Chloroethane	4.72	64	647108	24.84	ug/L		99
7) Trichlorofluoromethane	5.32	101	2502534	29.59	ug/L		99
8) 1,1-Dichloroethene	6.42	96	1092314	27.81	ug/L		94
9) Methylene chloride	7.40	84	1020488	29.83	ug/L		97
10) trans-1,2-Dichloroethene	7.96	96	1150685	27.67	ug/L		95
12) 1,1-Dichloroethane	8.76	63	2307375	27.86	ug/L		98
13) 2,2-Dichloropropane	9.83	77	2228288	30.98	ug/L		97
14) cis-1,2-Dichloroethene	9.83	96	1065313	27.11	ug/L		93
16) Bromochloromethane	10.24	128	379255	24.61	ug/L	#	82
17) Chloroform	10.40	83	2154764	29.45	ug/L		99
18) 1,1,1-Trichloroethane	10.72	97	2396695	31.05	ug/L		99
19) Carbon tetrachloride	11.03	117	2233730	29.45	ug/L		100
20) 1,1-Dichloropropene	11.02	75	2098843	29.09	ug/L		98
21) Benzene	11.36	78	3677001	28.29	ug/L		99
22) 1,2-Dichloroethane	11.37	62	906868	31.29	ug/L		98
23) Trichloroethene	12.48	95	1640085	28.46	ug/L		91
24) 1,2-Dichloropropane	12.83	63	1214345	27.22	ug/L		100
25) Dibromomethane	13.03	93	494826	27.67	ug/L		97
26) Bromodichloromethane	13.30	83	1685621	29.53	ug/L	m	66
27) cis-1,3-Dichloropropene	14.06	75	1443936	28.55	ug/L	m	0
28) Toluene	14.64	92	2604382	29.84	ug/L		97
29) trans-1,3-Dichloropropene	14.98	75	1013926	29.53	ug/L		98
30) 1,1,2-Trichloroethane	15.30	83	468063	27.88	ug/L		99
31) Tetrachloroethene	15.60	166	1648174	26.60	ug/L		97
32) 1,3-Dichloropropane	15.58	76	925183	28.08	ug/L		100
33) Dibromochloromethane	16.00	129	918828	26.18	ug/L		99
34) 1,2-Dibromomethane	16.19	107	650390	27.36	ug/L		94
35) Chlorobenzene	17.07	112	2720037	27.45	ug/L	m	0
36) 1,1,1,2-Tetrachloroethane	17.20	131	1093624	26.44	ug/L	m	0
37) Ethylbenzene	17.26	91	5555166	30.24	ug/L		97
38) Xylene (para & meta)	17.47	106	3951154	57.87	ug/L		91
39) Xylene (Ortho)	18.17	106	1755270	28.92	ug/L		92
40) Styrene	18.18	104	2731131	28.76	ug/L		87

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c8240.d
Acq On : 26 May 95 12:26 pm
Sample : 30 PPB STANDARD
Misc :
Quant Time: May 26 15:31 1995

Vial: 5
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Fri May 26 16:05:53 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
41)	Bromoform	18.50	173	450885	26.90	ug/L	m	0
42)	Isopropylbenzene	18.83	105	5734485	29.95	ug/L	m	45
44)	Bromobenzene	19.37	156	1026534	26.45	ug/L	#	88
45)	1,1,2,2-Tetrachloroethane	19.33	83	508409	29.75	ug/L	m	0
46)	1,2,3-Trichloropropane	19.39	75	599222	27.69	ug/L	#	57
47)	n-Propylbenzene	19.57	91	7449042	30.39	ug/L		99
48)	2-Chlorotoluene	19.73	91	4112354	31.73	ug/L		93
49)	4-Chlorotoluene	19.91	91	4889333	31.45	ug/L	m	98
50)	1,3,5-Trimethylbenzene	19.88	105	4744702	30.53	ug/L		95
51)	tert-Butylbenzene	20.48	119	4918253	28.71	ug/L		86
52)	1,2,4-Trimethylbenzene	20.56	105	4256753	28.89	ug/L		95
53)	sec-Butylbenzene	20.88	105	7312067	29.96	ug/L		99
54)	1,3-Dichlorobenzene	21.08	146	2102035	26.33	ug/L		97
55)	4-Isopropyltoluene	21.14	119	5435557	28.52	ug/L		94
56)	1,4-Dichlorobenzene	21.23	146	2067871	25.90	ug/L	m	96
58)	1,2-Dichlorobenzene	21.91	146	1555987	25.55	ug/L	m	44
59)	n-Butylbenzene	21.89	91	5865257	30.04	ug/L		97
60)	1,2-Dibromo-3-chloropropan	23.32	75	130755	32.60	ug/L		85
61)	1,2,4-Trichlorobenzene	24.89	180	1151444	27.19	ug/L		97
62)	Hexachlorobutadiene	25.22	225	1405948	32.37	ug/L		97
63)	Naphthalene	25.34	128	988735	24.80	ug/L		100
64)	1,2,3-Trichlorobenzene	25.81	180	788297	27.43	ug/L		97
65)	Methyl-tert butyl ether	8.01	73	1221403	32.71	ug/L	#	100
66)	tert-Butyl Alcohol	7.76	59	39667	10.62	ug/L		100

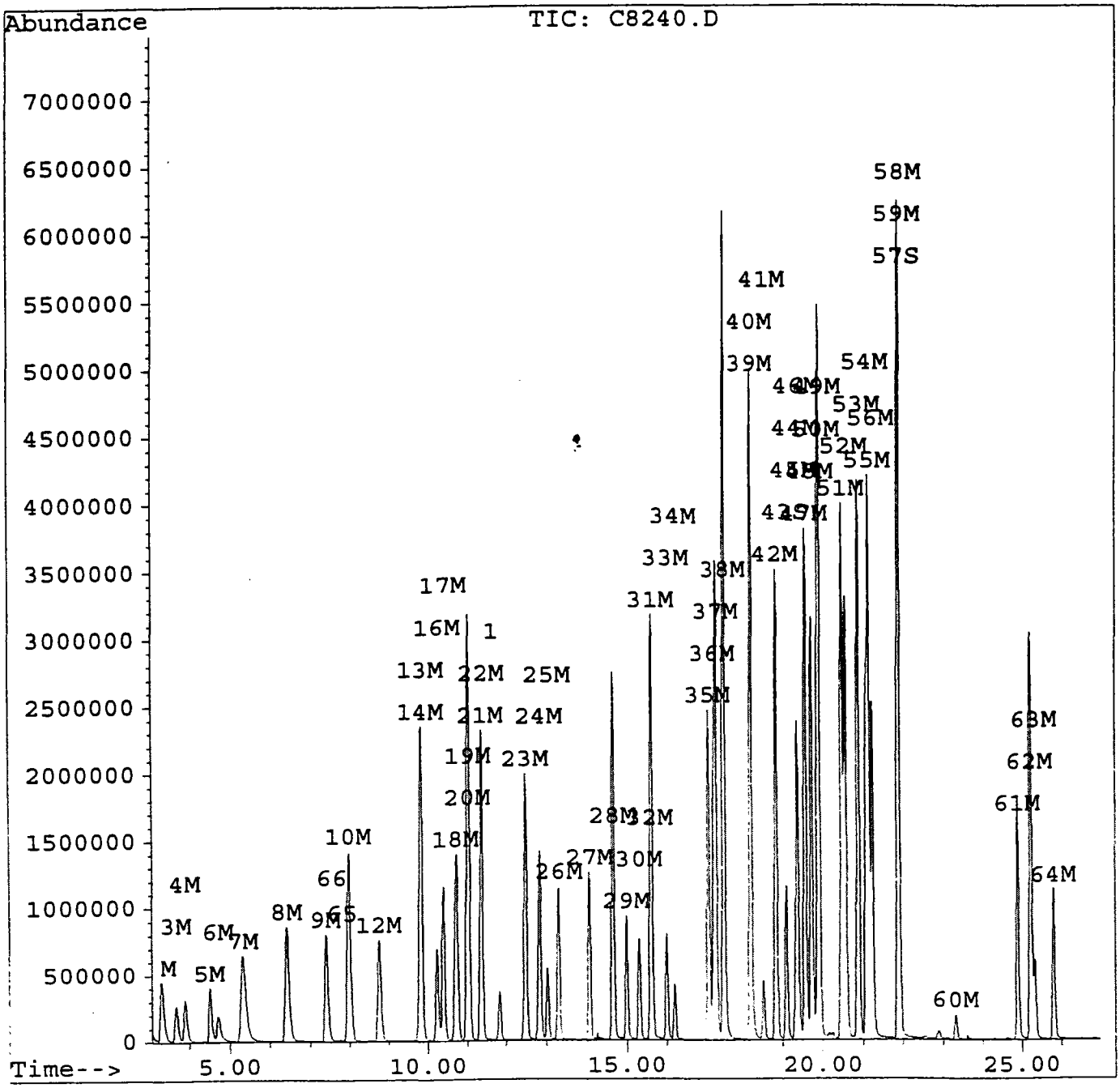
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c8240.d
Acq On : 26 May 95 12:26 pm
Sample : 30 PPB STANDARD
Misc :
Quant Time: May 26 15:31 1995

Vial: 5
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Fri May 26 16:05:53 1995
Response via : Multiple Level Calibration



Quantitation Report

Data File : d:\hpchem\1\data\c8241.d
Acq On : 26 May 95 1:00 pm
Sample : 40 PPB STANDARD
Misc :
Quant Time: May 26 15:35 1995

Vial: 6
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Fri May 26 16:05:53 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	11.83	96	677208	5.00	ug/L		-0.10
System Monitoring Compounds							%Recovery
43) 4-Bromofluorobenzene	19.10	95	1414597	22.19	ug/L		443.88%
57) 1,2-Dichlorobenzene-d4	21.88	152	645268	18.38	ug/L		367.55%
Target Compounds							Qvalue
2) Dichlorodifluoromethane	3.29	85	2050828	32.77	ug/L		99
3) Chloromethane	3.66	50	1255453	34.18	ug/L		98
4) Vinyl chloride	3.88	62	1403518	34.27	ug/L		99
5) Bromomethane	4.50	94	887089	31.79	ug/L		95
6) Chloroethane	4.68	64	660776	26.52	ug/L		99
7) Trichlorofluoromethane	5.29	101	3146458	38.89	ug/L		98
8) 1,1-Dichloroethene	6.40	96	1373656	36.56	ug/L		94
9) Methylene chloride	7.39	84	1256580	38.40	ug/L		93
10) trans-1,2-Dichloroethene	7.96	96	1461616	36.74	ug/L	m	0
12) 1,1-Dichloroethane	8.74	63	2990291	37.74	ug/L	m	0
13) 2,2-Dichloropropane	9.82	77	2784319	40.46	ug/L		96
14) cis-1,2-Dichloroethene	9.83	96	1387660	36.91	ug/L		95
16) Bromochloromethane	10.23	128	511825	34.71	ug/L	#	88
17) Chloroform	10.39	83	2839115	40.56	ug/L		100
18) 1,1,1-Trichloroethane	10.71	97	3074057	41.62	ug/L		100
19) Carbon tetrachloride	11.02	117	2848789	39.26	ug/L		100
20) 1,1-Dichloropropene	11.00	75	2646146	38.33	ug/L		97
21) Benzene	11.35	78	4715775	37.92	ug/L		98
22) 1,2-Dichloroethane	11.36	62	1219926	43.99	ug/L		100
23) Trichloroethene	12.48	95	2092020	37.94	ug/L		92
24) 1,2-Dichloropropane	12.83	63	1588792	37.22	ug/L		100
25) Dibromomethane	13.02	93	670030	39.16	ug/L		97
26) Bromodichloromethane	13.30	83	2234626	40.92	ug/L	m	85
27) cis-1,3-Dichloropropene	14.05	75	1927356	39.84	ug/L		97
28) Toluene	14.64	92	3353871	40.17	ug/L		99
29) trans-1,3-Dichloropropene	14.98	75	1365218	41.56	ug/L		97
30) 1,1,2-Trichloroethane	15.30	83	640167	39.86	ug/L		96
31) Tetrachloroethene	15.60	166	2106507	35.54	ug/L		98
32) 1,3-Dichloropropane	15.58	76	1225150	38.86	ug/L		98
33) Dibromochloromethane	15.99	129	1250833	37.25	ug/L		99
34) 1,2-Dibromomethane	16.19	107	896884	39.43	ug/L		97
35) Chlorobenzene	17.07	112	3558221	37.53	ug/L	m	0
36) 1,1,1,2-Tetrachloroethane	17.20	131	1437465	36.33	ug/L	m	0
37) Ethylbenzene	17.26	91	7148780	40.68	ug/L		98
38) Xylene (para & meta)	17.47	106	5046126	77.25	ug/L		90
39) Xylene (Ortho)	18.17	106	2266726	39.03	ug/L		90
40) Styrene	18.19	104	3590160	39.52	ug/L		90

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c8241.d
Acq On : 26 May 95 1:00 pm
Sample : 40 PPB STANDARD
Misc :
Quant Time: May 26 15:35 1995

Vial: 6 050
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Fri May 26 16:05:53 1995
Response via : Multiple Level Calibration

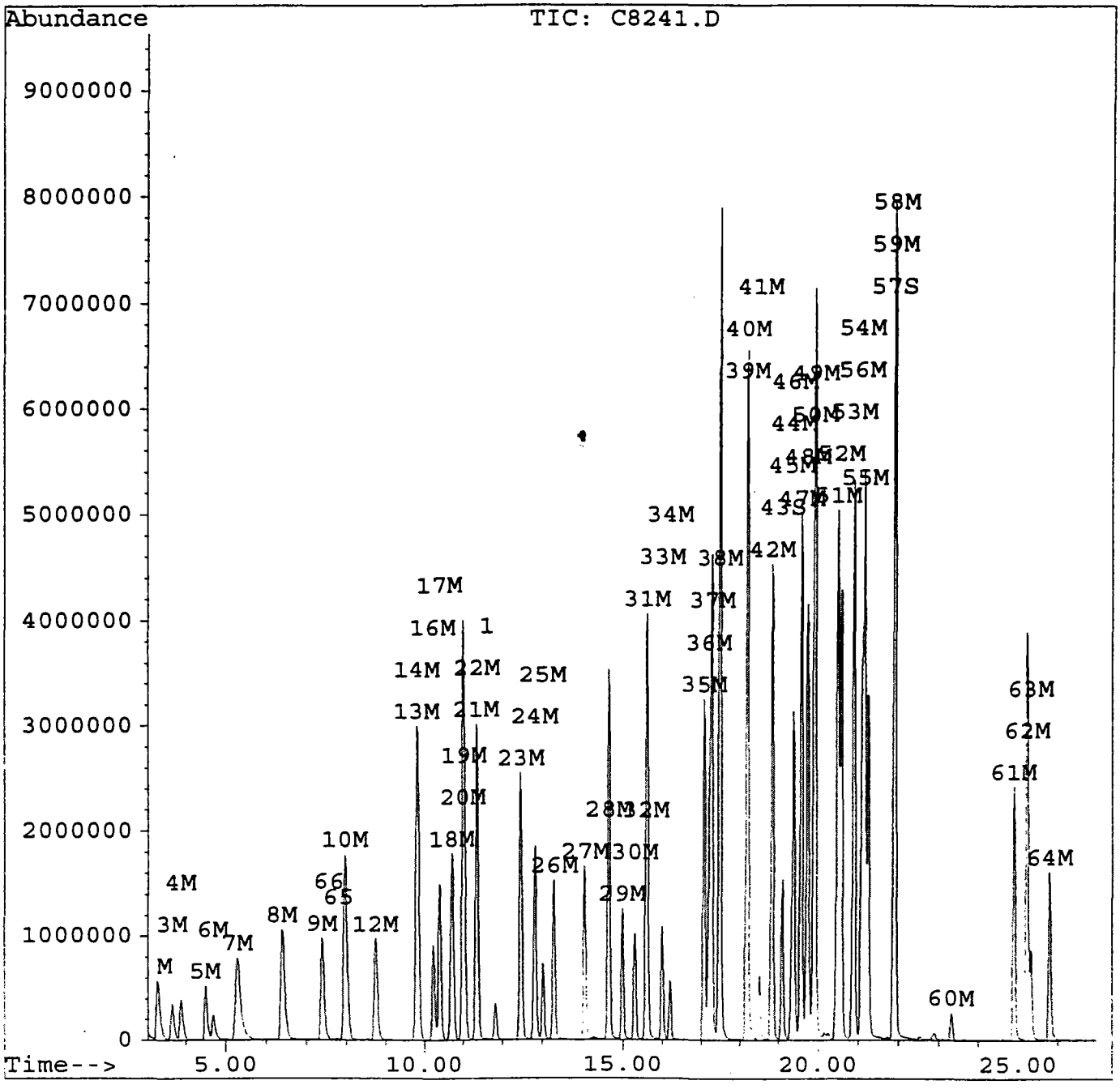
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
41)	Bromoform	18.51	173	635283	39.62	ug/L	m	0
42)	Isopropylbenzene	18.83	105	7325849	39.99	ug/L	m	45
44)	Bromobenzene	19.37	156	1361555	36.68	ug/L	#	90
45)	1,1,2,2-Tetrachloroethane	19.32	83	689989	42.21	ug/L	m	0
46)	1,2,3-Trichloropropane	19.40	75	810580	39.16	ug/L		97
47)	n-Propylbenzene	19.57	91	9540387	40.68	ug/L		98
48)	2-Chlorotoluene	19.73	91	5352127	43.16	ug/L		92
49)	4-Chlorotoluene	19.92	91	6372870	42.85	ug/L	m	98
50)	1,3,5-Trimethylbenzene	19.89	105	6077505	40.88	ug/L		95
51)	tert-Butylbenzene	20.48	119	6270177	38.26	ug/L		87
52)	1,2,4-Trimethylbenzene	20.56	105	5551247	39.38	ug/L		93
53)	sec-Butylbenzene	20.88	105	9291157	39.79	ug/L		97
54)	1,3-Dichlorobenzene	21.08	146	2769985	36.27	ug/L		96
55)	4-Isopropyltoluene	21.15	119	6986951	38.31	ug/L		95
56)	1,4-Dichlorobenzene	21.08	146	2761726	36.15	ug/L		96
58)	1,2-Dichlorobenzene	21.91	146	2026169	34.77	ug/L		97
59)	n-Butylbenzene	21.89	91	7484823	40.07	ug/L		96
60)	1,2-Dibromo-3-chloropropan	23.31	75	186592	48.63	ug/L		86
61)	1,2,4-Trichlorobenzene	24.88	180	1588732	39.22	ug/L		98
62)	Hexachlorobutadiene	25.23	225	1808777	43.53	ug/L		98
63)	Naphthalene	25.32	128	1420685	37.25	ug/L		100
64)	1,2,3-Trichlorobenzene	25.81	180	1119071	40.70	ug/L		100
65)	Methyl-tert butyl ether	8.00	73	1658962	46.44	ug/L	#	100
66)	tert-Butyl Alcohol	7.77	59	51615	14.45	ug/L		100

(#) = qualifier out of range (m) = manual integration

Data File : d:\hpchem\1\data\c8241.d
Acq On : 26 May 95 1:00 pm
Sample : 40 PPB STANDARD
Misc :
Quant Time: May 26 15:35 1995

Vial: 6
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Fri May 26 16:05:53 1995
Response via : Multiple Level Calibration



5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name : EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Lab File ID: C8326.D BFB Injection Date: 6/2/95

Instrument ID: 5972-INSTRUMENT 1 BFB Injection Time: 1424

GC Column: DB-624 X 75M ID: 0.53 (mm) Heated Purge: (Y/N) _____

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	21.6
75	30.0 - 66.0% of mass 95	51.5
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.7
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 120.0% of mass 95	54.0
175	4.0 - 9.0% of mass 174	3.3 (6.2)1
176	93.0 - 101.0% of mass 174	52.2 (96.7)1
177	5.0 - 9.0% of mass 176	3.6 (6.8)2

1-Value is % mass 174 2-Value is % mass 176

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

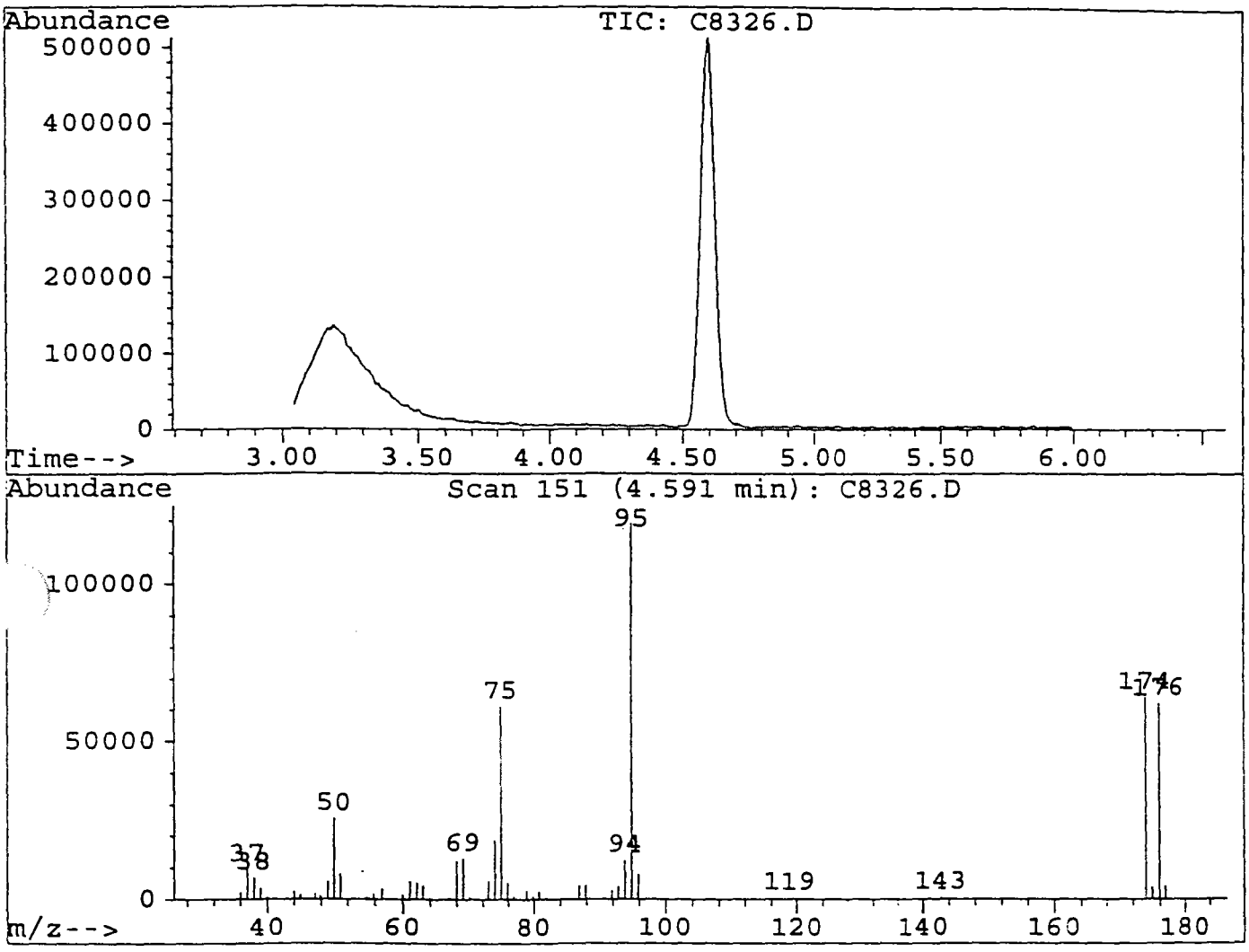
	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD010	10 STND	C8327.D	6/2/95	1438
02	1PPB STD	1PPB STD	C8328.D	6/2/95	1514
03	VBLK01	M. BLANK	C8329.D	6/2/95	1550
04	9523339V	9523339V	C8330.D	6/2/95	1626
05	9523340V	9523340V	C8331.D	6/2/95	1703
06	9523341V	9523341V	C8332.D	6/2/95	1739
07	9523342V	9523342V	C8333.D	6/2/95	1817
08	9523343V	9523343V	C8334.D	6/2/95	1853
09	9523163V	9523163V	C8335.D	6/2/95	1929
10	9523167V	9523167V	C8336.D	6/2/95	2004
11	9523166V	9523166V	C8337.D	6/2/95	2040
12	9523343MS	23343MS	C8338.D	6/2/95	2115
13	9523343MSD	23343MSD	C8339.D	6/2/95	2150
14	10PPBQCS	10PPBQCS	C8340.D	6/2/95	2224
15					
16					
17					
18					
19					
20					
21					
22					

CLPBFB

Data File : D:\HPCHEM\1\DATA\C8326.D
Acq On : 2 Jun 95 2:24 pm
Sample : BFB TUNE
Misc : 25 NG INJECTION

Vial: 1 053
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics



Peak Apex is scan: 151

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	21.6	25664	PASS
75	95	30	60	51.5	61280	PASS
95	95	100	100	100.0	119064	PASS
96	95	5	9	6.7	8035	PASS
173	174	0	2	0.0	0	PASS
174	95	50	100	54.0	64304	PASS
175	174	5	9	6.2	3986	PASS
176	174	95	101	96.7	62160	PASS
177	176	5	9	6.8	4228	PASS

C8326.D VOA524.M Fri Jun 02 14:32:21 1995 VOA

Scan 151 (4.591 min): C8326.D
BFB TUNE

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	2197	49.05	5823	66.95	698	80.80	2447
37.00	9510	49.95	25664	68.05	12370	81.90	588
38.00	7050	50.95	8205	69.05	12960	86.90	4512
39.00	3463	54.85	746	70.05	1017	87.95	4569
40.00	810	55.85	1680	72.95	6031	90.85	578
41.00	531	57.00	3447	73.95	18848	91.95	2776
42.90	532	60.00	1515	74.95	61280	92.95	4108
44.00	2522	61.00	5803	75.95	5237	93.95	12292
44.90	1537	62.00	5273	76.95	1207	94.95	119064
47.05	1979	62.90	4419	78.90	3035	95.95	8035
47.95	1137	64.00	533	79.90	971	118.85	671

Scan 151 (4.591 min): C8326.D
BFB TUNE

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
140.90	632						
142.80	775						
173.95	64304						
174.85	3986						
175.95	62160						
176.85	4228						

7A

VOLATILE CONTINUING CALIBRATION CHECK

(055

Lab Name: EMSL ANALYTICAL Contract: _____

Project No. _____ Site: _____ Location: _____ Group: _____

Instrument ID: 5972-INSTRUMENT 1 Calibration Date: 6/2/95 Time: 1438

Lab File ID: C8327.D Init. Calib. Date(s): 5/26/95 _____

Heated Purge: (Y/N) N Init. Calib. Times: _____ _____

GC Column: DB-624 X 7 ID: 0.53 (mm)

COMPOUND	$\overline{RRF}$	RRF10	MIN RRF	%D	MAX %D
Dichlorodifluoromethane	0.396	0.380		4.0	30.0
Chloromethane	0.233	0.232		0.4	30.0
Vinyl chloride	0.263	0.264		-0.4	30.0
Bromomethane	0.178	0.192		-7.9	30.0
Chloroethane	0.154	0.167		-8.4	30.0
Trichlorofluoromethane	0.588	0.573		2.6	30.0
1,1-Dichloroethene	0.258	0.256		0.8	30.0
Methylene chloride	0.274	0.320		-16.8	30.0
trans-1,2-Dichloroethene	0.273	0.275		-0.7	30.0
1,1-Dichloroethane	0.545	0.556		-2.0	30.0
2,2-Dichloropropane	0.534	0.534		0.0	30.0
cis-1,2-Dichloroethene	0.257	0.253		1.6	30.0
Bromochloromethane	0.090	0.082		8.9	30.0
Chloroform	0.512	0.502		2.0	30.0
1,1,1-Trichloroethane	0.566	0.553		2.3	30.0
Carbon tetrachloride	0.526	0.494		6.1	30.0
1,1-Dichloropropene	0.495	0.499		-0.8	30.0
Benzene	0.871	0.866		0.6	30.0
1,2-Dichloroethane	0.214	0.200		6.5	30.0
Trichloroethene	0.386	0.376		2.6	30.0
1,2-Dichloropropane	0.285	0.286		-0.4	30.0
Dibromomethane	0.115	0.109		5.2	30.0
Bromodichloromethane	0.396	0.380		4.0	30.0
cis-1,3-Dichloropropene	0.342	0.328		4.1	30.0
Toluene	0.619	0.623		-0.6	30.0
trans-1,3-Dichloropropene	0.236	0.227		3.8	30.0
1,1,2-Trichloroethane	0.110	0.105		4.5	30.0
Tetrachloroethene	0.388	0.364		6.2	30.0
1,3-Dichloropropane	0.219	0.212		3.2	30.0
Dibromochloromethane	0.215	0.197		8.4	30.0
1,2-Dibromomethane	0.152	0.144		5.3	30.0
Chlorobenzene	0.644	0.620		3.7	30.0
1,1,1,2-Tetrachloroethane	0.256	0.240		6.3	30.0
Ethylbenzene	1.302	1.285		1.3	30.0
Xylene (para & meta)	0.468	0.461		1.5	30.0
Xylene (Ortho)	0.414	0.402		2.9	30.0

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: EMSL ANALYTICAL Contract: _____

Project No. _____ Site: _____ Location: _____ Group: _____

Instrument ID: 5972-INSTRUMENT 1 Calibration Date: 6/2/95 Time: 1438

Lab File ID: C8327.D Init. Calib. Date(s): 5/26/95 _____

Heated Purge: (Y/N) N Init. Calib. Times: _____ _____

GC Column: DB-624 X 7 ID: 0.53 (mm)

COMPOUND	$\overline{RRF}$	RRF10	MIN RRF	%D	MAX %D
Styrene	0.641	0.610		4.8	30.0
Bromoform	0.105	0.094		10.5	30.0
Isopropylbenzene	1.330	1.288		3.2	30.0
Bromobenzene	0.240	0.224		6.7	30.0
1,1,2,2-Tetrachloroethane	0.118	0.120		-1.7	30.0
1,2,3-Trichloropropane	0.143	0.134		6.3	30.0
n-Propylbenzene	1.731	1.721		0.6	30.0
2-Chlorotoluene	0.960	0.928		3.3	30.0
4-Chlorotoluene	1.140	1.086		4.7	30.0
1,3,5-Trimethylbenzene	1.101	1.070		2.8	30.0
tert-Butylbenzene	1.142	1.106		3.2	30.0
1,2,4-Trimethylbenzene	1.009	0.994		1.5	30.0
sec-Butylbenzene	1.693	1.641		3.1	30.0
1,3-Dichlorobenzene	0.489	0.456		6.7	30.0
4-Isopropyltoluene	1.264	1.234		2.4	30.0
1,4-Dichlorobenzene	0.485	0.442		8.9	30.0
1,2-Dichlorobenzene	0.364	0.339		6.9	30.0
n-Butylbenzene	1.355	1.360		-0.4	30.0
1,2-Dibromo-3-chloropropane	0.030	0.028		6.7	30.0
1,2,4-Trichlorobenzene	0.268	0.237		11.6	30.0
Hexachlorobutadiene	0.323	0.287		11.1	30.0
Naphthalene	0.232	0.203		12.5	30.0
1,2,3-Trichlorobenzene	0.187	0.170		9.1	30.0
4-Bromofluorobenzene	0.499	0.488		2.2	30.0
1,2-Dichlorobenzene-d4	0.228	0.224		1.8	30.0

Evaluate Continuing Calibration Report

C 057

Data File : D:\HPCHEM\1\DATA\C8327.D
Acq On : 2 Jun 95 2:38 pm
Sample : 10 PPB CHK STANDARD
Misc :

Vial: 2
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue May 30 13:15:19 1995
Response via : Multiple Level Calibration

Min. RRF : 0.001 Min. Rel. Area : 50% Max. R.T. Dev 0.30min
Max. RRF Dev : 30% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
1		Fluorobenzene	1.000	1.000	0.0	99	0.00
2	M	Dichlorodifluoromethane	0.396	0.380	4.0	90	0.02
3	M	Chloromethane	0.233	0.232	0.4	93	0.03
4	M	Vinyl chloride	0.263	0.264	-0.6	96	0.02
5	M	Bromomethane	0.178	0.192	-7.7	97	0.04
6	M	Chloroethane	0.154	0.167	-8.3	97	0.02
7	M	Trichlorofluoromethane	0.588	0.573	2.5	95	0.02
8	M	1,1-Dichloroethene	0.258	0.256	0.8	96	0.03
9	M	Methylene chloride	0.274	0.320	-16.7	90	0.00
10	M	trans-1,2-Dichloroethene	0.273	0.275	-0.9	98	0.00
1		Hexane	0.000	0.000#	0.0	0#	-9.46#
12	M	1,1-Dichloroethane	0.545	0.556	-2.1	102	0.00
13	M	2,2-Dichloropropane	0.534	0.534	0.1	97	0.00
4	M	cis-1,2-Dichloroethene	0.257	0.253	1.5	96	0.00
5		2-Butanone	0.000	0.000#	0.0	0#	0.04
16	M	Bromochloromethane	0.090	0.082	9.1	93	0.01
7	M	Chloroform	0.512	0.502	1.9	98	0.02
8	M	1,1,1-Trichloroethane	0.566	0.553	2.4	97	0.00
19	M	Carbon tetrachloride	0.526	0.494	6.0	95	0.00
20	M	1,1-Dichloropropene	0.495	0.499	-0.9	98	0.00
1	M	Benzene	0.871	0.866	0.5	97	0.01
22	M	1,2-Dichloroethane	0.214	0.200	6.5	95	0.00
23	M	Trichloroethene	0.386	0.376	2.7	96	0.01
4	M	1,2-Dichloropropane	0.285	0.286	-0.4	101	0.01
5	M	Dibromomethane	0.115	0.109	5.9	96	0.00
26	M	Bromodichloromethane	0.396	0.380	4.0	98	0.00
7	M	cis-1,3-Dichloropropene	0.342	0.328	4.1	98	0.01
8	M	Toluene	0.619	0.623	-0.8	103	0.01
29	M	trans-1,3-Dichloropropene	0.236	0.227	4.0	98	0.00
30	M	1,1,2-Trichloroethane	0.110	0.105	4.7	98	0.00
1	M	Tetrachloroethene	0.388	0.364	6.1	94	0.00
32	M	1,3-Dichloropropane	0.219	0.212	3.3	99	0.01
33	M	Dibromochloromethane	0.215	0.197	8.4	96	0.01
4	M	1,2-Dibromomethane	0.152	0.144	5.6	99	0.00
5	M	Chlorobenzene	0.644	0.620	3.7	97	0.00
36	M	1,1,1,2-Tetrachloroethane	0.256	0.240	6.4	97	0.01
7	M	Ethylbenzene	1.302	1.285	1.3	100	0.00
8	M	Xylene (para & meta)	0.468	0.461	1.5	99	0.00
39	M	Xylene (Ortho)	0.414	0.402	2.8	98	0.00
4	M	Styrene	0.641	0.610	4.8	97	0.00
1	M	Bromoform	0.105	0.094	10.4	95	-0.01
42	M	Isopropylbenzene	1.330	1.288	3.2	98	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

058

Data File : D:\HPCHEM\1\DATA\C8327.D Vial: 2
Acq On : 2 Jun 95 2:38 pm Operator: SRK
Sample : 10 PPB CHK STANDARD Inst : 5972 - In
Misc : Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue May 30 13:15:19 1995
Response via : Multiple Level Calibration

Min. RRF : 0.001 Min. Rel. Area : 50% Max. R.T. Dev 0.30min
Max. RRF Dev : 30% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
43	S	4-Bromofluorobenzene	0.499	0.488	2.2	101	0.01
44	M	Bromobenzene	0.240	0.224	6.8	96	0.00
45	M	1,1,2,2-Tetrachloroethane	0.118	0.120	-2.1	107	-0.01
46	M	1,2,3-Trichloropropane	0.143	0.134	6.5	96	-0.01
47	M	n-Propylbenzene	1.731	1.721	0.6	102	0.00
48	M	2-Chlorotoluene	0.960	0.928	3.4	100	0.00
49	M	4-Chlorotoluene	1.140	1.086	4.7	97	0.00
50	M	1,3,5-Trimethylbenzene	1.101	1.070	2.9	100	-0.01
51	M	tert-Butylbenzene	1.142	1.106	3.2	99	0.00
52	M	1,2,4-Trimethylbenzene	1.009	0.994	1.5	100	0.00
53	M	sec-Butylbenzene	1.693	1.641	3.1	100	0.00
54	M	1,3-Dichlorobenzene	0.489	0.456	6.8	97	0.00
55	M	4-Isopropyltoluene	1.264	1.234	2.4	100	0.01
56	M	1,4-Dichlorobenzene	0.485	0.442	8.8	95	-0.01
57	S	1,2-Dichlorobenzene-d4	0.228	0.224	1.7	102	-0.01
58	M	1,2-Dichlorobenzene	0.364	0.339	7.1	96	0.00
59	M	n-Butylbenzene	1.355	1.360	-0.3	104	0.00
60	M	1,2-Dibromo-3-chloropropane	0.030	0.028	4.9	105	0.01
61	M	1,2,4-Trichlorobenzene	0.268	0.237	11.4	92	0.00
62	M	Hexachlorobutadiene	0.323	0.287	11.1	94	0.00
63	M	Naphthalene	0.232	0.203	12.6	92	0.00
64	M	1,2,3-Trichlorobenzene	0.187	0.170	9.1	97	0.00
65		Methyl-tert butyl ether	0.292	0.285	2.3	99	0.02
66		tert-Butyl Alcohol	0.004	0.004	13.3	99	-0.01

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report

Data File : d:\hpchem\1\data\c8327.d
Acq On : 2 Jun 95 2:38 pm
Sample : 10 PPB CHK STANDARD
Misc :
Quant Time: Jun 18 10:56 1995

Vial: 2
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue May 30 13:15:19 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	11.84	96	767042	5.00	ug/L		0.00
System Monitoring Compounds							%Recovery
43) 4-Bromofluorobenzene	19.10	95	374057	4.89	ug/L		97.77%
57) 1,2-Dichlorobenzene-d4	21.87	152	171801	4.92	ug/L		98.31%
Target Compounds							Qvalue
2) Dichlorodifluoromethane	3.30	85	583501	9.60	ug/L		98
3) Chloromethane	3.67	50	356438	9.96	ug/L		94
4) Vinyl chloride	3.89	62	405685	10.06	ug/L		99
5) Bromomethane	4.56	94	293817	10.77	ug/L		95
6) Chloroethane	4.78	64	255912	10.83	ug/L		100
7) Trichlorofluoromethane	5.36	101	878729	9.75	ug/L		99
8) 1,1-Dichloroethene	6.45	96	392865	9.92	ug/L		93
9) Methylene chloride	7.42	84	490286	11.67	ug/L	m	98
10) trans-1,2-Dichloroethene	7.97	96	422170	10.09	ug/L		96
12) 1,1-Dichloroethane	8.77	63	853713	10.21	ug/L		94
13) 2,2-Dichloropropane	9.83	77	818786	9.99	ug/L		99
14) cis-1,2-Dichloroethene	9.83	96	388232	9.85	ug/L		95
16) Bromochloromethane	10.25	128	125536	9.09	ug/L		95
17) Chloroform	10.41	83	769901	9.81	ug/L		100
18) 1,1,1-Trichloroethane	10.72	97	847947	9.76	ug/L		98
19) Carbon tetrachloride	11.03	117	758452	9.40	ug/L		99
20) 1,1-Dichloropropene	11.01	75	765585	10.09	ug/L		100
21) Benzene	11.36	78	1329023	9.95	ug/L		99
22) 1,2-Dichloroethane	11.36	62	306504	9.35	ug/L		98
23) Trichloroethene	12.49	95	576242	9.73	ug/L		99
24) 1,2-Dichloropropane	12.84	63	439106	10.04	ug/L		99
25) Dibromomethane	13.03	93	166758	9.41	ug/L		96
26) Bromodichloromethane	13.30	83	583419	9.60	ug/L		99
27) cis-1,3-Dichloropropene	14.07	75	503699	9.59	ug/L		98
28) Toluene	14.65	92	956341	10.08	ug/L		97
29) trans-1,3-Dichloropropene	14.99	75	348125	9.60	ug/L		99
30) 1,1,2-Trichloroethane	15.30	83	161436	9.53	ug/L		94
31) Tetrachloroethene	15.61	166	558578	9.39	ug/L		97
32) 1,3-Dichloropropane	15.59	76	324642	9.67	ug/L		98
33) Dibromochloromethane	16.00	129	301927	9.16	ug/L		94
34) 1,2-Dibromomethane	16.19	107	220690	9.44	ug/L		99
35) Chlorobenzene	17.07	112	951369	9.63	ug/L		98
36) 1,1,1,2-Tetrachloroethane	17.21	131	367447	9.36	ug/L		96
37) Ethylbenzene	17.26	91	1971802	9.87	ug/L		97
38) Xylene (para & meta)	17.47	106	1413580	19.71	ug/L		100
39) Xylene (Ortho)	18.17	106	617126	9.72	ug/L		89
40) Styrene	18.19	104	936258	9.52	ug/L		100

(#) = qualifier out of range (m) = manual integration

Data File : d:\hpchem\1\data\c8327.d
Acq On : 2 Jun 95 2:38 pm
Sample : 10 PPB CHK STANDARD
Misc :
Quant Time: Jun 18 10:56 1995

Vial: 2
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue May 30 13:15:19 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
41)	Bromoform	18.50	173	144872	8.96	ug/L		88
42)	Isopropylbenzene	18.83	105	1975228	9.68	ug/L	m	0
44)	Bromobenzene	19.38	156	342999	9.32	ug/L		92
45)	1,1,2,2-Tetrachloroethane	19.31	83	184638	10.21	ug/L		98
46)	1,2,3-Trichloropropane	19.39	75	205309	9.35	ug/L	#	46
47)	n-Propylbenzene	19.57	91	2639604	9.94	ug/L		100
48)	2-Chlorotoluene	19.73	91	1423366	9.66	ug/L		97
49)	4-Chlorotoluene	19.91	91	1666752	9.53	ug/L		84
50)	1,3,5-Trimethylbenzene	19.88	105	1640914	9.71	ug/L		96
51)	tert-Butylbenzene	20.48	119	1696559	9.68	ug/L		96
52)	1,2,4-Trimethylbenzene	20.56	105	1524127	9.85	ug/L		98
53)	sec-Butylbenzene	20.88	105	2517372	9.69	ug/L		99
54)	1,3-Dichlorobenzene	21.08	146	699189	9.32	ug/L		98
55)	4-Isopropyltoluene	21.15	119	1892941	9.76	ug/L		97
56)	1,4-Dichlorobenzene	21.23	146	678761	9.12	ug/L		91
58)	1,2-Dichlorobenzene	21.91	146	519547	9.29	ug/L		97
59)	n-Butylbenzene	21.89	91	2085804	10.03	ug/L		99
60)	1,2-Dibromo-3-chloropropan	23.32	75	43673	9.51	ug/L		87
61)	1,2,4-Trichlorobenzene	24.89	180	364226	8.86	ug/L		99
62)	Hexachlorobutadiene	25.23	225	440816	8.89	ug/L		100
63)	Naphthalene	25.33	128	311057	8.74	ug/L		100
64)	1,2,3-Trichlorobenzene	25.81	180	260555	9.09	ug/L		94
65)	Methyl-tert butyl ether	8.01	73	437846	9.77	ug/L		93
66)	tert-Butyl Alcohol	7.71	59	11905	17.33	ug/L		100

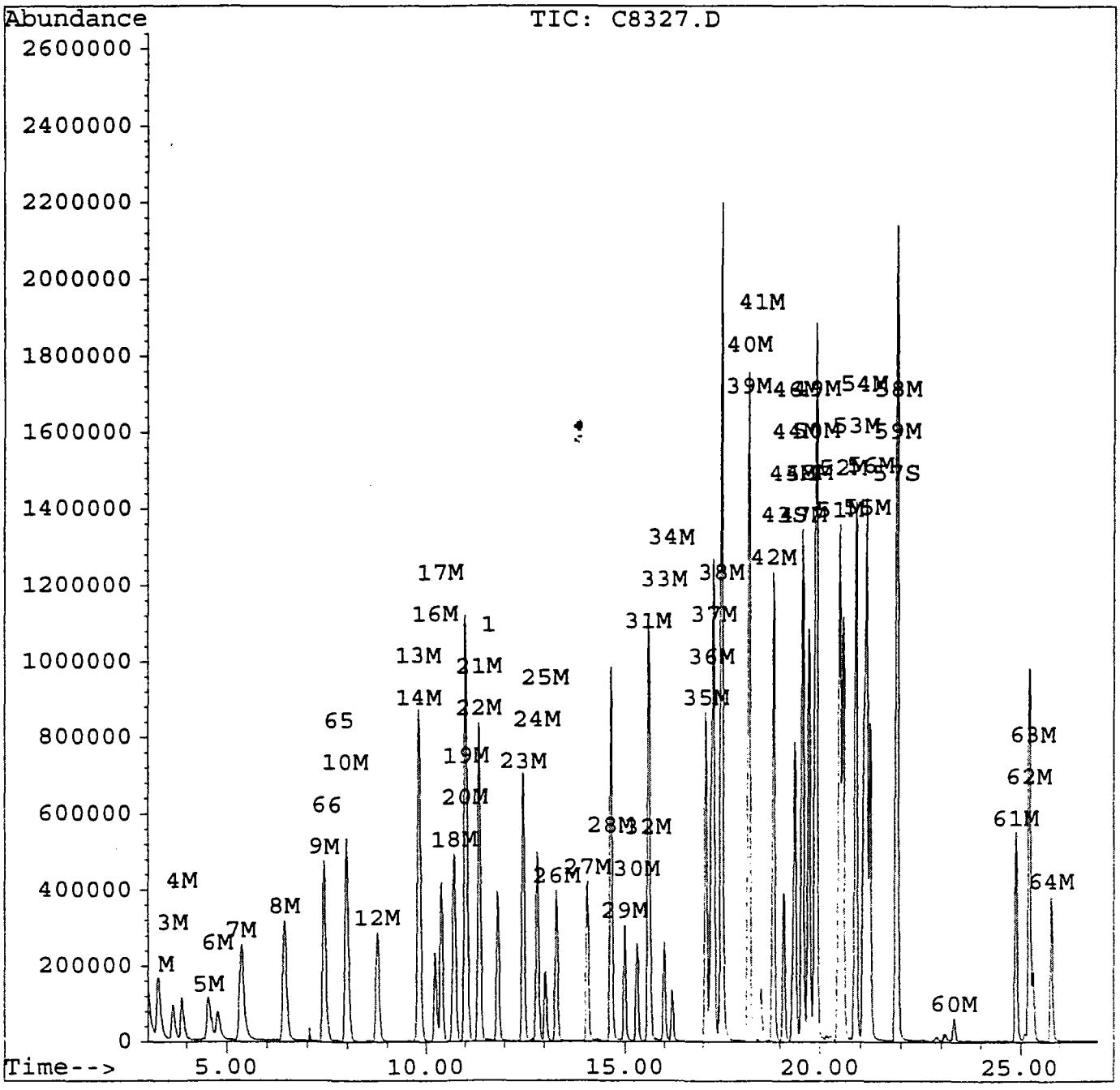
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c8327.d
Acq On : 2 Jun 95 2:38 pm
Sample : 10 PPB CHK STANDARD
Misc :
Quant Time: Jun 18 10:56 1995

Vial: 2
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue May 30 13:15:19 1995
Response via : Multiple Level Calibration



Quantitation Report

002

Data File : d:\hpchem\1\data\c8328.d
Acq On : 2 Jun 95 3:14 pm
Sample : 1 PPB CHK STANDARD
Misc :
Quant Time: Jun 2 15:42 1995

Vial: 3
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue May 30 13:15:19 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	11.84	96	701997	5.00	ug/L		0.00
System Monitoring Compounds							%Recovery
43) 4-Bromofluorobenzene	19.10	95	392100	5.60	ug/L		111.98%
57) 1,2-Dichlorobenzene-d4	21.88	152	188735	5.90	ug/L		118.00%
Target Compounds							Qvalue
2) Dichlorodifluoromethane	3.31	85	57067	1.03	ug/L		95
3) Chloromethane	3.68	50	33627	1.03	ug/L		81
4) Vinyl chloride	3.89	62	37514	1.02	ug/L		82
5) Bromomethane	4.55	94	31476	1.26	ug/L		99
6) Chloroethane	4.78	64	22965	1.06	ug/L		95
7) Trichlorofluoromethane	5.37	101	81182	0.98	ug/L		89
8) 1,1-Dichloroethene	6.46	96	35879	0.99	ug/L	#	82
9) Methylene chloride	7.42	84	288375	7.50	ug/L		98
10) trans-1,2-Dichloroethene	7.98	96	38379	1.00	ug/L		94
12) 1,1-Dichloroethane	8.78	63	83513	1.09	ug/L		96
13) 2,2-Dichloropropane	9.83	77	77701	1.04	ug/L		97
14) cis-1,2-Dichloroethene	9.84	96	37729	1.05	ug/L		92
16) Bromochloromethane	10.25	128	14427	1.14	ug/L		90
17) Chloroform	10.41	83	80218	1.12	ug/L		94
18) 1,1,1-Trichloroethane	10.73	97	79180	1.00	ug/L		97
19) Carbon tetrachloride	11.03	117	70373	0.95	ug/L		97
20) 1,1-Dichloropropene	11.02	75	70922	1.02	ug/L		96
21) Benzene	11.36	78	133400	1.09	ug/L		99
22) 1,2-Dichloroethane	11.36	62	34735	1.16	ug/L		99
23) Trichloroethene	12.49	95	57891	1.07	ug/L		93
24) 1,2-Dichloropropane	12.83	63	48388	1.21	ug/L		89
25) Dibromomethane	13.03	93	19457	1.20	ug/L	#	82
26) Bromodichloromethane	13.30	83	62965	1.13	ug/L		95
27) cis-1,3-Dichloropropene	14.06	75	53234	1.11	ug/L		98
28) Toluene	14.64	92	100393	1.16	ug/L		99
29) trans-1,3-Dichloropropene	14.99	75	36216	1.09	ug/L		96
30) 1,1,2-Trichloroethane	15.29	83	17810	1.15	ug/L		86
31) Tetrachloroethene	15.61	166	54046	0.99	ug/L		91
32) 1,3-Dichloropropane	15.59	76	38148	1.24	ug/L		97
33) Dibromochloromethane	16.00	129	32067	1.06	ug/L		99
34) 1,2-Dibromomethane	16.19	107	24684	1.15	ug/L		94
35) Chlorobenzene	17.07	112	98460	1.09	ug/L		97
36) 1,1,1,2-Tetrachloroethane	17.20	131	39264	1.09	ug/L		87
37) Ethylbenzene	17.26	91	192542	1.05	ug/L		100
38) Xylene (para & meta)	17.46	106	139158	2.12	ug/L		88
39) Xylene (Ortho)	18.17	106	62542	1.08	ug/L		93
40) Styrene	18.18	104	96581	1.07	ug/L		94

(#) = qualifier out of range (m) = manual integration

Quantitation Report

063

Data File : d:\hpchem\1\data2\c8328.d
Acq On : 2 Jun 95 3:14 pm
Sample : 1 PPB CHK STANDARD
Misc :
Quant Time: Jun 2 15:42 1995

Vial: 3
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue May 30 13:15:19 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
41)	Bromoform	18.50	173	18185	1.23	ug/L		83
42)	Isopropylbenzene	18.83	105	190069	1.02	ug/L		92
44)	Bromobenzene	19.37	156	38075	1.13	ug/L		95
45)	1,1,2,2-Tetrachloroethane	19.32	83	21192	1.28	ug/L		94
46)	1,2,3-Trichloropropane	19.40	75	26851	1.34	ug/L	#	78
47)	n-Propylbenzene	19.57	91	258094	1.06	ug/L		96
48)	2-Chlorotoluene	19.72	91	155848	1.16	ug/L		99
49)	4-Chlorotoluene	19.91	91	181185	1.13	ug/L		79
50)	1,3,5-Trimethylbenzene	19.89	105	160790	1.04	ug/L		98
51)	tert-Butylbenzene	20.48	119	168154	1.05	ug/L		99
52)	1,2,4-Trimethylbenzene	20.56	105	158808	1.12	ug/L		97
53)	sec-Butylbenzene	20.87	105	253326	1.07	ug/L		99
54)	1,3-Dichlorobenzene	21.08	146	79249	1.15	ug/L		93
55)	4-Isopropyltoluene	21.14	119	187231	1.05	ug/L		97
56)	1,4-Dichlorobenzene	21.23	146	79905	1.17	ug/L		92
58)	1,2-Dichlorobenzene	21.91	146	59283	1.16	ug/L		91
59)	n-Butylbenzene	21.89	91	208059	1.09	ug/L		98
60)	1,2-Dibromo-3-chloropropan	23.31	75	5339	1.27	ug/L	#	75
61)	1,2,4-Trichlorobenzene	24.89	180	46194	1.23	ug/L		97
62)	Hexachlorobutadiene	25.23	225	47903	1.06	ug/L		96
63)	Naphthalene	25.34	128	45226	1.39	ug/L		100
64)	1,2,3-Trichlorobenzene	25.81	180	37447	1.43	ug/L		90
65)	Methyl-tert butyl ether	8.01	73	56568	1.38	ug/L		91

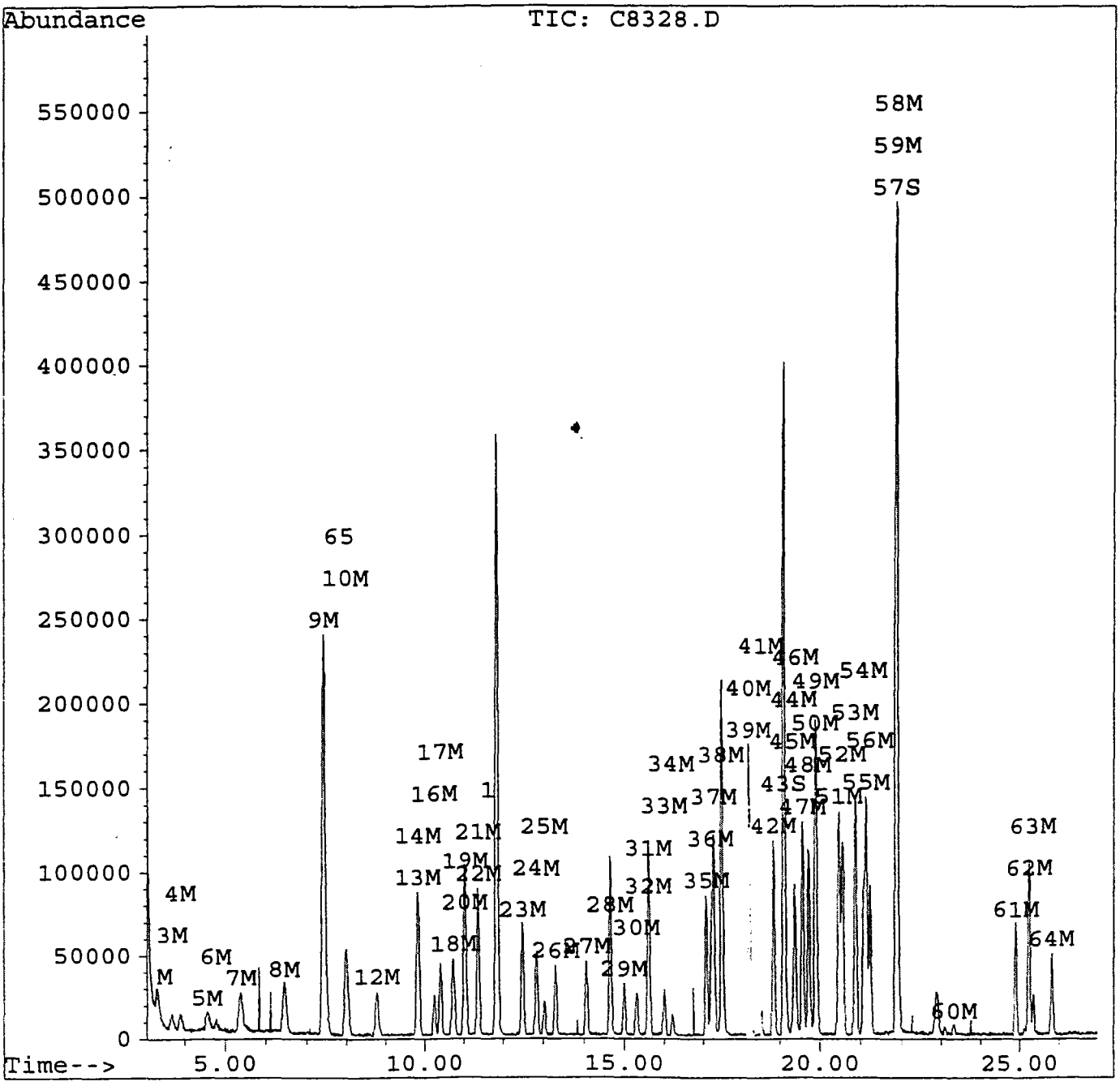
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data2\c8328.d
Acq On : 2 Jun 95 3:14 pm
Sample : 1 PPB CHK STANDARD
Misc :
Quant Time: Jun 2 15:42 1995

Vial: 3
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue May 30 13:15:19 1995
Response via : Multiple Level Calibration



Quantitation Report

(065

Data File : d:\hpchem\1\data\c8340.d
Acq On : 2 Jun 95 10:24 pm
Sample : 10 PPB QCS
Misc : 25 ML
Quant Time: Jun 18 11:14 1995

Vial: 15
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue May 30 13:15:19 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	11.86	96	672699	5.00	ug/L	0.02
System Monitoring Compounds						%Recovery
43) 4-Bromofluorobenzene	19.11	95	343138	5.11	ug/L	102.27%
57) 1,2-Dichlorobenzene-d4	21.90	152	159135	5.19	ug/L	103.83%
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.31	85	373874	7.01	ug/L	96
3) Chloromethane	3.68	50	242950	7.74	ug/L	97
4) Vinyl chloride	3.89	62	304858	8.62	ug/L	92
5) Bromomethane	4.55	94	223328	9.34	ug/L	96
6) Chloroethane	4.79	64	195151	9.41	ug/L	97
7) Trichlorofluoromethane	5.36	101	738479	9.34	ug/L	97
8) 1,1-Dichloroethene	6.46	96	329465	9.49	ug/L	95
9) Methylene chloride	7.43	84	474810	12.89	ug/L	96
10) trans-1,2-Dichloroethene	7.99	96	359156	9.79	ug/L	98
12) 1,1-Dichloroethane	8.78	63	749063	10.21	ug/L	97
13) 2,2-Dichloropropane	9.85	77	562813	7.83	ug/L	98
14) cis-1,2-Dichloroethene	9.85	96	337128	9.75	ug/L	98
16) Bromochloromethane	10.26	128	124511	10.28	ug/L	98
17) Chloroform	10.42	83	698552	10.15	ug/L	97
18) 1,1,1-Trichloroethane	10.74	97	754191	9.90	ug/L	98
19) Carbon tetrachloride	11.05	117	686973	9.71	ug/L	97
20) 1,1-Dichloropropene	11.03	75	655965	9.86	ug/L	97
21) Benzene	11.39	78	1139374	9.73	ug/L	99
22) 1,2-Dichloroethane	11.39	62	298197	10.37	ug/L	96
23) Trichloroethene	12.50	95	501167	9.65	ug/L	98
24) 1,2-Dichloropropane	12.85	63	397241	10.36	ug/L	100
25) Dibromomethane	13.05	93	161828	10.42	ug/L	98
26) Bromodichloromethane	13.32	83	559683	10.51	ug/L	98
27) cis-1,3-Dichloropropene	14.08	75	438904	9.53	ug/L	99
28) Toluene	14.66	92	819426	9.85	ug/L	98
29) trans-1,3-Dichloropropene	15.00	75	311680	9.80	ug/L	98
30) 1,1,2-Trichloroethane	15.32	83	152649	10.28	ug/L	99
31) Tetrachloroethene	15.62	166	490520	9.41	ug/L	96
32) 1,3-Dichloropropane	15.60	76	305203	10.37	ug/L	100
33) Dibromochloromethane	16.01	129	296590	10.26	ug/L	96
34) 1,2-Dibromomethane	16.21	107	207953	10.14	ug/L	94
35) Chlorobenzene	17.09	112	877680	10.13	ug/L	98
36) 1,1,1,2-Tetrachloroethane	17.22	131	338926	9.85	ug/L	92
37) Ethylbenzene	17.28	91	1722310	9.83	ug/L	100
38) Xylene (para & meta)	17.49	106	1228905	19.53	ug/L	93
39) Xylene (Ortho)	18.19	106	559418	10.05	ug/L	98
40) Styrene	18.20	104	840320	9.74	ug/L	95

(#) = qualifier out of range (m) = manual integration

Quantitation Report

056

Data File : d:\hpchem\1\data\c8340.d
Acq On : 2 Jun 95 10:24 pm
Sample : 10 PPB QCS
Misc : 25 ML
Quant Time: Jun 18 11:14 1995

Vial: 15
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue May 30 13:15:19 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
41)	Bromoform	18.52	173	149526	10.54	ug/L		86
42)	Isopropylbenzene	18.85	105	1770301	9.89	ug/L		91
44)	Bromobenzene	19.39	156	325111	10.08	ug/L		94
45)	1,1,2,2-Tetrachloroethane	19.33	83	173819	10.96	ug/L		92
46)	1,2,3-Trichloropropane	19.41	75	195899	10.17	ug/L	#	59
47)	n-Propylbenzene	19.58	91	2250521	9.66	ug/L		99
48)	2-Chlorotoluene	19.74	91	1385729	10.72	ug/L		98
49)	4-Chlorotoluene	19.93	91	1503669	9.80	ug/L		84
50)	1,3,5-Trimethylbenzene	19.90	105	1384988	9.35	ug/L		100
51)	tert-Butylbenzene	20.50	119	1501089	9.77	ug/L		100
52)	1,2,4-Trimethylbenzene	20.58	105	1369962	10.09	ug/L		99
53)	sec-Butylbenzene	20.90	105	2149114	9.44	ug/L		100
54)	1,3-Dichlorobenzene	21.10	146	648339	9.85	ug/L		97
55)	4-Isopropyltoluene	21.16	119	1594504	9.37	ug/L		98
56)	1,4-Dichlorobenzene	21.25	146	660068	10.11	ug/L		91
58)	1,2-Dichlorobenzene	21.93	146	511792	10.44	ug/L		97
59)	n-Butylbenzene	21.91	91	1685715	9.25	ug/L		99
60)	1,2-Dibromo-3-chloropropan	23.35	75	43634	10.83	ug/L		94
61)	1,2,4-Trichlorobenzene	24.91	180	365459	10.14	ug/L		93
62)	Hexachlorobutadiene	25.25	225	401437	9.23	ug/L		99
63)	Naphthalene	25.36	128	346845	11.12	ug/L		100
64)	1,2,3-Trichlorobenzene	25.83	180	262367	10.44	ug/L		91

(#) = qualifier out of range (m) = manual integration

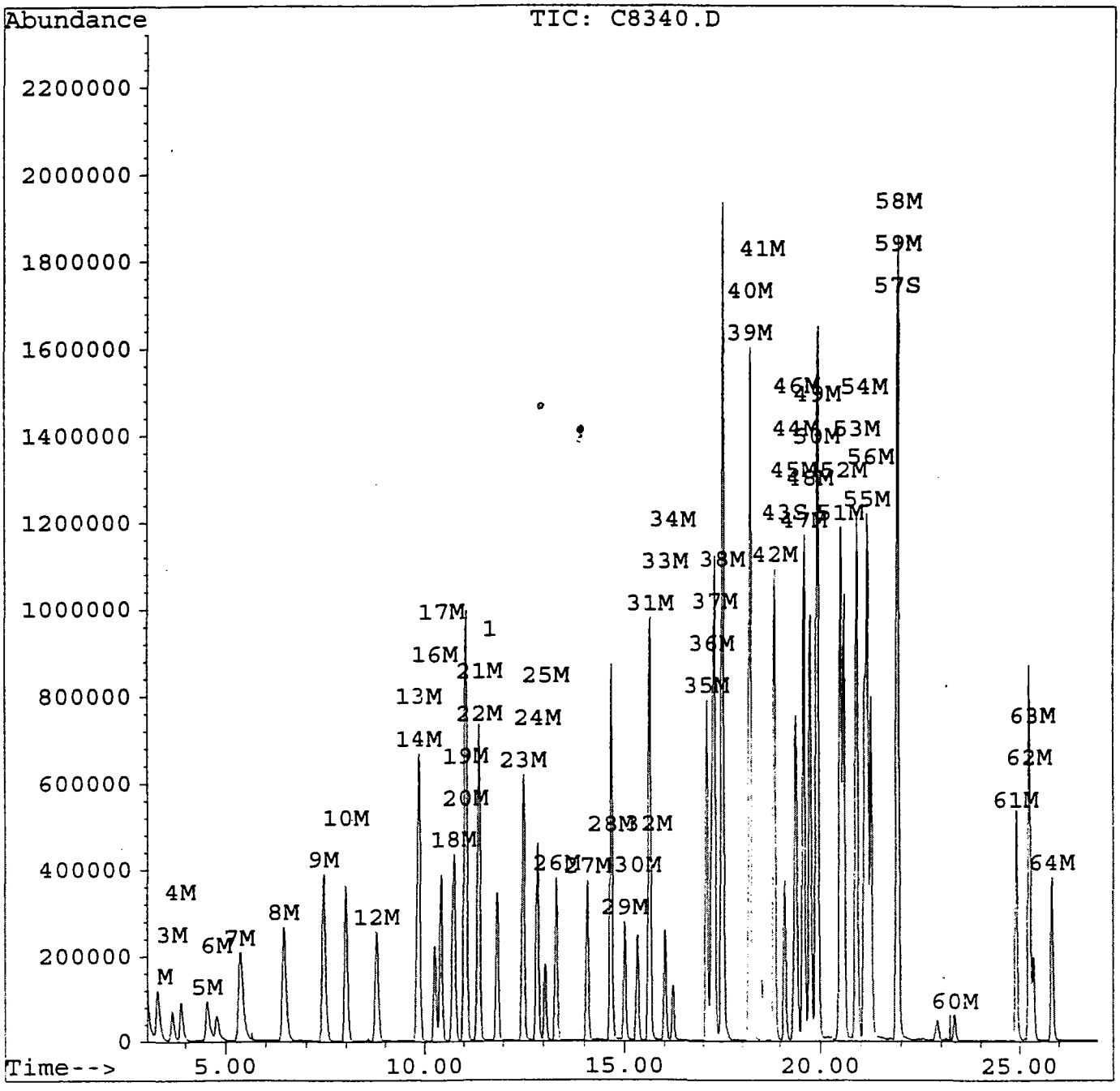
Quantitation Report

(057

Data File : d:\hpchem\1\data\c8340.d
Acq On : 2 Jun 95 10:24 pm
Sample : 10 PPB QCS
Misc : 25 ML
Quant Time: Jun 18 11:14 1995

Vial: 15
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue May 30 13:15:19 1995
Response via : Multiple Level Calibration



8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

068

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Lab File ID (Standard): C8327.D Date Analyzed: 6/2/95

Instrument ID: 5972-INSTRUMENT 1 Time Analyzed: 1438

GC Column: DB-624 X 75M ID: 0.53 (mm) Heated Purge (Y/N) N

		IS1 (FBZ) AREA #	RT #	AREA #	RT #	AREA #	RT #
	8 HOUR STD	767042	11.84				
	UPPER LIMIT	1534084	12.34				
	LOWER LIMIT	383521	11.34				
	SAMPLE NO.						
01	1PPB STD	701997	11.84				
02	VBLK01	689722	11.84				
03	9523339V	691197	11.84				
04	9523340V	590801	11.84				
05	9523341V	685338	11.84				
06	9523342V	725874	11.84				
07	9523343V	693564	11.84				
08	9523163V	708098	11.84				
09	9523167V	674824	11.85				
10	9523166V	688621	11.84				
11	9523343MS	668860	11.85				
12	9523343MSD	671183	11.85				
13	10PPBQCS	672699	11.86				
14							
15							
16							
17							
18							
19							
20							
21							
22							

IS1 (FBZ) = Fluorobenzene

AREA UPPER LIMIT = +30% of internal standard area
AREA LOWER LIMIT = -30% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

1A
VOLATILE ORGANIC ANALYSIS DATA SHEET
EPA 524.2

Lab Name: EMSL ANALYTICAL
Matrix (soil/water): WATER
Sample wt/vol: 25 mL
Level (low/med): LOW
% Moisture: not dec.: NA
GC Column: DB-624 x 75m ID: 0.53mm
Soil Extract Volume: NA

Lab Sample ID: 9523340 TB
Lab File ID: C8331.D
Date Received: 05/22/95
Date Analyzed: 06/02/95
Dilution Factor: 1
Soil Aliquot Volume: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	COMMENT
75-71-8	Dichlorodifluoromethane	.50	U
74-87-3	Chloromethane	.50	U
74-83-9	Bromomethane	.50	U
75-01-4	Vinyl Chloride	.50	U
75-00-3	Chloroethane	.50	U
75-69-4	Trichlorofluoromethane	.50	U
75-09-2	Methylene Chloride	6.4	B
156-60-65	trans-1,2-Dichloroethene	.50	U
75-35-4	1,1-Dichloroethene	.50	U
75-34-3	1,1-Dichloroethane	.50	U
594-20-7	2,2-Dichloropropane	.50	U
74-97-1	Bromochloromethane	.50	U
156-59-2	cis-1,2-Dichloroethene	.50	U
67-66-3	Chloroform	.50	U
563-58-6	1,1-Dichloropropene	.50	U
107-06-2	1,2-Dichloroethane	.50	U
71-55-6	1,1,1-Trichloroethane	.50	U
74-95-3	Dibromomethane	.50	U
56-23-1	Carbon Tetrachloride	.50	U
75-27-4	Bromodichloromethane	.50	U
78-87-1	1,2-Dichloropropane	.50	U
10061-01-1	cis-1,3-Dichloropropene	.50	U
142-28-9	1,3-Dichloropropane	.50	U
79-01-6	Trichloroethene	.50	U
124-48-1	Dibromochloromethane	.50	U
79-00-1	1,1,2-Trichloroethane	.50	U
71-43-2	Benzene	.50	U
10061-02-6	trans-1,3-Dichloropropene	.50	U
75-25-2	Bromoform	.50	U
630-20-6	1,1,1,2-Tetrachloroethane	.50	U
127-18-4	Tetrachloroethene	.50	U
79-34-1	1,1,2,2-Tetrachloroethane	.50	U
108-88-3	Toluene	.80	
106-93-4	1,2-Dibromoethane	.50	U
108-90-7	Chlorobenzene	.50	U
100-41-4	Ethylbenzene	.50	U
1330-29-7	Xylene(total)	.50	U

U= Not Detected

1A
VOLATILE ORGANIC ANALYSIS DATA SHEET
EPA 524.2

Lab Name: EMSL ANALYTICAL
Matrix (soil/water): WATER
Sample wt/vol: 25 mL
Level (low/med): LOW
% Moisture: not dec.: NA
GC Column: DB-624 x 75m ID: 0.53mm
Soil Extract Volume: NA

Lab Sample ID: 9523340 TB
Lab File ID: C8331.D
Date Received: 05/22/95
Date Analyzed: 06/02/95
Dilution Factor: 1
Soil Aliquot Volume: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	COMMENT
100-42-1	Styrene	.50	U
98-82-8	Isopropylbenzene	.50	U
108-86-1	Bromobenzene	.50	U
96-18-4	1,2,3-Trichloropropane	.50	U
103-65-1	n-Propylbenzene	.50	U
95-49-8	2-Chlorotoluene	.60	
106-43-4	4-Chlorotoluene	.50	U
108-67-8	1,3,5-Trimethylbenzene	.50	U
98-06-6	tert-Butylbenzene	.50	U
95-63-6	1,2,4-Trimethylbenzene	.50	U
135-98-8	sec-Butylbenzene	.50	U
541-73-1	1,3-Dichlorobenzene	.50	U
106-46-7	1,4-Dichlorobenzene	.50	U
99-87-6	4-Isopropyltoluene	.50	U
95-50-1	1,2-Dichlorobenzene	.50	U
104-51-8	n-Butylbenzene	.50	U
96-12-8	1,2-Dibromo-3-chloropropane	.50	U
120-82-1	1,2,4-Trichlorobenzene	.50	U
87-68-3	Hexachlorobutadiene	.50	U
91-20-3	Naphthalene	.50	U
87-61-6	1,2,3-Trichlorobenzene	.50	U

COMMENT
U= Not Detected

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO. 071

9523340V
TB

Lab Name: EMSL ANALYTICAL Contract: _____

Project No. _____ Site: _____ Location: _____ Group: _____

Matrix: (soil/water) WATER Lab Sample ID: 9523340V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C8331.D

Level: (low/med) LOW Date Received: 5/22/95

% Moisture: not dec. NA Date Analyzed: 6/2/95

GC Column: DB-624 X 75M ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 1 Concentration Units: (ug/L or ug/Kg) ug/L

CAS Number	Compound Name	RT	Est. Conc.	Q
1.	Column Bleed	22.87	1	J
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

Quantitation Report

Data File : d:\hpchem\1\data\c8331.d
Acq On : 2 Jun 95 5:03 pm
Sample : 9523340
Misc : 25 ML
Quant Time: Jun 3 14:13 1995

Vial: 6
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue May 30 13:15:19 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	11.84	96	590801	5.00	ug/L	0.00
System Monitoring Compounds						%Recovery
43) 4-Bromofluorobenzene	19.09	95	304161	5.16	ug/L	103.22%
57) 1,2-Dichlorobenzene-d4	21.88	152	144866	5.38	ug/L	107.62%
Target Compounds						Qvalue
9) Methylene chloride	7.42	84	207678	6.42	ug/L	99
28) Toluene	14.66	92	56756	0.78	ug/L	91
48) 2-Chlorotoluene	19.73	91	72162	0.64	ug/L	92

(#) = qualifier out of range (m) = manual integration

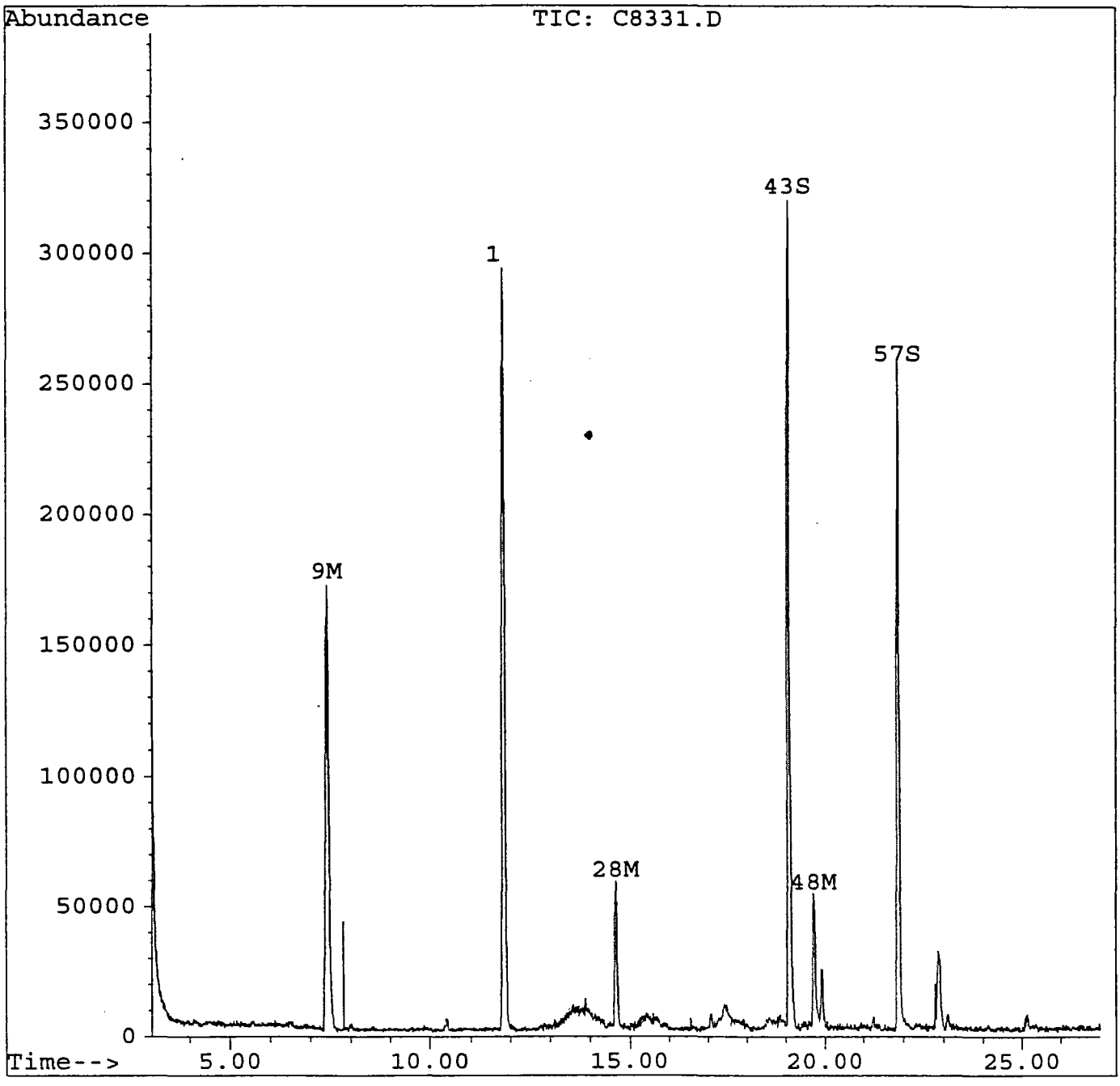
Quantitation Report

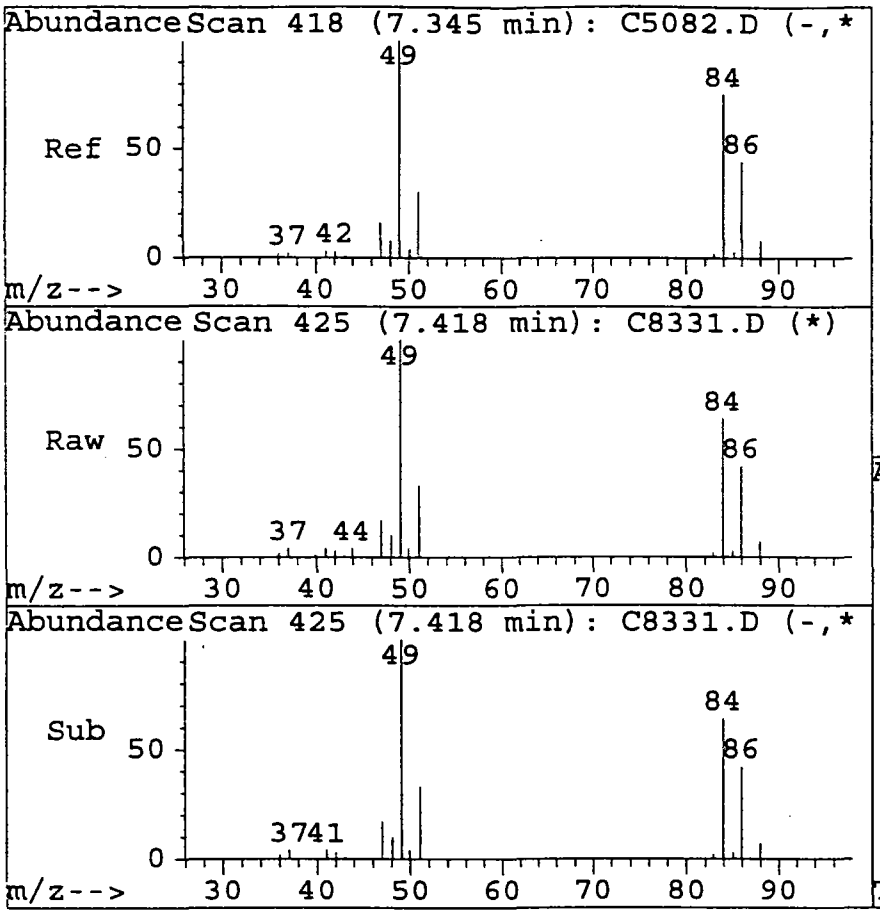
(073

Data File : d:\hpchem\1\data\c8331.d
Acq On : 2 Jun 95 5:03 pm
Sample : 9523340
Misc : 25 ML
Quant Time: Jun 3 14:13 1995

Vial: 6
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue May 30 13:15:19 1995
Response via : Multiple Level Calibration



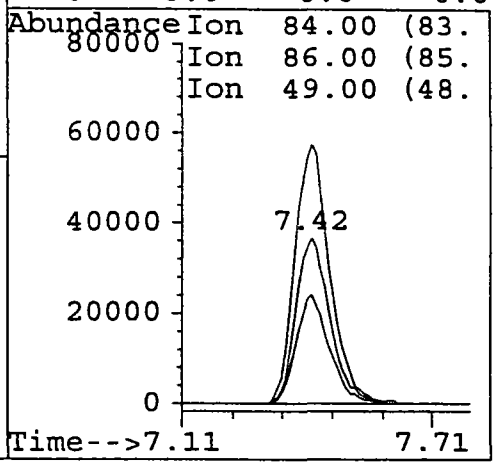


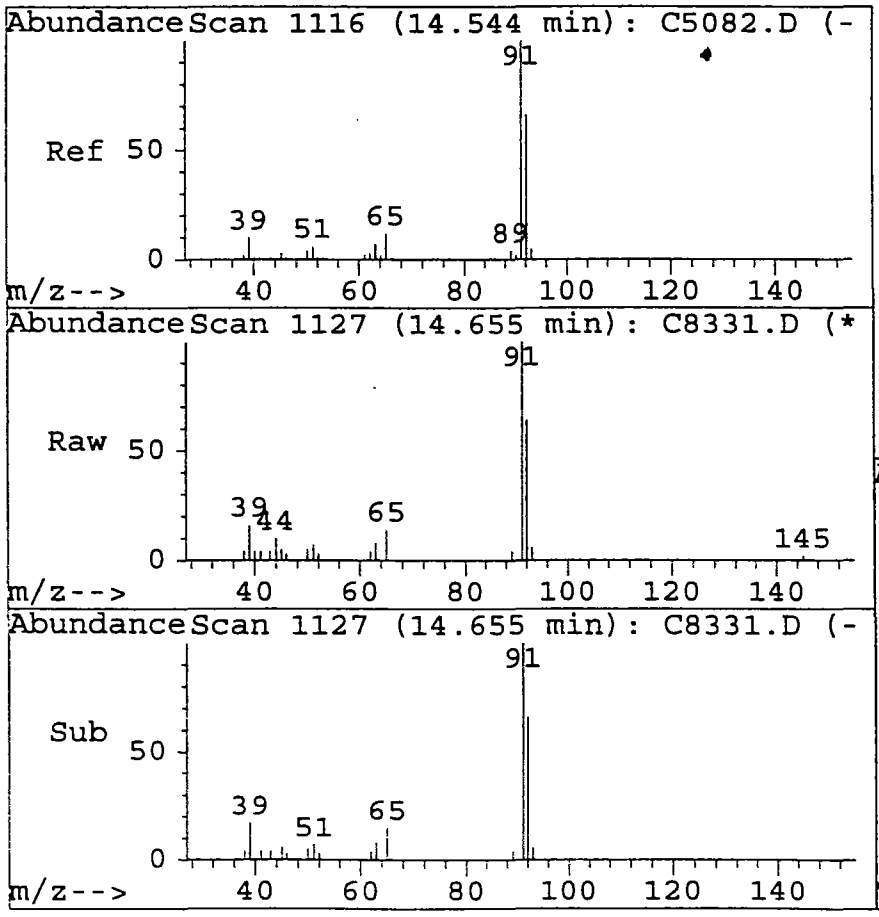
#9 (074

Methylene chloride
Concen: 6.42 ug/L
RT: 7.42 min Scan# 425
Delta R.T. 0.01 min
Lab File: c8331.d
Acq: 2 Jun 95 5:03 pm

Tgt Ion:84 Resp: 207678

Ion	Ratio	Lower	Upper
84	100		
86	65.6	43.1	83.1
49	156.6	136.3	176.3
0	0.0	0.0	0.0

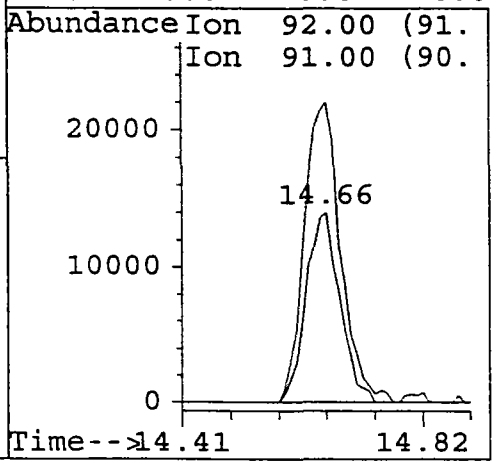


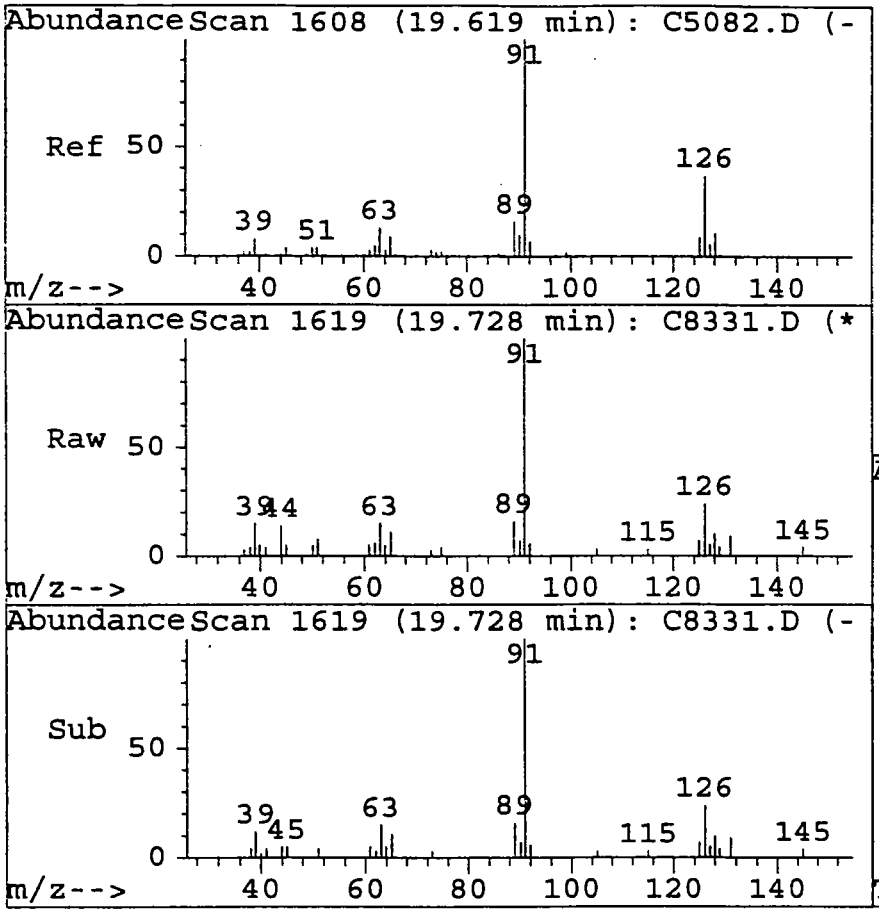


#28
Toluene
Concen: 0.78 ug/L
RT: 14.66 min Scan# 1127
Delta R.T. 0.01 min
Lab File: c8331.d
Acq: 2 Jun 95 5:03 pm

Tgt Ion:92 Resp: 56756

Ion	Ratio	Lower	Upper
92	100		
91	157.0	149.4	189.4
0	0.0	0.0	0.0
0	0.0	0.0	0.0

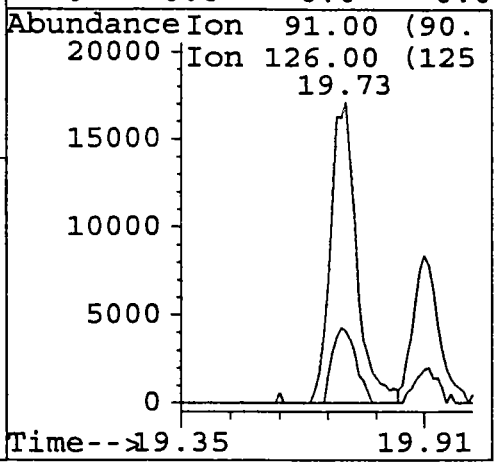




#48
2-Chlorotoluene
Concen: 0.64 ug/L
RT: 19.73 min Scan# 1619
Delta R.T. 0.00 min
Lab File: c8331.d
Acq: 2 Jun 95 5:03 pm

Tgt Ion:91 Resp: 72162

Ion	Ratio	Lower	Upper
91	100		
126	23.9	8.1	48.1
0	0.0	0.0	0.0
0	0.0	0.0	0.0



Library Search Compound Report

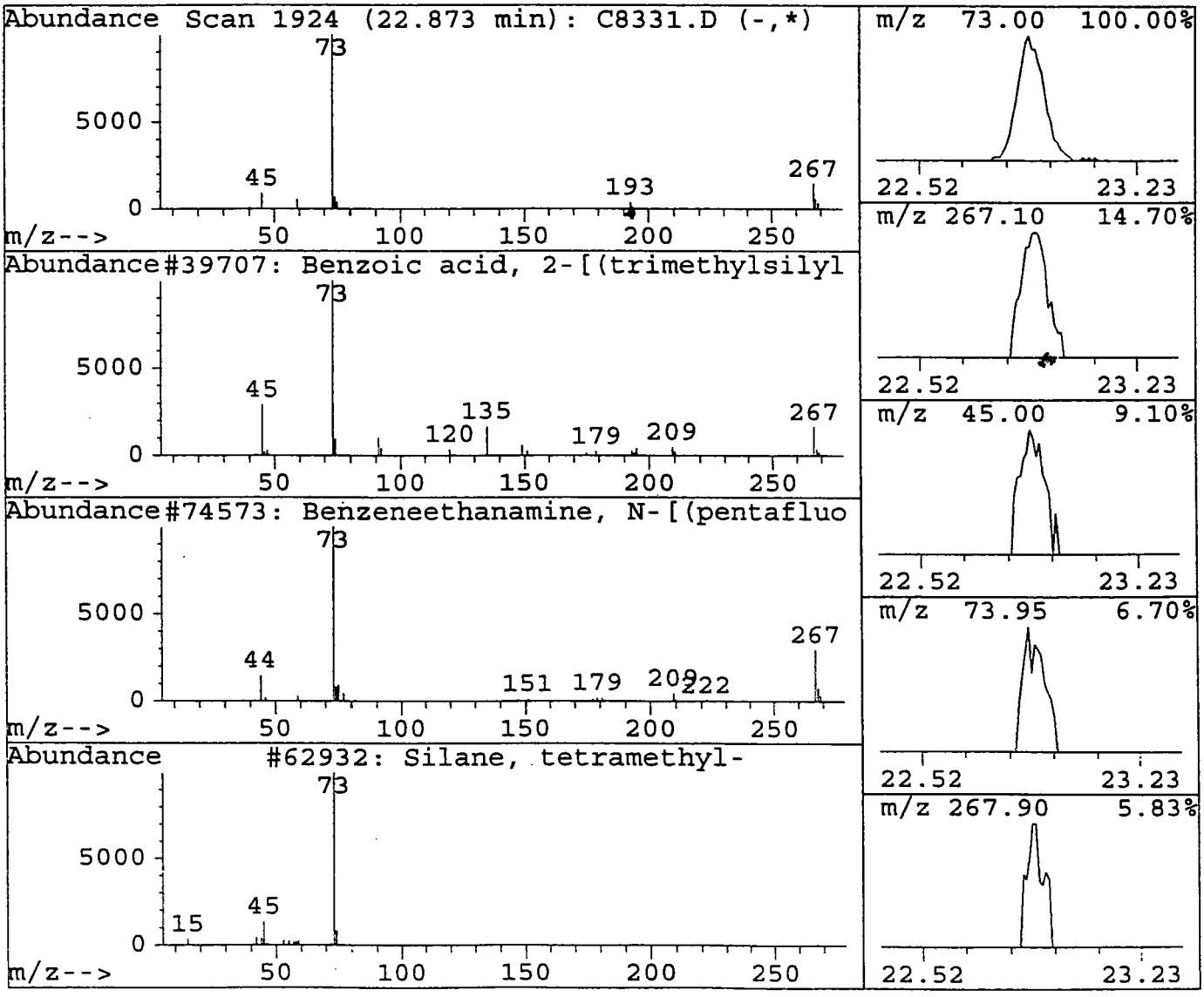
Data File : d:\hpchem\1\data\c8331.d
Acq On : 2 Jun 95 5:03 pm
Sample : 9523340
Misc : 25 ML

Vial: 6
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Library : C:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
22.87	0.60 ug/L	161877	Fluorobenzene	11.84

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Benzoic acid, 2-[(trimethylsilyl)ox	39707	003789-85-3	9
2	Benzeneethanamine, N-[(pentafluorop	74573	055429-85-1	4
3	Silane, tetramethyl-	62932	000075-76-3	2
4	N-Ethylformamide	292	000627-45-2	4
5	Silane, 9H-fluoren-9-yltrimethyl-	31629	007385-10-6	2



1A
VOLATILE ORGANIC ANALYSIS DATA SHEET
EPA 524.2

Lab Name: EMSL ANALYTICAL
Matrix (soil/water): WATER
Sample wt/vol: 25 mL
Level (low/med): LOW
% Moisture: not dec.: NA
GC Column: DB-624 x 75m ID: 0.53mm
Soil Extract Volume: NA

Lab Sample ID: 9523341 FB
Lab File ID: C8332.D
Date Received: 05/22/95
Date Analyzed: 06/02/95
Dilution Factor: 1
Soil Aliquot Volume: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	COMMENT
75-71-8	Dichlorodifluoromethane	.50	U
74-87-3	Chloromethane	.50	U
74-83-9	Bromomethane	.50	U
75-01-4	Vinyl Chloride	.50	U
75-00-3	Chloroethane	.50	U
75-69-4	Trichlorofluoromethane	.50	U
75-09-2	Methylene Chloride	6.3	B
156-60-65	trans-1,2-Dichloroethene	.50	U
75-35-4	1,1-Dichloroethene	.50	U
75-34-3	1,1-Dichloroethane	.50	U
594-20-7	2,2-Dichloropropane	.50	U
74-97-1	Bromochloromethane	.50	U
156-59-2	cis-1,2-Dichloroethene	.50	U
67-66-3	Chloroform	.50	U
563-58-6	1,1-Dichloropropene	.50	U
107-06-2	1,2-Dichloroethane	.50	U
71-55-6	1,1,1-Trichloroethane	.50	U
74-95-3	Dibromomethane	.50	U
56-23-1	Carbon Tetrachloride	.50	U
75-27-4	Bromodichloromethane	.50	U
78-87-1	1,2-Dichloropropane	.50	U
10061-01-1	cis-1,3-Dichloropropene	.50	U
142-28-9	1,3-Dichloropropane	.50	U
79-01-6	Trichloroethene	.50	U
124-48-1	Dibromochloromethane	.50	U
79-00-1	1,1,2-Trichloroethane	.50	U
71-43-2	Benzene	.50	U
10061-02-6	trans-1,3-Dichloropropene	.50	U
75-25-2	Bromoform	.50	U
630-20-6	1,1,1,2-Tetrachloroethane	.50	U
127-18-4	Tetrachloroethene	.50	U
79-34-1	1,1,2,2-Tetrachloroethane	.50	U
108-88-3	Toluene	.50	U
106-93-4	1,2-Dibromoethane	.50	U
108-90-7	Chlorobenzene	.50	U
100-41-4	Ethylbenzene	.50	U
1330-29-7	Xylene(total)	.50	U

U= Not Detected

1A
VOLATILE ORGANIC ANALYSIS DATA SHEET
EPA 524.2

Lab Name: EMSL ANALYTICAL
Matrix (soil/water): WATER
Sample wt/vol: 25 mL
Level (low/med): LOW
% Moisture: not dec.: NA
GC Column: DB-624 x 75m ID: 0.53mm
Soil Extract Volume: NA

Lab Sample ID: 9523341 FB
Lab File ID: C8332.D
Date Received: 05/22/95
Date Analyzed: 06/02/95
Dilution Factor: 1
Soil Aliquot Volume: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	COMMENT
100-42-1	Styrene	.50	U
98-82-8	Isopropylbenzene	.50	U
108-86-1	Bromobenzene	.50	U
96-18-4	1,2,3-Trichloropropane	.50	U
103-65-1	n-Propylbenzene	.50	U
95-49-8	2-Chlorotoluene	.50	U
106-43-4	4-Chlorotoluene	.50	U
108-67-8	1,3,5-Trimethylbenzene	.50	U
98-06-6	tert-Butylbenzene	.50	U
95-63-6	1,2,4-Trimethylbenzene	.50	U
135-98-8	sec-Butylbenzene	.50	U
541-73-1	1,3-Dichlorobenzene	.50	U
106-46-7	1,4-Dichlorobenzene	.50	U
99-87-6	4-Isopropyltoluene	.50	U
95-50-1	1,2-Dichlorobenzene	.50	U
104-51-8	n-Butylbenzene	.50	U
96-12-8	1,2-Dibromo-3-chloropropane	.50	U
120-82-1	1,2,4-Trichlorobenzene	.50	U
87-68-3	Hexachlorobutadiene	.50	U
91-20-3	Naphthalene	.50	U
87-61-6	1,2,3-Trichlorobenzene	.50	U

COMMENT
U= Not Detected

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO. 079

9523341V
FB

Lab Name: EMSL ANALYTICAL Contract: _____

Project No. _____ Site: _____ Location: _____ Group: _____

Matrix: (soil/water) WATER Lab Sample ID: 9523341V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C8332.D

Level: (low/med) LOW Date Received: 5/22/95

% Moisture: not dec. NA Date Analyzed: 6/2/95

GC Column: DB-624 X 75M ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 1 Concentration Units: (ug/L or ug/Kg) ug/L

CAS Number	Compound Name	RT	Est. Conc.	Q
1.	Column Bleed	22.87	1	J
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

Quantitation Report

090

Data File : d:\hpchem\1\data\c8332.d
Acq On : 2 Jun 95 5:39 pm
Sample : 9523341
Misc : 25 ML
Quant Time: Jun 3 14:14 1995

Vial: 7
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue May 30 13:15:19 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	11.84	96	685338	5.00	ug/L	0.00
System Monitoring Compounds						%Recovery
43) 4-Bromofluorobenzene	19.09	95	354996	5.19	ug/L	103.85%
57) 1,2-Dichlorobenzene-d4	21.87	152	175930	5.63	ug/L	112.67%
Target Compounds						Qvalue
9) Methylene chloride	7.41	84	236338	6.30	ug/L	97

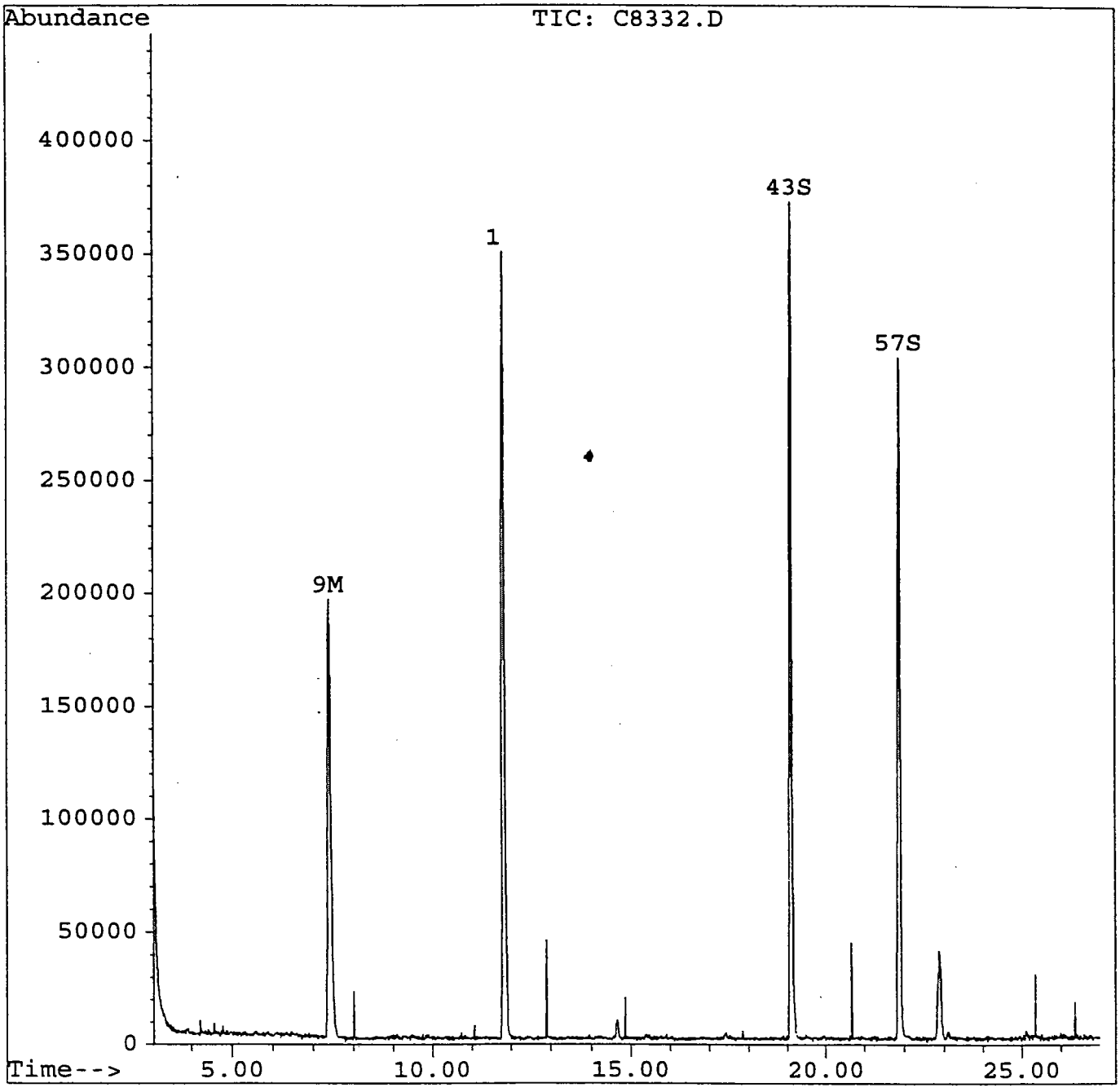
(#) = qualifier out of range (m) = manual integration

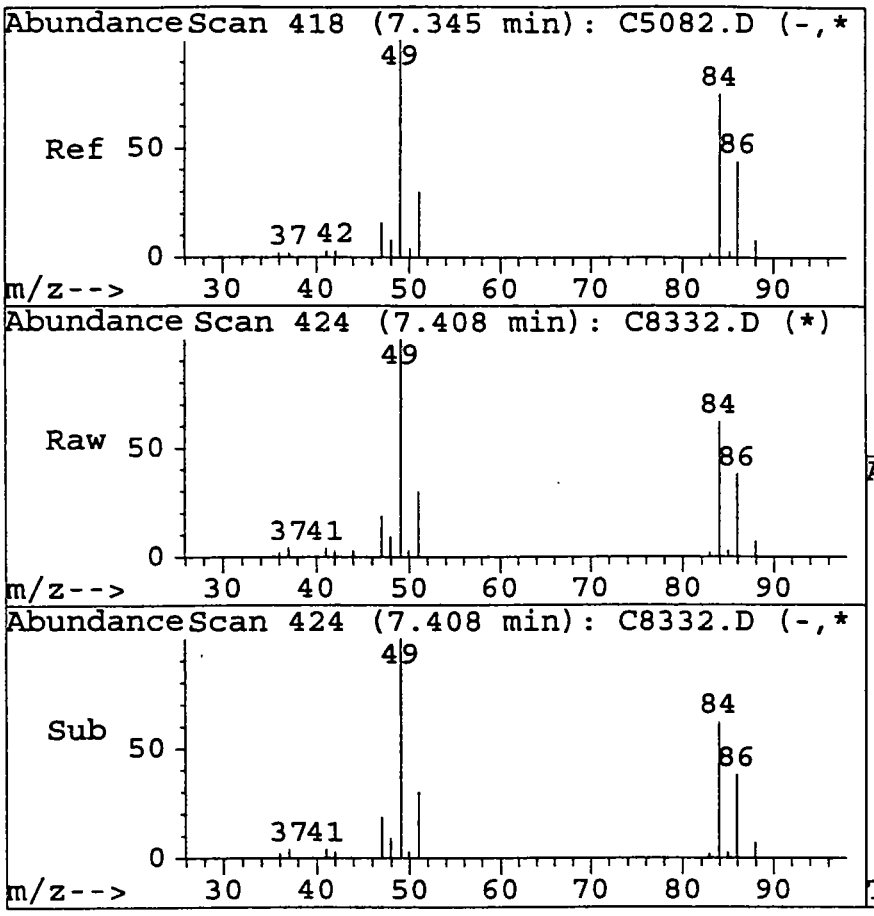
Quantitation Report

Data File : d:\hpchem\1\data\c8332.d
Acq On : 2 Jun 95 5:39 pm
Sample : 9523341
Misc : 25 ML
Quant Time: Jun 3 14:14 1995

Vial: 7
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue May 30 13:15:19 1995
Response via : Multiple Level Calibration

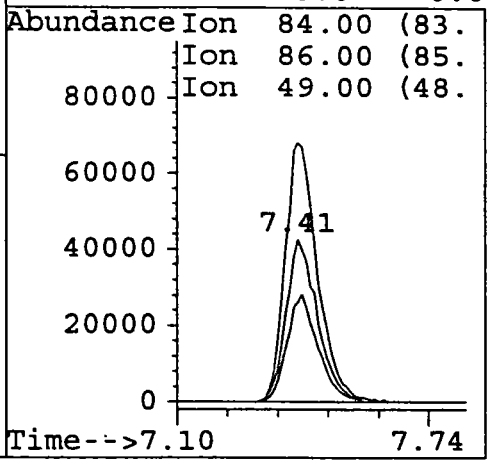




#9
Methylene chloride
Concen: 6.30 ug/L
RT: 7.41 min Scan# 424
Delta R.T. 0.00 min
Lab File: c8332.d
Acq: 2 Jun 95 5:39 pm

Tgt Ion:84 Resp: 236338

Ion	Ratio	Lower	Upper
84	100		
86	61.2	43.1	83.1
49	160.2	136.3	176.3
0	0.0	0.0	0.0



1A
VOLATILE ORGANIC ANALYSIS DATA SHEET
EPA 524.2

Lab Name: EMSL ANALYTICAL
Matrix (soil/water): WATER
Sample wt/vol: 25 mL
Level (low/med): LOW
% Moisture: not dec.: NA
GC Column: DB-624 x 75m ID: 0.53mm
Soil Extract Volume: NA

Lab Sample ID: 9523343 MW1-2931-785
Lab File ID: C8334.D
Date Received: 05/22/95
Date Analyzed: 06/02/95
Dilution Factor: 1
Soil Aliquot Volume: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	COMMENT
75-71-8	Dichlorodifluoromethane	.50	U
74-87-3	Chloromethane	.50	U
74-83-9	Bromomethane	.50	U
75-01-4	Vinyl Chloride	.50	U
75-00-3	Chloroethane	.50	U
75-69-4	Trichlorofluoromethane	.50	U
75-09-2	Methylene Chloride	1.4	B
156-60-65	trans-1,2-Dichloroethene	.50	U
75-35-4	1,1-Dichloroethene	.50	U
75-34-3	1,1-Dichloroethane	.50	U
594-20-7	2,2-Dichloropropane	.50	U
74-97-1	Bromochloromethane	.50	U
156-59-2	cis-1,2-Dichloroethene	.50	U
67-66-3	Chloroform	.50	U
563-58-6	1,1-Dichloropropene	.50	U
107-06-2	1,2-Dichloroethane	.50	U
71-55-6	1,1,1-Trichloroethane	.50	U
74-95-3	Dibromomethane	.50	U
56-23-1	Carbon Tetrachloride	.50	U
75-27-4	Bromodichloromethane	.50	U
78-87-1	1,2-Dichloropropane	.50	U
10061-01-1	cis-1,3-Dichloropropene	.50	U
142-28-9	1,3-Dichloropropane	.50	U
79-01-6	Trichloroethene	.50	U
124-48-1	Dibromochloromethane	.50	U
79-00-1	1,1,2-Trichloroethane	.50	U
71-43-2	Benzene	.50	U
10061-02-6	trans-1,3-Dichloropropene	.50	U
75-25-2	Bromoform	.50	U
630-20-6	1,1,1,2-Tetrachloroethane	.50	U
127-18-4	Tetrachloroethene	.50	U
79-34-1	1,1,2,2-Tetrachloroethane	.50	U
108-88-3	Toluene	.50	U
106-93-4	1,2-Dibromoethane	.50	U
108-90-7	Chlorobenzene	.50	U
100-41-4	Ethylbenzene	.50	U
1330-29-7	Xylene(total)	.50	U

U= Not Detected

1A
VOLATILE ORGANIC ANALYSIS DATA SHEET
EPA 524.2

Lab Name: EMSL ANALYTICAL
Matrix (soil/water): WATER
Sample wt/vol: 25 mL
Level (low/med): LOW
% Moisture: not dec.: NA
GC Column: DB-624 x 75m ID: 0.53mm
Soil Extract Volume: NA

Lab Sample ID: 9523343 MW1-293/785
Lab File ID: C8334.D
Date Received: 05/22/95
Date Analyzed: 06/02/95
Dilution Factor: 1
Soil Aliquot Volume: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	COMMENT
100-42-1	Styrene	.50	U
98-82-8	Isopropylbenzene	.50	U
108-86-1	Bromobenzene	.50	U
96-18-4	1,2,3-Trichloropropane	.50	U
103-65-1	n-Propylbenzene	.50	U
95-49-8	2-Chlorotoluene	.50	U
106-43-4	4-Chlorotoluene	.50	U
108-67-8	1,3,5-Trimethylbenzene	.50	U
98-06-6	tert-Butylbenzene	.50	U
95-63-6	1,2,4-Trimethylbenzene	.50	U
135-98-8	sec-Butylbenzene	.50	U
541-73-1	1,3-Dichlorobenzene	.50	U
106-46-7	1,4-Dichlorobenzene	.50	U
99-87-6	4-Isopropyltoluene	.50	U
95-50-1	1,2-Dichlorobenzene	.50	U
104-51-8	n-Butylbenzene	.50	U
96-12-8	1,2-Dibromo-3-chloropropane	.50	U
120-82-1	1,2,4-Trichlorobenzene	.50	U
87-68-3	Hexachlorobutadiene	.50	U
91-20-3	Naphthalene	.50	U
87-61-6	1,2,3-Trichlorobenzene	.50	U

COMMENT
U= Not Detected

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO. 005

9523343V
MVI-293178S

Lab Name: EMSL ANALYTICAL Contract:

Project No. Site: Location: Group:

Matrix: (soil/water) WATER Lab Sample ID: 9523343V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C8334.D

Level: (low/med) LOW Date Received: 5/22/95

% Moisture: not dec. NA Date Analyzed: 6/2/95

GC Column: DB-624 X 75M ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Number TICs found: 0 Concentration Units: (ug/L or ug/Kg) ug/L

CAS Number	Compound Name	RT	Est. Conc.	Q
1.	NONE FOUND			
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

Quantitation Report

Data File : d:\hpchem\1\data\c8334.d
Acq On : 2 Jun 95 6:53 pm
Sample : 9523343
Misc : 25 ML
Quant Time: Jun 3 14:18 1995

Vial: 9
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue May 30 13:15:19 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	11.84	96	693564	5.00	ug/L	0.00
System Monitoring Compounds						%Recovery
43) 4-Bromofluorobenzene	19.09	95	354810	5.13	ug/L	102.57%
57) 1,2-Dichlorobenzene-d4	21.88	152	175695	5.56	ug/L	111.19%
Target Compounds						Qvalue
9) Methylene chloride	7.42	84	53341	1.40	ug/L #	87

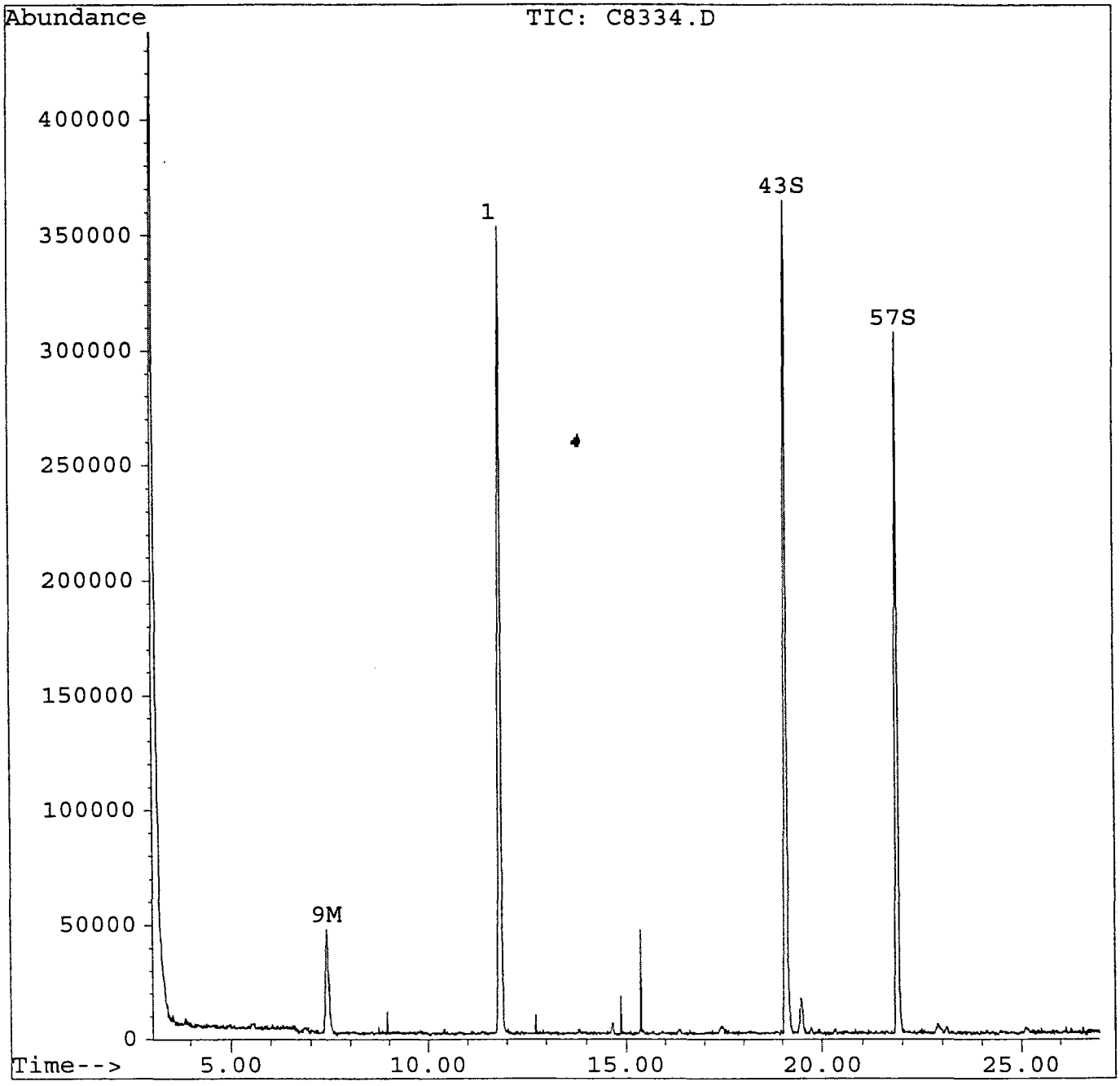
(#) = qualifier out of range (m) = manual integration

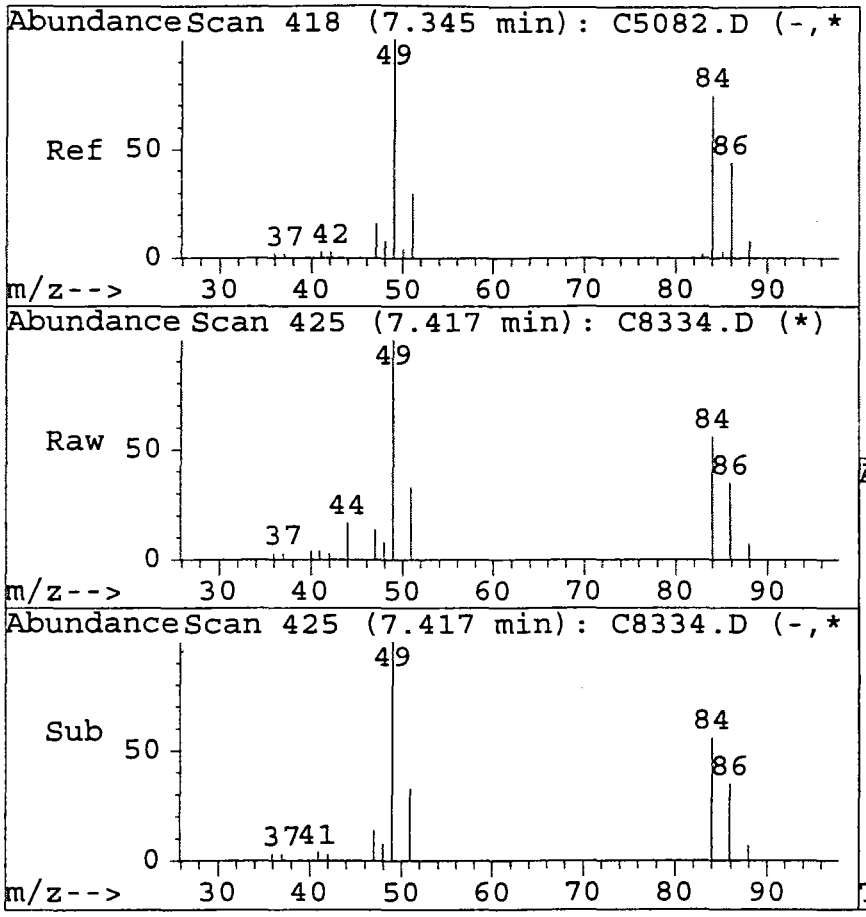
Quantitation Report

Data File : d:\hpchem\1\data\c8334.d
Acq On : 2 Jun 95 6:53 pm
Sample : 9523343
Misc : 25 ML
Quant Time: Jun 3 14:18 1995

Vial: 9
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue May 30 13:15:19 1995
Response via : Multiple Level Calibration



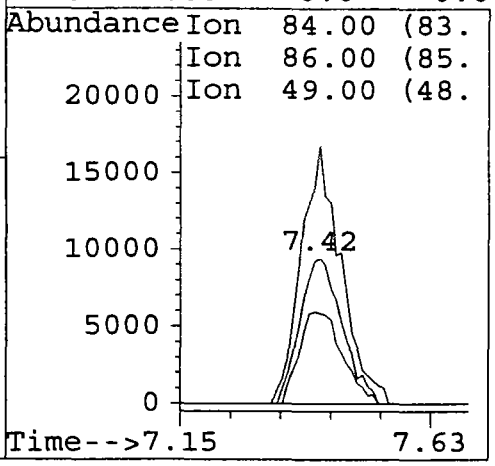


#9 (no8

Methylene chloride
Concen: 1.40 ug/L
RT: 7.42 min Scan# 425
Delta R.T. 0.01 min
Lab File: c8334.d
Acq: 2 Jun 95 6:53 pm

Tgt Ion:84 Resp: 53341

Ion	Ratio	Lower	Upper
84	100		
86	61.8	43.1	83.1
49	178.3	136.3	176.3#
0	0.0	0.0	0.0



2A

WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

	SAMPLE NO.	SMC1 (BFB) #	SMC2 (DCB) #	#	OTHER #	TOT OUT
01	1PPB STD	112	118			
02	VBLK01	106	112			
03	9523339V	108	115			
04	9523340V	103	108			
05	9523341V	104	113			
06	9523342V	104	109			
07	9523343V	103	111			
08	9523163V	104	112			
09	9523167V	107	104			
10	9523166V	105	113			
11	9523343MS	105	109			
12	9523343MSD	108	114			
13	10PPBQCS	102	104			
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						

QC LIMITS

SMC1 (BFB) = 4-Bromofluorobenzene (80-120)

SMC2 (DCB) = 1,2-Dichlorobenzene-d4 (80-120)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

4A

VOLATILE METHOD BLANK SUMMARY

SAMPLE NO.

VBLK01

Lab Name: EMSL ANALYTICAL Contract:

Project No.: Site: Location: Group:

Lab File ID: C8329.D Lab Sample ID: M. BLANK

Date Analyzed: 6/2/95 Time Analyzed: 1550

GC Column: DB-624 X 75M ID: 0.53 (mm) Heated Purge: (Y/N) N

Instrument ID: 5972-INSTRU

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	1PPB STD	1PPB STD	C8328.D	1514
02	9523339V	9523339V	C8330.D	1626
03	9523340V	9523340V	C8331.D	1703
04	9523341V	9523341V	C8332.D	1739
05	9523342V	9523342V	C8333.D	1817
06	9523343V	9523343V	C8334.D	1853
07	9523163V	9523163V	C8335.D	1929
08	9523167V	9523167V	C8336.D	2004
09	9523166V	9523166V	C8337.D	2040
10	9523343MS	23343MS	C8338.D	2115
11	9523343MSD	23343MSD	C8339.D	2150
12	10PPBQCS	10PPBQCS	C8340.D	2224
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

COMMENTS:

1A
VOLATILE ORGANIC ANALYSIS DATA SHEET
EPA 524.2

Lab Name: EMSL ANALYTICAL
Matrix (soil/water): WATER
Sample wt/vol: 25 mL
Level (low/med): LOW
% Moisture: not dec.: NA
GC Column: DB-624 x 75m ID: 0.53mm
Soil Extract Volume: NA

Lab Sample ID: METHOD BLANK
Lab File ID: C8329.D
Date Received: NA
Date Analyzed: 06/02/95
Dilution Factor: 1
Soil Aliquot Volume: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	COMMENT
75-71-8	Dichlorodifluoromethane	.50	U
74-87-3	Chloromethane	.50	U
74-83-9	Bromomethane	.50	U
75-01-4	Vinyl Chloride	.50	U
75-00-3	Chloroethane	.50	U
75-69-4	Trichlorofluoromethane	.50	U
75-09-2	Methylene Chloride	4.7	
156-60-65	trans-1,2-Dichloroethene	.50	U
75-35-4	1,1-Dichloroethene	.50	U
75-34-3	1,1-Dichloroethane	.50	U
594-20-7	2,2-Dichloropropane	.50	U
74-97-1	Bromochloromethane	.50	U
156-59-2	cis-1,2-Dichloroethene	.50	U
67-66-3	Chloroform	.50	U
563-58-6	1,1-Dichloropropene	.50	U
107-06-2	1,2-Dichloroethane	.50	U
71-55-6	1,1,1-Trichloroethane	.50	U
74-95-3	Dibromomethane	.50	U
56-23-1	Carbon Tetrachloride	.50	U
75-27-4	Bromodichloromethane	.50	U
78-87-1	1,2-Dichloropropane	.50	U
10061-01-1	cis-1,3-Dichloropropene	.50	U
142-28-9	1,3-Dichloropropane	.50	U
79-01-6	Trichloroethene	.50	U
124-48-1	Dibromochloromethane	.50	U
79-00-1	1,1,2-Trichloroethane	.50	U
71-43-2	Benzene	.50	U
10061-02-6	trans-1,3-Dichloropropene	.50	U
75-25-2	Bromoform	.50	U
630-20-6	1,1,1,2-Tetrachloroethane	.50	U
127-18-4	Tetrachloroethene	.50	U
79-34-1	1,1,2,2-Tetrachloroethane	.50	U
108-88-3	Toluene	.50	U
106-93-4	1,2-Dibromoethane	.50	U
108-90-7	Chlorobenzene	.50	U
100-41-4	Ethylbenzene	.50	U
1330-29-7	Xylene(total)	.50	U

U= Not Detected

1A
VOLATILE ORGANIC ANALYSIS DATA SHEET
EPA 524.2

Lab Name: _EMSL ANALYTICAL_____ Lab Sample ID: _METHOD BLANK___
Matrix (soil/water): _WATER_____ Lab File ID: ___C8329.D_____
Sample wt/vol: _25_mL_____ Date Received: _NA_____
Level (low/med): _LOW_____ Date Analyzed: _06/02/95_____
% Moisture: not dec.: _NA_____ Dilution Factor: __1_____
GC Column: _DB-624 x 75m_ ID: _0.53mm_ Soil Aliquot Volume: ____NA____
Soil Extract Volume: ___NA___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) _ug/L__	COMMENT
100-42-1	Styrene	.50	U
98-82-8	Isopropylbenzene	.50	U
108-86-1	Bromobenzene	.50	U
96-18-4	1,2,3-Trichloropropane	.50	U
103-65-1	n-Propylbenzene	.50	U
95-49-8	2-Chlorotoluene	.50	U
106-43-4	4-Chlorotoluene	.50	U
108-67-8	1,3,5-Trimethylbenzene	.50	U
98-06-6	tert-Butylbenzene	.50	U
95-63-6	1,2,4-Trimethylbenzene	.50	U
135-98-8	sec-Butylbenzene	.50	U
541-73-1	1,3-Dichlorobenzene	.50	U
106-46-7	1,4-Dichlorobenzene	.50	U
99-87-6	4-Isopropyltoluene	.50	U
95-50-1	1,2-Dichlorobenzene	.50	U
104-51-8	n-Butylbenzene	.50	U
96-12-8	1,2-Dibromo-3-chloropropane	.50	U
120-82-1	1,2,4-Trichlorobenzene	.50	U
87-68-3	Hexachlorobutadiene	.50	U
91-20-3	Naphthalene	.50	U
87-61-6	1,2,3-Trichlorobenzene	.50	U

COMMENT
U= Not Detected

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.

VBLK01

93

Lab Name: EMSL ANALYTICAL Contract:

Project No. Site: Location: Group:

Matrix: (soil/water) WATER Lab Sample ID: M. BLANK

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C8329.D

Level: (low/med) LOW Date Received: NA

% Moisture: not dec. NA Date Analyzed: 6/2/95

GC Column: DB-624 X 75M ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Concentration Units:

Number TICs found: 0 (ug/L or ug/Kg) ug/L

CAS Number	Compound Name	RT	Est. Conc.	Q
1.	NONE FOUND			
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

Quantitation Report

Data File : d:\hpchem\1\data\c8329.d
Acq On : 2 Jun 95 3:50 pm
Sample : METHOD BLANK
Misc : 25 ML
Quant Time: Jun 3 14:08 1995

Vial: 4
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

94

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue May 30 13:15:19 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	11.84	96	689722	5.00	ug/L	0.00
System Monitoring Compounds						%Recovery
43) 4-Bromofluorobenzene	19.10	95	364668	5.30	ug/L	106.00%
57) 1,2-Dichlorobenzene-d4	21.88	152	176494	5.62	ug/L	112.32%
Target Compounds						Qvalue
9) Methylene chloride	7.42	84	178459	4.73	ug/L	96

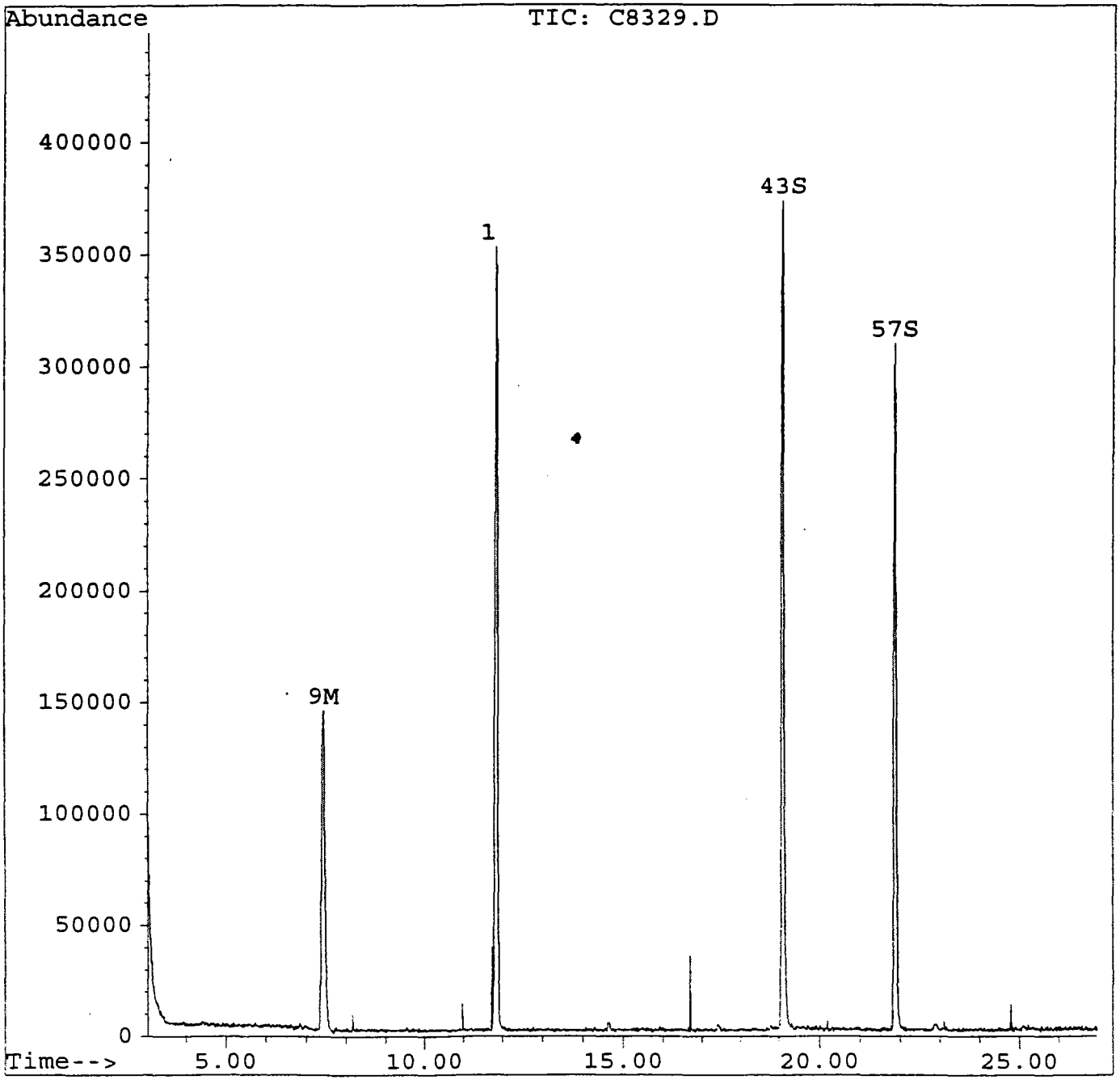
(#) = qualifier out of range (m) = manual integration

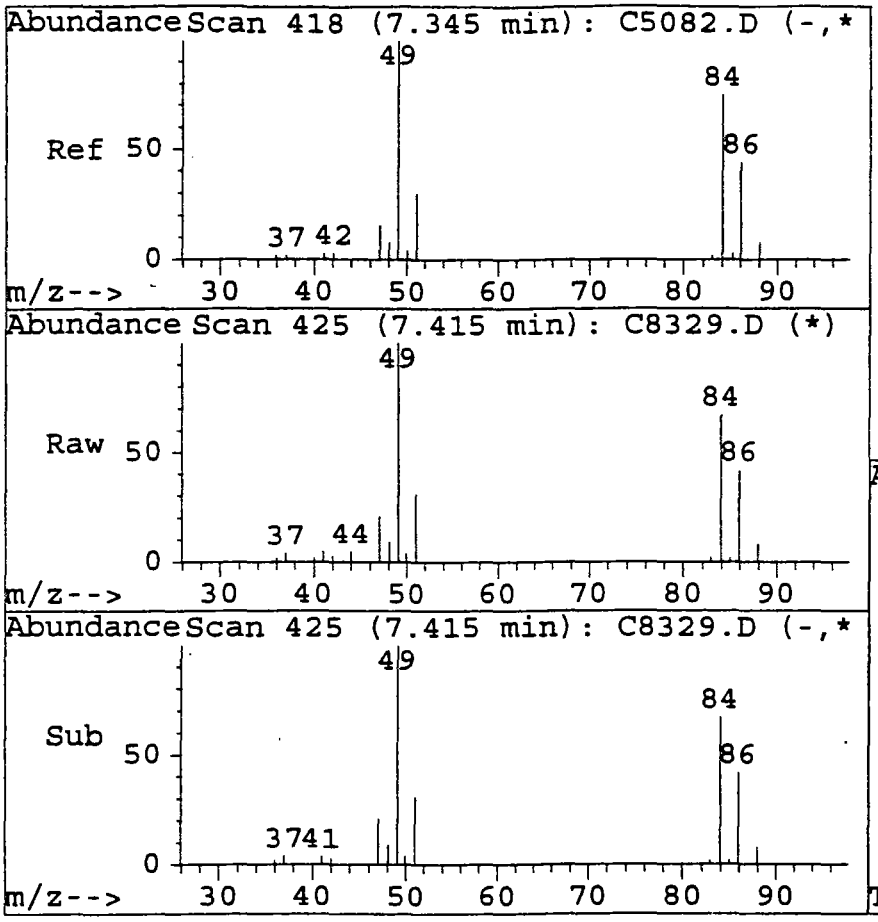
Quantitation Report

Data File : d:\hpchem\1\data\c8329.d
Acq On : 2 Jun 95 3:50 pm
Sample : METHOD BLANK
Misc : 25 ML
Quant Time: Jun 3 14:08 1995

Vial: 4
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue May 30 13:15:19 1995
Response via : Multiple Level Calibration

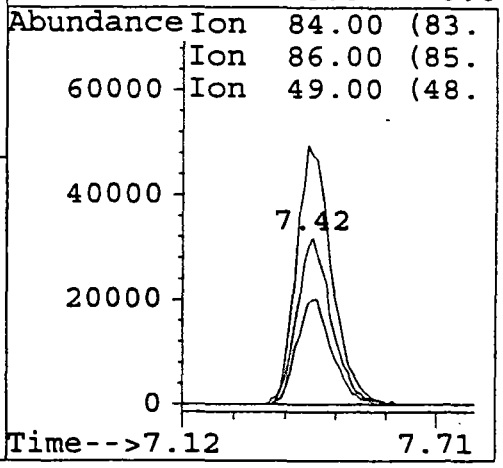




#9
Methylene chloride
Concen: 4.73 ug/L
RT: 7.42 min Scan# 425
Delta R.T. 0.01 min
Lab File: c8329.d
Acq: 2 Jun 95 3:50 pm

Tgt Ion:84 Resp: 178459

Ion	Ratio	Lower	Upper
84	100		
86	63.3	43.1	83.1
49	149.6	136.3	176.3
0	0.0	0.0	0.0



Spike Recovery and RPD Summary Report - WATER

(007

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue May 30 13:15:19 1995
Response via : Initial Calibration

Non-Spiked Sample: C8334.D

	Spike Sample	Spike Duplicate Sample
File ID :	C8338.D	C8339.D
Sample :	9523343 MS	9523343 MSD
Acq Time:	2 Jun 95 9:15 pm	2 Jun 95 9:50 pm

Compound	Sample Conc	Spike Added	Spike Res	Dup Res	Spike %Rec	Dup %Rec	RPD	QC Limits RPD	QC Limits % Rec
Dichlorodifluorometh	0.0	10	10	10	96	97	1	25	80-120
Chloromethane	0.0	10	10	10	101	98	3	25	80-120
Vinyl chloride	0.0	10	9	10	93	98	6	25	80-120
Bromomethane	0.0	10	10	10	101	103	2	25	80-120
Chloroethane	0.0	10	11	11	107	105	2	25	80-120
Trichlorofluorometha	0.0	10	10	10	98	101	2	25	80-120
1,1-Dichloroethene	0.0	10	9	9	87	94	8	25	80-120
Methylene chloride	1.4	10	8	8	69#	70#	1	25	80-120
trans-1,2-Dichloroet	0.0	10	10	10	95	99	4	25	80-120
1,1-Dichloroethane	0.0	10	10	10	102	103	1	25	80-120
2,2-Dichloropropane	0.0	10	8	8	81	82	2	25	80-120
cis-1,2-Dichloroethe	0.0	10	10	10	100	102	3	25	80-120
Bromochloromethane	0.0	10	10	11	101	107	5	25	80-120
Chloroform	0.0	10	10	10	101	103	2	25	80-120
1,1,1-Trichloroethan	0.0	10	10	10	102	101	1	25	80-120
Carbon tetrachloride	0.0	10	10	10	97	101	4	25	80-120
1,1-Dichloropropene	0.0	10	9	10	86	97	12	25	80-120
Benzene	0.0	10	10	10	99	101	2	25	80-120
1,2-Dichloroethane	0.0	10	10	11	104	107	2	25	80-120
Trichloroethene	0.0	10	10	10	98	99	1	25	80-120
1,2-Dichloropropane	0.0	10	10	10	105	105	0	25	80-120
Dibromomethane	0.0	10	10	11	102	108	5	25	80-120
Bromodichloromethane	0.0	10	10	11	99	105	6	25	80-120
cis-1,3-Dichloroprop	0.0	10	10	10	97	102	5	25	80-120
Toluene	0.0	10	10	10	95	99	4	25	80-120
trans-1,3-Dichloropr	0.0	10	10	10	96	104	8	25	80-120
1,1,2-Trichloroethan	0.0	10	11	11	106	108	3	25	80-120
Tetrachloroethene	0.0	10	10	10	98	100	2	25	80-120
1,3-Dichloropropane	0.0	10	11	11	105	108	3	25	80-120
Dibromochloromethane	0.0	10	10	11	104	105	2	25	80-120
1,2-Dibromomethane	0.0	10	10	11	105	109	4	25	80-120
Chlorobenzene	0.0	10	10	10	102	104	2	25	80-120
1,1,1,2-Tetrachloroe	0.0	10	11	11	113	105	7	25	80-120
Ethylbenzene	0.0	10	9	10	87	98	12	25	80-120
Xylene (para & meta)	0.0	20	13	18	65#	90	32#	25	80-120
Xylene (Ortho)	0.0	10	7	9	70#	94	30#	25	80-120
Styrene	0.0	10	2	4	21#	39#	62#	25	80-120
Bromoform	0.0	10	10	11	99	105	6	25	80-120
Isopropylbenzene	0.0	10	9	10	93	98	6	25	80-120
Bromobenzene	0.0	10	10	11	103	107	3	25	80-120
1,1,2,2-Tetrachloroe	0.0	10	12	12	122#	124#	1	25	80-120
1,2,3-Trichloropropa	0.0	10	11	12	107	118	10	25	80-120
n-Propylbenzene	0.0	10	9	10	90	99	10	25	80-120

Quantitation Report

Data File : d:\hpchem\1\data\c8338.d
Acq On : 2 Jun 95 9:15 pm
Sample : 9523343 MS
Misc : 25 ML
Quant Time: Jun 18 11:08 1995

Vial: 13
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue May 30 13:15:19 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	11.85	96	668860	5.00	ug/L		0.01
System Monitoring Compounds							%Recovery
43) 4-Bromofluorobenzene	19.11	95	350931	5.26	ug/L		105.19%
57) 1,2-Dichlorobenzene-d4	21.89	152	166698	5.47	ug/L		109.39%
Target Compounds							Qvalue
2) Dichlorodifluoromethane	3.30	85	506687	9.56	ug/L		99
3) Chloromethane	3.67	50	315932	10.12	ug/L		93
4) Vinyl chloride	3.89	62	326875	9.29	ug/L		96
5) Bromomethane	4.55	94	240023	10.09	ug/L		99
6) Chloroethane	4.79	64	221059	10.72	ug/L		90
7) Trichlorofluoromethane	5.36	101	772924	9.83	ug/L		99
8) 1,1-Dichloroethene	6.45	96	301226	8.73	ug/L	#	85
9) Methylene chloride	7.43	84	303995	8.30	ug/L		99
10) trans-1,2-Dichloroethene	7.97	96	346768	9.51	ug/L		96
12) 1,1-Dichloroethane	8.78	63	742577	10.18	ug/L		95
13) 2,2-Dichloropropane	9.84	77	577515	8.08	ug/L		99
14) cis-1,2-Dichloroethene	9.84	96	342923	9.98	ug/L		95
16) Bromochloromethane	10.26	128	121916	10.12	ug/L		95
17) Chloroform	10.41	83	695548	10.16	ug/L		99
18) 1,1,1-Trichloroethane	10.74	97	773283	10.21	ug/L		99
19) Carbon tetrachloride	11.05	117	680258	9.67	ug/L		99
20) 1,1-Dichloropropene	11.02	75	569965	8.61	ug/L		95
21) Benzene	11.37	78	1151235	9.88	ug/L		95
22) 1,2-Dichloroethane	11.37	62	300143	10.50	ug/L		96
23) Trichloroethene	12.49	95	504205	9.76	ug/L		99
24) 1,2-Dichloropropane	12.84	63	399285	10.47	ug/L		100
25) Dibromomethane	13.05	93	158049	10.23	ug/L		98
26) Bromodichloromethane	13.32	83	526552	9.94	ug/L		99
27) cis-1,3-Dichloropropene	14.08	75	441899	9.65	ug/L		97
28) Toluene	14.65	92	793802	9.59	ug/L		97
29) trans-1,3-Dichloropropene	15.00	75	304361	9.63	ug/L		94
30) 1,1,2-Trichloroethane	15.30	83	156077	10.57	ug/L		96
31) Tetrachloroethene	15.62	166	509635	9.83	ug/L		98
32) 1,3-Dichloropropane	15.60	76	308567	10.54	ug/L		98
33) Dibromochloromethane	16.00	129	298279	10.38	ug/L		99
34) 1,2-Dibromomethane	16.20	107	213188	10.46	ug/L		97
35) Chlorobenzene	17.08	112	879010	10.20	ug/L		97
36) 1,1,1,2-Tetrachloroethane	17.21	131	387142	11.31	ug/L		96
37) Ethylbenzene	17.27	91	1525869	8.76	ug/L		95
38) Xylene (para & meta)	17.48	106	809779	12.95	ug/L		95
39) Xylene (Ortho)	18.18	106	384862	6.95	ug/L		95
40) Styrene	18.19	104	177099	2.07	ug/L	#	67

(#) = qualifier out of range (m) = manual integration

Data File : d:\hpchem\1\data\c8338.d
Acq On : 2 Jun 95 9:15 pm
Sample : 9523343 MS
Misc : 25 ML
Quant Time: Jun 18 11:08 1995

Vial: 13
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue May 30 13:15:19 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
41)	Bromoform	18.51	173	140076	9.93	ug/L		88
42)	Isopropylbenzene	18.84	105	1649700	9.27	ug/L	m	45
44)	Bromobenzene	19.38	156	331886	10.35	ug/L	#	91
45)	1,1,2,2-Tetrachloroethane	19.33	83	193031	12.24	ug/L		96
46)	1,2,3-Trichloropropane	19.40	75	204110	10.66	ug/L	#	53
47)	n-Propylbenzene	19.58	91	2079546	8.98	ug/L		99
48)	2-Chlorotoluene	19.74	91	1387983	10.80	ug/L		100
49)	4-Chlorotoluene	19.92	91	1404670	9.21	ug/L		85
50)	1,3,5-Trimethylbenzene	19.90	105	573100	3.89	ug/L		96
51)	tert-Butylbenzene	20.49	119	1507256	9.86	ug/L		96
52)	1,2,4-Trimethylbenzene	20.57	105	534017	3.96	ug/L		98
53)	sec-Butylbenzene	20.89	105	2145893	9.48	ug/L		99
54)	1,3-Dichlorobenzene	21.09	146	690338	10.55	ug/L		100
55)	4-Isopropyltoluene	21.15	119	1220351	7.22	ug/L		98
56)	1,4-Dichlorobenzene	21.24	146	685885	10.57	ug/L		92
58)	1,2-Dichlorobenzene	21.92	146	524499	10.76	ug/L		98
59)	n-Butylbenzene	21.90	91	1648408	9.09	ug/L		100
60)	1,2-Dibromo-3-chloropropan	23.32	75	41948	10.47	ug/L		90
61)	1,2,4-Trichlorobenzene	24.89	180	395288	11.03	ug/L		96
62)	Hexachlorobutadiene	25.23	225	446035	10.32	ug/L		97
63)	Naphthalene	25.35	128	359109	11.58	ug/L		100
64)	1,2,3-Trichlorobenzene	25.82	180	284412	11.38	ug/L		95
65)	Methyl-tert butyl ether	8.01	73	398581	10.20	ug/L		93
66)	tert-Butyl Alcohol	7.76	59	12669	21.16	ug/L		100

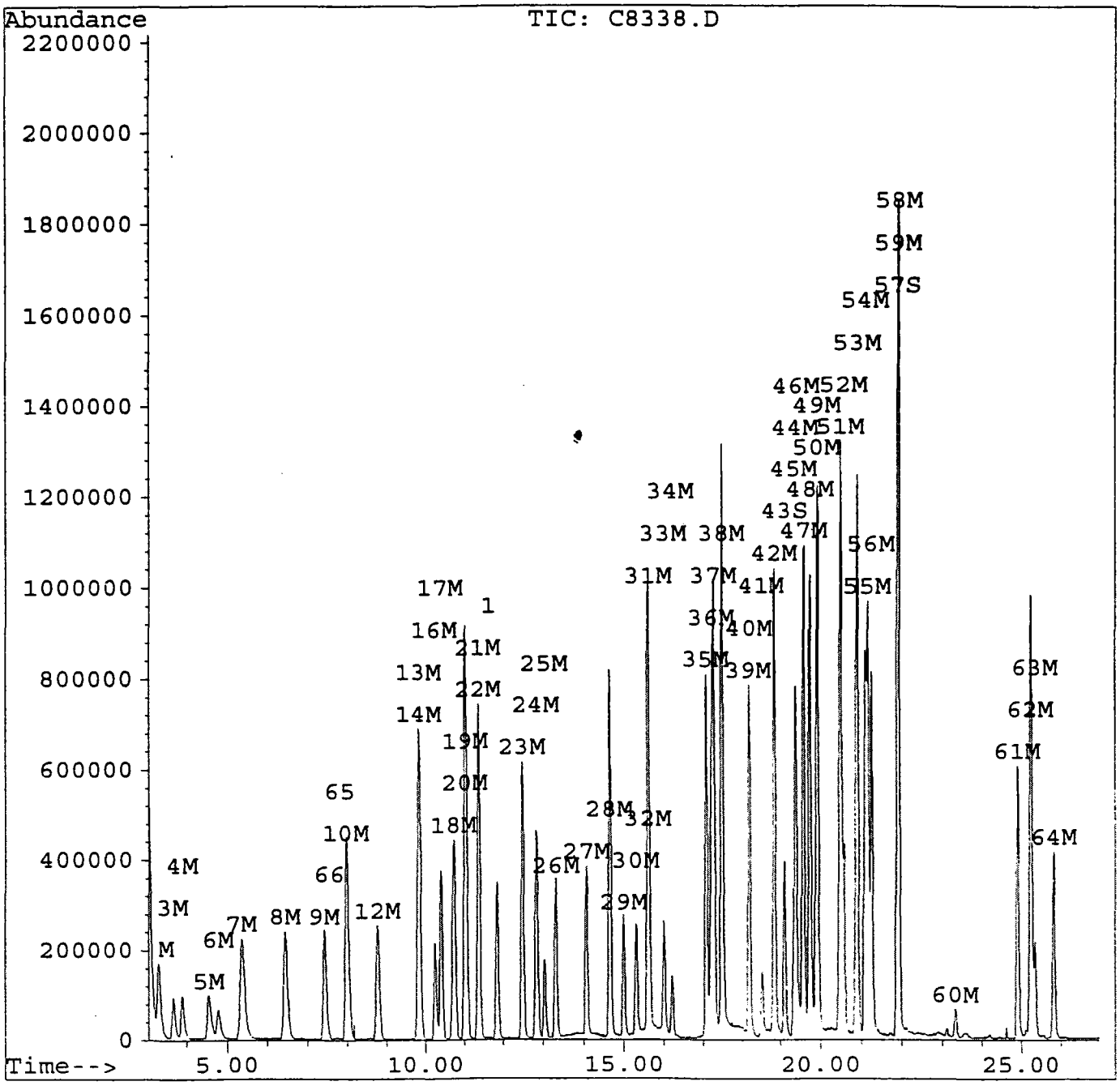
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c8338.d
Acq On : 2 Jun 95 9:15 pm
Sample : 9523343 MS
Misc : 25 ML
Quant Time: Jun 18 11:08 1995

Vial: 13
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue May 30 13:15:19 1995
Response via : Multiple Level Calibration



Quantitation Report

Data File : d:\hpchem\1\data\c8339.d
Acq On : 2 Jun 95 9:50 pm
Sample : 9523343 MSD
Misc : 25 ML
Quant Time: Jun 2 22:17 1995

Vial: 14
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue May 30 13:15:19 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	11.85	96	671183	5.00	ug/L		0.01
System Monitoring Compounds							%Recovery
43) 4-Bromofluorobenzene	19.10	95	363013	5.42	ug/L		108.44%
57) 1,2-Dichlorobenzene-d4	21.89	152	174022	5.69	ug/L		113.80%
Target Compounds							Qvalue
2) Dichlorodifluoromethane	3.30	85	514610	9.67	ug/L		95
3) Chloromethane	3.68	50	307626	9.82	ug/L		98
4) Vinyl chloride	3.90	62	347134	9.84	ug/L		98
5) Bromomethane	4.55	94	244863	10.26	ug/L		98
6) Chloroethane	4.78	64	217226	10.50	ug/L		99
7) Trichlorofluoromethane	5.37	101	794300	10.07	ug/L		100
8) 1,1-Dichloroethene	6.45	96	326026	9.41	ug/L		93
9) Methylene chloride	7.42	84	307771	8.37	ug/L		96
10) trans-1,2-Dichloroethene	8.00	96	363849	9.94	ug/L		96
12) 1,1-Dichloroethane	8.77	63	753547	10.29	ug/L		95
13) 2,2-Dichloropropane	9.84	77	591780	8.25	ug/L		95
14) cis-1,2-Dichloroethene	9.85	96	353277	10.24	ug/L		100
16) Bromochloromethane	10.26	128	128809	10.66	ug/L	#	86
17) Chloroform	10.42	83	709486	10.33	ug/L		98
18) 1,1,1-Trichloroethane	10.74	97	767323	10.09	ug/L		98
19) Carbon tetrachloride	11.05	117	712622	10.10	ug/L		97
20) 1,1-Dichloropropene	11.03	75	645965	9.73	ug/L		98
21) Benzene	11.38	78	1177103	10.07	ug/L		98
22) 1,2-Dichloroethane	11.38	62	308090	10.74	ug/L		94
23) Trichloroethene	12.49	95	512750	9.90	ug/L		98
24) 1,2-Dichloropropane	12.85	63	401590	10.50	ug/L		99
25) Dibromomethane	13.05	93	166737	10.76	ug/L		97
26) Bromodichloromethane	13.32	83	559898	10.53	ug/L		97
27) cis-1,3-Dichloropropene	14.07	75	468363	10.20	ug/L		100
28) Toluene	14.66	92	826190	9.95	ug/L		96
29) trans-1,3-Dichloropropene	15.00	75	329303	10.38	ug/L		98
30) 1,1,2-Trichloroethane	15.32	83	160754	10.85	ug/L		94
31) Tetrachloroethene	15.63	166	521708	10.03	ug/L		99
32) 1,3-Dichloropropane	15.60	76	317842	10.82	ug/L		98
33) Dibromochloromethane	16.01	129	303964	10.54	ug/L		99
34) 1,2-Dibromomethane	16.20	107	222064	10.86	ug/L		97
35) Chlorobenzene	17.08	112	898884	10.39	ug/L		99
36) 1,1,1,2-Tetrachloroethane	17.22	131	361598	10.53	ug/L		98
37) Ethylbenzene	17.27	91	1723486	9.86	ug/L		99
38) Xylene (para & meta)	17.48	106	1124706	17.92	ug/L		90
39) Xylene (Ortho)	18.18	106	524326	9.44	ug/L		96
40) Styrene	18.20	104	338953	3.94	ug/L		98

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c8339.d
Acq On : 2 Jun 95 9:50 pm
Sample : 9523343 MSD
Misc : 25 ML
Quant Time: Jun 2 22:17 1995

Vial: 14
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue May 30 13:15:19 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
41)	Bromoform	18.52	173	148876	10.52	ug/L		90
42)	Isopropylbenzene	18.84	105	1755979	9.83	ug/L		90
44)	Bromobenzene	19.38	156	343805	10.68	ug/L	#	89
45)	1,1,2,2-Tetrachloroethane	19.34	83	195543	12.36	ug/L		98
46)	1,2,3-Trichloropropane	19.41	75	226162	11.77	ug/L		90
47)	n-Propylbenzene	19.57	91	2297109	9.89	ug/L		99
48)	2-Chlorotoluene	19.74	91	1404422	10.89	ug/L		100
49)	4-Chlorotoluene	19.92	91	1519434	9.93	ug/L		83
50)	1,3,5-Trimethylbenzene	19.89	105	1127211	7.62	ug/L		97
51)	tert-Butylbenzene	20.49	119	1533078	10.00	ug/L		96
52)	1,2,4-Trimethylbenzene	20.57	105	874755	6.46	ug/L		98
53)	sec-Butylbenzene	20.89	105	2237152	9.84	ug/L		99
54)	1,3-Dichlorobenzene	21.09	146	692686	10.55	ug/L		97
55)	4-Isopropyltoluene	21.15	119	1588304	9.36	ug/L		100
56)	1,4-Dichlorobenzene	21.24	146	693155	10.64	ug/L		91
58)	1,2-Dichlorobenzene	21.92	146	536739	10.97	ug/L		98
59)	n-Butylbenzene	21.90	91	1829900	10.06	ug/L		98
60)	1,2-Dibromo-3-chloropropan	23.33	75	44811	11.15	ug/L		87
61)	1,2,4-Trichlorobenzene	24.90	180	403043	11.20	ug/L		99
62)	Hexachlorobutadiene	25.24	225	430915	9.93	ug/L		98
63)	Naphthalene	25.35	128	369223	11.86	ug/L		100
64)	1,2,3-Trichlorobenzene	25.82	180	297987	11.88	ug/L		99
65)	Methyl-tert butyl ether	8.02	73	424237	10.82	ug/L		97
66)	tert-Butyl Alcohol	7.72	59	12194	20.29	ug/L		100

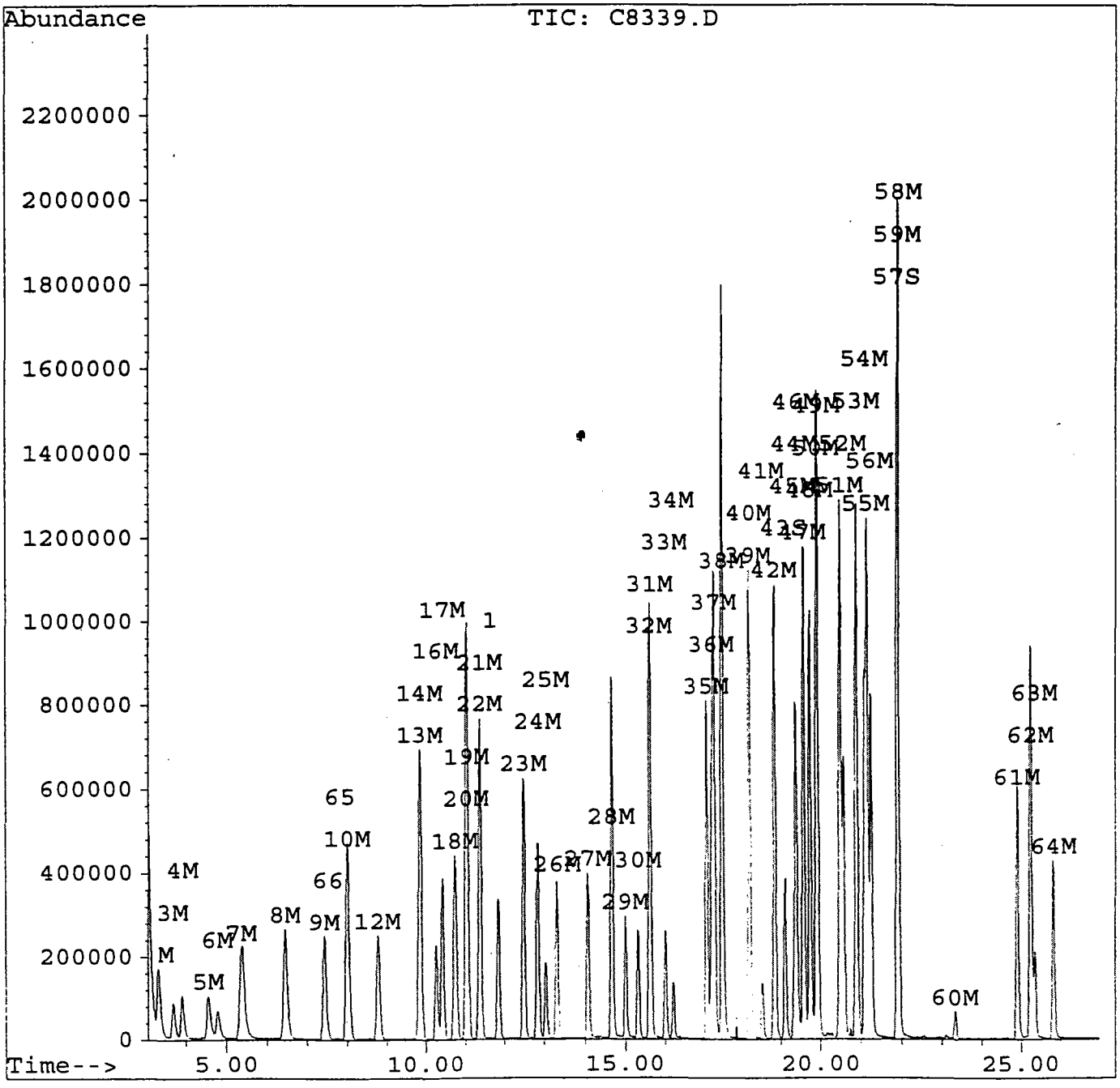
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c8339.d
Acq On : 2 Jun 95 9:50 pm
Sample : 9523343 MSD
Misc : 25 ML
Quant Time: Jun 2 22:17 1995

Vial: 14
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue May 30 13:15:19 1995
Response via : Multiple Level Calibration



GC/MS SEMIVOLATILE DATA PACKAGE

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Nam EMSL Analytical Contract: _____

Lab Code: ____ Case No.: _____ SAS No.: _____ SDG No.: _____

Lab File ID: B7750.D DFTPP Injection Date: 05/30/95

Instrument ID: ABNA DFTPP Injection Time: 0914

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE		
51	30.0 - 80.0% of mass 198	51.3		
68	Less than 2.0% of mass 69	0.0	0.0	)1
69	Mass 69 relative abundance	61.1		
70	Less than 2.0% of mass 69	0.3	0.6	)1
127	25.0 - 75.0% of mass 198	44.4		
197	Less than 1.0% of mass 198	0.0		
198	Base Peak, 100% relative abundance	100.0		
199	5.0 to 9.0% of mass 198	7.5		
275	10.0 - 30.0% of mass 198	23.1		
365	Greater than 0.75% of mass 198	2.8		
441	Present, but less than mass 443	9.3		
442	40.0 - 110.0% of mass 198	64.3		
443	15.0 - 24.0% of mass 442	13.1	20.3	)2

1-Value is % mass 69 2-Value is % mass 442

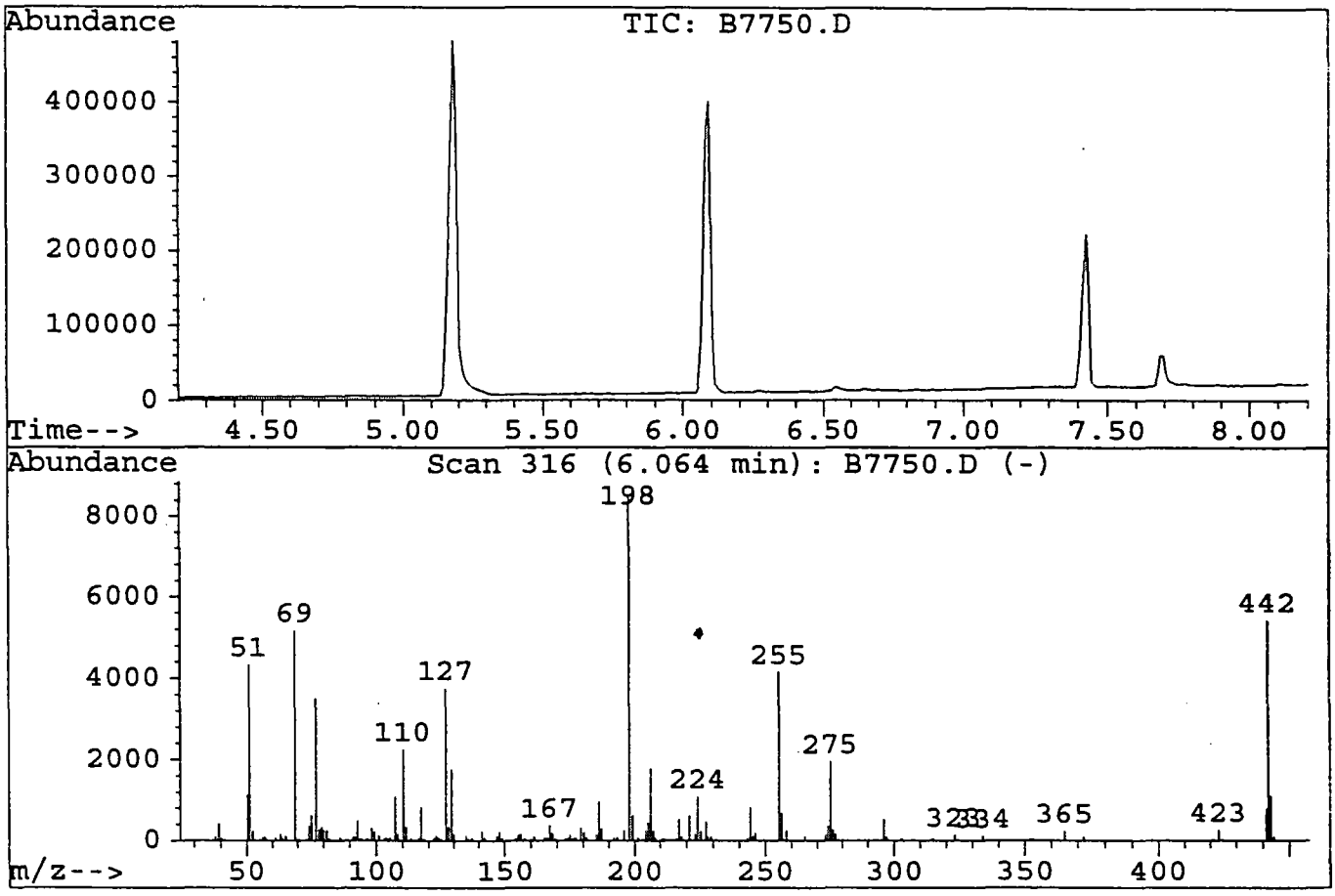
THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDAR

	EPA SAMPLE N	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
#		20 STANDARD	B7751.D	05/30/95	0944
#		50 STANDARD	B7752.D	05/30/95	1035
#		80 STANDARD	B7753.D	05/30/95	1127
#		120 STANDARD	B7754.D	05/30/95	1220
#		160 STANDARD	B7755.D	05/30/95	1312
#					
#					
#					
#					
#					
#					
#					
#					
#					
#					
#					
#					
#					
#					
#					

Data File : C:\HPCHEM\1\DATA2\B7750.D
Acq On : 30 May 95 9:14 am
Sample : DFTPP..... Converted from RTE d
Misc :

Vial: 1
Operator: SCOTTV
Inst : ABNA
BT Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration



Peak Apex is scan: 330

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	51.3	4339	PASS
68	69	0	2	0.0	0	PASS
69	198	0	100	61.1	5169	PASS
70	69	0	2	0.6	29	PASS
127	198	40	60	44.4	3758	PASS
197	198	0	1	0.0	0	PASS
198	198	100	100	100.0	8456	PASS
199	198	5	9	7.5	631	PASS
275	198	10	30	23.1	1951	PASS
365	198	1	100	2.8	238	PASS
441	443	0	100	71.3	788	PASS
442	198	40	100	64.3	5436	PASS
443	442	17	23	20.3	1105	PASS

Scan 316 (6.064 min): B7750.D

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
38.00	111	58.05	13	78.05	284	96.05	58
39.05	417	61.15	74	79.05	332	97.05	35
40.10	59	63.05	154	79.95	245	98.05	313
50.05	1128	64.05	37	81.05	252	99.05	224
51.00	4339	65.05	105	82.05	44	100.95	120
52.05	241	68.95	5169	83.10	16	103.15	68
53.00	10	70.05	29	86.15	75	103.95	87
54.05	4	73.05	43	91.05	88	105.05	85
55.05	32	74.05	376	91.95	98	107.05	1091
56.05	93	75.05	636	92.95	482	107.95	178
57.05	94	77.00	3509	94.05	48	110.05	2258

Scan 316 (6.064 min): B7750.D

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
111.05	347	128.00	343	154.10	63	168.00	172
112.15	17	129.00	1776	155.00	140	169.10	54
113.05	65	130.00	152	156.00	177	173.00	40
116.15	81	135.00	123	157.10	46	173.90	77
117.05	837	136.00	50	157.80	35	175.00	147
118.05	55	137.10	72	158.00	32	176.10	56
121.90	87	141.00	242	160.00	52	177.10	85
123.00	132	142.00	80	161.10	108	179.00	311
124.00	82	147.00	121	165.00	75	180.10	207
124.90	49	148.00	213	166.20	66	181.10	81
127.00	3758	148.90	57	167.00	382	182.10	5

Scan 316 (6.064 min): B7750.D

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
185.10	155	205.05	451	222.95	151	249.05	34
186.10	970	206.05	1785	224.05	1088	255.05	4157
187.10	295	207.05	238	225.05	239	256.05	688
192.00	75	207.95	66	227.05	470	256.95	53
193.10	96	210.25	50	227.95	86	257.95	257
196.00	270	211.05	79	229.05	93	265.05	108
198.00	8456	211.65	38	230.95	42	273.05	139
199.00	631	215.95	52	243.05	75	274.05	352
201.35	77	216.95	525	244.05	828	275.05	1951
202.85	45	217.95	89	245.05	118	276.05	266
204.05	257	220.95	629	246.05	185	277.05	157

Scan 316 (6.064 min): B7750.D

Modified:subtracted

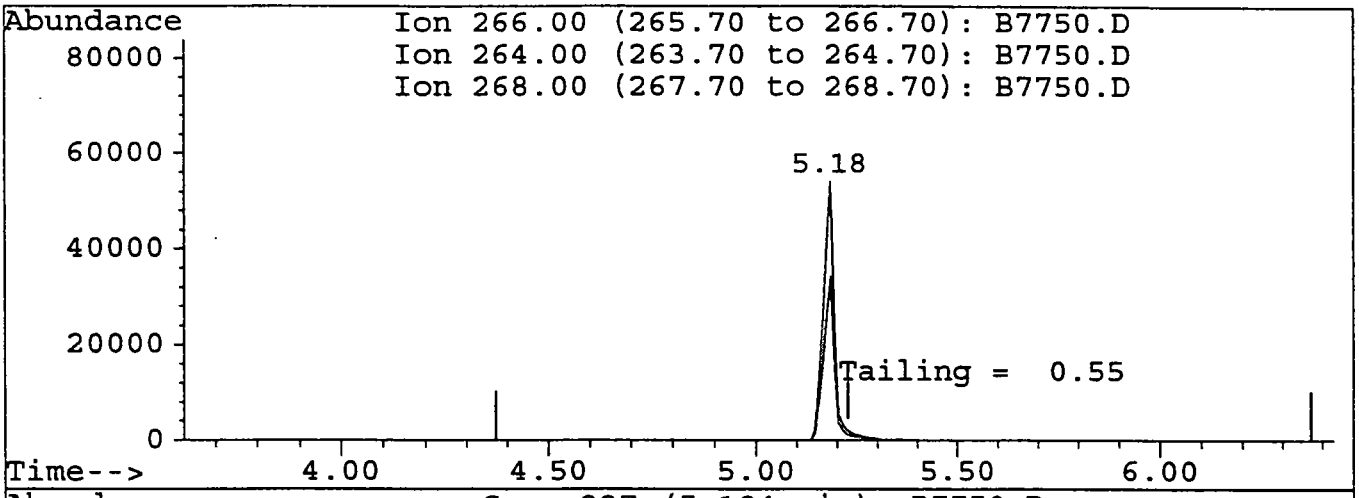
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
293.00	31	364.95	238				
296.00	527	372.05	89				
297.00	89	403.05	44				
303.00	67	420.95	40				
314.00	27	423.05	267				
314.90	61	424.05	52				
323.10	148	441.10	788				
324.10	39	442.00	5436				
334.00	124	443.00	1105				
352.10	49	444.10	101				
353.10	51						

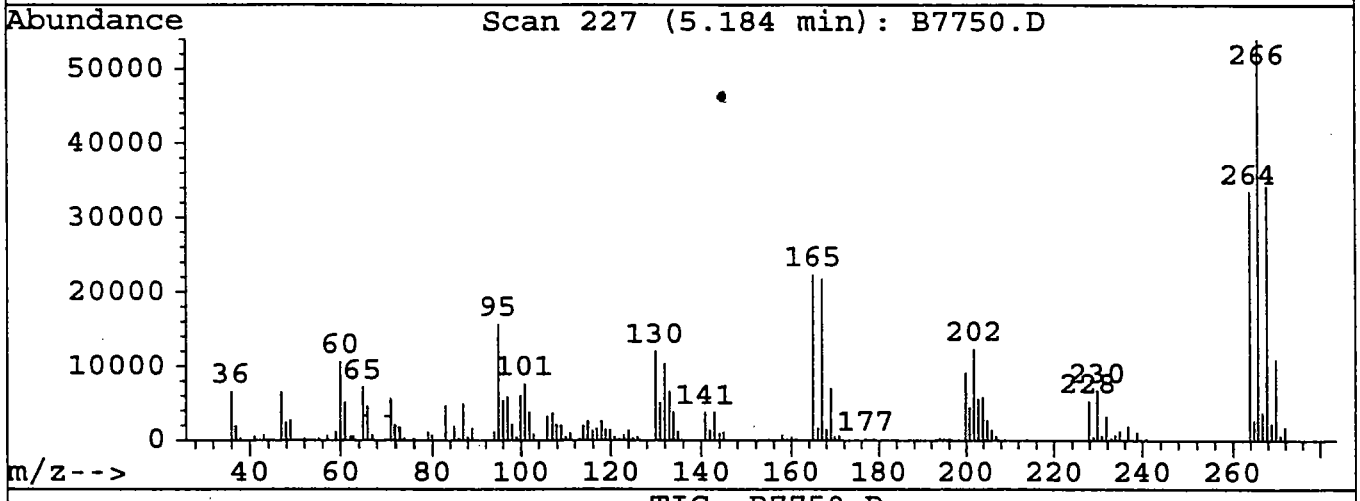
Quantitation Report

Data File : C:\HPCHEM\1\DATA2\B7750.D
Acq On : 30 May 95 9:14 am
Sample : DFTPP..... Converted from RTE d
Misc :
Quant Time: May 30 8:29 1995

Vial: 1
Operator: SCOTTV
Inst : ABNA
BT Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Tue May 30 08:17:48 1995
Response via : Multiple Level Calibration





TIC: B7750.D

(1) Pentachlorophenol (CM)

5.18min 321.74ug/mL

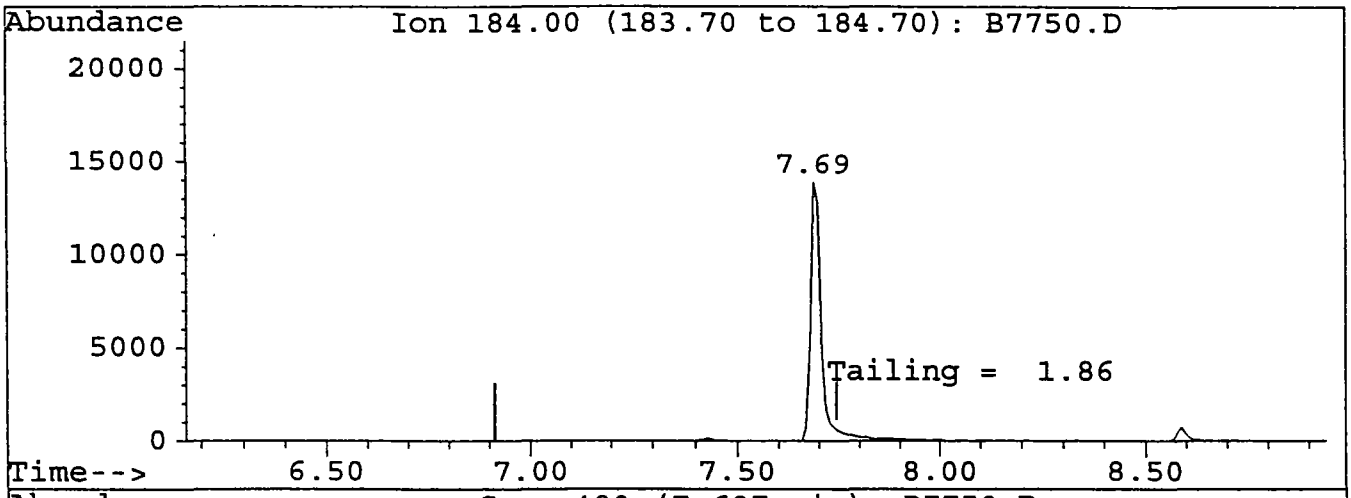
response 106272

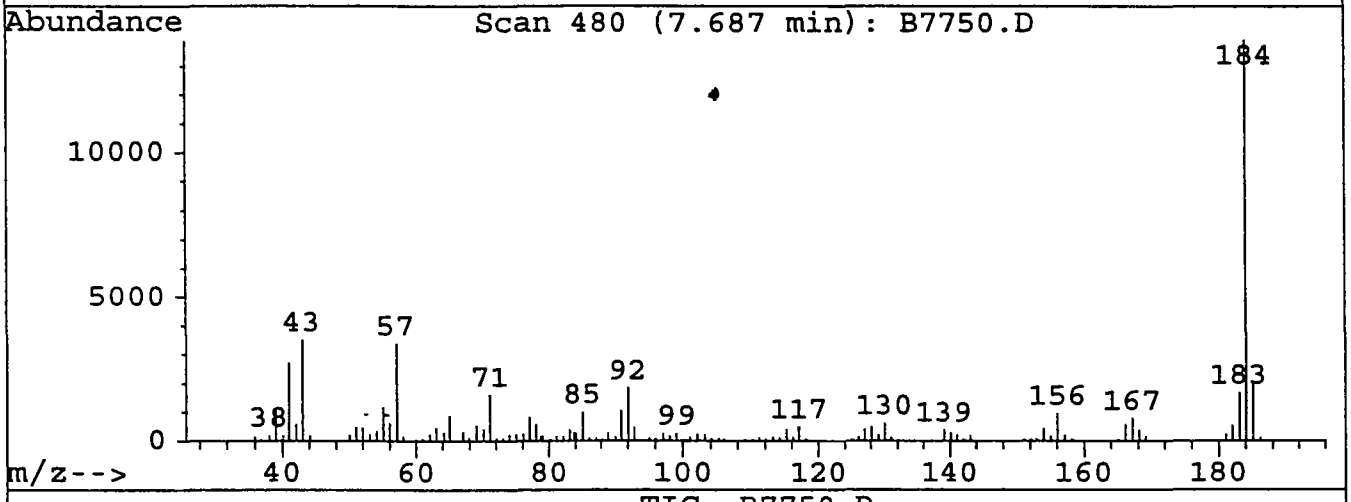
Ion	Exp%	Act%
266.00	100	100
264.00	64.30	62.02
268.00	64.70	63.47
0.00	0.00	0.00

Quantitation Report

Data File : C:\HPCHEM\1\DATA2\B7750.D Vial: 1
Acq On : 30 May 95 9:14 am Operator: SCOTTV
Sample : DFTPP..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: May 30 8:29 1995

Method : C:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Tue May 30 08:17:48 1995
Response via : Multiple Level Calibration





TIC: B7750.D

(2) Benzidine
7.69min 86.22ug/ml
response 26489

Ion	Exp%	Act%
184.00	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Response Factor Report ABNA

Method : C:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 09:37:17 1995
Response via : Initial Calibration

Calibration Files
160 =B7755.D 120 =B7754.D 80 =B7753.D
50 =B7752.D 20 =B7751.D

		Compound	160	120	80	50	20	Avg	%RSD
1)	I	1,4-Dichlorobenzene-d	----------ISTD----------						
2)	S	2-Fluorophenol	1.046	1.205	1.170	1.071	1.165	1.131	6.09
3)	S	Phenol-d5	1.808	2.019	1.924	1.724	1.888	1.873	6.00
4)	M	N-nitrosodimethylamin	0.599	0.546	0.436	0.731		0.578	21.22
5)		Pyridine	0.424	0.364	0.429	0.496		0.428	12.65
6)	CM	Phenol	1.442	1.792	1.686	1.698	1.721	1.668	7.94
7)	MT	bis(2-Chloroethyl)eth	1.893	2.082	2.104	2.042	2.008	2.026	4.10
8)	M	2-Chlorophenol	1.138	1.284	1.307	1.245	1.372	1.269	6.83
9)	MT	1,3-Dichlorobenzene	1.295	1.404	1.490	1.416	1.320	1.385	5.65
10)	CM	1,4-Dichlorobenzene	1.318	1.468	1.512	1.469	1.379	1.429	5.51
11)	M	1,2-Dichlorobenzene	1.255	1.391	1.452	1.374	1.315	1.357	5.54
12)	T	2-Methylphenol	1.109	1.268	1.262	1.164	1.220	1.204	5.61
13)	M	bis(2-chloroisopropyl	1.886	1.860	1.988	1.730	1.878	1.868	4.92
14)	T	4-Methylphenol	1.216	1.432	1.330	1.310	1.320	1.322	5.82
15)	PM	N-Nitroso-Di-n-propyl	1.289	1.444	1.471	1.267	1.257	1.346	7.68
16)	M	Hexachloroethane	0.691	0.756	0.792	0.747	0.701	0.737	5.65
17)	I	Naphthalene-d8	----------ISTD----------						
18)	S	Nitrobenzene-d5	0.437	0.466	0.478	0.437	0.460	0.456	4.02
19)	M	Nitrobenzene	0.398	0.409	0.461	0.436	0.416	0.424	5.86
20)	M	Isophorone	0.776	0.850	0.875	0.817	1.149	0.893	16.52
21)	MC	2-Nitrophenol	0.189	0.225	0.225	0.200	0.213	0.210	7.50
22)	M	2,4-Dimethylphenol	0.362	0.429	0.388	0.382	0.407	0.394	6.49
23)	M	bis(2-Chloroethoxy)me	0.441	0.448	0.467	0.455	0.469	0.456	2.57
24)	MC	2,4-Dichlorophenol	0.271	0.299	0.307	0.292	0.322	0.298	6.39
25)	M	1,2,4-Trichlorobenzen	0.293	0.318	0.326	0.322	0.326	0.317	4.42
26)	M	Naphthalene	0.922	0.948	1.039	0.963	1.023	0.979	5.12
27)	T	4-Chloroaniline	0.455	0.465	0.471	0.468	0.457	0.463	1.47
28)	MC	Hexachlorobutadiene	0.175	0.186	0.189	0.186	0.190	0.185	3.26
29)	MC	4-Chloro-3-methylphen	0.355	0.396	0.398	0.385	0.385	0.384	4.45
30)	M	2-Chloronaphthalene	0.672	0.680	0.719	0.700	0.709	0.696	2.81
31)	T	2-Methylnaphthalene	0.890	0.985	0.640	0.702	0.711	0.786	18.46
32)	I	Acenaphthene-d10	----------ISTD----------						
33)	P	Hexachlorocyclopentad	0.294	0.303	0.302	0.258	0.233	0.278	11.19
34)	MC	2,4,6-Trichlorophenol	0.470	0.452	0.413	0.381	0.361	0.415	11.10
35)	T	2,4,5-Trichlorophenol	0.221	0.317	0.348	0.370	0.365	0.324	18.94
36)	S	2-Fluorobiphenyl	1.163	1.254	1.230	1.178	1.174	1.200	3.30
37)	T	2-Nitroaniline	0.527	0.566	0.592	0.578	0.483	0.549	8.04
38)	M	Dimethylphthalate	1.233	1.348	1.373	1.295	1.248	1.299	4.68
39)	M	Acenaphthylene	1.606	1.717	1.805	1.711	1.683	1.704	4.20
40)	M	2,6-Dinitrotoluene	0.295	0.312	0.346	0.327	0.271	0.310	9.34
41)	T	3-Nitroaniline	0.279	0.370	0.403	0.363	0.315	0.346	14.10

(#) = Out of Range

Response Factor Report ABNA

Method : C:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 09:37:17 1995
Response via : Initial Calibration

Calibration Files
160 =B7755.D 120 =B7754.D 80 =B7753.D
50 =B7752.D 20 =B7751.D

		Compound	160	120	80	50	20	Avg	%RSD
42)	CM	Acenaphthene	0.982	1.056	1.036	1.024	1.028	1.025	2.65
43)	MP	2,4-Dinitrophenol	0.189	0.213	0.198	0.155	0.107	0.172	24.56
44)	PM	4-Nitrophenol	0.151	0.178	0.188	0.168	0.142	0.166	11.52
45)	T	Dibenzofuran	1.475	1.700	1.686	1.669	1.512	1.609	6.62
46)	M	2,4-Dinitrotoluene	1.132	1.243	1.193	1.143	1.125	1.167	4.29
47)	M	Diethylphthalate	1.274	1.533	1.576	1.452	1.379	1.443	8.38
48)	M	Fluorene	1.222	1.333	1.295	1.228	1.216	1.259	4.17
49)	M	4-Chlorophenyl-phenyl	0.554	0.608	0.613	0.591	0.615	0.596	4.25
50)		Phenanthrene-d10	----------ISTD----------						
51)	T	4-Nitroaniline	0.131	0.151	0.160	0.214	0.175	0.166	18.75
52)	MC	4,6-Dinitro-2-methylp	0.141	0.142	0.151	0.129	0.096	0.132	16.20
53)	T	n-Nitrosodiphenylamin	0.458	0.524	0.531	0.530	0.499	0.508	6.15
54)	S	2,4,6-Tribromophenol	0.098	0.113	0.112	0.106	0.111	0.108	5.77
55)		1,2-Diphenylhydrazine	1.065	1.251	1.281	1.312	1.147	1.211	8.48
56)	M	4-Bromophenyl-phenyle	0.186	0.198	0.212	0.220	0.213	0.206	6.61
57)	M	Hexachlorobenzene	0.138	0.231	0.244	0.228	0.233	0.215	20.20
58)	CM	Pentachlorophenol	0.131	0.150	0.154	0.133	0.119	0.137	10.26
59)	M	Phenanthrene	0.983	1.142	1.181	1.095	1.071	1.094	6.87
60)	M	Anthracene	0.809	1.021	1.128	1.028	1.059	1.009	11.85
61)		Carbazole	0.656	1.051	1.106	0.964	0.941	0.944	18.43
62)	M	Di-n-butylphthalate	1.441	1.645	1.749	1.638	1.559	1.606	7.11
63)	MC	Fluoranthene	0.922	0.947	1.162	1.124	1.019	1.035	10.22
64)	I	Chrysene-d12	----------ISTD----------						
65)		Benzidine	0.569	0.427	0.364	0.399	0.428	0.437	17.86
66)	M	Pyrene	1.857	1.452	1.658	1.267	1.273	1.502	16.98
67)	S	Terphenyl-d14	1.355	1.039	1.124	0.880	0.911	1.062	17.99
68)	M	Butylbenzylphthalate	1.130	0.958	1.080	0.843	0.796	0.962	15.08
69)	M	Benzo[a]anthracene	1.813	1.529	1.731	1.342	1.163	1.516	17.74
70)	M	3,3'-Dichlorobenzidin	0.345	0.347	0.471	0.353	0.416	0.386	14.47
71)	M	Chrysene	0.661	0.691	1.035	0.768	1.060	0.843	22.65
72)	M	bis(2-Ethylhexyl)phth	1.536	1.331	1.560	1.243	1.151	1.364	13.17
73)	I	Perylene-d12	----------ISTD----------						
74)	MC	Di-n-octylphthalate	4.287	5.460	5.911	4.718		5.094	14.31
75)	M	Benzo[b]fluoranthene	2.445	2.215	2.794	2.522	2.357	2.467	8.75
76)	m	Benzo[k]fluoranthene	1.248	0.961	1.258	1.108	1.376	1.190	13.40
77)	mc	Benzo[a]pyrene	1.114	0.945	1.269	1.355	1.450	1.227	16.33
78)	m	Indeno[1,2,3-cd]pyren	0.493	0.521	0.450	0.417	0.381	0.452	12.46
79)	m	Dibenz[a,h]anthracene	0.471	0.517	0.454	0.365	0.371	0.436	15.14
80)	M	Benzo[g,h,i]perylene	0.385	0.372	0.381	0.326	0.314	0.356	9.28
81)		1-Methyl naphthalene						0.000#	-1.00
82)		7,12-Dimethylbenz(a)a						0.000#	-1.00

(#) = Out of Range

Quantitation Report

Data File : c:\hpchem\1\data2\b7751.d Vial: 2
Acq On : 30 May 95 9:44 am Operator: SCOTTV
Sample : 20 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: May 31 10:03 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Tue May 30 08:17:48 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.05	152	25556	40.00	ug/mL	-0.26
17) Naphthalene-d8	12.74	136	103257	40.00	ug/mL	-0.28
32) Acenaphthene-d10	18.06	164	74029	40.00	ug/mL	-0.32
50) Phenanthrene-d10	22.53	188	123712	40.00	ug/ml	-0.36
64) Chrysene-d12	30.59	240	101227	40.00	ug/mL	-0.44
73) Perylene-d12	34.60	264	55866	40.00	ug/mL	-0.44
System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	5.47	112	37223	52.40	ug/mL	52.40%
3) Phenol-d5	8.39	99	60299	61.22	ug/mL	61.22%
18) Nitrobenzene-d5	10.70	82	59323	55.23	ug/mL	55.23%
36) 2-Fluorobiphenyl	16.21	172	108666	45.06	ug/mL	45.06%
54) 2,4,6-Tribromophenol	20.47	330	17160	50.11	ug/mL	50.11%
67) Terphenyl-d14	27.65	244	115295	44.07	ug/mL	44.07%
Target Compounds						Qvalue
4) N-nitrosodimethylamine	1.68	74	11819	64.09	ug/mlm	0
6) Phenol	8.41	94	21988	23.29	ug/mL	100
7) bis(2-Chloroethyl)ether	12.42	93	25656	25.13	ug/mL	94
8) 2-Chlorophenol	8.45	128	17535	22.70	ug/mL	91
9) 1,3-Dichlorobenzene	8.84	146	16873	19.30	ug/mL	95
10) 1,4-Dichlorobenzene	9.09	146	17619	19.90	ug/mL	99
11) 1,2-Dichlorobenzene	9.47	146	16808	18.80	ug/mL	99
12) 2-Methylphenol	10.13	108	15585	20.61	ug/mLm	62
13) bis(2-chloroisopropyl)ethe	10.13	45	23996	14.64	ug/mL#	8
14) 4-Methylphenol	10.63	108	16867	20.62	ug/mL	96
15) N-Nitroso-Di-n-propylamine	10.47	70	16063	19.56	ug/mL	95
16) Hexachloroethane	10.43	117	8960	16.89	ug/mL	93
19) Nitrobenzene	10.74	77	21469	22.12	ug/mL#	73
20) Isophorone	10.70	82	59319	34.39	ug/mL#	68
21) 2-Nitrophenol	11.70	139	11002	19.97	ug/mL	97
22) 2,4-Dimethylphenol	10.63	107	20989	21.66	ug/mL#	32
23) bis(2-Chloroethoxy)methane	8.16	93	24189	20.63	ug/mL#	42
24) 2,4-Dichlorophenol	12.47	162	16624	20.82	ug/mL	97
25) 1,2,4-Trichlorobenzene	12.65	180	16825	18.32	ug/mL	99
26) Naphthalene	12.80	128	52795	20.11	ug/mL#	89
27) 4-Chloroaniline	13.15	127	23600	19.35	ug/mL	98
28) Hexachlorobutadiene	13.32	225	9812	16.62	ug/mL	99
29) 4-Chloro-3-methylphenol	14.86	107	19868	19.58	ug/mL	90
30) 2-Chloronaphthalene	16.38	162	36612	17.42	ug/ml	97
31) 2-Methylnaphthalene	14.94	142	36729	19.16	ug/mL	98
33) Hexachlorocyclopentadiene	15.48	237	8635	12.84	ug/mL	99
34) 2,4,6-Trichlorophenol	15.92	196	13356	18.21	ug/mL	96
35) 2,4,5-Trichlorophenol	16.02	196	13494	17.54	ug/mL	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data2\b7751.d Vial: 2
Acq On : 30 May 95 9:44 am Operator: SCOTTV
Sample : 20 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: May 31 10:03 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Tue May 30 08:17:48 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
37)	2-Nitroaniline	16.85	65	17876	21.08	ug/mL#	100
38)	Dimethylphthalate	17.62	163	46196	21.25	ug/mL	100
39)	Acenaphthylene	17.58	152	62290	16.75	ug/mL	98
40)	2,6-Dinitrotoluene	17.69	165	10022	19.61	ug/mL	99
41)	3-Nitroaniline	18.12	138	11669	15.38	ug/mL	98
42)	Acenaphthene	18.14	153	38044	16.56	ug/mL	99
43)	2,4-Dinitrophenol	18.44	184	3955	15.55	ug/mLm	95
44)	4-Nitrophenol	18.93	109	5206	21.05	ug/mL	91
45)	Dibenzofuran	18.69	168	55975	17.19	ug/mL	98
46)	2,4-Dinitrotoluene	19.73	165	41635	17.45	ug/mL#	34
47)	Diethylphthalate	19.83	149	51035	19.15	ug/mL	99
48)	Fluorene	19.73	166	45015	17.98	ug/mL	98
49)	4-Chlorophenyl-phenylether	19.93	204	22774	18.71	ug/mL	94
51)	4-Nitroaniline	19.95	138	10837	22.35	ug/mL	97
52)	4,6-Dinitro-2-methylphenol	20.06	198	5946	17.19	ug/mL	100
53)	n-Nitrosodiphenylamine	20.33	169	30841	25.02	ug/mL#	1
55)	1,2-Diphenylhydrazine (as	20.39	77	70933	22.38	ug/ml	100
56)	4-Bromophenyl-phenylether	21.37	248	13195	20.03	ug/mL#	89
57)	Hexachlorobenzene	21.35	284	14382	18.78	ug/mL#	51
58)	Pentachlorophenol	22.07	266	7390	16.37	ug/mL	99
59)	Phenanthrene	22.61	178	66272	19.37	ug/mL	98
60)	Anthracene	22.74	178	65476	19.46	ug/mLm	97
61)	Carbazole	23.40	167	58205	18.79	ug/ml	100
62)	Di-n-butylphthalate	24.92	149	96445	16.33	ug/mL	99
63)	Fluoranthene	26.19	202	63031	16.63	ug/mLm	93
65)	Benzidine	26.88	184	21650	24.83	ug/mlm	100
66)	Pyrene	26.83	202	64445	15.73	ug/mL#	87
68)	Butylbenzylphthalate	29.43	149	40290	16.46	ug/mL	90
69)	Benzo[a]anthracene	30.57	228	58860	18.72	ug/mL	99
70)	3,3'-Dichlorobenzidine	30.72	252	21074	24.51	ug/mL	98
71)	Chrysene	30.57	228	53653	19.46	ug/mLm	98
72)	bis(2-Ethylhexyl)phthalate	31.40	149	58259	15.97	ug/mL	100
74)	Di-n-octylphthalate	33.31	149	92370	9.30	ug/mL	98
75)	Benzo[b]fluoranthene	33.62	252	65848	26.94	ug/mLm	98
76)	Benzo[k]fluoranthene	33.70	252	38434	16.42	ug/mLm	91
77)	Benzo[a]pyrene	34.45	252	40502	24.28	ug/mLm	97
78)	Indeno[1,2,3-cd]pyrene	37.16	276	10646	15.19	ug/mL#	85
79)	Dibenz[a,h]anthracene	37.27	278	10355	16.78	ug/mL#	91
80)	Benzo[g,h,i]perylene	37.74	276	8780	14.39	ug/mLm	97

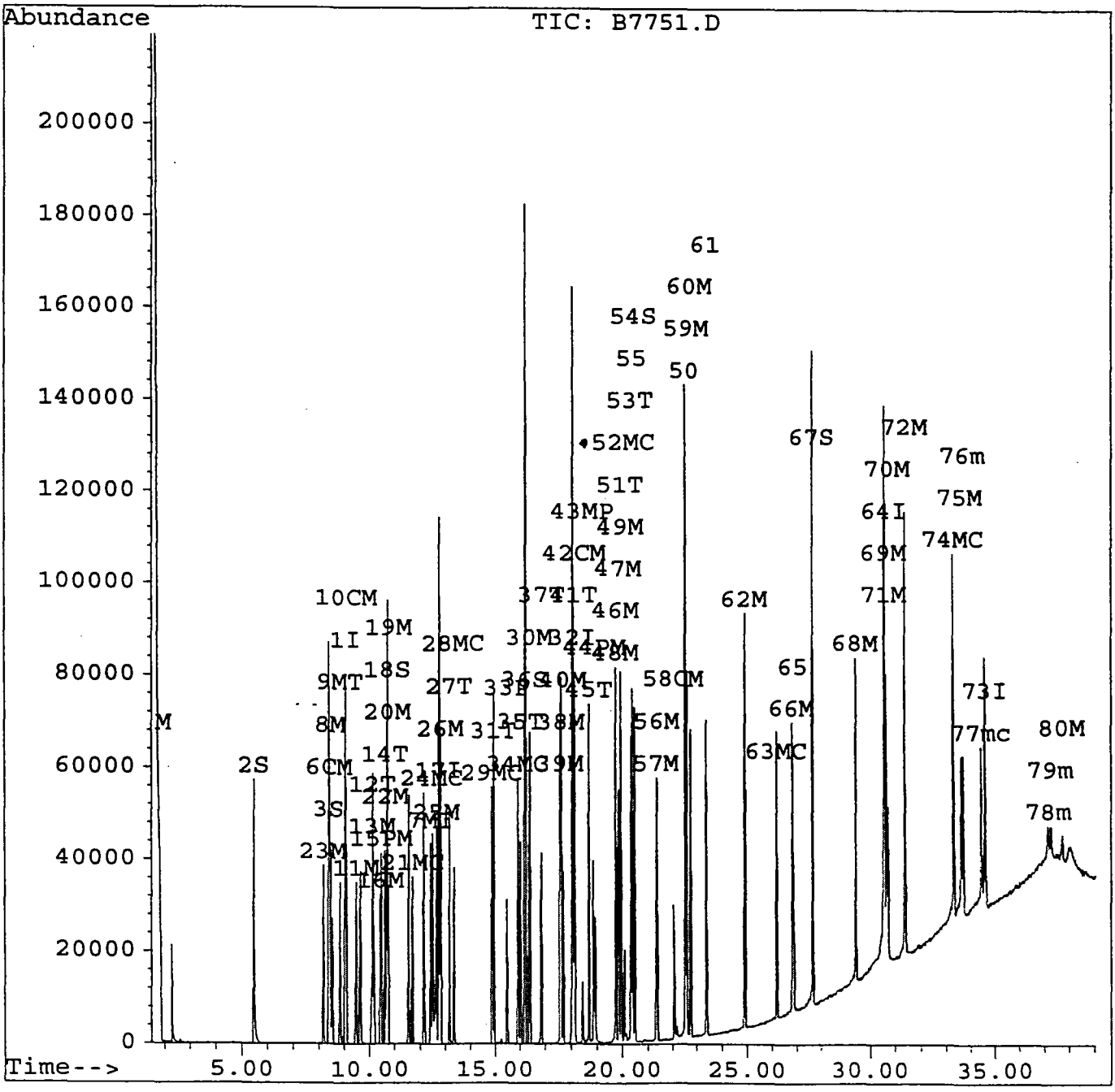
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data2\b7751.d
Acq On : 30 May 95 9:44 am
Sample : 20 STD.....
Misc :
Quant Time: May 31 10:03 1995

Vial: 2
Operator: SCOTTV
Converted from RTE d Inst : ABNA
BT Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Tue May 30 08:17:48 1995
Response via : Multiple Level Calibration



Quantitation Report

Data File : c:\hpchem\1\data2\b7752.d Vial: 3
Acq On : 30 May 95 10:35 am Operator: SCOTTV
Sample : 50 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: May 31 10:04 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Tue May 30 08:17:48 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.03	152	29664	40.00	ug/mL	-0.27
17) Naphthalene-d8	12.75	136	124059	40.00	ug/mL	-0.28
32) Acenaphthene-d10	18.05	164	81773	40.00	ug/mL	-0.33
50) Phenanthrene-d10	22.52	188	131721	40.00	ug/ml	-0.37
64) Chrysene-d12	30.58	240	118287	40.00	ug/mL	-0.45
73) Perylene-d12	34.60	264	45273	40.00	ug/mL	-0.45
System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	5.47	112	39705	48.15	ug/mL	48.15%
3) Phenol-d5	8.39	99	63940	55.92	ug/mL	55.92%
18) Nitrobenzene-d5	10.71	82	67799	52.53	ug/mL	52.53%
36) 2-Fluorobiphenyl	16.20	172	120432	45.21	ug/mL	45.21%
54) 2,4,6-Tribromophenol	20.46	330	17504	48.01	ug/mL	48.01%
67) Terphenyl-d14	27.65	244	130090	42.56	ug/mL	42.56%
Target Compounds						Qvalue
4) N-nitrosodimethylamine	1.70	74	27115	126.68	ug/mlm	0
6) Phenol	8.43	94	62958	57.46	ug/mL	100
7) bis(2-Chloroethyl)ether	12.42	93	75709	63.88	ug/mL	99
8) 2-Chlorophenol	8.45	128	46179	51.50	ug/mL#	84
9) 1,3-Dichlorobenzene	8.84	146	52488	51.73	ug/mL	98
10) 1,4-Dichlorobenzene	9.09	146	54452	52.99	ug/mL	99
11) 1,2-Dichlorobenzene	9.47	146	50964	49.12	ug/mL	99
12) 2-Methylphenol	10.13	108	43177	49.20	ug/mLm	65
13) bis(2-chloroisopropyl)ethe	10.09	45	64159	33.73	ug/mL#	67
14) 4-Methylphenol	10.63	108	48583	51.18	ug/mL	98
15) N-Nitroso-Di-n-propylamine	10.49	70	46969	49.27	ug/mL	99
16) Hexachloroethane	10.42	117	27701	44.99	ug/mL#	69
19) Nitrobenzene	10.76	77	67644	58.02	ug/mL	89
20) Isophorone	11.57	82	126657	61.12	ug/mL	97
21) 2-Nitrophenol	11.69	139	31019	46.87	ug/mL	88
22) 2,4-Dimethylphenol	10.63	107	59303	50.95	ug/mL#	32
23) bis(2-Chloroethoxy)methane	8.16	93	70617	50.13	ug/mL#	42
24) 2,4-Dichlorophenol	12.48	162	45218	47.12	ug/mL	98
25) 1,2,4-Trichlorobenzene	12.65	180	49933	45.25	ug/mL	98
26) Naphthalene	12.81	128	149358	47.34	ug/mL#	91
27) 4-Chloroaniline	13.15	127	72575	49.52	ug/mL	100
28) Hexachlorobutadiene	13.33	225	28798	40.59	ug/mL	98
29) 4-Chloro-3-methylphenol	14.87	107	59715	48.98	ug/mL	99
30) 2-Chloronaphthalene	16.37	162	108511	42.96	ug/ml	97
31) 2-Methylnaphthalene	14.94	142	108935	47.31	ug/mL	98
33) Hexachlorocyclopentadiene	15.46	237	26413	35.57	ug/mL	98
34) 2,4,6-Trichlorophenol	15.91	196	38933	48.06	ug/mL	99
35) 2,4,5-Trichlorophenol	16.00	196	37853	44.55	ug/mL	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data2\b7752.d Vial: 3
Acq On : 30 May 95 10:35 am Operator: SCOTTV
Sample : 50 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: May 31 10:04 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Tue May 30 08:17:48 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
37)	2-Nitroaniline	16.85	65	59044	63.04	ug/mL#	100
38)	Dimethylphthalate	17.62	163	132350	55.11	ug/mL	99
39)	Acenaphthylene	17.58	152	174919	42.58	ug/mL	99
40)	2,6-Dinitrotoluene	17.70	165	33402	59.16	ug/mL	98
41)	3-Nitroaniline	18.12	138	37075	44.25	ug/mL	98
42)	Acenaphthene	18.14	153	104702	41.25	ug/mL	100
43)	2,4-Dinitrophenol	18.45	184	15812	56.30	ug/mL#	91
44)	4-Nitrophenol	18.93	109	17219	63.03	ug/mL#	83
45)	Dibenzofuran	18.70	168	170626	47.45	ug/mL	97
46)	2,4-Dinitrotoluene	19.72	165	116800	44.33	ug/mL#	32
47)	Diethylphthalate	19.86	149	148456	50.42	ug/mL	98
48)	Fluorene	19.72	166	125476	45.36	ug/mL	98
49)	4-Chlorophenyl-phenylether	19.92	204	60420	44.93	ug/mL	95
51)	4-Nitroaniline	19.99	138	35220	68.23	ug/mL	97
52)	4,6-Dinitro-2-methylphenol	20.09	198	21308	57.84	ug/mL	100
53)	n-Nitrosodiphenylamine	20.32	169	87310	66.53	ug/mL#	1
55)	1,2-Diphenylhydrazine (as	20.38	77	216080	64.04	ug/ml	100
56)	4-Bromophenyl-phenylether	21.36	248	36244	51.67	ug/mL#	89
57)	Hexachlorobenzene	21.34	284	37570	46.07	ug/mL#	76
58)	Pentachlorophenol	22.06	266	21962	45.70	ug/mL	98
59)	Phenanthrene	22.60	178	180287	49.49	ug/mL	100
60)	Anthracene	22.75	178	169255	47.24	ug/mLm	99
61)	Carbazole	23.39	167	158797	48.15	ug/ml	99
62)	Di-n-butylphthalate	24.91	149	269738	42.89	ug/mL	100
63)	Fluoranthene	26.20	202	185037	45.86	ug/mLm	81
65)	Benzidine	26.87	184	58973	57.88	ug/mlm	100
66)	Pyrene	26.84	202	187374	39.15	ug/mL	97
68)	Butylbenzylphthalate	29.42	149	124656	43.57	ug/mL	91
69)	Benzo[a]anthracene	30.56	228	198412	54.00	ug/mL	100
70)	3,3'-Dichlorobenzidine	30.71	252	52146	51.91	ug/mL	98
71)	Chrysene	30.66	228	113518	35.24	ug/mLm	98
72)	bis(2-Ethylhexyl)phthalate	31.39	149	183732	43.10	ug/mL	99
74)	Di-n-octylphthalate	33.30	149	267010	33.18	ug/mL	98
75)	Benzo[b]fluoranthene	33.63	252	142718	72.04	ug/mL	98
76)	Benzo[k]fluoranthene	33.71	252	62677	33.05	ug/mLm	95
77)	Benzo[a]pyrene	34.44	252	76698	56.74	ug/mLm	99
78)	Indeno[1,2,3-cd]pyrene	37.16	276	23591	41.53	ug/mLm	96
79)	Dibenz[a,h]anthracene	37.28	278	20678	41.35	ug/mL	96
80)	Benzo[g,h,i]perylene	37.74	276	18451	37.32	ug/mL	95

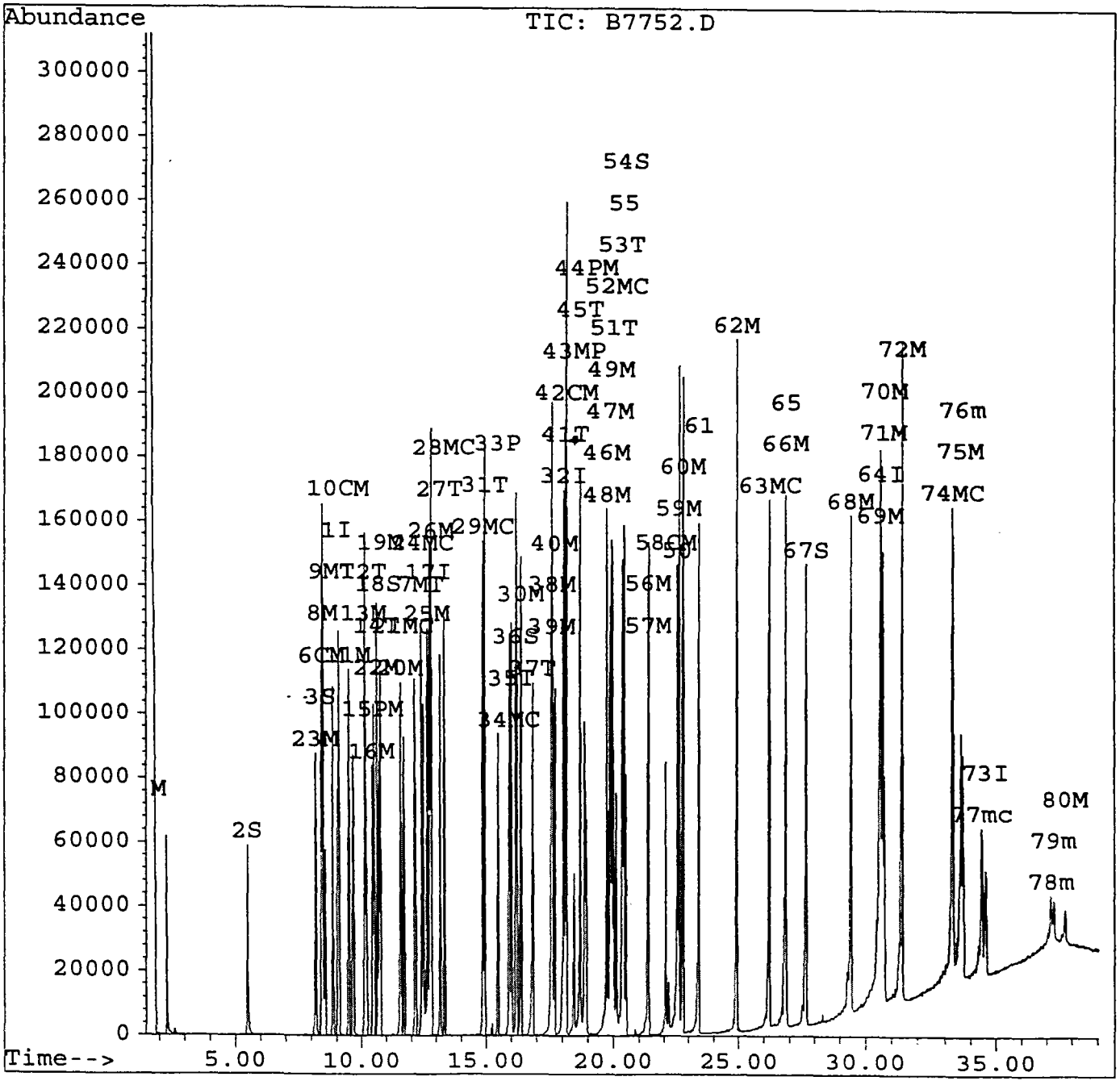
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data2\b7752.d
Acq On : 30 May 95 10:35 am
Sample : 50 STD.....
Misc :
Quant Time: May 31 10:04 1995

Vial: 3
Operator: SCOTTV
Converted from RTE d Inst : ABNA
BT Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Tue May 30 08:17:48 1995
Response via : Multiple Level Calibration



Quantitation Report

Data File : c:\hpchem\1\data2\b7753.d Vial: 4
Acq On : 30 May 95 11:27 am Operator: SCOTTV
Sample : 80 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: May 31 9:32 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Tue May 30 08:17:48 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.05	152	29814	40.00	ug/mL	-0.26
17) Naphthalene-d8	12.75	136	126317	40.00	ug/mL	-0.28
32) Acenaphthene-d10	18.05	164	87574	40.00	ug/mL	-0.33
50) Phenanthrene-d10	22.54	188	151522	40.00	ug/ml	-0.35
64) Chrysene-d12	30.60	240	106944	40.00	ug/mL	-0.42
73) Perylene-d12	34.60	264	39840	40.00	ug/mL	-0.45
System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	5.47	112	43593	52.60	ug/mL	52.60%
3) Phenol-d5	8.41	99	71703	62.40	ug/mL	62.40%
18) Nitrobenzene-d5	10.72	82	75552	57.49	ug/mL	57.49%
36) 2-Fluorobiphenyl	16.22	172	134602	47.18	ug/mL	47.18%
54) 2,4,6-Tribromophenol	20.48	330	21167	50.47	ug/mL	50.47%
67) Terphenyl-d14	27.65	244	150199	54.35	ug/mL	54.35%
Target Compounds						Qvalue
4) N-nitrosodimethylamine	1.62	74	25992	120.82	ug/ml	100
6) Phenol	8.45	94	100529	91.29	ug/mL	100
7) bis(2-Chloroethyl)ether	12.44	93	125480	105.34	ug/mL	99
8) 2-Chlorophenol	8.45	128	77924	86.47	ug/mL#	89
9) 1,3-Dichlorobenzene	8.86	146	88850	87.12	ug/mL	98
10) 1,4-Dichlorobenzene	9.09	146	90142	87.29	ug/mL	98
11) 1,2-Dichlorobenzene	9.49	146	86576	83.03	ug/mL	99
12) 2-Methylphenol	10.15	108	75232	85.29	ug/mLm	63
13) bis(2-chloroisopropyl)ethe	10.11	45	118548	62.01	ug/mL#	81
14) 4-Methylphenol	10.65	108	79296	83.11	ug/mL	97
15) N-Nitroso-Di-n-propylamine	10.53	70	87737	91.57	ug/mL	94
16) Hexachloroethane	10.44	117	47246	76.35	ug/mL	93
19) Nitrobenzene	10.78	77	116413	98.06	ug/mL#	86
20) Isophorone	11.61	82	221062	104.76	ug/mL	99
21) 2-Nitrophenol	11.71	139	56797	84.29	ug/mL	91
22) 2,4-Dimethylphenol	10.65	107	97981	82.67	ug/mL#	32
23) bis(2-Chloroethoxy)methane	8.18	93	117962	82.25	ug/mL#	42
24) 2,4-Dichlorophenol	12.50	162	77661	79.49	ug/mL	99
25) 1,2,4-Trichlorobenzene	12.65	180	82424	73.37	ug/mL	100
26) Naphthalene	12.83	128	262498	81.72	ug/mL#	92
27) 4-Chloroaniline	13.17	127	118867	79.65	ug/mL	99
28) Hexachlorobutadiene	13.33	225	47670	66.00	ug/mL	96
29) 4-Chloro-3-methylphenol	14.87	107	100652	81.09	ug/mL	90
30) 2-Chloronaphthalene	16.39	162	181668	70.65	ug/ml	100
31) 2-Methylnaphthalene	14.94	142	161698	68.97	ug/mL	98
33) Hexachlorocyclopentadiene	15.46	237	52969	66.60	ug/mL	100
34) 2,4,6-Trichlorophenol	15.93	196	72387	83.44	ug/mL	98
35) 2,4,5-Trichlorophenol	16.00	196	60973	67.01	ug/mL	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data2\b7753.d Vial: 4
Acq On : 30 May 95 11:27 am Operator: SCOTTV
Sample : 80 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: May 31 9:32 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Tue May 30 08:17:48 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
37)	2-Nitroaniline	16.87	65	103690	103.37	ug/mL#	100
38)	Dimethylphthalate	17.66	163	240471	93.49	ug/mL#	99
39)	Acenaphthylene	17.60	152	316138	71.86	ug/mL	99
40)	2,6-Dinitrotoluene	17.74	165	60631	100.28	ug/mL	92
41)	3-Nitroaniline	18.16	138	70580	78.65	ug/mL	92
42)	Acenaphthene	18.16	153	181405	66.74	ug/mL	99
43)	2,4-Dinitrophenol	18.47	184	34630	115.13	ug/mL	93
44)	4-Nitrophenol	18.95	109	33002	112.80	ug/mL	86
45)	Dibenzofuran	18.70	168	295374	76.70	ug/mL	95
46)	2,4-Dinitrotoluene	19.74	165	209002	74.07	ug/mL#	32
47)	Diethylphthalate	19.86	149	275990	87.53	ug/mL	98
48)	Fluorene	19.74	166	226899	76.60	ug/mL	99
49)	4-Chlorophenyl-phenylether	19.94	204	107387	74.57	ug/mL	95
51)	4-Nitroaniline	20.03	138	48638	81.91	ug/mL	96
52)	4,6-Dinitro-2-methylphenol	20.11	198	45736	107.93	ug/mL	100
53)	n-Nitrosodiphenylamine	20.34	169	161028	106.67	ug/mL#	1
55)	1,2-Diphenylhydrazine (as	20.40	77	388272	100.03	ug/ml	100
56)	4-Bromophenyl-phenylether	21.38	248	64383	79.79	ug/mL	94
57)	Hexachlorobenzene	21.37	284	73929	78.80	ug/mL#	70
58)	Pentachlorophenol	22.06	266	46630	84.35	ug/mL	97
59)	Phenanthrene	22.62	178	357765	85.38	ug/mL	99
60)	Anthracene	22.77	178	341982	82.98	ug/mLm	98
61)	Carbazole	23.41	167	335154	88.34	ug/ml	99
62)	Di-n-butylphthalate	24.91	149	529878	73.24	ug/mL	99
63)	Fluoranthene	26.20	202	352244	75.89	ug/mLm	91
65)	Benzidine	26.88	184	77859	84.53	ug/ml	100
66)	Pyrene	26.84	202	354638	81.96	ug/mL#	89
68)	Butylbenzylphthalate	29.42	149	231051	89.32	ug/mL	95
69)	Benzo[a]anthracene	30.58	228	370214	111.44	ug/mL	99
70)	3,3'-Dichlorobenzidine	30.72	252	100778	110.96	ug/mL	98
71)	Chrysene	30.68	228	221302	75.99	ug/mLm	98
72)	bis(2-Ethylhexyl)phthalate	31.39	149	333704	86.58	ug/mL	97
74)	Di-n-octylphthalate	33.30	149	471006	66.51	ug/mL	99
75)	Benzo[b]fluoranthene	33.63	252	222662	127.72	ug/mL	97
76)	Benzo[k]fluoranthene	33.71	252	100220	60.05	ug/mLm	94
77)	Benzo[a]pyrene	34.44	252	101126	85.01	ug/mLm	99
78)	Indeno[1,2,3-cd]pyrene	37.17	276	35858	71.73	ug/mL	88
79)	Dibenz[a,h]anthracene	37.28	278	36175	82.20	ug/mL	94
80)	Benzo[g,h,i]perylene	37.75	276	30352	69.77	ug/mLm	99

(#) = qualifier out of range (m) = manual integration

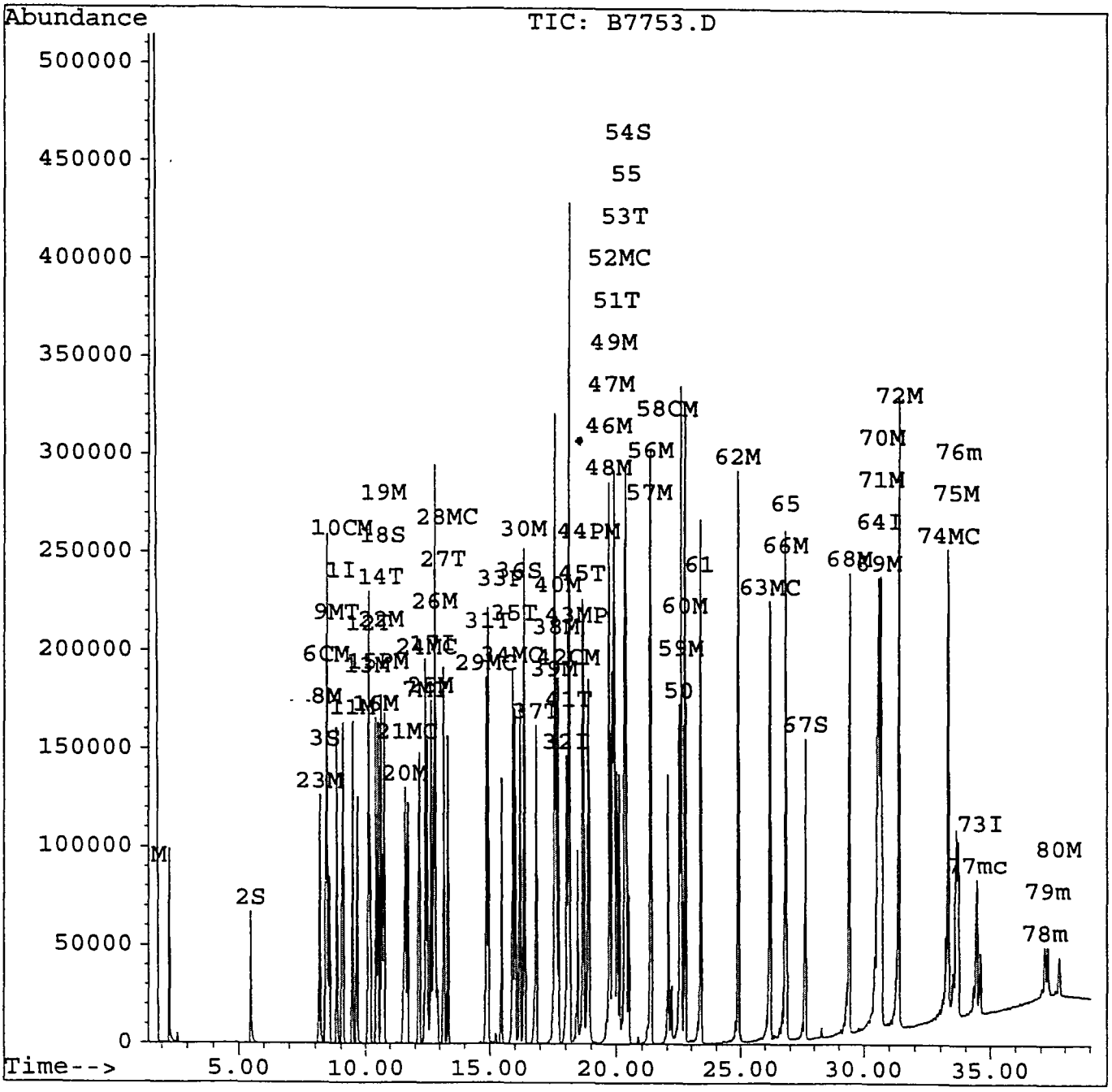
Quantitation Report

Data File : c:\hpchem\1\data2\b7753.d
Acq On : 30 May 95 11:27 am
Sample : 80 STD.....
Misc :
Quant Time: May 31 9:32 1995

Converted from RTE d

Vial: 4
Operator: SCOTTV
Inst : ABNA
BT Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Tue May 30 08:17:48 1995
Response via : Multiple Level Calibration



Quantitation Report

Data File : c:\hpchem\1\data2\b7754.d Vial: 5
Acq On : 30 May 95 12:20 pm Operator: SCOTTV
Sample : 120 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: May 31 9:49 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Tue May 30 08:17:48 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.05	152	27011	40.00	ug/mL	-0.26
17) Naphthalene-d8	12.77	136	112346	40.00	ug/mL	-0.26
32) Acenaphthene-d10	18.05	164	74142	40.00	ug/mL	-0.33
50) Phenanthrene-d10	22.53	188	133454	40.00	ug/ml	-0.36
64) Chrysene-d12	30.59	240	102268	40.00	ug/mL	-0.43
73) Perylene-d12	34.61	264	30843	40.00	ug/mL	-0.44
System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	5.47	112	40691	54.19	ug/mL	54.19%
3) Phenol-d5	8.41	99	68173	65.48	ug/mL	65.48%
18) Nitrobenzene-d5	10.73	82	65499	56.04	ug/mL	56.04%
36) 2-Fluorobiphenyl	16.22	172	116201	48.11	ug/mL	48.11%
54) 2,4,6-Tribromophenol	20.48	330	18886	51.13	ug/mL	51.13%
67) Terphenyl-d14	27.64	244	132840	50.26	ug/mL	50.26%
Target Compounds						Qvalue
4) N-nitrosodimethylamine	1.64	74	44263	227.10	ug/ml	100
6) Phenol	8.47	94	145178	145.51	ug/mL	100
7) bis(2-Chloroethyl)ether	12.44	93	168732	156.34	ug/mL	98
8) 2-Chlorophenol	8.47	128	104043	127.43	ug/mL#	87
9) 1,3-Dichlorobenzene	8.86	146	113739	123.10	ug/mL	98
10) 1,4-Dichlorobenzene	9.11	146	118937	127.12	ug/mL	99
11) 1,2-Dichlorobenzene	9.49	146	112702	119.30	ug/mL	98
12) 2-Methylphenol	10.17	108	102718	128.54	ug/mLm	63
13) bis(2-chloroisopropyl)ethe	10.11	45	150752	87.04	ug/mL#	79
14) 4-Methylphenol	10.67	108	116050	134.26	ug/mL	97
15) N-Nitroso-Di-n-propylamine	10.53	70	117037	134.82	ug/mL	99
16) Hexachloroethane	10.44	117	61265	109.28	ug/mL#	81
19) Nitrobenzene	10.78	77	137726	130.44	ug/mL#	79
20) Isophorone	11.63	82	286449	152.63	ug/mL	100
21) 2-Nitrophenol	11.73	139	75814	126.50	ug/mL	95
22) 2,4-Dimethylphenol	10.67	107	144674	137.24	ug/mL#	32
23) bis(2-Chloroethoxy)methane	8.18	93	151120	118.47	ug/mL#	42
24) 2,4-Dichlorophenol	12.52	162	100762	115.96	ug/mL	99
25) 1,2,4-Trichlorobenzene	12.67	180	107106	107.19	ug/mL	98
26) Naphthalene	12.83	128	319371	111.79	ug/mL#	91
27) 4-Chloroaniline	13.17	127	156643	118.02	ug/mL	98
28) Hexachlorobutadiene	13.35	225	62689	97.58	ug/mL	98
29) 4-Chloro-3-methylphenol	14.89	107	133371	120.81	ug/mL#	86
30) 2-Chloronaphthalene	16.39	162	229152	100.19	ug/ml	100
31) 2-Methylnaphthalene	14.96	142	331843	159.13	ug/mL	97
33) Hexachlorocyclopentadiene	15.46	237	67420	100.13	ug/mL	97
34) 2,4,6-Trichlorophenol	15.93	196	100492	136.82	ug/mL	99
35) 2,4,5-Trichlorophenol	16.00	196	70403	91.40	ug/mL	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data2\b7754.d Vial: 5
Acq On : 30 May 95 12:20 pm Operator: SCOTTV
Sample : 120 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: May 31 9:49 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Tue May 30 08:17:48 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
37)	2-Nitroaniline	16.87	65	125966	148.33	ug/mL#	100
38)	Dimethylphthalate	17.66	163	299887	137.71	ug/mL	99
39)	Acenaphthylene	17.61	152	381978	102.55	ug/mL	99
40)	2,6-Dinitrotoluene	17.74	165	69446	135.67	ug/mLm	93
41)	3-Nitroaniline	18.16	138	82189	108.18	ug/mL	95
42)	Acenaphthene	18.16	153	234884	102.07	ug/mL	99
43)	2,4-Dinitrophenol	18.49	184	47322	185.83	ug/mL	87
44)	4-Nitrophenol	18.96	109	39654	160.09	ug/mL	90
45)	Dibenzofuran	18.72	168	378169	115.99	ug/mL	98
46)	2,4-Dinitrotoluene	19.75	165	276442	115.72	ug/mL#	32
47)	Diethylphthalate	19.86	149	341020	127.75	ug/mL	99
48)	Fluorene	19.75	166	296520	118.24	ug/mL	98
49)	4-Chlorophenyl-phenylether	19.94	204	135159	110.86	ug/mL	94
51)	4-Nitroaniline	20.06	138	60415	115.52	ug/mL	95
52)	4,6-Dinitro-2-methylphenol	20.13	198	56816	152.23	ug/mLm	100
53)	n-Nitrosodiphenylamine	20.35	169	209653	157.68	ug/mL#	1
55)	1,2-Diphenylhydrazine (as	20.40	77	500723	146.47	ug/ml	100
56)	4-Bromophenyl-phenylether	21.39	248	79413	111.75	ug/mL	95
57)	Hexachlorobenzene	21.37	284	92449	111.89	ug/mL#	68
58)	Pentachlorophenol	22.06	266	59890	123.01	ug/mL	99
59)	Phenanthrene	22.62	178	457295	123.90	ug/mL	99
60)	Anthracene	22.78	178	408657	112.58	ug/mLm	99
61)	Carbazole	23.41	167	420878	125.96	ug/ml	99
62)	Di-n-butylphthalate	24.92	149	658579	103.35	ug/mL	100
63)	Fluoranthene	26.21	202	379190	92.76	ug/mLm	91
65)	Benzidine	26.87	184	131098	148.83	ug/mlm	100
66)	Pyrene	26.85	202	445627	107.70	ug/mL#	89
68)	Butylbenzylphthalate	29.43	149	293901	118.82	ug/mL	93
69)	Benzo[a]anthracene	30.57	228	469239	147.71	ug/mL	99
70)	3,3'-Dichlorobenzidine	30.73	252	106370	122.47	ug/mL#	97
71)	Chrysene	30.67	228	211972	76.11	ug/mLm	98
72)	bis(2-Ethylhexyl)phthalate	31.40	149	408257	110.77	ug/mL	98
74)	Di-n-octylphthalate	33.31	149	505170	92.14	ug/mL	100
75)	Benzo[b]fluoranthene	33.64	252	204971	151.87	ug/mLm	97
76)	Benzo[k]fluoranthene	33.72	252	88924	68.83	ug/mLm	96
77)	Benzo[a]pyrene	34.45	252	87415	94.92	ug/mLm	97
78)	Indeno[1,2,3-cd]pyrene	37.18	276	48224	124.60	ug/mL#	81
79)	Dibenz[a,h]anthracene	37.31	278	47851	140.44	ug/mL	98
80)	Benzo[g,h,i]perylene	37.76	276	34423	102.21	ug/mLm	95

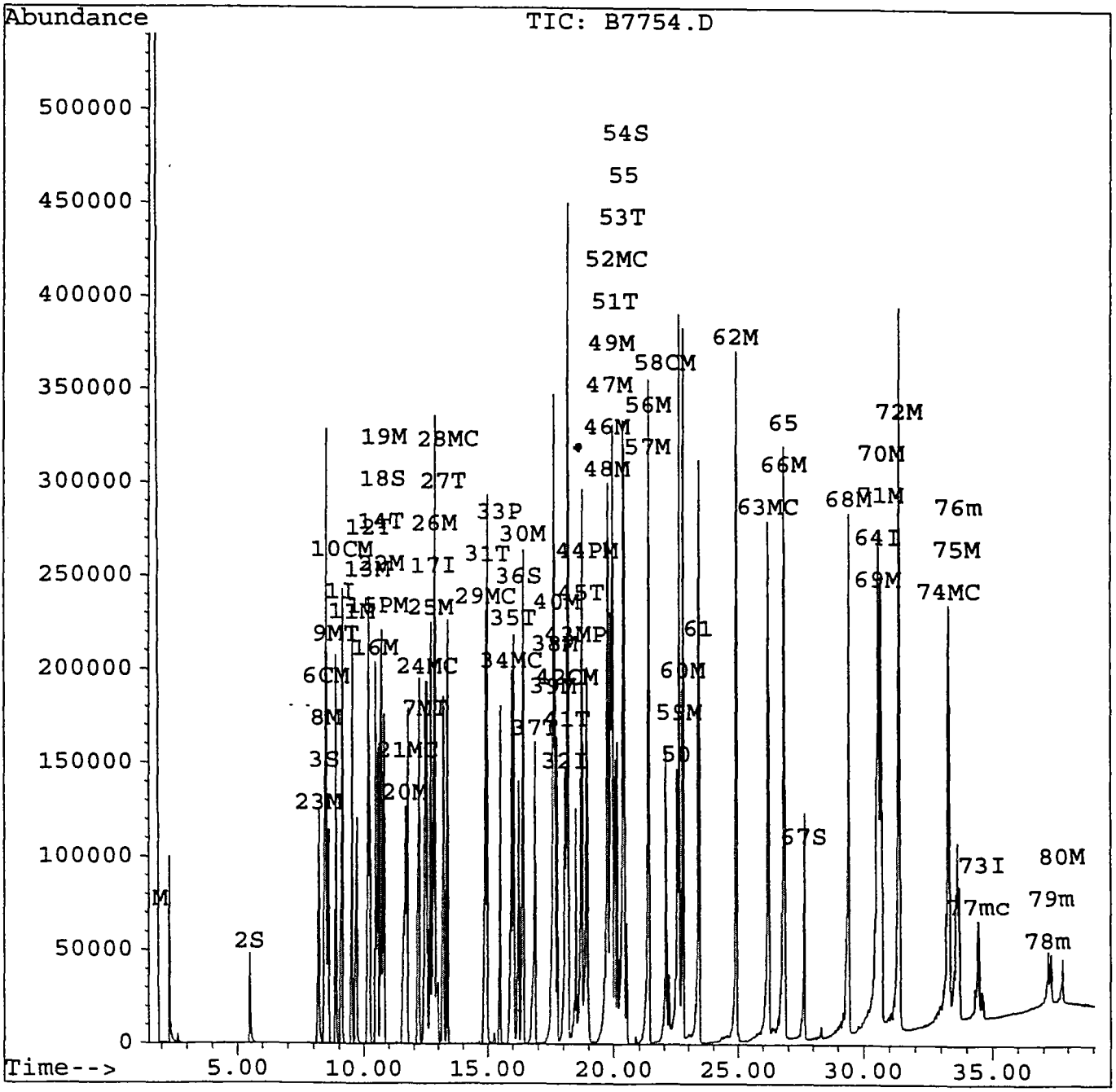
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data2\b7754.d
Acq On : 30 May 95 12:20 pm
Sample : 120 STD.....
Misc :
Quant Time: May 31 9:49 1995

Vial: 5
Operator: SCOTTV
Converted from RTE d Inst : ABNA
BT Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Tue May 30 08:17:48 1995
Response via : Multiple Level Calibration



Quantitation Report

Data File : c:\hpchem\1\data2\b7755.d Vial: 6
Acq On : 30 May 95 1:12 pm Operator: SCOTTV
Sample : 160 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: May 31 9:52 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Tue May 30 08:17:48 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.05	152	29361	40.00	ug/mL	-0.26
17) Naphthalene-d8	12.77	136	123075	40.00	ug/mL	-0.26
32) Acenaphthene-d10	18.07	164	86872	40.00	ug/mL	-0.31
50) Phenanthrene-d10	22.53	188	155037	40.00	ug/ml	-0.36
64) Chrysene-d12	30.60	240	82528	40.00	ug/mL	-0.43
73) Perylene-d12	34.62	264	32039	40.00	ug/mL	-0.43
System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	5.47	112	38395	47.04	ug/mL	47.04%
3) Phenol-d5	8.43	99	66343	58.62	ug/mL	58.62%
18) Nitrobenzene-d5	10.73	82	67218	52.50	ug/mL	52.50%
36) 2-Fluorobiphenyl	16.22	172	126324	44.63	ug/mL	44.63%
54) 2,4,6-Tribromophenol	20.49	330	18970	44.21	ug/mL	44.21%
67) Terphenyl-d14	27.64	244	139748	65.52	ug/mL	65.52%
Target Compounds						Qvalue
4) N-nitrosodimethylamine	1.64	74	70397	332.28	ug/ml	100
6) Phenol	8.47	94	169408	156.21	ug/mL	100
7) bis(2-Chloroethyl)ether	12.46	93	222301	189.49	ug/mL	91
8) 2-Chlorophenol	8.47	128	133653	150.59	ug/mL#	88
9) 1,3-Dichlorobenzene	8.86	146	152142	151.49	ug/mL	97
10) 1,4-Dichlorobenzene	9.11	146	154778	152.19	ug/mL	98
11) 1,2-Dichlorobenzene	9.49	146	147372	143.51	ug/mL	99
12) 2-Methylphenol	10.17	108	130214	149.90	ug/mLm	63
13) bis(2-chloroisopropyl)ethe	10.13	45	221469	117.64	ug/mL	93
14) 4-Methylphenol	10.67	108	142777	151.95	ug/mL	97
15) N-Nitroso-Di-n-propylamine	10.55	70	151444	160.49	ug/mL	97
16) Hexachloroethane	10.44	117	81125	133.13	ug/mL#	82
19) Nitrobenzene	10.80	77	196043	169.49	ug/mL#	87
20) Isophorone	11.65	82	382084	185.84	ug/mL	99
21) 2-Nitrophenol	11.73	139	92995	141.64	ug/mL	89
22) 2,4-Dimethylphenol	10.67	107	178112	154.23	ug/mL#	32
23) bis(2-Chloroethoxy)methane	8.20	93	217251	155.46	ug/mL#	42
24) 2,4-Dichlorophenol	12.52	162	133269	140.00	ug/mL	99
25) 1,2,4-Trichlorobenzene	12.67	180	144061	131.61	ug/mL	99
26) Naphthalene	12.83	128	453739	144.98	ug/mL#	91
27) 4-Chloroaniline	13.19	127	223903	153.98	ug/mL	98
28) Hexachlorobutadiene	13.35	225	86033	122.24	ug/mL	97
29) 4-Chloro-3-methylphenol	14.89	107	174950	144.66	ug/mL#	75
30) 2-Chloronaphthalene	16.39	162	331044	132.12	ug/ml	99
31) 2-Methylnaphthalene	14.97	142	438189	191.81	ug/mL	98
33) Hexachlorocyclopentadiene	15.49	237	102334	129.71	ug/mL	99
34) 2,4,6-Trichlorophenol	15.95	196	163412	189.89	ug/mL	97
35) 2,4,5-Trichlorophenol	16.03	196	76742	85.03	ug/mL	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data2\b7755.d Vial: 6
Acq On : 30 May 95 1:12 pm Operator: SCOTTV
Sample : 160 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: May 31 9:52 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Tue May 30 08:17:48 1995
Response via : Multiple Level Calibration

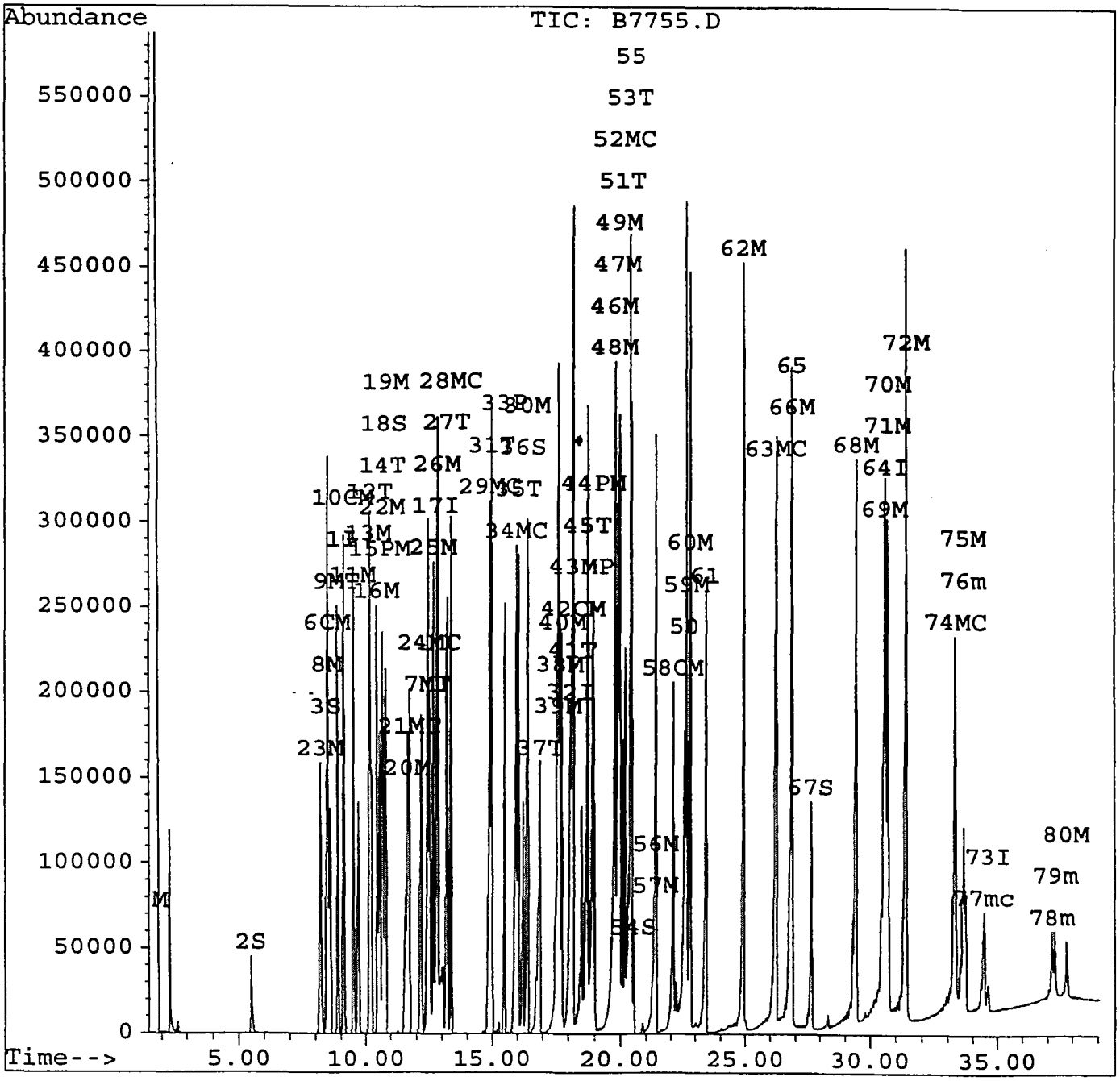
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
37)	2-Nitroaniline	16.89	65	183241	184.15	ug/mL#	100
38)	Dimethylphthalate	17.67	163	428564	167.96	ug/mL	99
39)	Acenaphthylene	17.61	152	558058	127.87	ug/mL	99
40)	2,6-Dinitrotoluene	17.76	165	102561	171.00	ug/mLm	92
41)	3-Nitroaniline	18.17	138	96949	108.91	ug/mL	100
42)	Acenaphthene	18.17	153	341152	126.53	ug/mL	99
43)	2,4-Dinitrophenol	18.50	184	65640	219.99	ug/mL	88
44)	4-Nitrophenol	18.96	109	52458	180.75	ug/mL	93
45)	Dibenzofuran	18.73	168	512481	134.15	ug/mL	98
46)	2,4-Dinitrotoluene	19.77	165	393324	140.52	ug/mL#	35
47)	Diethylphthalate	19.89	149	442732	141.55	ug/mL	97
48)	Fluorene	19.77	166	424603	144.50	ug/mL	99
49)	4-Chlorophenyl-phenylether	19.94	204	192605	134.83	ug/mL	98
51)	4-Nitroaniline	20.08	138	81046	133.39	ug/mL	90
52)	4,6-Dinitro-2-methylphenol	20.16	198	87159	201.02	ug/mLm	100
53)	n-Nitrosodiphenylamine	20.37	169	283832	183.75	ug/mL#	1
55)	1,2-Diphenylhydrazine (as	20.41	77	660607	166.34	ug/ml	100
56)	4-Bromophenyl-phenylether	21.39	248	115508	139.91	ug/mLm	91
57)	Hexachlorobenzene	21.37	284	85494	89.06	ug/mLm	53
58)	Pentachlorophenol	22.09	266	81327	143.79	ug/mL	100
59)	Phenanthrene	22.63	178	609750	142.21	ug/mL	99
60)	Anthracene	22.78	178	501796	118.99	ug/mLm	99
61)	Carbazole	23.40	167	406913	104.82	ug/ml	98
62)	Di-n-butylphthalate	24.92	149	893793	120.74	ug/mL	99
63)	Fluoranthene	26.22	202	572007	120.45	ug/mLm	92
65)	Benzidine	26.87	184	187882	264.32	ug/ml	100
66)	Pyrene	26.85	202	612856	183.54	ug/mL#	89
68)	Butylbenzylphthalate	29.44	149	373168	186.95	ug/mL	91
69)	Benzo[a]anthracene	30.58	228	598348	233.40	ug/mL	99
70)	3,3'-Dichlorobenzidine	30.72	252	113910	162.52	ug/mL	99
71)	Chrysene	30.68	228	218157	97.07	ug/mLm	98
72)	bis(2-Ethylhexyl)phthalate	31.41	149	506955	170.44	ug/mL	96
74)	Di-n-octylphthalate	33.32	149	549407	96.47	ug/mL	99
75)	Benzo[b]fluoranthene	33.65	252	313299	223.47	ug/mLm	96
76)	Benzo[k]fluoranthene	33.65	252	159963	119.19	ug/mLm	96
77)	Benzo[a]pyrene	34.46	252	142747	149.22	ug/mLm	97
78)	Indeno[1,2,3-cd]pyrene	37.20	276	63169	157.13	ug/mL	98
79)	Dibenz[a,h]anthracene	37.32	278	60387	170.62	ug/mL	99
80)	Benzo[g,h,i]perylene	37.76	276	49358	141.09	ug/mLm	94

(#) = qualifier out of range (m) = manual integration

Data File : c:\hpchem\1\data2\b7755.d
Acq On : 30 May 95 1:12 pm
Sample : 160 STD..... Converted from RTE d
Misc :
Quant Time: May 31 9:52 1995

Vial: 6
Operator: SCOTTV
Inst : ABNA
BT Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Tue May 30 08:17:48 1995
Response via : Multiple Level Calibration



5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name : EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Lab File ID: B7802.D DFTPP Injection Date: 6/3/95

Instrument ID: ABNA DFTPP Injection Time: 0953

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
51	30.0 - 80.0% of mass 198	53.6
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	60.9
70	Less than 2.0% of mass 69	0.0 (0.0)1
127	25.0 - 75.0% of mass 198	47.3
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100 % relative abundance	100.0
199	5.0 - 9.0% of mass 198	7.2
275	10.0 - 30.0% of mass 198	22.9
365	Greater than 0.75% of mass 198	2.8
441	Present, but less than mass 443	11.1
442	40.0 - 110.0% of mass 198	70.8
443	15.0 - 24.0% of mass 442	14.0 (19.8)2

1-Value is % mass 69 2-Value is % mass 442

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD050	50 STD	B7803.D	6/3/95	1013
02	SBLK01	BLANK1	B7804.D	6/3/95	1104
03	9521072B	9521072B	B7805.D	6/3/95	1154
04	9521073B	9521073B	B7806.D	6/3/95	1244
05	SBLK02	BLANK2	B7807.D	6/3/95	1334
06	9522265B	9522265B	B7808.D	6/3/95	1424
07	9522845B	9522845B	B7809.D	6/3/95	1515
08	SBLK03	BLANK3	B7810.D	6/3/95	1606
09	9523339B	9523339B	B7811.D	6/3/95	1656
10	9523341B	9523341B	B7812.D	6/3/95	1747
11	9523342B	9523342B	B7813.D	6/3/95	1838
12	9523343B	9523343B	B7814.D	6/3/95	1928
13	9523530B	9523530B	B7815.D	6/3/95	2018
14	9523531B	9523531B	B7816.D	6/3/95	2108
15	9523533B	9523533B	B7817.D	6/3/95	2158
16	9523534B	9523534B	B7818.D	6/3/95	2248
17	9523535B	9523535B	B7819.D	6/3/95	2337
18	9523536B	9523536B	B7820.D	6/4/95	0027
19	SBLK04	BLANK4	B7821.D	6/4/95	0117
20	9523789B	9523789B	B7822.D	6/4/95	0206
21	9523792B	9523792B	B7823.D	6/4/95	0256
22	9523787B	9523787B	B7824.D	6/4/95	0346

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name : EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Lab File ID: B7802.D DFTPP Injection Date: 6/3/95

Instrument ID: ABNA DFTPP Injection Time: 0953

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
51	30.0 - 80.0% of mass 198	53.6
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	60.9
70	Less than 2.0% of mass 69	0.0 (0.0)1
127	25.0 - 75.0% of mass 198	47.3
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100 % relative abundance	100.0
199	5.0 - 9.0% of mass 198	7.2
275	10.0 - 30.0% of mass 198	22.9
365	Greater than 0.75% of mass 198	2.8
441	Present, but less than mass 443	11.1
442	40.0 - 110.0% of mass 198	70.8
443	15.0 - 24.0% of mass 442	14.0 (19.8)2

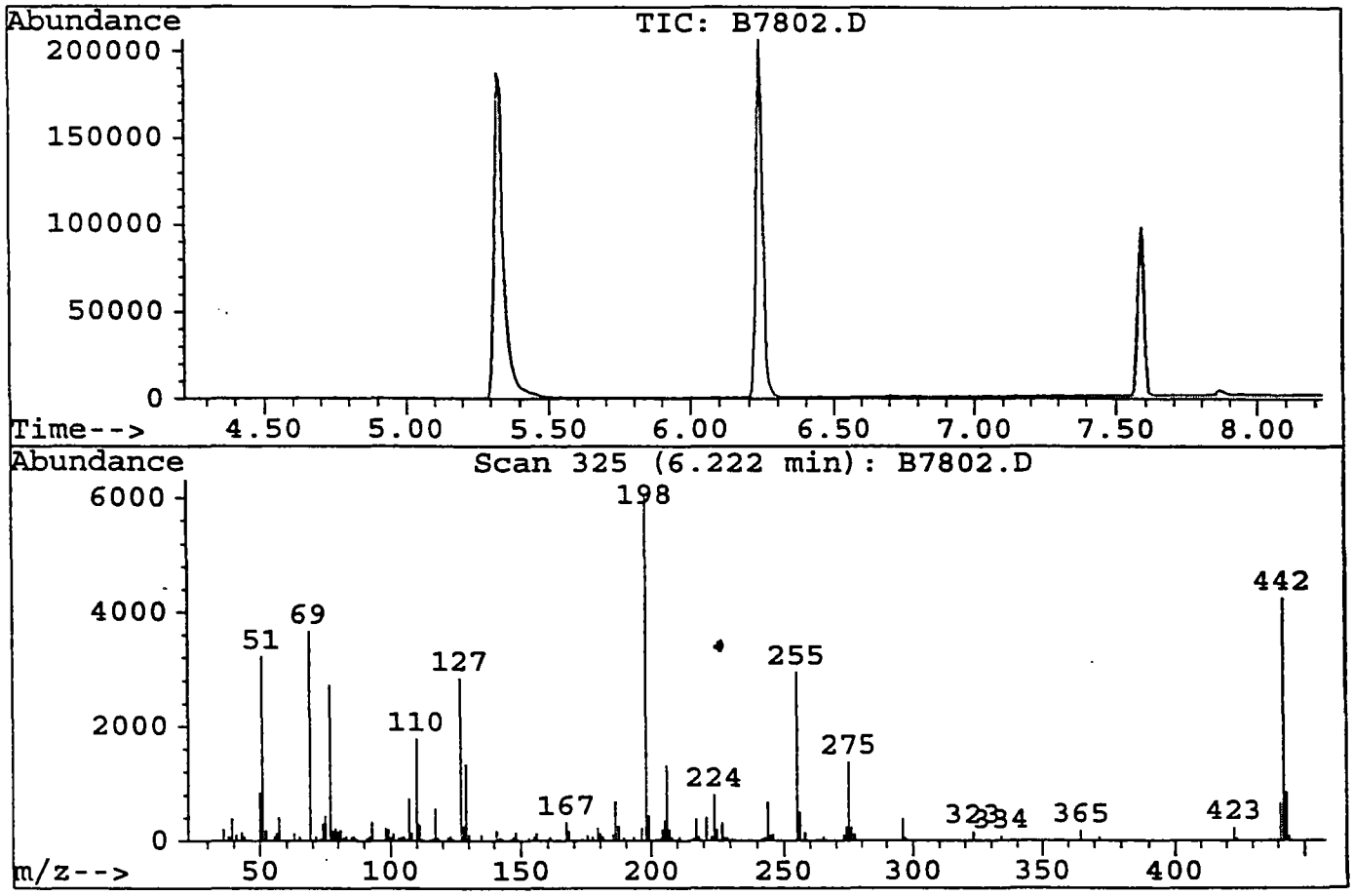
1-Value is % mass 69 2-Value is % mass 442

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SBLK05	BLANK5	B7825.D	6/4/95	0435
02	22654MS	22654MS	B7826.D	6/4/95	0525
03	22654MSD	22654MSD	B7827.D	6/4/95	0615
04	22659MS	22659MS	B7828.D	6/4/95	0704
05	22659MSD	22659MSD	B7829.D	6/4/95	0754
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

Data File : C:\HPCHEM\1\DATA2\B7802.D Vial: 1
Acq On : 3 Jun 95 9:53 am Operator: SCOTTV
Sample : DFTPP..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration



Peak Apex is scan: 325

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	53.6	3226	PASS
68	69	0	2	0.0	0	PASS
69	198	0	100	60.9	3667	PASS
70	69	0	2	0.0	0	PASS
127	198	40	60	47.3	2846	PASS
197	198	0	1	0.0	0	PASS
198	198	100	100	100.0	6021	PASS
199	198	5	9	7.2	434	PASS
275	198	10	30	22.9	1379	PASS
365	198	1	100	2.8	170	PASS
441	443	0	100	79.3	669	PASS
442	198	40	100	70.8	4261	PASS
443	442	17	23	19.8	844	PASS

Scan 325 (6.222 min): B7802.D
D_TPP..... Converted from RTE data file >B7802::D5

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.10	195	57.05	413	79.95	160	99.05	186
37.90	74	63.05	134	81.05	193	100.05	51
39.10	386	65.05	66	81.95	54	100.95	118
41.05	94	68.95	3667	82.95	76	102.95	50
43.05	140	71.15	74	85.05	67	103.95	70
43.95	71	73.05	38	85.95	78	105.05	69
50.05	844	74.05	294	87.05	29	106.15	34
51.05	3226	74.95	427	90.95	51	107.05	746
52.05	179	77.05	2720	92.05	75	107.95	136
55.15	74	78.05	169	92.95	316	109.95	1785
55.95	133	79.05	215	98.05	224	111.05	275

Scan 325 (6.222 min): B7802.D
DFTPP..... Converted from RTE data file >B7802::D5

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
111.85	36	134.90	114	160.00	39	186.00	683
116.05	42	140.90	173	161.00	63	187.00	242
117.05	564	142.10	53	167.00	318	188.90	51
118.05	51	142.90	34	168.00	162	193.00	70
121.90	66	145.90	30	173.00	42	196.10	225
123.00	89	147.00	83	175.00	88	198.00	6021
123.90	35	147.90	160	177.00	64	199.00	434
127.00	2846	149.00	36	179.00	216	201.65	29
128.10	250	152.90	50	180.00	127	202.95	41
128.90	1336	155.00	69	180.90	71	203.95	197
130.10	102	156.00	130	185.00	110	205.05	353

Scan 325 (6.222 min): B7802.D
D_TPP..... Converted from RTE data file >B7802::D5

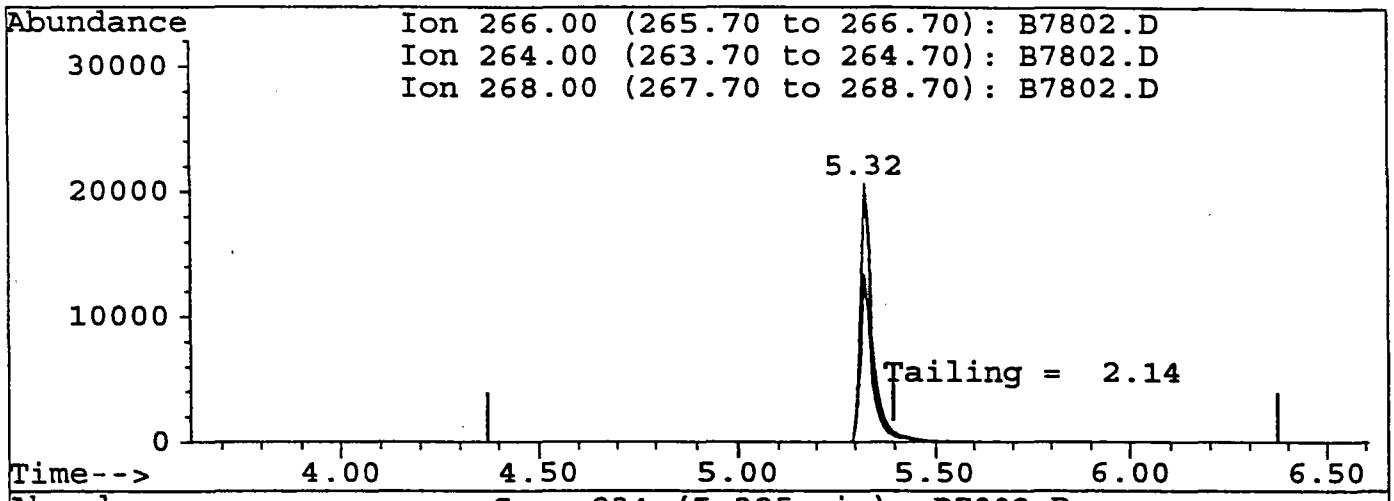
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
206.05	1320	224.95	192	255.95	487	334.00	73
207.05	189	226.95	305	258.05	143	364.95	170
207.95	55	227.95	55	264.95	68	372.05	67
210.15	33	228.85	61	272.95	102	423.05	224
211.05	66	231.05	37	274.05	239	423.95	49
216.15	46	242.05	44	275.05	1379	441.00	669
216.95	373	243.05	52	276.05	219	442.00	4261
217.95	69	244.05	676	277.05	109	443.00	844
220.95	411	245.05	91	296.00	378	444.00	72
222.95	81	245.95	117	297.00	45		
224.05	802	255.05	2950	323.10	156		

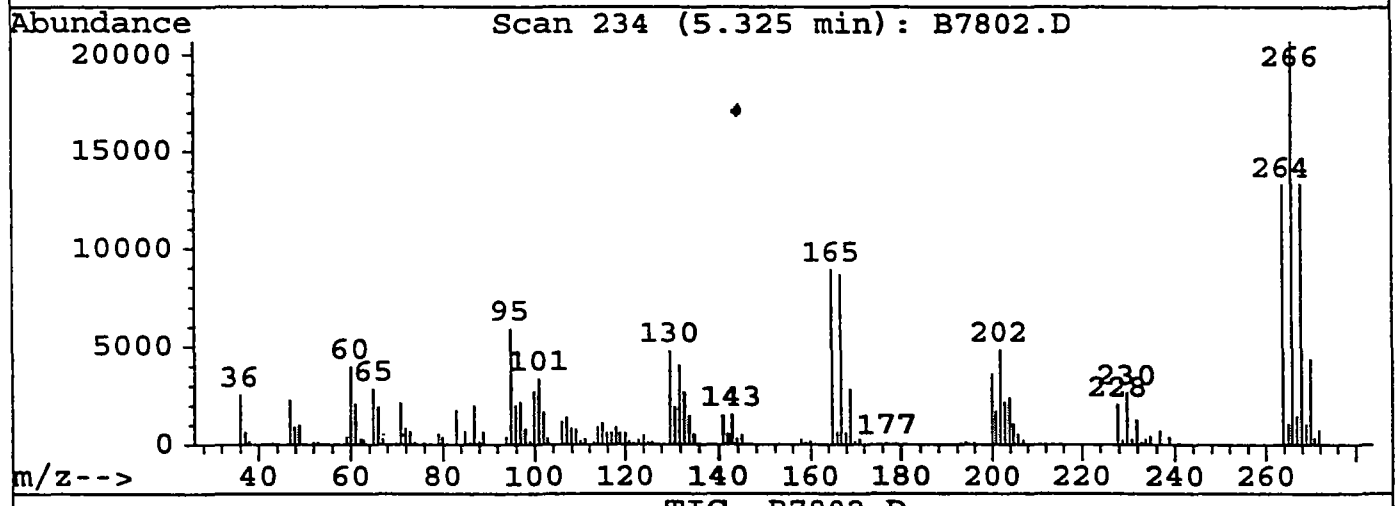
Quantitation Report

Data File : C:\HPCHEM\1\DATA2\B7802.D
Acq On : 3 Jun 95 9:53 am
Sample : DFTPP..... Converted from RTE d
Misc :
Quant Time: Jun 3 9:06 1995

Vial: 1
Operator: SCOTTV
Inst : ABNA
BT Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 10:06:36 1995
Response via : Multiple Level Calibration





TIC: B7802.D

(1) Pentachlorophenol (CM)

5.32min 133.02ug/mL

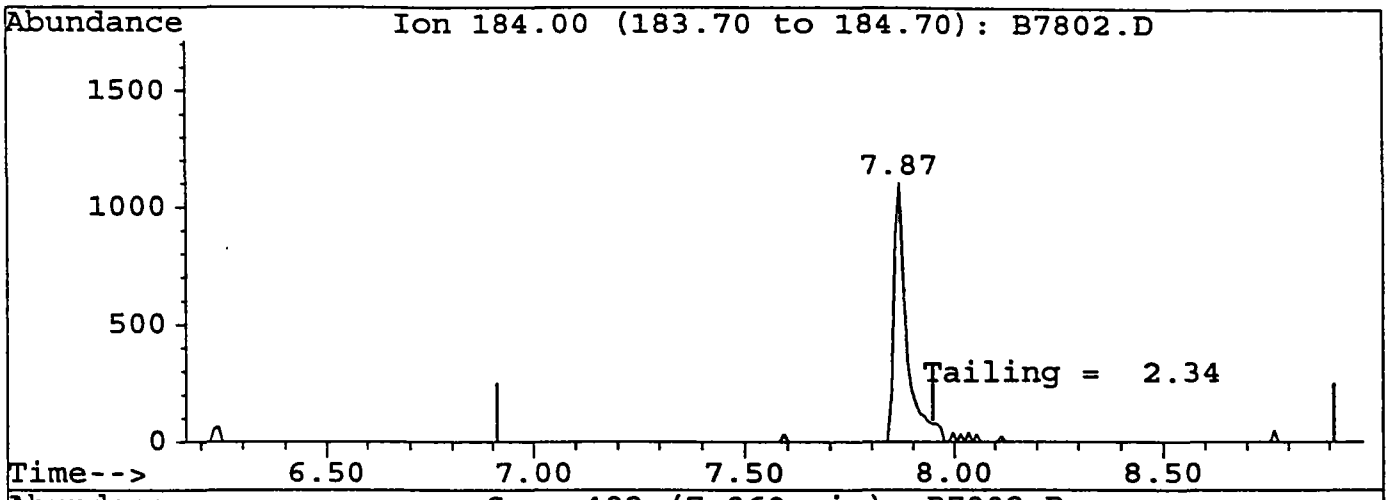
response 43936

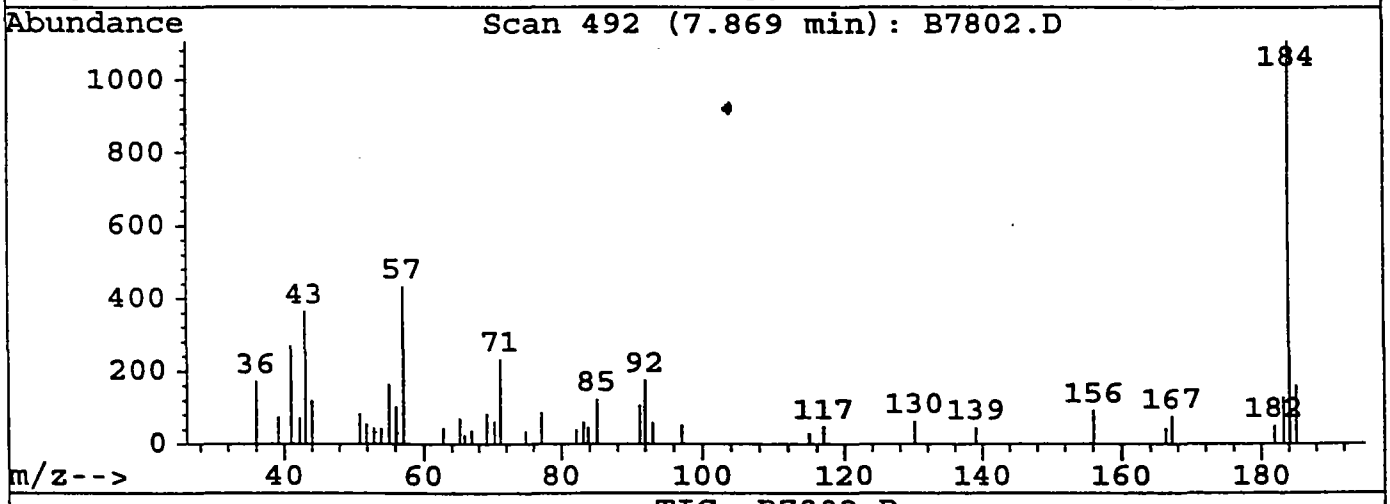
Ion	Exp%	Act%
266.00	100	100
264.00	64.30	64.30
268.00	64.70	64.53
0.00	0.00	0.00

Quantitation Report

Data File : C:\HPCHEM\1\DATA2\B7802.D Vial: 1
Acq On : 3 Jun 95 9:53 am Operator: SCOTTV
Sample : DFTPP..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jun 3 9:06 1995

Method : C:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 10:06:36 1995
Response via : Multiple Level Calibration





TIC: B7802.D

(2) Benzidine
7.87min 7.97ug/ml
response 2449

Ion	Exp%	Act%
184.00	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: EMSL ANALYTICAL Contract: _____

Project No. _____ Site: _____ Location: _____ Group: _____

Instrument ID: ABNA Calibration Date: 6/3/95 Time: 1013

Lab File ID: B7803.D Init. Calib. Date(s): 6/3/95 1/0/00

Init. Calib. Times: 1013 0000

COMPOUND	RRF	RRF50	MIN RRF	%D	MAX %D
bis(2-Chloroethyl)ether	2.026	2.027		0.0	
1,3-Dichlorobenzene	1.385	1.449		-4.6	
1,4-Dichlorobenzene	1.429	1.500		-5.0	30.0
1,2-Dichlorobenzene	1.357	1.424		-4.9	
bis(2-chloroisopropyl)ether	1.868	1.769		5.3	
N-Nitroso-Di-n-propylamine	1.346	1.315	0.050	2.3	
Hexachloroethane	0.737	0.736		0.1	
Nitrobenzene	0.424	0.446		-5.2	
Isophorone	0.893	0.814		8.8	
bis(2-Chloroethoxy)methane	0.456	0.453		0.7	
1,2,4-Trichlorobenzene	0.317	0.332		-4.7	
Naphthalene	0.979	1.023		-4.5	
4-Chloroaniline	0.463	0.464		-0.2	
Hexachlorobutadiene	0.185	0.191		-3.2	30.0
2-Methylnaphthalene	0.786	0.742		5.6	
Hexachlorocyclopentadiene	0.278	0.250	0.050	10.1	
2-Chloronaphthalene	0.696	0.716		-2.9	
2-Nitroaniline	0.549	0.487		11.3	
Dimethylphthalate	1.299	1.277		1.7	
Acenaphthylene	1.704	1.652		3.1	
2,6-Dinitrotoluene	0.310	0.301		2.9	
3-Nitroaniline	0.346	0.344		0.6	
Acenaphthene	1.025	1.040		-1.5	30.0
Dibenzofuran	1.609	1.625		-1.0	
2,4-Dinitrotoluene	1.167	1.125		3.6	
Diethylphthalate	1.443	1.376		4.6	
Fluorene	1.259	1.219		3.2	
4-Chlorophenyl-phenylether	0.596	0.628		-5.4	
4-Nitroaniline	0.166	0.194		-16.9	
n-Nitrosodiphenylamine	0.508	0.502		1.2	
4-Bromophenyl-phenylether	0.206	0.219		-6.3	
Hexachlorobenzene	0.215	0.232		-7.9	
Phenanthrene	1.094	1.129		-3.2	
Anthracene	1.009	1.064		-5.5	
Carbazole	0.944	1.015		-7.5	
Di-n-butylphthalate	1.606	1.633		-1.7	
Fluoranthene	1.035	1.139		-10.0	30.0

All other compounds must meet a minimum RRF of 0.010.

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: EMSL ANALYTICAL Contract: _____

Project No. _____ Site: _____ Location: _____ Group: _____

Instrument ID: ABNA Calibration Date: 6/3/95 Time: 1013

Lab File ID: B7803.D Init. Calib. Date(s): 6/3/95 1/0/00

Init. Calib. Times: 1013 0000

COMPOUND	RRF	RRF50	MIN RRF	%D	MAX %D
Pyrene	1.502	1.240		17.4	
Butylbenzylphthalate	0.962	0.769		20.1	
Benzo[a]anthracene	1.516	1.300		14.2	
3,3'-Dichlorobenzidine	0.386	0.357		7.5	
Chrysene	0.843	0.806		4.4	
bis(2-Ethylhexyl)phthalate	1.364	1.148		15.8	
Di-n-octylphthalate	5.094	4.570		10.3	30.0
Benzo[b]fluoranthene	2.467	2.153		12.7	
Benzo[k]fluoranthene	1.190	1.273		-7.0	
Benzo[a]pyrene	1.227	1.266		-3.2	30.0
Indeno[1,2,3-cd]pyrene	0.452	0.458		-1.3	
Dibenz[a,h]anthracene	0.436	0.384		11.9	
Benzo[g,h,i]perylene	0.356	0.291		18.3	
Nitrobenzene-d5	0.456	0.443		2.9	
2-Fluorobiphenyl	1.200	1.187		1.1	
Terphenyl-d14	1.062	0.881		17.0	

All other compounds must meet a minimum RRF of 0.010.

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA2\B7803.D Vial: 2
Acq On : 3 Jun 95 10:13 am Operator: SCOTTV SUP
Sample : 50 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 10:06:36 1995
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	99	0.18
2	S	2-Fluorophenol	1.131	1.044	7.7	96	0.16
3	S	Phenol-d5	1.873	1.712	8.6	98	0.14
4	M	N-nitrosodimethylamine	0.578	0.585	-1.1	79	-0.10
5		Pyridine	0.428	0.000#	100.0#	0#	-1.62#
6	CM	Phenol	1.668	1.607	3.7	93	0.14
7	MT	bis(2-Chloroethyl)ether	2.026	2.027	-0.1	98	0.18
8	M	2-Chlorophenol	1.269	1.290	-1.6	102	0.16
9	MT	1,3-Dichlorobenzene	1.385	1.449	-4.6	101	0.18
10	CM	1,4-Dichlorobenzene	1.429	1.500	-5.0	101	0.18
11	M	1,2-Dichlorobenzene	1.357	1.424	-4.9	102	0.18
12	T	2-Methylphenol	1.204	1.299	-7.9	110	0.66#
13	M	bis(2-chloroisopropyl)ether	1.868	1.769	5.3	101	0.20
14	T	4-Methylphenol	1.322	1.299	1.7	98	0.16
15	PM	N-Nitroso-Di-n-propylamine	1.346	1.315	2.3	102	0.18
16	M	Hexachloroethane	0.737	0.736	0.1	97	0.19
17	I	Naphthalene-d8	1.000	1.000	0.0	94	0.18
18	S	Nitrobenzene-d5	0.456	0.443	2.8	96	0.18
19	M	Nitrobenzene	0.424	0.446	-5.2	96	0.18
20	M	Isophorone	0.893	0.814	8.8	94	0.16
21	MC	2-Nitrophenol	0.210	0.202	4.2	95	0.20
22	M	2,4-Dimethylphenol	0.394	0.392	0.4	97	0.16
23	M	bis(2-Chloroethoxy)methane	0.456	0.453	0.7	94	0.16
24	MC	2,4-Dichlorophenol	0.298	0.301	-0.8	97	0.18
25	M	1,2,4-Trichlorobenzene	0.317	0.332	-4.7	97	0.18
26	M	Naphthalene	0.979	1.023	-4.5	100	0.20
27	T	4-Chloroaniline	0.463	0.464	-0.1	93	0.20
28	MC	Hexachlorobutadiene	0.185	0.191	-3.3	97	0.18
29	MC	4-Chloro-3-methylphenol	0.384	0.376	2.0	92	0.18
30	M	2-Chloronaphthalene	0.696	0.716	-2.8	96	0.21
31	T	2-Methylnaphthalene	0.786	0.742	5.5	100	0.19
32	I	Acenaphthene-d10	1.000	1.000	0.0	99	0.21
33	P	Hexachlorocyclopentadiene	0.278	0.250	10.3	95	0.19
34	MC	2,4,6-Trichlorophenol	0.415	0.353	15.0	91	0.20
35	T	2,4,5-Trichlorophenol	0.324	0.384	-18.4	102	0.19
36	S	2-Fluorobiphenyl	1.200	1.187	1.1	99	0.19
37	T	2-Nitroaniline	0.549	0.487	11.3	83	0.19
	M	Dimethylphthalate	1.299	1.277	1.8	97	0.19
39	M	Acenaphthylene	1.704	1.652	3.1	95	0.21
40	M	2,6-Dinitrotoluene	0.310	0.301	2.8	91	0.21

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA2\B7803.D Vial: 2
Acq On : 3 Jun 95 10:13 am Operator: SCOTTV SUP
Sample : 50 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 10:06:36 1995
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
1	T	3-Nitroaniline	0.346	0.344	0.6	94	0.21
2	CM	Acenaphthene	1.025	1.040	-1.5	100	0.21
43	MP	2,4-Dinitrophenol	0.172	0.164	4.8	104	0.21
4	PM	4-Nitrophenol	0.166	0.160	3.5	94	0.19
5	T	Dibenzofuran	1.609	1.625	-1.0	96	0.21
46	M	2,4-Dinitrotoluene	1.167	1.125	3.6	97	0.23
47	M	Diethylphthalate	1.443	1.376	4.6	93	0.21
8	M	Fluorene	1.259	1.219	3.2	98	0.23
49	M	4-Chlorophenyl-phenylether	0.596	0.628	-5.4	105	0.23
0		Phenanthrene-d10	1.000	1.000	0.0	102	0.25
51	T	4-Nitroaniline	0.166	0.194	-16.9	93	0.21
52	MC	4,6-Dinitro-2-methylphenol	0.132	0.139	-5.1	109	0.21
3	T	n-Nitrosodiphenylamine	0.508	0.502	1.2	96	0.23
4	S	2,4,6-Tribromophenol	0.108	0.110	-2.0	106	0.23
55		1,2-Diphenylhydrazine (as a	1.211	1.189	1.8	92	0.23
6	M	4-Bromophenyl-phenylether	0.206	0.219	-6.2	101	0.23
7	M	Hexachlorobenzene	0.215	0.232	-8.2	104	0.23
58	CM	Pentachlorophenol	0.137	0.160	-16.2	122	0.23
59	M	Phenanthrene	1.094	1.129	-3.2	105	0.25
0	M	Anthracene	1.009	1.064	-5.5	105	0.25
1		Carbazole	0.944	1.015	-7.5	107	0.25
62	M	Di-n-butylphthalate	1.606	1.633	-1.6	102	0.23
3	MC	Fluoranthene	1.035	1.139	-10.1	103	0.27
64	I	Chrysene-d12	1.000	1.000	0.0	110	0.31
5		Benzidine	0.437	0.361	17.5	99	0.27
6	M	Pyrene	1.502	1.240	17.4	107	0.27
67	S	Terphenyl-d14	1.062	0.881	17.1	110	0.27
68	M	Butylbenzylphthalate	0.962	0.769	20.0	100	0.27
9	M	Benzo[a]anthracene	1.516	1.300	14.2	106	0.31
70	M	3,3'-Dichlorobenzidine	0.386	0.357	7.5	111	0.29
71	M	Chrysene	0.843	0.806	4.4	115	0.31
2	M	bis(2-Ethylhexyl)phthalate	1.364	1.148	15.8	101	0.27
73	I	Perylene-d12	1.000	1.000	0.0	206#	0.30
74	MC	Di-n-octylphthalate	5.094	4.570	10.3	200#	0.27
5	M	Benzo[b]fluoranthene	2.467	2.153	12.7	176#	0.30
76	m	Benzo[k]fluoranthene	1.190	1.273	-7.0	237#	0.31
7	mc	Benzo[a]pyrene	1.227	1.266	-3.2	193#	-0.51#
8	m	Indeno[1,2,3-cd]pyrene	0.452	0.458	-1.1	227#	0.26
79	m	Dibenz[a,h]anthracene	0.436	0.384	11.8	217#	0.26

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA2\B7803.D Vial: 2
Acq On : 3 Jun 95 10:13 am Operator: SCOTTV SUP
Sample : 50 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 10:06:36 1995
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
80	M	Benzo[g,h,i]perylene	0.356	0.291	18.1	185#	0.26
81		1-Methyl naphthalene	0.000	0.000#	0.0	0#	-13.33#
82		7,12-Dimethylbenz(a)anthrac	0.000	0.000#	0.0	191#	0.30
83		Quinoline	0.000	0.000#	0.0	95	0.20
84		Thiophenol	0.000	0.000#	0.0	72	0.17
85		4-Methyl chrysene	0.000	0.000#	0.0	118	0.31
86		Dibenz(a,j)acridine	0.000	0.000#	0.0	131	0.27
87		Indene	0.000	0.000#	0.0	94	0.18

Quantitation Report

Data File : c:\hpchem\1\data2\b7803.d Vial: 2
Acq On : 3 Jun 95 10:13 am Operator: SCOTTV
Sample : 50 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jun 7 9:32 1995

Method : C:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 10:06:36 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.21	152	29236	40.00	ug/mL	0.18
17) Naphthalene-d8	12.92	136	116999	40.00	ug/mL	0.18
32) Acenaphthene-d10	18.26	164	80656	40.00	ug/mL	0.21
50) Phenanthrene-d10	22.77	188	134208	40.00	ug/ml	0.25
64) Chrysene-d12	30.89	240	129676	40.00	ug/mL	0.31
73) Perylene-d12	34.90	264	93467	40.00	ug/mL	0.30
System Monitoring Compounds						**%Recovery**
2) 2-Fluorophenol	5.63	112	38146	46.13	ug/mL	46.13%
3) Phenol-d5	8.53	99	62550	45.70	ug/mL	45.70%
18) Nitrobenzene-d5	10.88	82	64784	48.60	ug/mL	48.60%
36) 2-Fluorobiphenyl	16.39	172	119643	49.45	ug/mL	49.45%
54) 2,4,6-Tribromophenol	20.69	330	18489	51.01	ug/mL	51.01%
67) Terphenyl-d14	27.91	244	142742	41.47	ug/mL	41.47%
Target Compounds						**Qvalue**
4) N-nitrosodimethylamine	1.85	74	21365	50.56	ug/mlm	100
6) Phenol	8.57	94	58717	48.17	ug/mL	100
7) bis(2-Chloroethyl)ether	12.60	93	74087	50.04	ug/mL	96
8) 2-Chlorophenol	8.61	128	47149	50.82	ug/mL	95
9) 1,3-Dichlorobenzene	9.01	146	52942	52.30	ug/mL	98
10) 1,4-Dichlorobenzene	9.26	146	54825	52.49	ug/mL	99
11) 1,2-Dichlorobenzene	9.65	146	52051	52.46	ug/mL	98
12) 2-Methylphenol	10.79	108	47472	53.93	ug/mL	65
13) bis(2-chloroisopropyl)ethe	10.28	45	64632	47.33	ug/mL#	1
14) 4-Methylphenol	10.79	108	47472	49.15	ug/mL	99
15) N-Nitroso-Di-n-propylamine	10.67	70	48058	48.86	ug/mL	91
16) Hexachloroethane	10.61	117	26915	49.93	ug/mL	99
19) Nitrobenzene	10.94	77	65242	52.61	ug/mL#	89
20) Isophorone	11.73	82	119099	45.58	ug/mL	96
21) 2-Nitrophenol	11.88	139	29485	47.92	ug/mL	98
22) 2,4-Dimethylphenol	10.79	107	57307	49.78	ug/mL#	32
23) bis(2-Chloroethoxy)methane	8.32	93	66255	49.66	ug/mL#	42
24) 2,4-Dichlorophenol	12.65	162	43957	50.41	ug/mL	97
25) 1,2,4-Trichlorobenzene	12.83	180	48531	52.36	ug/mL	98
26) Naphthalene	13.00	128	149571	52.24	ug/mL#	91
27) 4-Chloroaniline	13.35	127	67787	50.05	ug/mL	98
28) Hexachlorobutadiene	13.50	225	27957	51.65	ug/mL	96
29) 4-Chloro-3-methylphenol	15.04	107	55034	49.01	ug/mL	100
30) 2-Chloronaphthalene	16.58	162	104679	51.41	ug/ml	99
31) 2-Methylnaphthalene	15.14	142	108545	47.23	ug/mL	100
33) Hexachlorocyclopentadiene	15.66	237	25173	44.85	ug/mL	96
34) 2,4,6-Trichlorophenol	16.10	196	35610	42.51	ug/mL	99
35) 2,4,5-Trichlorophenol	16.20	196	38697	59.22	ug/mL	100

(#) = qualifier out of range (m) = manual integration

Data File : c:\hpchem\1\data2\b7803.d Vial: 2
Acq On : 3 Jun 95 10:13 am Operator: SCOTTV
Sample : 50 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jun 7 9:32 1995

Method : C:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 10:06:36 1995
Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
37) 2-Nitroaniline	17.05	65	49104	44.34	ug/mL#	100
38) Dimethylphthalate	17.82	163	128716	49.12	ug/mL	99
39) Acenaphthylene	17.80	152	166597	48.47	ug/mL	99
40) 2,6-Dinitrotoluene	17.91	165	30393	48.59	ug/mL	97
41) 3-Nitroaniline	18.34	138	34672	49.71	ug/mL	95
42) Acenaphthene	18.36	153	104858	50.73	ug/mL	100
43) 2,4-Dinitrophenol	18.66	184	16518	47.58	ug/mL	99
44) 4-Nitrophenol	19.13	109	16116	48.25	ug/mL	89
45) Dibenzofuran	18.92	168	163832	50.51	ug/mL	95
46) 2,4-Dinitrotoluene	19.96	165	113430	48.20	ug/mL#	32
47) Diethylphthalate	20.07	149	138770	47.70	ug/mL	100
48) Fluorene	19.96	166	122870	48.41	ug/mL	99
49) 4-Chlorophenyl-phenylether	20.15	204	63340	52.68	ug/mL	93
51) 4-Nitroaniline	20.21	138	32609	58.46	ug/mL	97
52) 4,6-Dinitro-2-methylphenol	20.30	198	23243	52.57	ug/mL	100
53) n-Nitrosodiphenylamine	20.55	169	84236	49.39	ug/mL#	1
55) 1,2-Diphenylhydrazine (as	20.61	77	199476	49.08	ug/ml	100
56) 4-Bromophenyl-phenylether	21.59	248	36733	53.12	ug/mL#	89
57) Hexachlorobenzene	21.58	284	38977	54.11	ug/mL	91
58) Pentachlorophenol	22.29	266	26808	58.11	ug/mL	98
59) Phenanthrene	22.85	178	189424	51.58	ug/mL	100
60) Anthracene	23.00	178	178492	52.73	ug/mLm	99
61) Carbazole	23.64	167	170215	53.76	ug/ml	100
62) Di-n-butylphthalate	25.14	149	273873	50.81	ug/mL	99
63) Fluoranthene	26.47	202	191126	55.04	ug/mLm	95
65) Benzidine	27.14	184	58486	41.24	ug/mlm	100
66) Pyrene	27.10	202	200950	41.28	ug/mLm	87
68) Butylbenzylphthalate	29.69	149	124639	39.98	ug/mL	95
69) Benzo[a]anthracene	30.87	228	210709	42.89	ug/mLm	99
70) 3,3'-Dichlorobenzidine	31.00	252	57942	46.26	ug/mL	99
71) Chrysene	30.96	228	130675	47.82	ug/mLm	97
72) bis(2-Ethylhexyl)phthalate	31.66	149	186121	42.09	ug/mL	99
74) Di-n-octylphthalate	33.57	149	533971	44.86	ug/mLm	99
75) Benzo[b]fluoranthene	33.93	252	251584	43.65	ug/mLm	99
76) Benzo[k]fluoranthene	34.01	252	148737	53.49	ug/mLm	94
77) Benzo[a]pyrene	33.93	252	147880	51.60	ug/mL	98
78) Indeno[1,2,3-cd]pyrene	37.43	276	53465	50.57	ug/mLm	89
79) Dibenz[a,h]anthracene	37.54	278	44917	44.12	ug/mL	98
80) Benzo[g,h,i]perylene	38.01	276	34048	40.97	ug/mLm	98

(#) = qualifier out of range (m) = manual integration

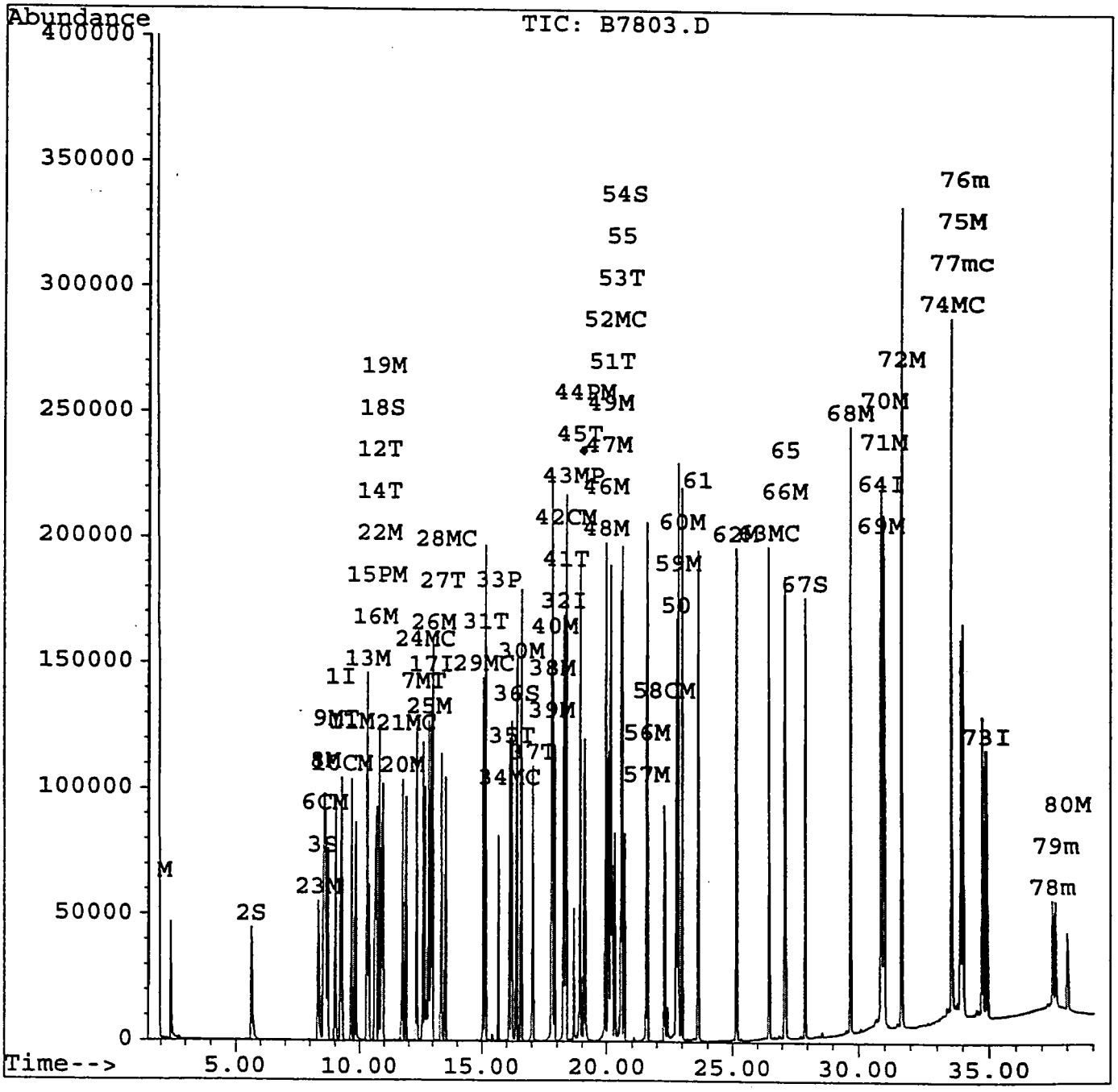
Quantitation Report

Data File : c:\hpchem\1\data2\b7803.d
Acq On : 3 Jun 95 10:13 am
Sample : 50 STD.....
Misc :
Quant Time: Jun 7 9:32 1995

Converted from RTE d

Vial: 2
Operator: SCOTTV
Inst : ABNA
BT Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 10:06:36 1995
Response via : Multiple Level Calibration



8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Lab File ID (Standard): B7803.D Date Analyzed: 6/3/95

Instrument ID: ABNA Time Analyzed: 1013

		IS1 (DCB) AREA	#	RT	#	IS2 (NPT) AREA	#	RT	#	IS3 (ANT) AREA	#	RT	#
	12 HOUR STD	29236		9.21		116999		12.92		80656		18.26	
	UPPER LIMIT	58472		9.71		233998		13.42		161312		18.76	
	LOWER LIMIT	14618		8.71		58500		12.42		40328		17.76	
	SAMPLE NO.												
01	SBLK01	29342		9.21		113640		12.92		77393		18.25	
02	9521072B	43362		9.20		172473		12.92		120771		18.25	
03	9521073B	49674		9.20		207002		12.94		136613		18.27	
04	SBLK02	45568		9.20		183778		12.92		124916		18.27	
05	9522265B	38448		9.21		156239		12.92		104790		18.25	
06	9522845B	34293		9.20		139874		12.92		94484		18.25	
07	SBLK03	31802		9.20		131302		12.92		86836		18.27	
08	9523339B	31877		9.20		132687		12.92		87914		18.25	
09	9523341B	37996		9.20		159444		12.94		104434		18.27	
10	9523342B	34168		9.20		146228		12.94		97312		18.27	
11	9523343B	33809		9.20		139851		12.92		93023		18.27	
12	9523530B	34840		9.20		145007		12.92		98737		18.25	
13	9523531B	35055		9.20		145276		12.92		99265		18.27	
14	9523533B	36725		9.20		152052		12.92		102907		18.27	
15	9523534B	37321		9.29		127658		13.06		64338		18.50	
16	9523535B	36905		9.21		144207		12.92		97310		18.26	
17	9523536B	36125		9.20		148482		12.92		99681		18.27	
18	SBLK04	38489		9.20		152333		12.92		104920		18.25	
19	9523789B	39839		9.20		162610		12.92		110929		18.27	
20	9523792B	36962		9.20		155161		12.92		105988		18.27	
21	9523787B	38496		9.20		159554		12.92		108441		18.27	
22	SBLK05	43303		9.20		177127		12.92		122916		18.27	

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Lab File ID (Standard): B7803.D Date Analyzed: 6/3/95

Instrument ID: ABNA Time Analyzed: 1013

		IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
	12 HOUR STD	29236	9.21	116999	12.92	80656	18.26
	UPPER LIMIT	58472	9.71	233998	13.42	161312	18.76
	LOWER LIMIT	14618	8.71	58500	12.42	40328	17.76
	SAMPLE NO.						
01	22654MS	33780	9.20	129967	12.94	93254	18.26
02	22654MSD	35303	9.20	144937	12.94	99611	18.26
03	22659MS	28616	9.20	119812	12.94	81829	18.26
04	22659MSD	30456	9.21	121585	12.94	84364	18.26
05							
06							
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Lab File ID (Standard): B7803.D Date Analyzed: 6/3/95

Instrument ID: ABNA Time Analyzed: 1013

		IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
	12 HOUR STD	134208	22.77	129676	30.89	93467	34.90
	UPPER LIMIT	268416	23.27	259352	31.39	186934	35.40
	LOWER LIMIT	67104	22.27	64838	30.39	46734	34.40
	SAMPLE NO.						
01	SBLK01	127774	22.76	144639	30.86	143369	34.89
02	9521072B	201946	22.77	208937	30.89	160791	34.90
03	9521073B	222787	22.77	231737	30.89	165808	34.90
04	SBLK02	200423	22.77	227269	30.88	184816	34.91
05	9522265B	172502	22.78	184570	30.88	122938	34.91
06	9522845B	149864	22.78	156654	30.88	124082	34.91
07	SBLK03	142609	22.77	151919	30.88	122270	34.91
08	9523339B	145640	22.78	157437	30.89	128975	34.92
09	9523341B	172617	22.77	198222	30.90	166777	34.93
10	9523342B	156213	22.77	174808	30.88	147217	34.91
11	9523343B	149747	22.77	162481	30.88	137109	34.91
12	9523530B	159922	22.78	179407	30.88	152667	34.91
13	9523531B	164218	22.77	179435	30.88	151215	34.91
14	9523533B	167089	22.77	185071	30.88	155624	34.91
15	9523534B	126172	22.95	162548	30.91	85072	34.88
16	9523535B	153052	22.76	160811	30.89	134801	34.89
17	9523536B	149413	22.77	158425	30.88	129419	34.91
18	SBLK04	168411	22.78	175380	30.88	148566	34.91
19	9523789B	183194	22.77	209328	30.88	181543	34.91
20	9523792B	175832	22.77	198461	30.88	168915	34.91
21	9523787B	177208	22.77	191680	30.88	155077	34.91
22	SBLK05	199698	22.77	216974	30.88	174620	34.91

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Lab File ID (Standard): B7803.D Date Analyzed: 6/3/95

Instrument ID: ABNA Time Analyzed: 1013

		IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
	12 HOUR STD	134208	22.77	129676	30.89	93467	34.90
	UPPER LIMIT	268416	23.27	259352	31.39	186934	35.40
	LOWER LIMIT	67104	22.27	64838	30.39	46734	34.40
	SAMPLE NO.						
01	22654MS	155903	22.77	148922	30.91	65345	34.91
02	22654MSD	164759	22.77	152801	30.91	66464	34.91
03	22659MS	135678	22.77	133913	30.90	64806	34.89
04	22659MSD	145091	22.77	140877	30.90	65773	34.90
05							
06							
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO. 115

9523341B FB

Lab Name: EMSL ANALYTICAL Contract:

Project No.: Site: Location: Group:

Matrix: (soil/water) WATER Lab Sample ID: 9523341B

Sample wt/vol: 1000.0 (g/mL ML Lab File ID: B7812.D

Level: (low/med) Date Received: 5/22/95

% Moisture: decanted: (Y/N): N Date Extracted: 5/26/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 6/3/95

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
62-75-9	N-nitrosodimethylamine	2	U
111-44-4	bis(2-Chloroethyl)ether	1	U
541-73-1	1,3-Dichlorobenzene	2	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	2	U
108-60-1	bis(2-chloroisopropyl)ether	5	U
621-64-7	N-Nitroso-Di-n-propylamine	2	U
67-72-1	Hexachloroethane	1	U
98-95-3	Nitrobenzene	2	U
78-59-1	Isophorone	1	U
111-91-1	bis(2-Chloroethoxy)methane	3	U
120-82-1	1,2,4-Trichlorobenzene	2	U
91-20-3	Naphthalene	2	U
87-68-3	Hexachlorobutadiene	2	U
77-47-4	Hexachlorocyclopentadiene	12	U
91-58-7	2-Chloronaphthalene	1	U
131-11-3	Dimethylphthalate	1	U
208-96-8	Acenaphthylene	5	U
606-20-2	2,6-Dinitrotoluene	2	U
83-32-9	Acenaphthene	3	U
121-14-2	2,4-Dinitrotoluene	3	U
84-66-2	Diethylphthalate	1	U
86-73-7	Fluorene	3	U
7005-72-3	4-Chlorophenyl-phenylether	3	U
86-30-6	n-Nitrosodiphenylamine	6	U
122-66-7	1,2-Diphenylhydrazine(as azo)	6	U
101-55-3	4-Bromophenyl-phenylether	2	U
118-74-1	Hexachlorobenzene	2	U
85-01-08	Phenanthrene	2	U
120-12-7	Anthracene	2	U
84-74-2	Di-n-butylphthalate	5	U
206-44-0	Fluoranthene	1	U
92-87-5	Benzidine	1	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO. 116

9523341B FB

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Matrix: (soil/water) WATER Lab Sample ID: 9523341B

Sample wt/vol: 1000.0 (g/mL ML Lab File ID: B7812.D

Level: (low/med) _____ Date Received: 5/22/95

% Moisture: _____ decanted: (Y/N): N Date Extracted: 5/26/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 6/3/95

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
129-00-0	Pyrene	2	U
85-68-7	Butylbenzylphthalate	9	U
56-55-3	Benzo[a]anthracene	2	U
91-94-1	3,3'-Dichlorobenzidine	15	U
218-01-9	Chrysene	2	U
117-81-7	bis(2-Ethylhexyl)phthalate	4	U
117-84-0	Di-n-octylphthalate	2	U
205-99-2	Benzo[b]fluoranthene	1	U
207-08-9	Benzo[k]fluoranthene	2	U
50-32-8	Benzo[a]pyrene	2	U
193-39-5	Indeno[1,2,3-cd]pyrene	2	U
53-70-3	Dibenz[a,h]anthracene	3	U
191-24-2	Benzo[g,h,i]perylene	2	U

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO. 1 1 7

9523341B
FB

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Matrix: (soil/water) WATER Lab Sample ID: 9523341B

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: B7812.D

Level: (low/med) _____ Date Received: 5/22/95

% Moisture: 0 decanted: (Y/N) N Date Extracted: 5/26/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 6/3/95

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

Number TICs found: 1 Concentration Units: (ug/L or ug/Kg) ug/L

CAS Number	Compound Name	RT	Est. Conc	Q
1.	Unknown	29.88	7	J
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

Quantitation Report

Data File : c:\hpchem\1\data2\b7812.d Vial: 11
Acq On : 3 Jun 95 5:47 pm Operator: SCOTTV
Sample : 23341..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jun 5 15:46 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 10:06:36 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.20	152	37996	40.00	ug/mL	0.17
17) Naphthalene-d8	12.94	136	159444	40.00	ug/mL	0.19
32) Acenaphthene-d10	18.27	164	104434	40.00	ug/mL	0.22
50) Phenanthrene-d10	22.77	188	172617	40.00	ug/ml	0.25
64) Chrysene-d12	30.90	240	198222	40.00	ug/mL	0.32
73) Perylene-d12	34.93	264	166777	40.00	ug/mL	0.33
System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	0.00	112	0	0.00	ug/mL	0.00%
3) Phenol-d5	9.22	99	398	0.22	ug/mL	0.22%
18) Nitrobenzene-d5	10.88	82	110053	60.58	ug/mL	60.58%
36) 2-Fluorobiphenyl	16.40	172	187875	59.97	ug/mL	59.97%
54) 2,4,6-Tribromophenol	0.00	330	0	0.00	ug/mL	0.00%
67) Terphenyl-d14	27.95	244	330666	62.85	ug/mL	62.85%
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration

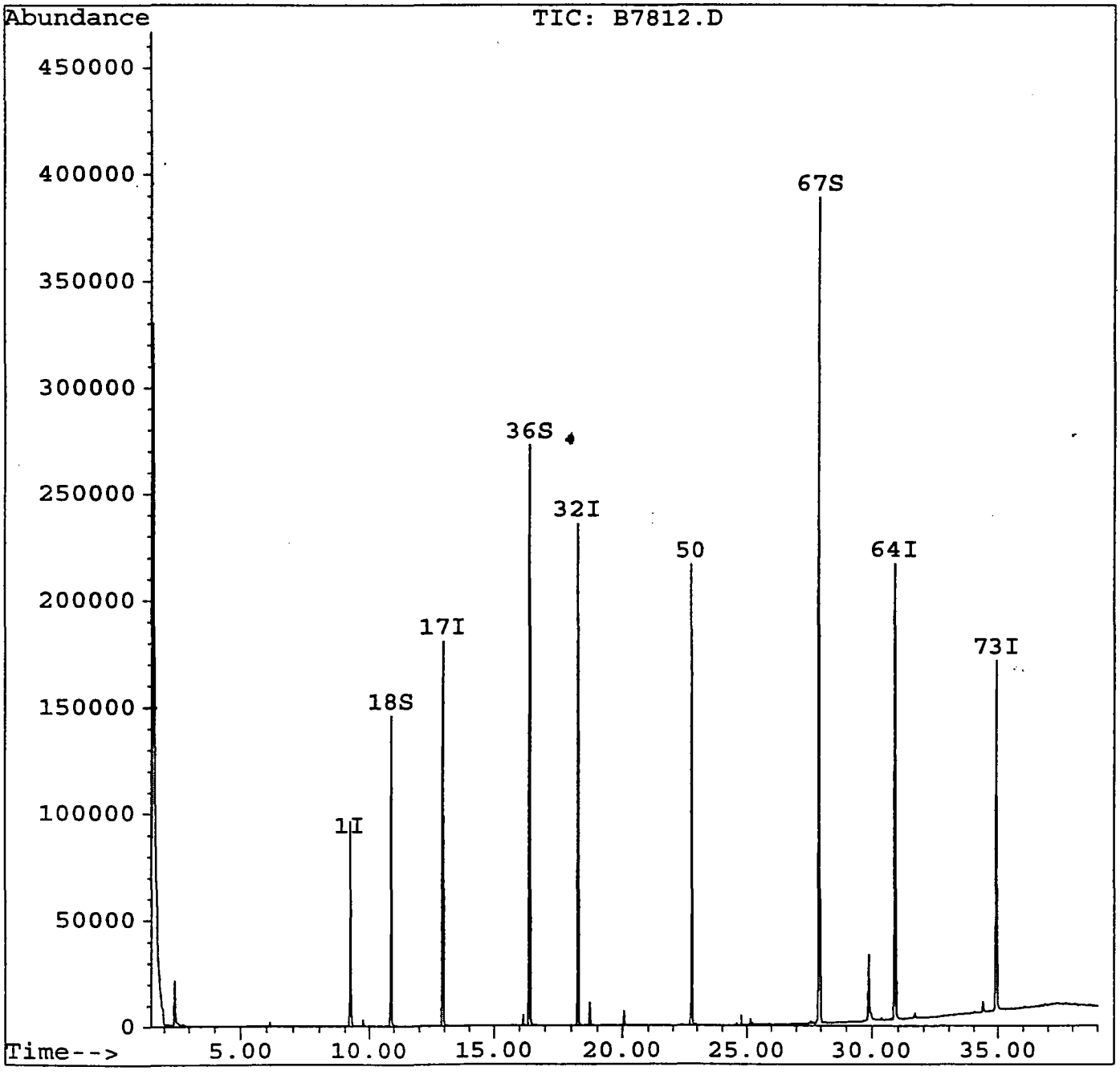
Quantitation Report

Data File : c:\hpchem\1\data2\b7812.d
Acq On : 3 Jun 95 5:47 pm
Sample : 23341.....
Misc :
Quant Time: Jun 5 15:46 1995

Converted from RTE d

Vial: 11
Operator: SCOTTV
Inst : ABNA
BT Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 10:06:36 1995
Response via : Multiple Level Calibration



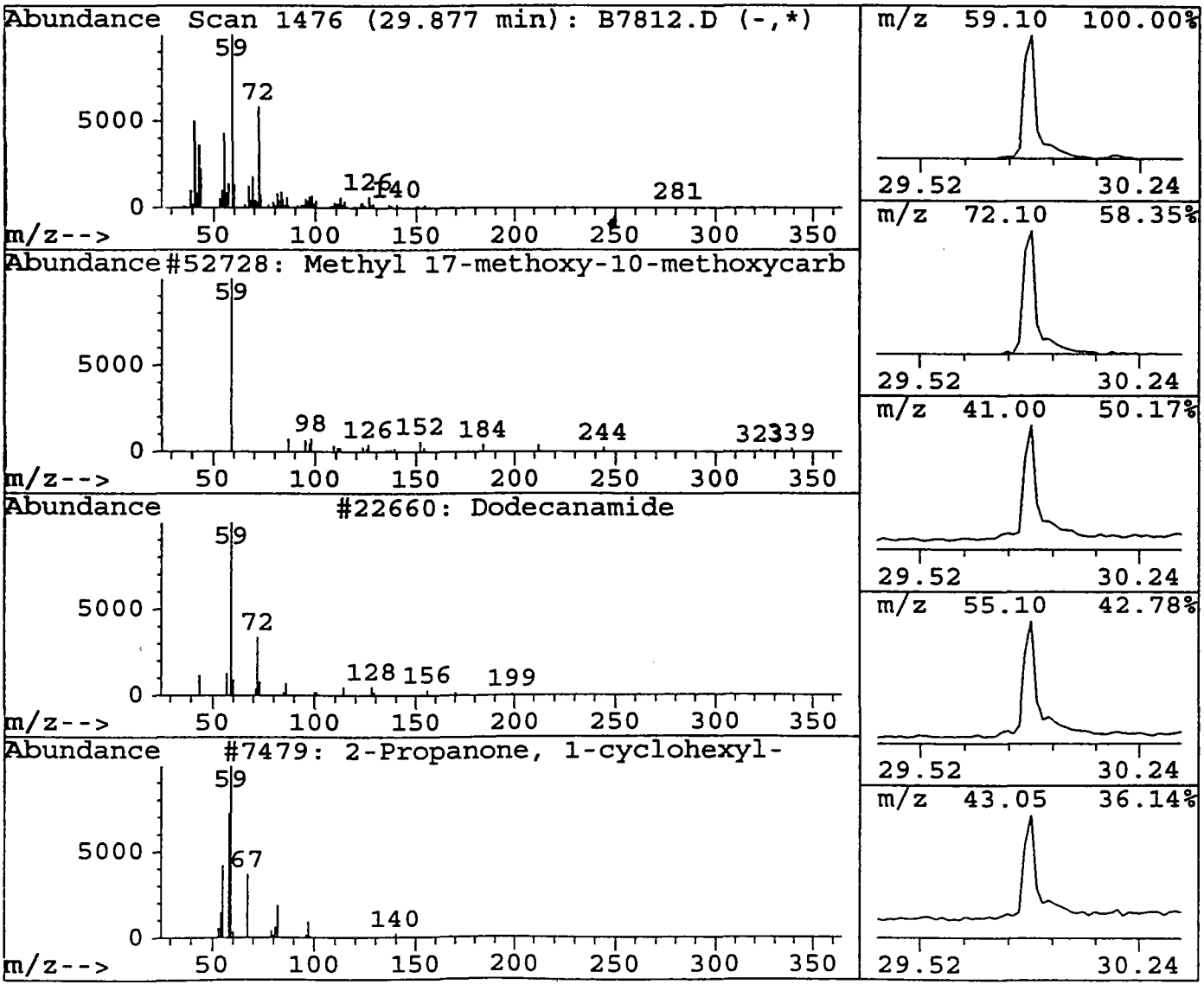
Library Search Compound Report

Data File : c:\hpchem\1\data2\b7812.d Vial: 11
Acq On : 3 Jun 95 5:47 pm Operator: SCOTTV
Sample : 23341..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Library : C:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
29.88	6.60 ug/ml	95507	Chrysene-d12	30.90

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Methyl 17-methoxy-10-methoxycarbony	52728	000000-00-0	43
2	Dodecanamide	22660	001120-16-7	40
3	2-Propanone, 1-cyclohexyl-	7479	000103-78-6	38
4	Hydrazine, 1,1-dimethyl-2-(1-methyl	5486	075267-97-9	38
5	Pentanamide, 4-methyl-	3136	001119-29-5	37



1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

9523343B

mw1-293178S

151

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Matrix: (soil/water) WATER Lab Sample ID: 9523343B

Sample wt/vol: 1000.0 (g/mL ML Lab File ID: B7814.D

Level: (low/med) _____ Date Received: 5/22/95

% Moisture: _____ decanted: (Y/N): N Date Extracted: 5/26/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 6/3/95

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
62-75-9	N-nitrosodimethylamine	2	U
111-44-4	bis(2-Chloroethyl)ether	1	U
541-73-1	1,3-Dichlorobenzene	2	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	2	U
108-60-1	bis(2-chloroisopropyl)ether	5	U
621-64-7	N-Nitroso-Di-n-propylamine	2	U
67-72-1	Hexachloroethane	1	U
98-95-3	Nitrobenzene	2	U
78-59-1	Isophorone	1	U
111-91-1	bis(2-Chloroethoxy)methane	3	U
120-82-1	1,2,4-Trichlorobenzene	2	U
91-20-3	Naphthalene	2	U
87-68-3	Hexachlorobutadiene	2	U
77-47-4	Hexachlorocyclopentadiene	12	U
91-58-7	2-Chloronaphthalene	1	U
131-11-3	Dimethylphthalate	1	U
208-96-8	Acenaphthylene	5	U
606-20-2	2,6-Dinitrotoluene	2	U
83-32-9	Acenaphthene	3	U
121-14-2	2,4-Dinitrotoluene	3	U
84-66-2	Diethylphthalate	1	U
86-73-7	Fluorene	3	U
7005-72-3	4-Chlorophenyl-phenylether	3	U
86-30-6	n-Nitrosodiphenylamine	6	U
122-66-7	1,2-Diphenylhydrazine(as azo)	6	U
101-55-3	4-Bromophenyl-phenylether	2	U
118-74-1	Hexachlorobenzene	2	U
85-01-08	Phenanthrene	2	U
120-12-7	Anthracene	2	U
84-74-2	Di-n-butylphthalate	5	U
206-44-0	Fluoranthene	1	U
92-87-5	Benzidine	1	U

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO. 9523343B MW1-293785 152

Lab Name: EMSL ANALYTICAL Contract:

Project No.: Site: Location: Group:

Matrix: (soil/water) WATER Lab Sample ID: 9523343B

Sample wt/vol: 1000.0 (g/mL ML Lab File ID: B7814.D

Level: (low/med) Date Received: 5/22/95

% Moisture: decanted: (Y/N): N Date Extracted: 5/26/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 6/3/95

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
129-00-0	Pyrene	2	U
85-68-7	Butylbenzylphthalate	9	U
56-55-3	Benzo[a]anthracene	2	U
91-94-1	3,3'-Dichlorobenzidine	15	U
218-01-9	Chrysene	2	U
117-81-7	bis(2-Ethylhexyl)phthalate	4	U
117-84-0	Di-n-octylphthalate	2	U
205-99-2	Benzo[b]fluoranthene	1	U
207-08-9	Benzo[k]fluoranthene	2	U
50-32-8	Benzo[a]pyrene	2	U
193-39-5	Indeno[1,2,3-cd]pyrene	2	U
53-70-3	Dibenz[a,h]anthracene	3	U
191-24-2	Benzo[g,h,i]perylene	2	U

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.
9523343B
MW1-293178S

53

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Matrix: (soil/water) WATER Lab Sample ID: 9523343B

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: B7814.D

Level: (low/med) _____ Date Received: 5/22/95

% Moisture: 0 decanted: (Y/N) N Date Extracted: 5/26/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 6/3/95

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

Number TICs found: 0 Concentration Units: (ug/L or ug/Kg) ug/L

CAS Number	Compound Name	RT	Est. Conc	Q
1.	NONE FOUND			
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

Quantitation Report

Data File : c:\hpchem\1\data2\b7814.d Vial: 13
Acq On : 3 Jun 95 7:28 pm Operator: SCOTTV
Sample : 23343..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jun 5 15:51 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 10:06:36 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.20	152	33809	40.00	ug/mL	0.17
17) Naphthalene-d8	12.92	136	139851	40.00	ug/mL	0.17
32) Acenaphthene-d10	18.27	164	93023	40.00	ug/mL	0.22
50) Phenanthrene-d10	22.77	188	149747	40.00	ug/ml	0.26
64) Chrysene-d12	30.88	240	162481	40.00	ug/mL	0.30
73) Perylene-d12	34.91	264	137109	40.00	ug/mL	0.31
System Monitoring Compounds						**%Recovery**
2) 2-Fluorophenol	0.00	112	0	0.00	ug/mL	0.00%
3) Phenol-d5	9.20	99	339	0.21	ug/mL	0.21%
18) Nitrobenzene-d5	10.88	82	101391	63.63	ug/mL	63.63%
36) 2-Fluorobiphenyl	16.40	172	172983	61.99	ug/mL	61.99%
54) 2,4,6-Tribromophenol	0.00	330	0	0.00	ug/mL	0.00%
67) Terphenyl-d14	27.93	244	311657	72.27	ug/mL	72.27%
Target Compounds						**Qvalue**

(#) = qualifier out of range (m) = manual integration

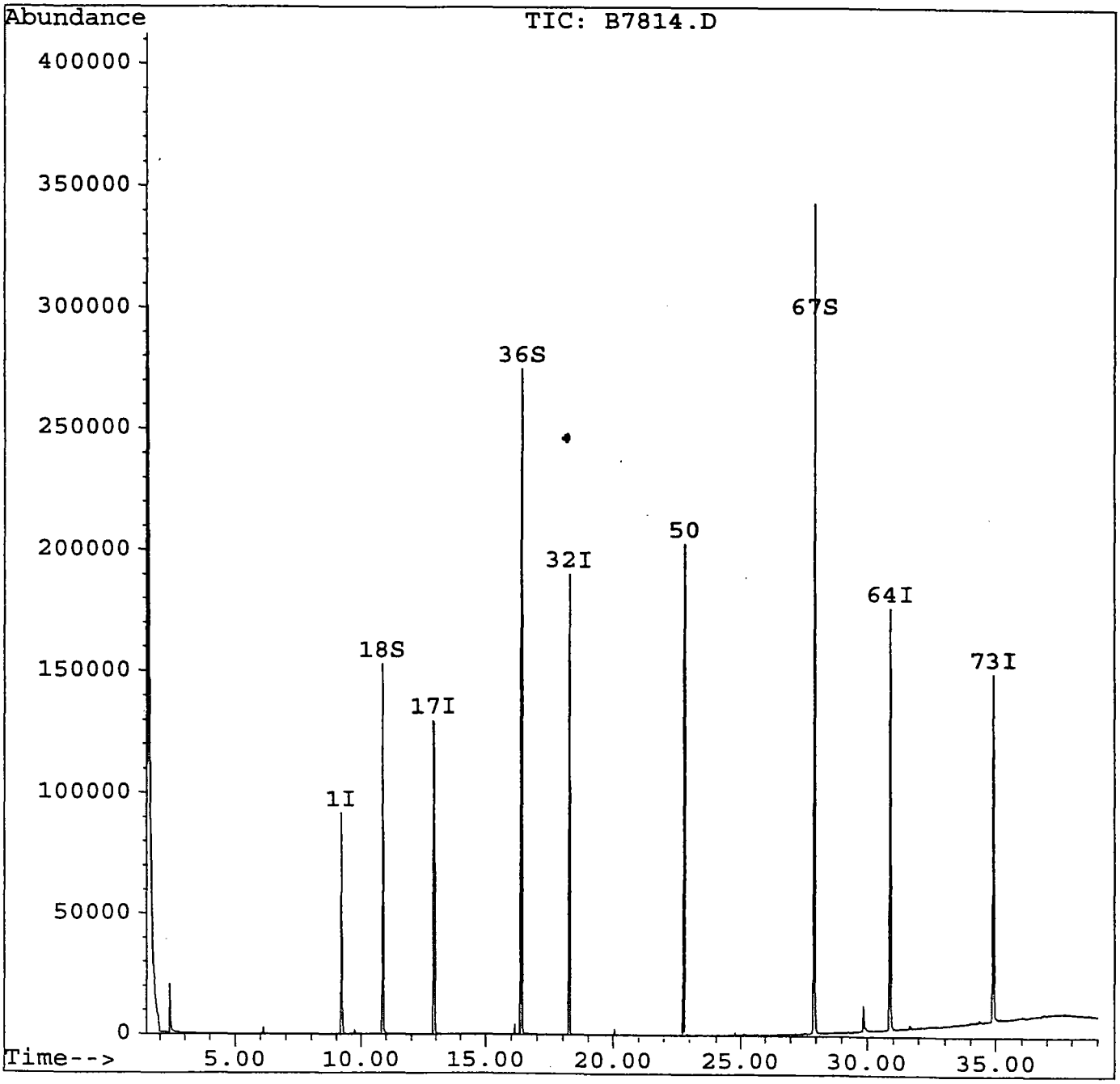
Quantitation Report

Data File : c:\hpchem\1\data2\b7814.d
Acq On : 3 Jun 95 7:28 pm
Sample : 23343.....
Misc :
Quant Time: Jun 5 15:51 1995

Converted from RTE d

Vial: 13
Operator: SCOTTV
Inst : ABNA
BT Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 10:06:36 1995
Response via : Multiple Level Calibration



2C

WATER SEMIVOLATILE SURROGATE RECOVERY

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

	SAMPLE NO.	S1 (NBZ) #	S2 (FBP) #	S3 (TPH) #	#	#	#	#	#	TOT OUT
01	SBLK02	29	23	38						
02	9522265B	44	37	66						
03	9522845B	60	49	73						
04	SBLK03	68	67	89						
05	9523339B	73	69	60						
06	9523341B	61	60	63						
07	9523342B	74	70	68						
08	9523343B	64	62	72						
09	9523530B	64	61	65						
10	9523531B	73	67	69						
11	9523533B	40	39	64						
12	9523534B	81	67	76						
13	9523535B	70	69	68						
14	9523536B	62	65	68						
15	SBLK04	62	61	68						
16	9523789B	57	61	72						
17	9523792B	60	64	70						
18	9523787B	39	43	63						
19	SBLK05	57	55	63						
20	22654MS	91	63	82						
21	22654MSD	74	61	72						
22	22659MS	75	67	80						
23	22659MSD	78	65	78						
24										
25										
26										
27										
28										
29										
30										

	QC LIMITS
S1 (NBZ) = Nitrobenzene-d5	(22-101)
S2 (FBP) = 2-Fluorobiphenyl	(20-94)
S3 (TPH) = Terphenyl-d14	(35-127)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogate diluted out

4B

SEMIVOLATILE METHOD BLANK SUMMARY

SAMPLE NO. 157

SBLK03

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Lab File ID: B7810.D Lab Sample ID: BLANK3

Instrument ID: ABNA Date Extracted: 5/26/95

Matrix: (soil/water) WATER Date Analyzed: 6/3/95

Level: (low/med) _____ Time Analyzed: 1606

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	9523339B	9523339B	B7811.D	06/03/95
02	9523341B	9523341B	B7812.D	06/03/95
03	9523342B	9523342B	B7813.D	06/03/95
04	9523343B	9523343B	B7814.D	06/03/95
05	9523530B	9523530B	B7815.D	06/03/95
06	9523531B	9523531B	B7816.D	06/03/95
07	9523533B	9523533B	B7817.D	06/03/95
08	9523534B	9523534B	B7818.D	06/03/95
09	9523535B	9523535B	B7819.D	06/03/95
10	9523536B	9523536B	B7820.D	06/04/95
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

COMMENTS:

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

SBLK03 1 8

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Matrix: (soil/water) WATER Lab Sample ID: BLANK3

Sample wt/vol: 1000.0 (g/mL ML Lab File ID: B7810.D

Level: (low/med) _____ Date Received: 5/22/95

% Moisture: _____ decanted: (Y/N): N Date Extracted: 5/26/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 6/3/95

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
62-75-9	N-nitrosodimethylamine	2	U
111-44-4	bis(2-Chloroethyl)ether	1	U
541-73-1	1,3-Dichlorobenzene	2	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	2	U
108-60-1	bis(2-chloroisopropyl)ether	5	U
621-64-7	N-Nitroso-Di-n-propylamine	2	U
67-72-1	Hexachloroethane	1	U
98-95-3	Nitrobenzene	2	U
78-59-1	Isophorone	1	U
111-91-1	bis(2-Chloroethoxy)methane	3	U
120-82-1	1,2,4-Trichlorobenzene	2	U
91-20-3	Naphthalene	2	U
87-68-3	Hexachlorobutadiene	2	U
77-47-4	Hexachlorocyclopentadiene	12	U
91-58-7	2-Chloronaphthalene	1	U
131-11-3	Dimethylphthalate	1	U
208-96-8	Acenaphthylene	5	U
606-20-2	2,6-Dinitrotoluene	2	U
83-32-9	Acenaphthene	3	U
121-14-2	2,4-Dinitrotoluene	3	U
84-66-2	Diethylphthalate	1	U
86-73-7	Fluorene	3	U
7005-72-3	4-Chlorophenyl-phenylether	3	U
86-30-6	n-Nitrosodiphenylamine	6	U
122-66-7	1,2-Diphenylhydrazine(as azo)	6	U
101-55-3	4-Bromophenyl-phenylether	2	U
118-74-1	Hexachlorobenzene	2	U
85-01-08	Phenanthrene	2	U
120-12-7	Anthracene	2	U
84-74-2	Di-n-butylphthalate	5	U
206-44-0	Fluoranthene	1	U
92-87-5	Benzidine	1	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

SBLK03

159

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Matrix: (soil/water) WATER Lab Sample ID: BLANK3

Sample wt/vol: 1000.0 (g/mL ML Lab File ID: B7810.D

Level: (low/med) _____ Date Received: 5/22/95

% Moisture: _____ decanted: (Y/N): N Date Extracted: 5/26/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 6/3/95

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
129-00-0	Pyrene	2	U
85-68-7	Butylbenzylphthalate	9	U
56-55-3	Benzo[a]anthracene	2	U
91-94-1	3,3'-Dichlorobenzidine	15	U
218-01-9	Chrysene	2	U
117-81-7	bis(2-Ethylhexyl)phthalate	4	U
117-84-0	Di-n-octylphthalate	2	U
205-99-2	Benzo[b]fluoranthene	1	U
207-08-9	Benzo[k]fluoranthene	2	U
50-32-8	Benzo[a]pyrene	2	U
193-39-5	Indeno[1,2,3-cd]pyrene	2	U
53-70-3	Dibenz[a,h]anthracene	3	U
191-24-2	Benzo[g,h,i]perylene	2	U

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.
SBLK03

160

Lab Name: EMSL ANALYTICAL Contract:

Project No.: Site: Location: Group:

Matrix: (soil/water) WATER Lab Sample ID: BLANK3

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: B7810.D

Level: (low/med) Date Received: 5/22/95

% Moisture: 0 decanted: (Y/N) N Date Extracted: 5/26/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 6/3/95

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 2 Concentration Units: (ug/L or ug/Kg) ug/L

CAS Number	Compound Name	RT	Est. Conc	Q
1.	Unknown	29.86	8	J
2.	Unknown	34.37	5	J
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

Quantitation Report

Data File : c:\hpchem\1\data2\b7810.d Vial: 9
Acq On : 3 Jun 95 4:06 pm Operator: SCOTTV
Sample : BLANK..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jun 5 15:43 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 10:06:36 1995
Response via : Multiple Level Calibration

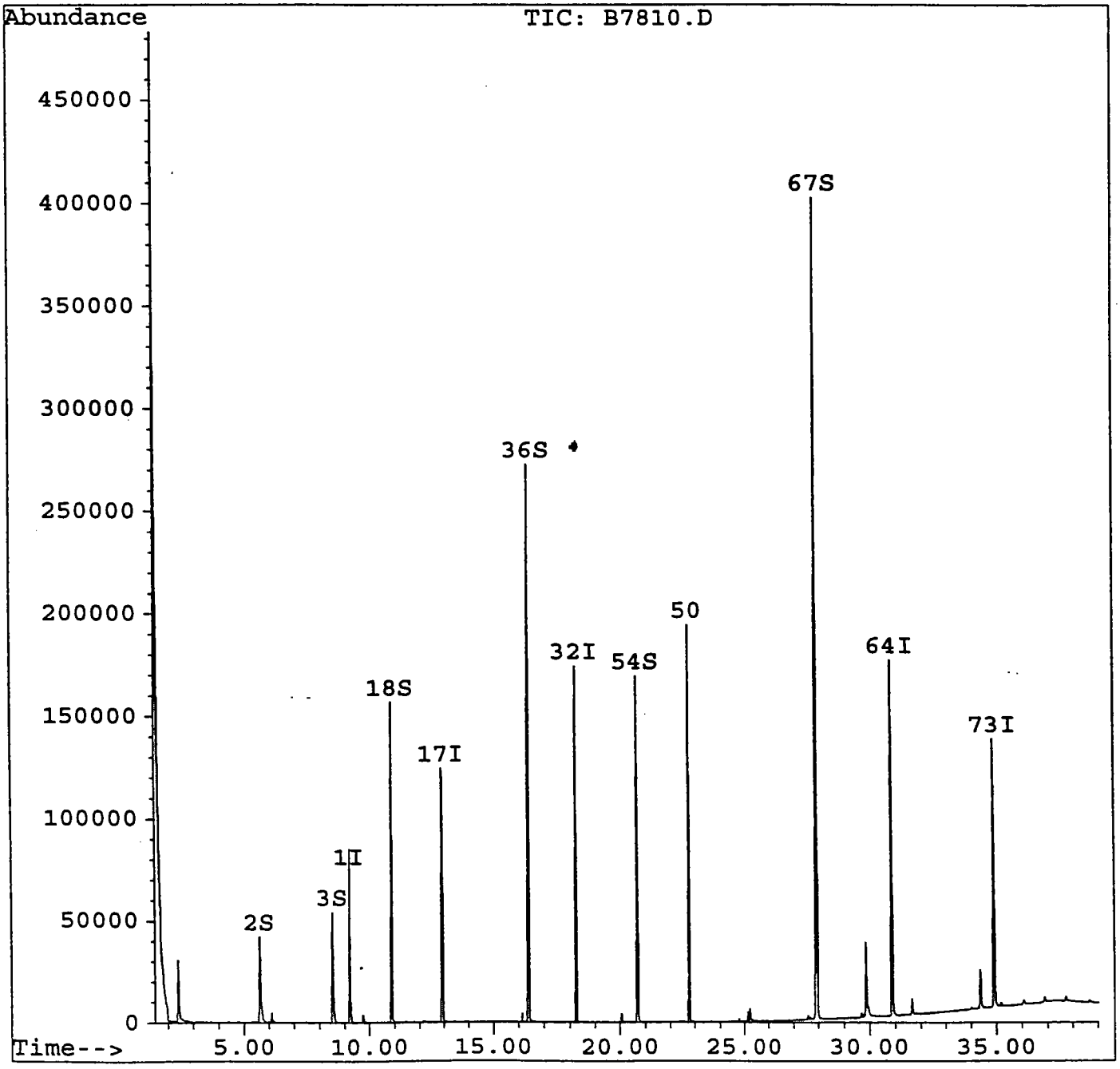
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.20	152	31802	40.00	ug/mL	0.17
17) Naphthalene-d8	12.92	136	131302	40.00	ug/mL	0.17
32) Acenaphthene-d10	18.27	164	86836	40.00	ug/mL	0.22
50) Phenanthrene-d10	22.77	188	142609	40.00	ug/ml	0.25
64) Chrysene-d12	30.88	240	151919	40.00	ug/mL	0.30
73) Perylene-d12	34.91	264	122270	40.00	ug/mL	0.31
System Monitoring Compounds						**%Recovery**
2) 2-Fluorophenol	5.62	112	39963	44.43	ug/mL	44.43%
3) Phenol-d5	8.53	99	41380	27.79	ug/mL	27.79%
18) Nitrobenzene-d5	10.88	82	101686	67.97	ug/mL	67.97%
36) 2-Fluorobiphenyl	16.40	172	173985	66.80	ug/mL	66.80%
54) 2,4,6-Tribromophenol	20.69	330	34408	89.34	ug/mL	89.34%
67) Terphenyl-d14	27.95	244	360667	89.45	ug/mL	89.45%
Target Compounds						**Qvalue**

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data2\b7810.d Vial: 9
Acq On : 3 Jun 95 4:06 pm Operator: SCOTTV
Sample : BLANK..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jun 5 15:43 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 10:06:36 1995
Response via : Multiple Level Calibration

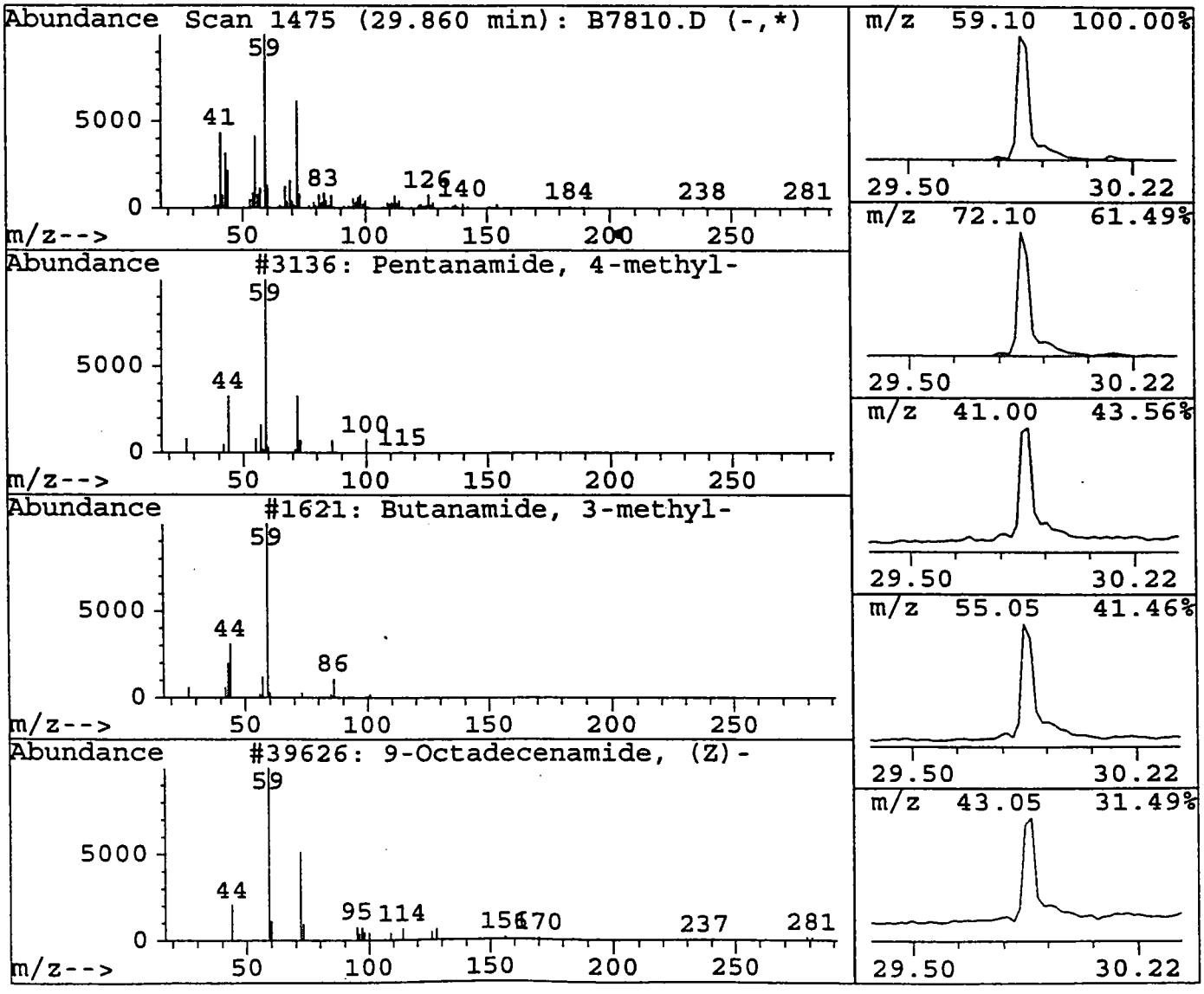


Data File : c:\hpchem\1\data2\b7810.d Vial: 9
Acq On : 3 Jun 95 4:06 pm Operator: SCOTTV
Sample : BLANK..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Library : C:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
29.86	8.47 ug/ml	96921	Chrysene-d12	30.88

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Pentanamide, 4-methyl-	3136	001119-29-5	50
2	Butanamide, 3-methyl-	1621	000541-46-8	47
3	9-Octadecenamide, (Z)-	39626	000301-02-0	43
4	2,3-Dimethyl-4-penten-2-ol	3046	019781-52-3	38
5	Hydrazine, 1,1-dimethyl-2-(1-methyl	5486	075267-97-9	38



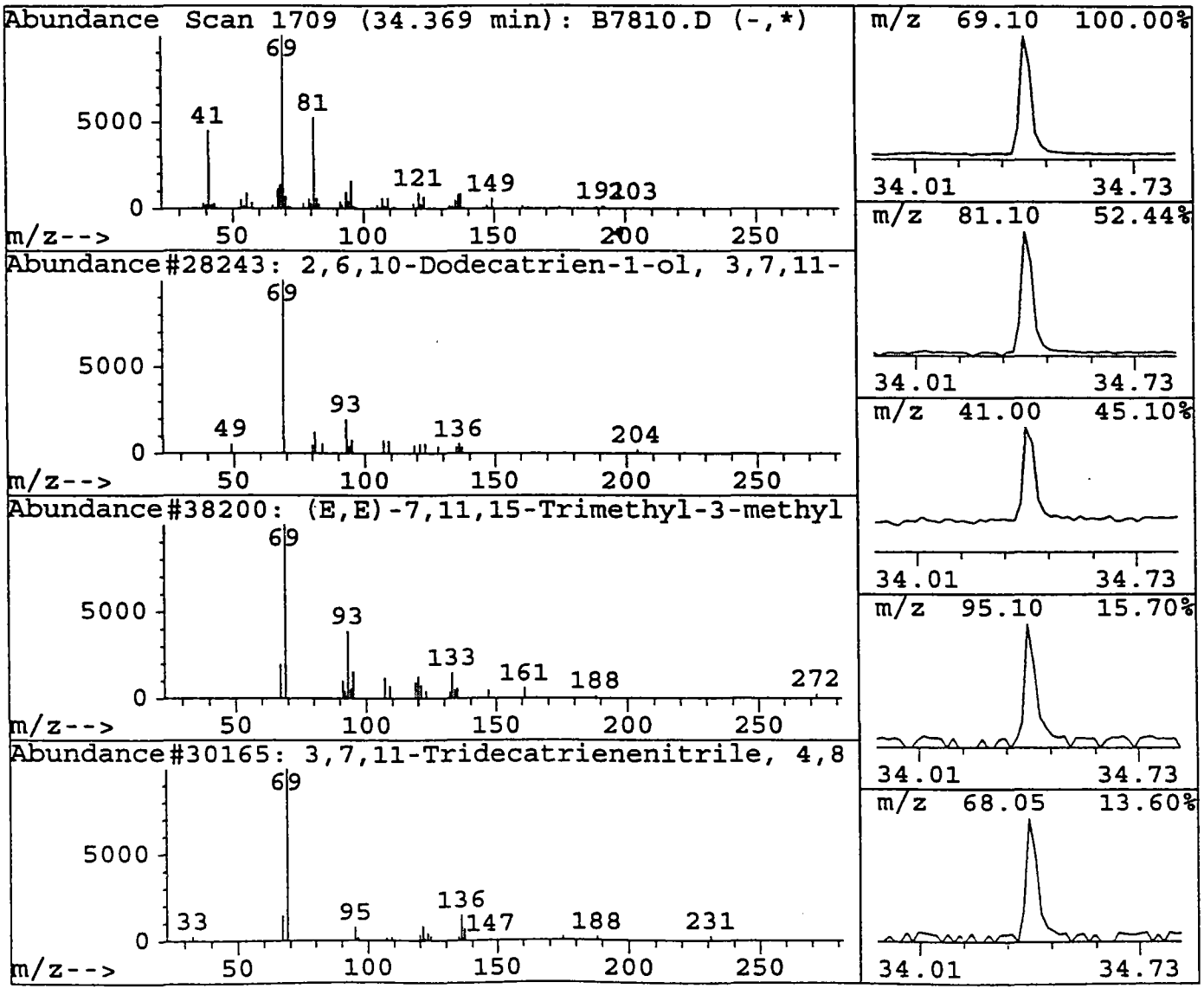
Library Search Compound Report

Data File : c:\hpchem\1\data2\b7810.d Vial: 9
Acq On : 3 Jun 95 4:06 pm Operator: SCOTTV
Sample : BLANK..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Library : C:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
34.37	5.41 ug/ml	50573	Perylene-d12	34.91

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2,6,10-Dodecatrien-1-ol, 3,7,11-tri	28243	004602-84-0	64
2	(E,E)-7,11,15-Trimethyl-3-methylene	38200	070901-63-2	56
3	3,7,11-Tridecatrienenitrile, 4,8,12	30165	006006-01-5	56
4	1,6-Octadiene, 3,5-dimethyl-, cis-	7016	000000-00-0	53
5	2,6-Octadien-1-ol, 3,7-dimethyl-, (	67079	000106-25-2	53



4B

SEMIVOLATILE METHOD BLANK SUMMARY

SAMPLE NO.

SBLK05

105

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Lab File ID: B7825.D Lab Sample ID: BLANK5

Instrument ID: ABNA Date Extracted: 5/23/95

Matrix: (soil/water) WATER Date Analyzed: 6/4/95

Level: (low/med) _____ Time Analyzed: 0435

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	22654MS	22654MS	B7826.D	06/04/95
02	22654MSD	22654MSD	B7827.D	06/04/95
03	22659MS	22659MS	B7828.D	06/04/95
04	22659MSD	22659MSD	B7829.D	06/04/95
05				
06				
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

COMMENTS:

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO. 106

SBLK05

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Matrix: (soil/water) WATER Lab Sample ID: BLANK5

Sample wt/vol: 1000.0 (g/mL ML Lab File ID: B7825.D

Level: (low/med) _____ Date Received: _____

% Moisture: _____ decanted: (Y/N): N Date Extracted: 5/23/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 6/4/95

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
62-75-9	N-nitrosodimethylamine	2	U
108-95-2	Phenol	2	U
111-44-4	bis(2-Chloroethyl)ether	1	U
95-57-8	2-Chlorophenol	2	U
541-73-1	1,3-Dichlorobenzene	2	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	2	U
108-60-1	bis(2-chloroisopropyl)ether	5	U
621-64-7	N-Nitroso-Di-n-propylamine	2	U
67-72-1	Hexachloroethane	1	U
98-95-3	Nitrobenzene	2	U
78-59-1	Isophorone	1	U
88-75-5	2-Nitrophenol	3	U
105-67-9	2,4-Dimethylphenol	3	U
111-91-1	bis(2-Chloroethoxy)methane	3	U
120-83-2	2,4-Dichlorophenol	3	U
120-82-1	1,2,4-Trichlorobenzene	2	U
91-20-3	Naphthalene	2	U
87-68-3	Hexachlorobutadiene	2	U
59-50-7	4-Chloro-3-methylphenol	3	U
77-47-4	Hexachlorocyclopentadiene	12	U
88-06-2	2,4,6-Trichlorophenol	3	U
91-58-7	2-Chloronaphthalene	1	U
131-11-3	Dimethylphthalate	1	U
208-96-8	Acenaphthylene	5	U
606-20-2	2,6-Dinitrotoluene	2	U
83-32-9	Acenaphthene	3	U
51-28-5	2,4-Dinitrophenol	24	U
100-02-7	4-Nitrophenol	21	U
121-14-2	2,4-Dinitrotoluene	3	U
84-66-2	Diethylphthalate	1	U
86-73-7	Fluorene	3	U
7005-72-3	4-Chlorophenyl-phenylether	3	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO. 107

SBLK05

Lab Name: EMSL ANALYTICAL Contract:

Project No.: Site: Location: Group:

Matrix: (soil/water) WATER Lab Sample ID: BLANK5

Sample wt/vol: 1000.0 (g/mL ML Lab File ID: B7825.D

Level: (low/med) Date Received:

% Moisture: decanted: (Y/N): N Date Extracted: 5/23/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 6/4/95

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
534-52-1	4,6-Dinitro-2-methylphenol	3	U
86-30-6	n-Nitrosodiphenylamine	6	U
122-66-7	1,2-Diphenylhydrazine(as azo)	6	U
101-55-3	4-Bromophenyl-phenylether	2	U
118-74-1	Hexachlorobenzene	2	U
87-86-5	Pentachlorophenol	5	U
85-01-08	Phenanthrene	2	U
120-12-7	Anthracene	2	U
84-74-2	Di-n-butylphthalate	5	U
206-44-0	Fluoranthene	1	U
92-87-5	Benzidine	1	U
129-00-0	Pyrene	2	U
85-68-7	Butylbenzylphthalate	9	U
56-55-3	Benzo[a]anthracene	2	U
91-94-1	3,3'-Dichlorobenzidine	15	U
218-01-9	Chrysene	2	U
117-81-7	bis(2-Ethylhexyl)phthalate	4	U
117-84-0	Di-n-octylphthalate	2	U
205-99-2	Benzo[b]fluoranthene	1	U
207-08-9	Benzo[k]fluoranthene	2	U
50-32-8	Benzo[a]pyrene	2	U
193-39-5	Indeno[1,2,3-cd]pyrene	2	U
53-70-3	Dibenz[a,h]anthracene	3	U
191-24-2	Benzo[g,h,i]perylene	2	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

SBLK05

Lab Name: EMSL ANALYTICAL Contract:

Project No.: Site: Location: Group:

Matrix: (soil/water) WATER Lab Sample ID: BLANK5

Sample wt/vol: 1000.0 (g/mL ML Lab File ID: B7825.D

Level: (low/med) Date Received: 5/24/95

% Moisture: decanted: (Y/N): N Date Extracted: 5/23/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 6/4/95

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
62-75-9	N-nitrosodimethylamine	2	U
111-44-4	bis(2-Chloroethyl)ether	1	U
541-73-1	1,3-Dichlorobenzene	2	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	2	U
108-60-1	bis(2-chloroisopropyl)ether	5	U
621-64-7	N-Nitroso-Di-n-propylamine	2	U
67-72-1	Hexachloroethane	1	U
98-95-3	Nitrobenzene	2	U
78-59-1	Isophorone	1	U
111-91-1	bis(2-Chloroethoxy)methane	3	U
120-82-1	1,2,4-Trichlorobenzene	2	U
91-20-3	Naphthalene	2	U
87-68-3	Hexachlorobutadiene	2	U
77-47-4	Hexachlorocyclopentadiene	12	U
91-58-7	2-Chloronaphthalene	1	U
131-11-3	Dimethylphthalate	1	U
208-96-8	Acenaphthylene	5	U
606-20-2	2,6-Dinitrotoluene	2	U
83-32-9	Acenaphthene	3	U
121-14-2	2,4-Dinitrotoluene	3	U
84-66-2	Diethylphthalate	1	U
86-73-7	Fluorene	3	U
7005-72-3	4-Chlorophenyl-phenylether	3	U
86-30-6	n-Nitrosodiphenylamine	6	U
122-66-7	1,2-Diphenylhydrazine(as azo)	6	U
101-55-3	4-Bromophenyl-phenylether	2	U
118-74-1	Hexachlorobenzene	2	U
85-01-08	Phenanthrene	2	U
120-12-7	Anthracene	2	U
84-74-2	Di-n-butylphthalate	5	U
206-44-0	Fluoranthene	1	U
92-87-5	Benzidine	1	U

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO. 169

SBLK05

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Matrix: (soil/water) WATER Lab Sample ID: BLANK5

Sample wt/vol: 1000.0 (g/mL ML Lab File ID: B7825.D

Level: (low/med) _____ Date Received: 5/24/95

% Moisture: _____ decanted: (Y/N): N Date Extracted: 5/23/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 6/4/95

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
129-00-0	Pyrene	2	U
85-68-7	Butylbenzylphthalate	9	U
56-55-3	Benzo[a]anthracene	2	U
91-94-1	3,3'-Dichlorobenzidine	15	U
218-01-9	Chrysene	2	U
117-81-7	bis(2-Ethylhexyl)phthalate	4	U
117-84-0	Di-n-octylphthalate	2	U
205-99-2	Benzo[b]fluoranthene	1	U
207-08-9	Benzo[k]fluoranthene	2	U
50-32-8	Benzo[a]pyrene	2	U
193-39-5	Indeno[1,2,3-cd]pyrene	2	U
53-70-3	Dibenz[a,h]anthracene	3	U
191-24-2	Benzo[g,h,i]perylene	2	U

Quantitation Report

Data File : c:\hpchem\1\data2\b7825.d Vial: 24
Acq On : 4 Jun 95 4:35 am Operator: SCOTTV
Sample : BLANK..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jun 5 16:06 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 10:06:36 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.20	152	43303	40.00	ug/mL	0.17
17) Naphthalene-d8	12.92	136	177127	40.00	ug/mL	0.17
32) Acenaphthene-d10	18.27	164	122916	40.00	ug/mL	0.22
50) Phenanthrene-d10	22.77	188	199698	40.00	ug/ml	0.26
64) Chrysene-d12	30.88	240	216974	40.00	ug/mL	0.30
73) Perylene-d12	34.91	264	174620	40.00	ug/mL	0.31
System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	5.64	112	78262	63.90	ug/mL	63.90%
3) Phenol-d5	8.53	99	133633	65.92	ug/mL	65.92%
18) Nitrobenzene-d5	10.88	82	114709	56.84	ug/mL	56.84%
36) 2-Fluorobiphenyl	16.40	172	202657	54.96	ug/mL	54.96%
54) 2,4,6-Tribromophenol	20.70	330	47874	88.77	ug/mL	88.77%
67) Terphenyl-d14	27.93	244	363044	63.04	ug/mL	63.04%
Target Compounds						Qvalue

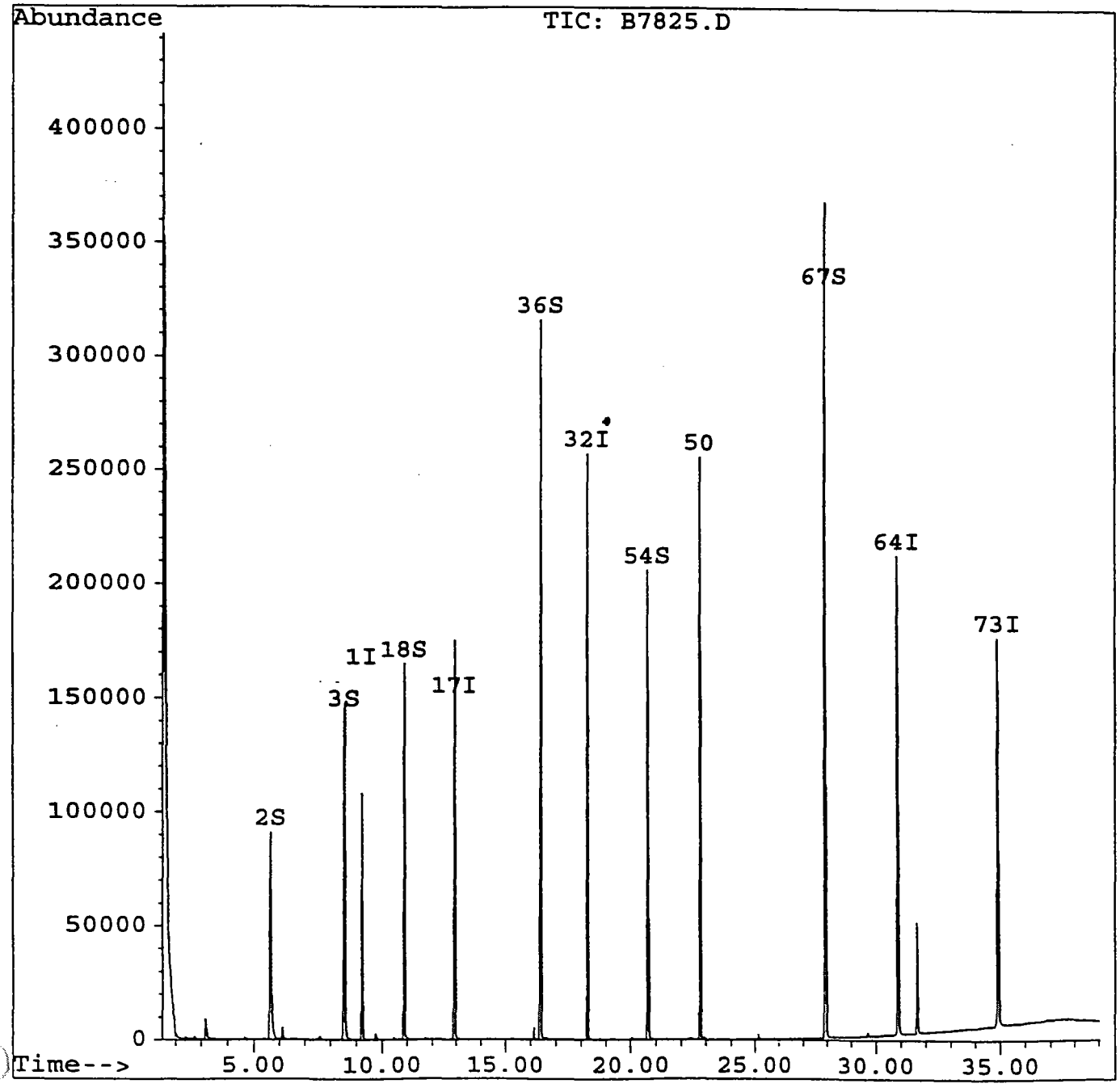
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data2\b7825.d
Acq On : 4 Jun 95 4:35 am
Sample : BLANK..... Converted from RTE d
Misc :
Quant Time: Jun 5 16:06 1995

Vial: 24
Operator: SCOTTV
Inst : ABNA
BT Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 10:06:36 1995
Response via : Multiple Level Calibration



Spike Recovery and RPD Summary Report - WATER

Method : C:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 10:06:36 1995
Response via : Initial Calibration

Non-Spiked Sample: B7742.D

	Spike Sample	Spike Duplicate Sample
File ID :	B7826.D	B7827.D
Sample :	22654MS.....	Converted from RTE data file >B7826::D5

Compound	Sample Conc	Spike Added	Spike Res	Dup Res	Spike %Rec	Dup %Rec	RPD	QC Limits RPD	QC Limits % Rec
N-nitrosodimethylami	0.0	100	108	91	108	91	17	100	1-300
Phenol	0.0	100	69	64	69	64	7	23	5-112
bis(2-Chloroethyl)et	0.0	100	77	68	77	68	13	55	12-158
2-Chlorophenol	0.0	100	76	67	76	67	13	29	23-134
1,3-Dichlorobenzene	0.0	100	57	50	57	50	14	42	1-172
1,4-Dichlorobenzene	0.0	100	58	51	58	51	13	32	20-124
1,2-Dichlorobenzene	0.0	100	62	53	62	53	15	31	32-129
bis(2-chloroisopropy	0.0	100	134	118	134	118	13	46	36-166
N-Nitroso-Di-n-propy	0.0	100	78	66	78	66	16	55	1-230
Hexachloroethane	0.0	100	50	42	50	42	18	25	40-113
Nitrobenzene	0.2	100	84	71	83	71	17	39	35-180
Isophorone	0.0	100	70	59	70	59	17	63	21-196
2-Nitrophenol	0.0	100	79	65	79	65	19	35	29-182
2,4-Dimethylphenol	0.0	100	43	40	43	40	7	26	32-119
bis(2-Chloroethoxy)m	0.0	100	58	49	58	49	18	35	33-184
2,4-Dichlorophenol	0.0	100	79	67	79	67	16	26	39-135
1,2,4-Trichlorobenze	0.0	100	67	59	67	59	13	28	44-142
Naphthalene	0.0	100	71	61	71	61	15	30	21-133
Hexachlorobutadiene	0.0	100	55	49	55	49	11	26	24-116
4-Chloro-3-methylphe	0.0	100	73	63	73	63	15	37	22-147
2-Chloronaphthalene	0.0	100	77	68	77	68	12	13	60-118
2,4,6-Trichloropheno	0.0	100	57	52	57	52	8	32	37-144
Dimethylphthalate	0.0	100	44	35	44	35	22	23	1-112
Acenaphthylene	0.0	100	56	50	56	50	12	40	33-145
2,6-Dinitrotoluene	0.0	100	73	71	73	71	3	30	50-158
Acenaphthene	0.0	100	77	71	77	71	8	28	47-145
2,4-Dinitrophenol	0.0	100	68	65	68	65	4	50	1-191
4-Nitrophenol	0.5	100	76	70	76	70	8	47	1-132
2,4-Dinitrotoluene	0.0	100	75	68	75	68	9	22	39-139
Diethylphthalate	0.1	100	47	41	47	41	15	27	1-114
Fluorene	0.9	100	75	69	74	68	9	21	59-121
4-Chlorophenyl-pheny	0.0	100	77	69	77	69	11	33	25-158
4,6-Dinitro-2-methyl	0.0	100	76	70	76	70	8	93	1-181
4-Bromophenyl-phenyl	0.0	100	78	72	78	72	8	23	53-127
Hexachlorobenzene	0.0	100	90	82	90	82	10	25	1-152
Pentachlorophenol	0.0	100	100	93	100	93	7	49	14-176
Phenanthrene	0.0	100	81	75	81	75	9	21	54-120
Anthracene	0.0	100	96	83	96	83	14	32	52-115
Di-n-butylphthalate	0.2	100	77	71	77	71	8	17	1-118
Fluoranthene	0.0	100	95	88	95	88	8	33	26-137
Pyrene	0.0	100	68	65	68	65	5	25	52-115
Butylbenzylphthalate	0.3	100	65	58	64	57	12	23	1-152
Benzo[a]anthracene	0.1	100	65	58	65	58	11	28	33-143

Chrysene	0.1	100	118	106	118	106	10	48	17-168
bis(2-Ethylhexyl)pht	0.4	100	71	63	71	62	13	41	8-158
Di-n-octylphthalate	0.0	100	67	59	67	59	13	31	4-146
Benzo[b]fluoranthene	0.0	100	53	48	53	48	11	39	24-159
Benzo[k]fluoranthene	0.1	100	108	99	108	99	8	32	11-162
Benzo[a]pyrene	0.1	100	101	90	101	90	12	39	17-163
Indeno[1,2,3-cd]pyre	0.0	100	42	38	42	38	10	45	1-171
Dibenz[a,h]anthracen	0.0	100	47	50	47	50	5	70	1-227
Benzo[g,h,i]perylene	0.0	100	54	48	54	48	11	59	1-219

Quantitation Report

Data File : c:\hpchem\1\data2\b7826.d Vial: 25
Acq On : 4 Jun 95 5:25 am Operator: SCOTTV
Sample : 22654MS..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jun 13 13:06 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 10:06:36 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.20	152	33780	40.00	ug/mL	0.17
17) Naphthalene-d8	12.94	136	129967	40.00	ug/mL	0.19
32) Acenaphthene-d10	18.26	164	93254	40.00	ug/mL	0.21
50) Phenanthrene-d10	22.77	188	155903	40.00	ug/ml	0.25
64) Chrysene-d12	30.91	240	148922	40.00	ug/mL	0.33
73) Perylene-d12	34.91	264	65345	40.00	ug/mL	0.31
System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	5.66	112	86730	90.77	ug/mL	90.77%
3) Phenol-d5	8.57	99	147096	93.02	ug/mL	93.02%
18) Nitrobenzene-d5	10.90	82	134034	90.52	ug/mL	90.52%
36) 2-Fluorobiphenyl	16.41	172	175522	62.75	ug/mL	62.75%
54) 2,4,6-Tribromophenol	20.71	330	46665	110.83	ug/mL	110.83%
67) Terphenyl-d14	27.94	244	322279	81.53	ug/mL	81.53%
Target Compounds						Qvalue
4) N-nitrosodimethylamine	2.43	74	52801	108.13	ug/mlm	0
5) Pyridine	1.58	79	3052	8.44	ug/ml	100
6) Phenol	8.61	94	97169	68.99	ug/mL	100
7) bis(2-Chloroethyl)ether	12.61	93	132335	77.35	ug/mL	96
8) 2-Chlorophenol	8.63	128	81945	76.45	ug/mL	90
9) 1,3-Dichlorobenzene	9.01	146	66629	56.96	ug/mL	97
10) 1,4-Dichlorobenzene	9.26	146	69858	57.89	ug/mL	100
11) 1,2-Dichlorobenzene	9.65	146	70561	61.55	ug/mL	98
13) bis(2-chloroisopropyl)ethe	10.30	45	211229	133.86	ug/mL#	65
15) N-Nitroso-Di-n-propylamine	10.69	70	88152	77.56	ug/mL	95
16) Hexachloroethane	10.61	117	31123	49.97	ug/mL	89
19) Nitrobenzene	10.96	77	115194	83.63	ug/mL#	85
20) Isophorone	11.75	82	203312	70.04	ug/mL	98
21) 2-Nitrophenol	11.88	139	53977	78.97	ug/mL#	85
22) 2,4-Dimethylphenol	12.33	107	55100	43.09	ug/mLm	1
23) bis(2-Chloroethoxy)methane	8.72	93	86556	58.41	ug/mL	98
24) 2,4-Dichlorophenol	12.67	162	76577	79.05	ug/mL	98
25) 1,2,4-Trichlorobenzene	12.83	180	68935	66.95	ug/mL	98
26) Naphthalene	13.00	128	225507	70.91	ug/mL#	90
27) 4-Chloroaniline	13.00	127	28186	18.73	ug/mL#	1
28) Hexachlorobutadiene	13.52	225	33083	55.03	ug/mL	98
29) 4-Chloro-3-methylphenol	15.04	107	91543	73.39	ug/mL	95
30) 2-Chloronaphthalene	16.60	162	173185	76.58	ug/mlm	95
31) 2-Methylnaphthalene	15.04	142	68690	26.91	ug/mL#	18
34) 2,4,6-Trichlorophenol	16.12	196	54836	56.62	ug/mL	98
35) 2,4,5-Trichlorophenol	16.12	196	54836	72.58	ug/mL	98
37) 2-Nitroaniline	17.93	65	3806	2.97	ug/mL#	100
38) Dimethylphthalate	17.83	163	132688	43.80	ug/mL	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data2\b7826.d Vial: 25
Acq On : 4 Jun 95 5:25 am Operator: SCOTTV
Sample : 22654MS..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jun 13 13:06 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 10:06:36 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
39)	Acenaphthylene	17.80	152	221369	55.71	ug/mL	99
40)	2,6-Dinitrotoluene	17.93	165	52674	72.83	ug/mL	98
42)	Acenaphthene	18.37	153	184037	77.01	ug/mL	98
43)	2,4-Dinitrophenol	18.68	184	27438	68.35	ug/mL#	82
44)	4-Nitrophenol	19.15	109	29448	76.25	ug/mL	93
46)	2,4-Dinitrotoluene	19.97	165	203714	74.87	ug/mL#	33
47)	Diethylphthalate	20.07	149	159610	47.45	ug/mL	100
48)	Fluorene	19.97	166	219880	74.92	ug/mL	99
49)	4-Chlorophenyl-phenylether	20.15	204	106703	76.76	ug/mL	99
51)	4-Nitroaniline	19.97	138	2333	3.60	ug/mL#	26
52)	4,6-Dinitro-2-methylphenol	20.32	198	38799	75.54	ug/mL	100
53)	n-Nitrosodiphenylamine	20.57	169	120798	60.97	ug/mL#	1
55)	1,2-Diphenylhydrazine (as	20.63	77	341255	72.29	ug/ml	100
56)	4-Bromophenyl-phenylether	21.61	248	63010	78.44	ug/mL	93
57)	Hexachlorobenzene	21.59	284	75708	90.48	ug/mL#	81
58)	Pentachlorophenol	22.31	266	53483	99.80	ug/mL	98
59)	Phenanthrene	22.87	178	347261	81.41	ug/mL	99
60)	Anthracene	22.87	178	375780	95.56	ug/mL	98
62)	Di-n-butylphthalate	25.16	149	485216	77.50	ug/mL	100
63)	Fluoranthene	27.13	202	383198	95.00	ug/mL	95
65)	Benzidine	27.15	184	31355	19.25	ug/ml	100
66)	Pyrene	27.13	202	382718	68.46	ug/mL#	87
68)	Butylbenzylphthalate	29.69	149	231108	64.56	ug/mL	98
69)	Benzo[a]anthracene	30.89	228	364541	64.61	ug/mL	99
70)	3,3'-Dichlorobenzidine	31.03	252	116175	80.76	ug/mL	99
71)	Chrysene	30.89	228	369164	117.64	ug/mL	97
72)	bis(2-Ethylhexyl)phthalate	31.66	149	362642	71.41	ug/mL	98
74)	Di-n-octylphthalate	33.57	149	561704	67.50	ug/mL	99
75)	Benzo[b]fluoranthene	33.94	252	214943	53.34	ug/mL	99
76)	Benzo[k]fluoranthene	33.94	252	210450	108.25	ug/mL	91
77)	Benzo[a]pyrene	34.04	252	202935	101.27	ug/mL	97
78)	Indeno[1,2,3-cd]pyrene	37.41	276	31241	42.27	ug/mL#	76
79)	Dibenz[a,h]anthracene	37.53	278	33601	47.21	ug/mL#	91
80)	Benzo[g,h,i]perylene	37.41	276	31328	53.91	ug/mL#	91

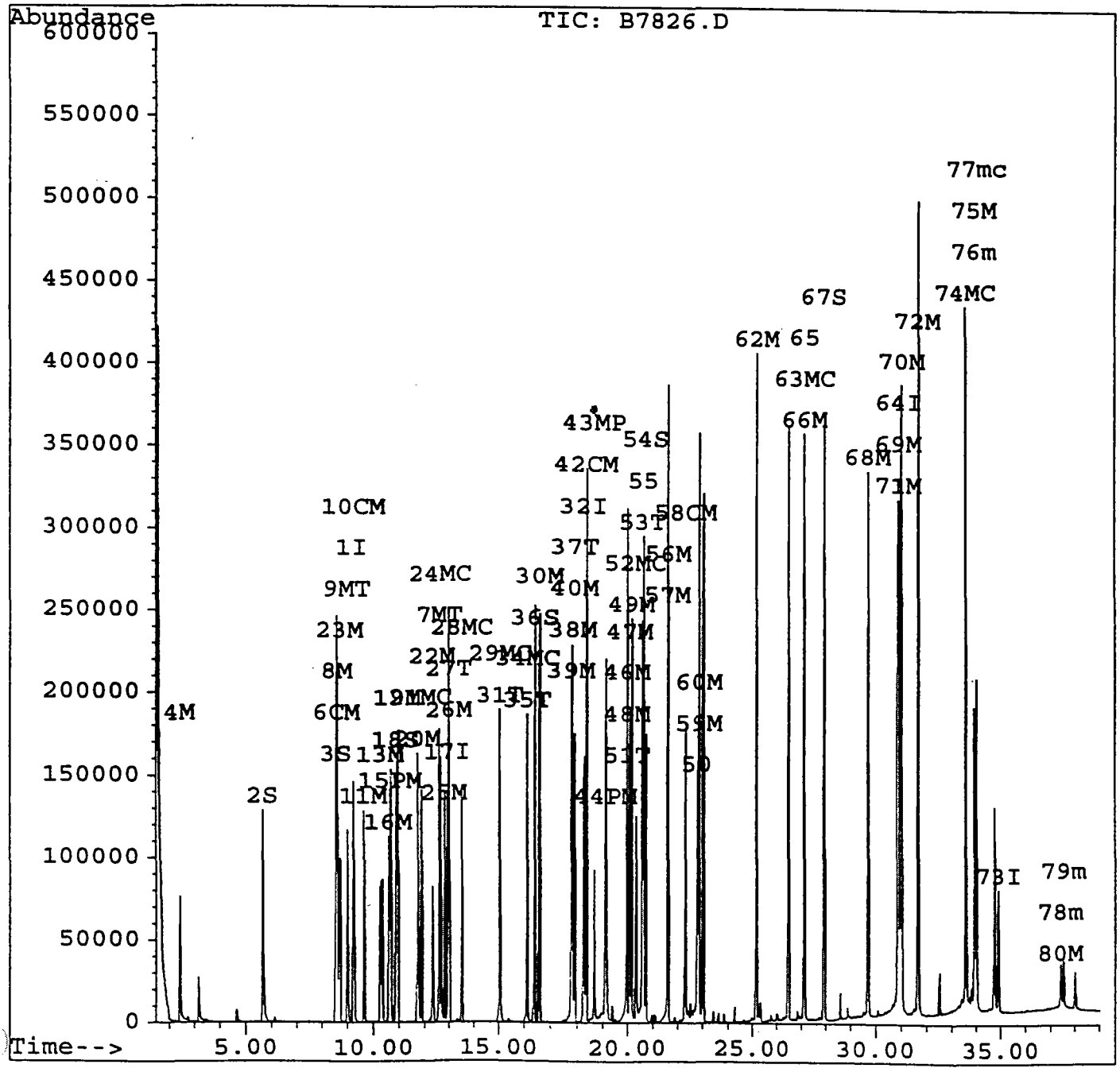
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data2\b7826.d
Acq On : 4 Jun 95 5:25 am
Sample : 22654MS..... Converted from RTE d
Misc :
Quant Time: Jun 13 13:06 1995

Vial: 25
Operator: SCOTTV
Inst : ABNA
BT Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 10:06:36 1995
Response via : Multiple Level Calibration



Quantitation Report

Data File : c:\hpchem\1\data2\b7827.d
Acq On : 4 Jun 95 6:15 am
Sample : 22654MSD..... Converted from RTE d
Misc :
Quant Time: Jun 13 13:07 1995

Vial: 26
Operator: SCOTTV
Inst : ABNA
BT Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 10:06:36 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.20	152	35303	40.00	ug/mL	0.17
17) Naphthalene-d8	12.94	136	144937	40.00	ug/mL	0.19
32) Acenaphthene-d10	18.26	164	99611	40.00	ug/mL	0.21
50) Phenanthrene-d10	22.77	188	164759	40.00	ug/ml	0.25
64) Chrysene-d12	30.91	240	152801	40.00	ug/mL	0.33
73) Perylene-d12	34.91	264	66464	40.00	ug/mL	0.31
System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	5.66	112	82094	82.21	ug/mL	82.21%
3) Phenol-d5	8.57	99	140345	84.92	ug/mL	84.92%
18) Nitrobenzene-d5	10.90	82	122579	74.23	ug/mL	74.23%
36) 2-Fluorobiphenyl	16.41	172	181198	60.64	ug/mL	60.64%
54) 2,4,6-Tribromophenol	20.71	330	47406	106.54	ug/mL	106.54%
67) Terphenyl-d14	27.94	244	291235	71.81	ug/mL	71.81%
Target Compounds						Qvalue
4) N-nitrosodimethylamine	2.43	74	46421	90.97	ug/mlm	100
5) Pyridine	1.58	79	3239	8.57	ug/ml	100
6) Phenol	8.61	94	94440	64.16	ug/mL	100
7) bis(2-Chloroethyl)ether	12.59	93	122019	68.25	ug/mL	93
8) 2-Chlorophenol	8.63	128	74868	66.83	ug/mL#	87
9) 1,3-Dichlorobenzene	9.01	146	60664	49.63	ug/mL	97
10) 1,4-Dichlorobenzene	9.26	146	63929	50.69	ug/mL	97
11) 1,2-Dichlorobenzene	9.65	146	63514	53.01	ug/mL	98
13) bis(2-chloroisopropyl)ethe	10.26	45	194225	117.78	ug/mL#	64
15) N-Nitroso-Di-n-propylamine	10.67	70	78184	65.82	ug/mL	99
16) Hexachloroethane	10.61	117	27204	41.80	ug/mL	93
19) Nitrobenzene	10.96	77	108893	70.89	ug/mL	92
20) Isophorone	11.75	82	190833	58.95	ug/mL	99
21) 2-Nitrophenol	11.88	139	49518	64.97	ug/mL#	85
22) 2,4-Dimethylphenol	12.33	107	57269	40.16	ug/mLm	1
23) bis(2-Chloroethoxy)methane	8.72	93	80511	48.72	ug/mL	99
24) 2,4-Dichlorophenol	12.67	162	72662	67.26	ug/mL	99
25) 1,2,4-Trichlorobenzene	12.83	180	67428	58.72	ug/mL	99
26) Naphthalene	13.00	128	216145	60.94	ug/mL#	91
27) 4-Chloroaniline	13.00	127	27276	16.26	ug/mL#	4
28) Hexachlorobutadiene	13.52	225	33024	49.25	ug/mL	99
29) 4-Chloro-3-methylphenol	15.04	107	87494	62.90	ug/mL	94
30) 2-Chloronaphthalene	16.58	162	170492	67.60	ug/ml	97
31) 2-Methylnaphthalene	15.04	142	66426	23.33	ug/mL#	18
34) 2,4,6-Trichlorophenol	16.12	196	53903	52.11	ug/mL	99
35) 2,4,5-Trichlorophenol	16.12	196	53903	66.79	ug/mL	99
37) 2-Nitroaniline	17.93	65	3941	2.88	ug/mL#	100
38) Dimethylphthalate	17.83	163	113606	35.11	ug/mL	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data2\b7827.d Vial: 26
Acq On : 4 Jun 95 6:15 am Operator: SCOTTV
Sample : 22654MSD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jun 13 13:07 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 10:06:36 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
39)	Acenaphthylene	17.80	152	210414	49.57	ug/mL	99
40)	2,6-Dinitrotoluene	17.93	165	54747	70.87	ug/mL	92
42)	Acenaphthene	18.37	153	181623	71.15	ug/mL	99
43)	2,4-Dinitrophenol	18.68	184	28083	65.49	ug/mL#	78
44)	4-Nitrophenol	19.15	109	28931	70.14	ug/mL	91
46)	2,4-Dinitrotoluene	19.97	165	198956	68.45	ug/mL#	33
47)	Diethylphthalate	20.07	149	146204	40.69	ug/mL	99
48)	Fluorene	19.97	166	215505	68.74	ug/mL	99
49)	4-Chlorophenyl-phenylether	20.15	204	102158	68.80	ug/mL	99
51)	4-Nitroaniline	19.97	138	2275	3.32	ug/mL#	23
52)	4,6-Dinitro-2-methylphenol	20.32	198	38003	70.01	ug/mL	100
53)	n-Nitrosodiphenylamine	20.57	169	120181	57.40	ug/mL#	1
55)	1,2-Diphenylhydrazine (as	20.63	77	326407	65.42	ug/ml	100
56)	4-Bromophenyl-phenylether	21.61	248	61314	72.23	ug/mL	92
57)	Hexachlorobenzene	21.59	284	72489	81.98	ug/mL#	80
58)	Pentachlorophenol	22.31	266	52714	93.08	ug/mL	99
59)	Phenanthrene	22.87	178	336724	74.69	ug/mL	98
60)	Anthracene	22.87	178	345412	83.11	ug/mL	97
62)	Di-n-butylphthalate	25.16	149	472693	71.44	ug/mL	100
63)	Fluoranthene	27.13	202	375315	88.04	ug/mL	93
65)	Benzidine	27.15	184	42901	25.67	ug/ml	100
66)	Pyrene	27.13	202	374572	65.30	ug/mL#	88
68)	Butylbenzylphthalate	29.69	149	211242	57.51	ug/mL	99
69)	Benzo[a]anthracene	30.87	228	336521	58.13	ug/mL	100
70)	3,3'-Dichlorobenzidine	31.03	252	109427	74.14	ug/mL#	96
71)	Chrysene	30.87	228	341333	106.01	ug/mL	97
72)	bis(2-Ethylhexyl)phthalate	31.66	149	327633	62.88	ug/mL	99
74)	Di-n-octylphthalate	33.57	149	500739	59.16	ug/mL	99
75)	Benzo[b]fluoranthene	33.94	252	196612	47.97	ug/mL	99
76)	Benzo[k]fluoranthene	33.94	252	196612	99.43	ug/mL	93
77)	Benzo[a]pyrene	33.94	252	182768	89.67	ug/mL	100
78)	Indeno[1,2,3-cd]pyrene	37.41	276	28662	38.13	ug/mL#	78
79)	Dibenz[a,h]anthracene	37.53	278	36034	49.77	ug/mL#	92
80)	Benzo[g,h,i]perylene	37.41	276	28604	48.40	ug/mL	93

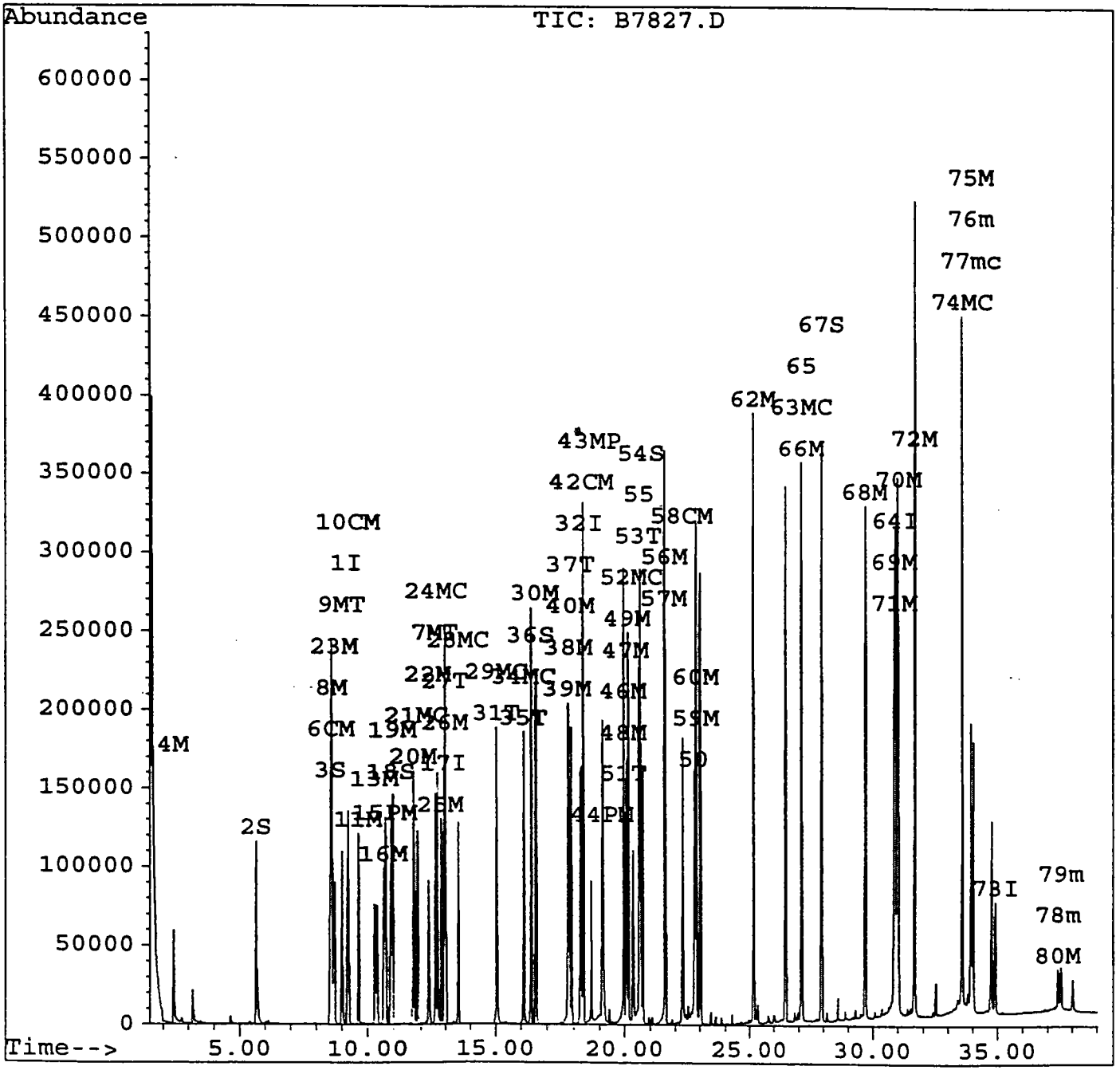
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data2\b7827.d
Acq On : 4 Jun 95 6:15 am
Sample : 22654MSD..... Converted from RTE d
Misc :
Quant Time: Jun 13 13:07 1995

Vial: 26
Operator: SCOTTV
Inst : ABNA
BT Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 10:06:36 1995
Response via : Multiple Level Calibration



Spike Recovery and RPD Summary Report - WATER

Method : C:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 10:06:36 1995
Response via : Initial Calibration

Non-Spiked Sample: B7741.D

	Spike Sample	Spike Duplicate Sample
File ID :	B7828.D	B7829.D
Sample :	22659MS.....	Converted from RTE data file >B7828::D5

Compound	Sample Conc	Spike Added	Spike Res	Dup Res	Spike %Rec	Dup %Rec	RPD	QC Limits RPD	QC Limits % Rec
N-nitrosodimethylami	0.0	100	83	85	83	85	1	100	1-300
Phenol	0.0	100	65	65	65	65	0	23	5-112
bis(2-Chloroethyl)et	0.0	100	66	64	66	64	2	55	12-158
2-Chlorophenol	0.0	100	65	65	65	65	1	29	23-134
1,3-Dichlorobenzene	0.0	100	48	48	48	48	1	42	1-172
1,4-Dichlorobenzene	0.0	100	49	50	49	50	2	32	20-124
1,2-Dichlorobenzene	0.0	100	52	53	52	53	1	31	32-129
bis(2-chloroisopropy	0.0	100	118	119	118	119	1	46	36-166
N-Nitroso-Di-n-propy	0.0	100	67	65	67	65	3	55	1-230
Hexachloroethane	0.0	100	51	42	51	42	19	25	40-113
Nitrobenzene	0.1	100	62	66	62	66	6	39	35-180
Isophorone	0.0	100	60	63	60	63	5	63	21-196
2-Nitrophenol	0.0	100	63	65	63	65	4	35	29-182
2,4-Dimethylphenol	0.0	100	34	32	34	32	7	26	32-119
bis(2-Chloroethoxy)m	0.0	100	47	50	47	50	6	35	33-184
2,4-Dichlorophenol	0.0	100	68	68	68	68	1	26	39-135
1,2,4-Trichlorobenze	0.0	100	57	60	57	60	6	28	44-142
Naphthalene	0.0	100	63	66	63	66	4	30	21-133
Hexachlorobutadiene	0.0	100	50	52	50	52	4	26	24-116
4-Chloro-3-methylphe	0.0	100	63	63	63	63	1	37	22-147
2-Chloronaphthalene	0.0	100	67	70	67	70	4	13	60-118
2,4,6-Trichloropheno	0.0	100	55	54	55	54	3	32	37-144
Dimethylphthalate	0.0	100	38	34	38	34	11	23	1-112
Acenaphthylene	0.0	100	52	52	52	52	0	40	33-145
2,6-Dinitrotoluene	0.0	100	76	74	76	74	3	30	50-158
Acenaphthene	0.0	100	75	76	75	76	1	28	47-145
2,4-Dinitrophenol	0.0	100	67	66	67	66	2	50	1-191
4-Nitrophenol	0.6	100	79	80	79	79	0	47	1-132
2,4-Dinitrotoluene	0.0	100	71	74	71	74	3	22	39-139
Diethylphthalate	0.0	100	49	48	49	48	2	27	1-114
Fluorene	0.7	100	71	74	70	73	3	21	59-121
4-Chlorophenyl-pheny	0.0	100	70	74	70	74	5	33	25-158
4,6-Dinitro-2-methyl	0.0	100	75	72	75	72	4	93	1-181
4-Bromophenyl-phenyl	0.0	100	73	76	73	76	3	23	53-127
Hexachlorobenzene	0.0	100	84	84	84	84	1	25	1-152
Pentachlorophenol	0.0	100	90	92	90	92	2	49	14-176
Phenanthrene	0.0	100	79	76	79	76	3	21	54-120
Anthracene	0.0	100	88	84	88	84	5	32	52-115
Di-n-butylphthalate	0.1	100	80	79	80	79	1	17	1-118
Fluoranthene	0.0	100	96	96	96	96	0	33	26-137
Pyrene	0.0	100	67	68	67	68	2	25	52-115
Butylbenzylphthalate	0.2	100	67	68	67	67	0	23	1-152
Benzo[a]anthracene	0.1	100	65	64	65	64	1	28	33-143
3,3'-Dichlorobenzidi	0.0	100	20	21	20	21	46	71	1-262

Chrysene	0.1	100	117	117	117	117	0	48	17-168
bis(2-Ethylhexyl)pht	0.4	100	76	74	75	73	3	41	8-158
Di-n-octylphthalate	0.0	100	65	68	65	68	6	31	4-146
Benzo[b]fluoranthene	0.0	100	52	51	52	51	2	39	24-159
Benzo[k]fluoranthene	0.1	100	108	106	108	106	2	32	11-162
nzo[a]pyrene	0.1	100	104	103	104	102	2	39	17-163
ndeno[1,2,3-cd]pyre	0.0	100	42	39	42	39	8	45	1-171
Dibenz[a,h]anthracen	0.0	100	52	48	52	48	8	70	1-227
Benzo[g,h,i]perylene	0.0	100	53	49	53	49	9	59	1-219

Quantitation Report

Data File : c:\hpchem\1\data2\b7828.d Vial: 27
Acq On : 4 Jun 95 7:04 am Operator: SCOTTV
Sample : 22659MS..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jun 13 13:36 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 10:06:36 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.20	152	28616	40.00	ug/mL	0.17
17) Naphthalene-d8	12.94	136	119812	40.00	ug/mL	0.19
32) Acenaphthene-d10	18.26	164	81829	40.00	ug/mL	0.21
50) Phenanthrene-d10	22.77	188	135678	40.00	ug/ml	0.25
64) Chrysene-d12	30.90	240	133913	40.00	ug/mL	0.32
73) Perylene-d12	34.89	264	64806	40.00	ug/mL	0.30
System Monitoring Compounds						**%Recovery**
2) 2-Fluorophenol	5.64	112	38324	47.35	ug/mL	47.35%
3) Phenol-d5	8.55	99	92701	69.20	ug/mL	69.20%
18) Nitrobenzene-d5	10.88	82	102452	75.05	ug/mL	75.05%
36) 2-Fluorobiphenyl	16.41	172	163275	66.52	ug/mL	66.52%
54) 2,4,6-Tribromophenol	20.71	330	33951	92.66	ug/mL	92.66%
67) Terphenyl-d14	27.93	244	283818	79.85	ug/mL	79.85%
Target Compounds						**Qvalue**
4) N-nitrosodimethylamine	2.41	74	34539	83.50	ug/mlm	0
5) Pyridine	1.54	79	2567	8.38	ug/ml	100
6) Phenol	8.59	94	77522	64.98	ug/mL	100
7) bis(2-Chloroethyl)ether	12.59	93	95053	65.59	ug/mL	96
8) 2-Chlorophenol	8.61	128	59112	65.10	ug/mL	95
9) 1,3-Dichlorobenzene	9.01	146	47356	47.79	ug/mL	98
10) 1,4-Dichlorobenzene	9.26	146	50047	48.96	ug/mL	99
11) 1,2-Dichlorobenzene	9.65	146	50447	51.95	ug/mL	97
13) bis(2-chloroisopropyl)ethe	10.28	45	157284	117.66	ug/mL#	66
15) N-Nitroso-Di-n-propylamine	10.67	70	64689	67.19	ug/mL	99
16) Hexachloroethane	10.61	117	26874	50.94	ug/mLm	92
19) Nitrobenzene	10.94	77	78667	61.95	ug/mL#	76
20) Isophorone	11.75	82	159932	59.77	ug/mL	99
21) 2-Nitrophenol	11.88	139	39464	62.63	ug/mL	87
22) 2,4-Dimethylphenol	12.33	107	40415	34.28	ug/mLm	1
23) bis(2-Chloroethoxy)methane	8.70	93	64392	47.13	ug/mL	98
24) 2,4-Dichlorophenol	12.67	162	60633	67.90	ug/mL	98
25) 1,2,4-Trichlorobenzene	12.83	180	53810	56.69	ug/mL	99
26) Naphthalene	13.00	128	185978	63.43	ug/mL#	91
27) 4-Chloroaniline	13.00	127	23324	16.82	ug/mL#	8
28) Hexachlorobutadiene	13.52	225	27583	49.77	ug/mL	98
29) 4-Chloro-3-methylphenol	15.04	107	71878	62.51	ug/mL	92
30) 2-Chloronaphthalene	16.58	162	140364	67.32	ug/ml	95
31) 2-Methylnaphthalene	15.04	142	56186	23.87	ug/mL#	18
34) 2,4,6-Trichlorophenol	16.12	196	47014	55.32	ug/mL	97
35) 2,4,5-Trichlorophenol	16.12	196	47014	70.91	ug/mL	98
37) 2-Nitroaniline	17.93	65	3809	3.39	ug/mL#	100
38) Dimethylphthalate	17.83	163	100094	37.65	ug/mL	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data2\b7828.d Vial: 27
Acq On : 4 Jun 95 7:04 am Operator: SCOTTV
Sample : 22659MS..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jun 13 13:36 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 10:06:36 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
39)	Acenaphthylene	17.80	152	181282	51.99	ug/mL	99
40)	2,6-Dinitrotoluene	17.93	165	48485	76.40	ug/mL	81
42)	Acenaphthene	18.37	153	158243	75.46	ug/mL	99
43)	2,4-Dinitrophenol	18.66	184	23597	66.99	ug/mL	99
44)	4-Nitrophenol	19.14	109	26892	79.36	ug/mL	88
46)	2,4-Dinitrotoluene	19.97	165	169896	71.16	ug/mL#	34
47)	Diethylphthalate	20.07	149	145441	49.27	ug/mL	98
48)	Fluorene	19.97	166	183372	71.21	ug/mL	99
49)	4-Chlorophenyl-phenylether	20.15	204	85539	70.12	ug/mL	98
51)	4-Nitroaniline	19.97	138	1902	3.37	ug/mL#	23
52)	4,6-Dinitro-2-methylphenol	20.32	198	33506	74.96	ug/mL	100
53)	n-Nitrosodiphenylamine	20.55	169	89532	51.93	ug/mL#	1
55)	1,2-Diphenylhydrazine (as	20.63	77	282944	68.87	ug/ml	100
56)	4-Bromophenyl-phenylether	21.61	248	51088	73.08	ug/mL	94
57)	Hexachlorobenzene	21.59	284	60888	83.62	ug/mL#	75
58)	Pentachlorophenol	22.31	266	42101	90.27	ug/mL	99
59)	Phenanthrene	22.85	178	292342	78.75	ug/mL	99
60)	Anthracene	22.85	178	302620	88.42	ug/mL	99
62)	Di-n-butylphthalate	25.16	149	437772	80.34	ug/mL	99
63)	Fluoranthene	27.12	202	337156	96.04	ug/mL	94
65)	Benzidine	27.93	184	3699	2.53	ug/ml	100
66)	Pyrene	27.12	202	336460	66.93	ug/mL#	87
68)	Butylbenzylphthalate	29.70	149	217209	67.48	ug/mL	87
69)	Benzo[a]anthracene	30.88	228	328642	64.77	ug/mL	99
70)	3,3'-Dichlorobenzidine	31.00	252	25385	19.62	ug/mLm	97
71)	Chrysene	30.88	228	330668	117.19	ug/mL	97
72)	bis(2-Ethylhexyl)phthalate	31.67	149	345135	75.58	ug/mL	100
74)	Di-n-octylphthalate	33.58	149	533567	64.65	ug/mL	100
75)	Benzo[b]fluoranthene	34.03	252	207506	51.92	ug/mL	99
76)	Benzo[k]fluoranthene	34.03	252	207506	107.62	ug/mL	92
77)	Benzo[a]pyrene	34.03	252	207506	104.42	ug/mL	98
78)	Indeno[1,2,3-cd]pyrene	37.42	276	30768	41.98	ug/mL#	84
79)	Dibenz[a,h]anthracene	37.54	278	36991	52.40	ug/mL	94
80)	Benzo[g,h,i]perylene	37.42	276	30768	53.39	ug/mL	97

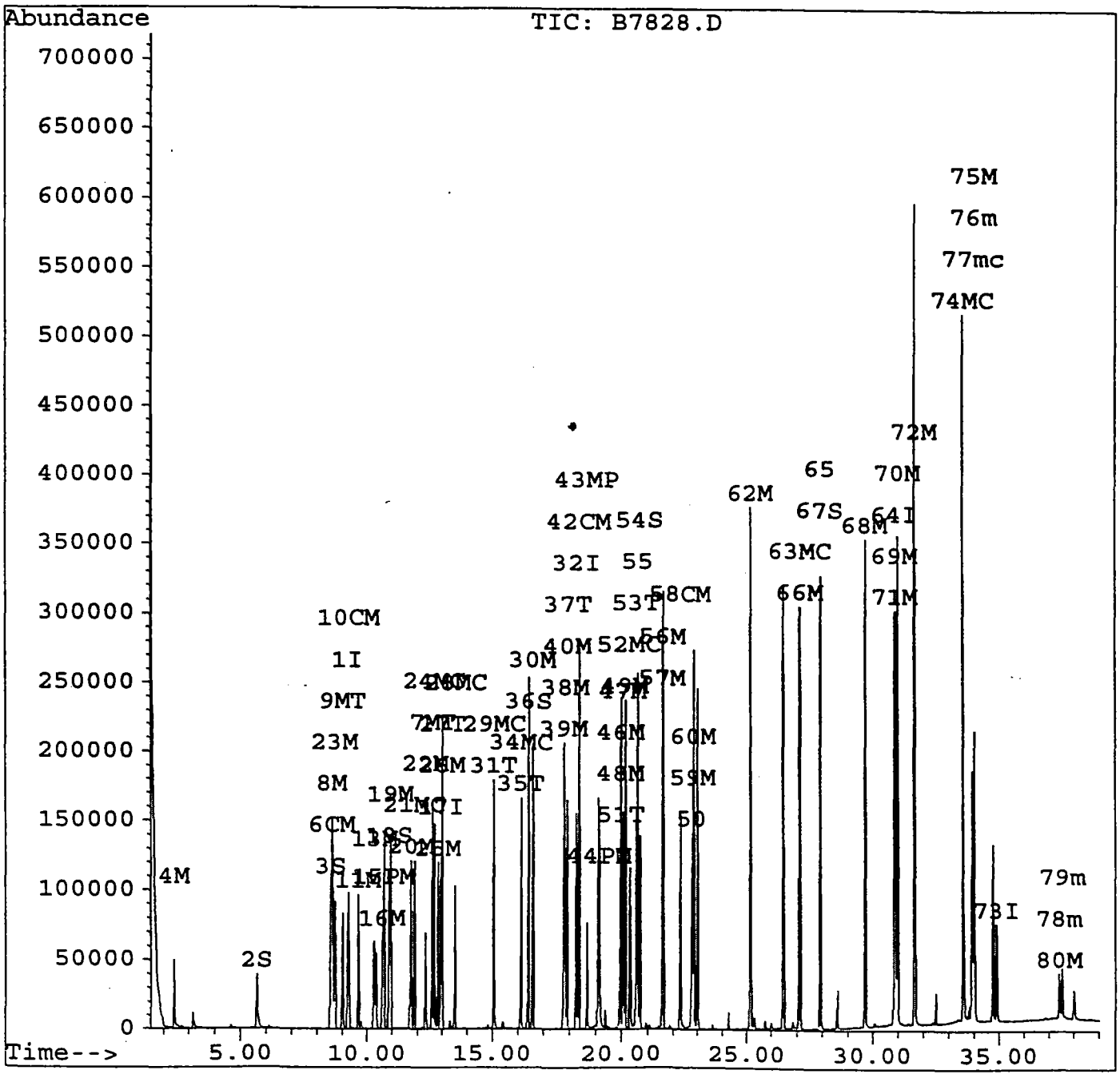
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data2\b7828.d
Acq On : 4 Jun 95 7:04 am
Sample : 22659MS..... Converted from RTE d
Misc :
Quant Time: Jun 13 13:36 1995

Vial: 27
Operator: SCOTTV
Inst : ABNA
BT Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 10:06:36 1995
Response via : Multiple Level Calibration



Quantitation Report

Data File : c:\hpchem\1\data2\b7829.d Vial: 28
Acq On : 4 Jun 95 7:54 am Operator: SCOTTV
Sample : 22659MSD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jun 13 13:38 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 10:06:36 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.21	152	30456	40.00	ug/mL	0.17
17) Naphthalene-d8	12.94	136	121585	40.00	ug/mL	0.19
32) Acenaphthene-d10	18.26	164	84364	40.00	ug/mL	0.21
50) Phenanthrene-d10	22.77	188	145091	40.00	ug/ml	0.25
64) Chrysene-d12	30.90	240	140877	40.00	ug/mL	0.32
73) Perylene-d12	34.90	264	65773	40.00	ug/mL	0.30
System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	5.62	112	46772	54.29	ug/mL	54.29%
3) Phenol-d5	8.55	99	107330	75.28	ug/mL	75.28%
18) Nitrobenzene-d5	10.88	82	108636	78.42	ug/mL	78.42%
36) 2-Fluorobiphenyl	16.41	172	165709	65.48	ug/mL	65.48%
54) 2,4,6-Tribromophenol	20.71	330	39093	99.77	ug/mL	99.77%
67) Terphenyl-d14	27.93	244	291732	78.02	ug/mL	78.02%
Target Compounds						Qvalue
4) N-nitrosodimethylamine	2.41	74	37285	84.69	ug/mlm	0
5) Pyridine	1.56	79	2539	7.79	ug/ml	100
6) Phenol	8.59	94	82228	64.76	ug/mL	100
7) bis(2-Chloroethyl)ether	12.60	93	99103	64.25	ug/mL	98
8) 2-Chlorophenol	8.61	128	63241	65.44	ug/mL	94
9) 1,3-Dichlorobenzene	9.01	146	51022	48.38	ug/mL	97
10) 1,4-Dichlorobenzene	9.26	146	54214	49.83	ug/mL	99
11) 1,2-Dichlorobenzene	9.65	146	54332	52.57	ug/mL	98
13) bis(2-chloroisopropyl)ethe	10.28	45	169096	118.86	ug/mL#	65
15) N-Nitroso-Di-n-propylamine	10.67	70	66550	64.95	ug/mL	99
16) Hexachloroethane	10.61	117	23688	42.19	ug/mL	96
19) Nitrobenzene	10.94	77	84987	65.95	ug/mL#	77
20) Isophorone	11.75	82	169858	62.55	ug/mL	99
21) 2-Nitrophenol	11.88	139	41660	65.15	ug/mL	88
22) 2,4-Dimethylphenol	12.33	107	38383	32.08	ug/mLm	1
23) bis(2-Chloroethoxy)methane	8.70	93	69472	50.11	ug/mL	100
24) 2,4-Dichlorophenol	12.67	162	61214	67.55	ug/mL	97
25) 1,2,4-Trichlorobenzene	12.83	180	58047	60.26	ug/mL	99
26) Naphthalene	13.00	128	195977	65.87	ug/mL#	91
27) 4-Chloroaniline	13.00	127	24740	17.58	ug/mL#	10
28) Hexachlorobutadiene	13.50	225	28998	51.56	ug/mL	97
29) 4-Chloro-3-methylphenol	15.04	107	73983	63.40	ug/mL	98
30) 2-Chloronaphthalene	16.58	162	148187	70.04	ug/ml	98
31) 2-Methylnaphthalene	15.04	142	56674	23.73	ug/mL#	18
34) 2,4,6-Trichlorophenol	16.12	196	47065	53.72	ug/mL	98
35) 2,4,5-Trichlorophenol	16.12	196	47065	68.86	ug/mL	99
37) 2-Nitroaniline	17.93	65	3818	3.30	ug/mL#	100
38) Dimethylphthalate	17.83	163	92844	33.88	ug/mL	99

(#) = qualifier out of range (m) = manual integration

Data File : c:\hpchem\1\data2\b7829.d Vial: 28
Acq On : 4 Jun 95 7:54 am Operator: SCOTTV
Sample : 22659MSD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jun 13 13:38 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 10:06:36 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
39)	Acenaphthylene	17.80	152	187395	52.13	ug/mL	99
40)	2,6-Dinitrotoluene	17.93	165	48705	74.44	ug/mL	81
42)	Acenaphthene	18.37	153	164599	76.13	ug/mL	99
43)	2,4-Dinitrophenol	18.66	184	23948	65.95	ug/mL	99
44)	4-Nitrophenol	19.15	109	27839	79.68	ug/mL	90
46)	2,4-Dinitrotoluene	19.95	165	181124	73.58	ug/mL#	31
47)	Diethylphthalate	20.07	149	147246	48.39	ug/mL	98
48)	Fluorene	19.95	166	195315	73.56	ug/mL	100
49)	4-Chlorophenyl-phenylether	20.15	204	92973	73.93	ug/mL	99
51)	4-Nitroaniline	19.97	138	2140	3.55	ug/mL#	23
52)	4,6-Dinitro-2-methylphenol	20.32	198	34580	72.34	ug/mL	100
53)	n-Nitrosodiphenylamine	20.55	169	103444	56.10	ug/mL#	1
55)	1,2-Diphenylhydrazine (as	20.63	77	304015	69.20	ug/ml	100
56)	4-Bromophenyl-phenylether	21.61	248	56539	75.63	ug/mL	94
57)	Hexachlorobenzene	21.59	284	65629	84.28	ug/mL#	76
58)	Pentachlorophenol	22.31	266	45874	91.98	ug/mL	96
59)	Phenanthrene	22.85	178	302063	76.09	ug/mL	100
60)	Anthracene	22.85	178	307177	83.93	ug/mL	99
62)	Di-n-butylphthalate	25.16	149	462525	79.38	ug/mL	100
63)	Fluoranthene	27.12	202	360324	95.98	ug/mL	93
65)	Benzidine	27.93	184	3521	2.29	ug/ml	100
66)	Pyrene	27.12	202	359722	68.02	ug/mL#	89
68)	Butylbenzylphthalate	29.69	149	229144	67.66	ug/mL	98
69)	Benzo[a]anthracene	30.88	228	343280	64.31	ug/mL	99
70)	3,3'-Dichlorobenzidine	31.00	252	42496	31.23	ug/mLm	95
71)	Chrysene	30.88	228	346867	116.85	ug/mL	97
72)	bis(2-Ethylhexyl)phthalate	31.68	149	354135	73.72	ug/mL	97
74)	Di-n-octylphthalate	33.58	149	572669	68.37	ug/mL	99
75)	Benzo[b]fluoranthene	34.03	252	206742	50.97	ug/mL	98
76)	Benzo[k]fluoranthene	34.03	252	206742	105.65	ug/mL	95
77)	Benzo[a]pyrene	34.03	252	206742	102.50	ug/mL	98
78)	Indeno[1,2,3-cd]pyrene	37.42	276	28894	38.84	ug/mL	89
79)	Dibenz[a,h]anthracene	37.52	278	34681	48.41	ug/mL#	86
80)	Benzo[g,h,i]perylene	37.42	276	28610	48.92	ug/mL	100

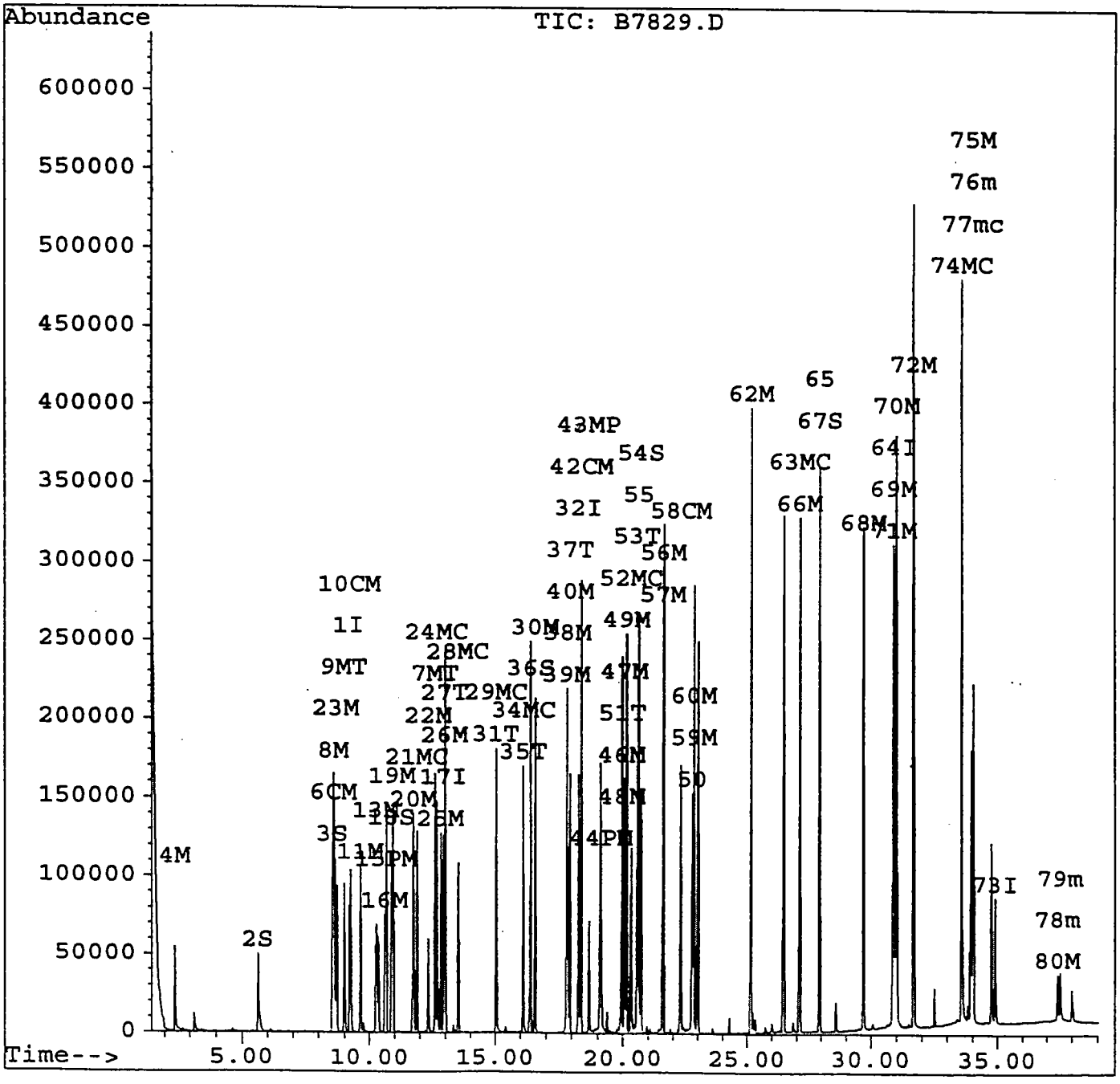
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data2\b7829.d
Acq On : 4 Jun 95 7:54 am
Sample : 22659MSD..... Converted from RTE d
Misc :
Quant Time: Jun 13 13:38 1995

Vial: 28
Operator: SCOTTV
Inst : ABNA
BT Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 10:06:36 1995
Response via : Multiple Level Calibration



New Jersey Department of Environmental Protection
Division of Water Resources
Bureau of Underground Storage Tanks
CN-029, Trenton, New Jersey 08625

LABORATORY AUTHENTICATION STATEMENT

I certify under penalty of law, where applicable, this laboratory meets the Laboratory Performance Standards and Quality Control requirements specified in N.J.A.C. 7:18, 40 CFR Part 136 for Water and Wastewater Analyses and SW 846 for Solid Waste Analyses. I have personally examined and am familiar with the information contained in this report, and based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate, complete, and meets the standards specified in N.J.A.C. 7:18, 40 CFR Part 136, and/or SW 846. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment.

Paul Farara

Laboratory Manager (as defined in N.J.A.C. 7:18)

EMSL ANALYTICAL, INC.

Asbestos - Lead - Environmental - Materials

New Jersey

Corporate Office & Main Laboratory
108 Haddon Avenue
Westmont, NJ 08108
(609) 858-4800

3 Cooper Street
Westmont, NJ 08108
(609) 858-4800

1056 Stelton Road
Piscataway, NJ 08854
(908) 981-0550

New York

350 Fifth Avenue
Empire State Bldg.
Suite 1524
New York, NY 10118
(212) 290-0051

208 Stonehenge Lane
Carle Place, NY 11514
(516) 997-7251

California

1720 S. Amphlett Blvd.
Suite 130
San Mateo, CA 94402
(415) 570-5401

Florida

1878 Adams Avenue
Melbourne, FL 32935
(407) 253-4224

Georgia

1600 Rosewell Street, SE
Suite One
Smyrna, GA 30080
(404) 333-6066

Michigan

212 S. Wagner Road
Ann Arbor, MI 48103
(313) 668-6810

North Carolina

620-G Guilford College Rd.
Greensboro, NC 27409
(910) 297-1487

Texas

2501 Central Parkway
Suite C-13
Houston, TX 77092
(713) 686-3635

ANALYTICAL DATA REPORT
FOR
U.S. ARMY, FORT MONMOUTH
SELFM-PW-EV
Building 173
Fort Monmouth, NJ 07703

PROJECT : **#94513093229**

EMSL Project: # 95063937

Field Sample No. & Location	Laboratory Sample ID	Matrix	Date & Time of Collection	Date Received
1861.1, Trip Blank	**95-26426**	**Aqueous**	**6/13/95 @ 0605**	**6/13/95**
1861.2, Field Blank	**95-26427**	**Aqueous**	**6/13/95 @ 1535**	**6/13/95**
1865.1, MW1-2931785, Bldg. 1108	**95-26434**	**Aqueous**	**6/13/95 @ 1457**	**6/13/95**

Laboratory Name	EMSL ANALYTICAL, INC.
Certification No.	NJDEP No. 04653 PADER No. 68-367 NY-ELAP No. 10896
Supervisor/Manager Signature	Paul Laraia
Printed Name	Paul V. Laraia
Date	07-17-95

REPORT NARRATIVE

All initial runs for the Ft. Monmouth P.O. #IJO #95-0091/SAI were analyzed within hold. The samples were taken by EMSL between the dates of 5/18/95 thru 5/25/95.

There was a problem with the water used for the field and trip blanks. On certain days the field crew used DI water from the incorrect system resulting in low level contamination of Toluene, 2-Chlorotoluene and sometimes Chlorobenzene. However the resultant concentrations of these compounds were very low and the samples accompanying these field and trip blanks did not show these compounds to be present.

EMSL

TABLE OF CONTENTS

SAMPLE DATA SUMMARY PACKAGE

EMSL

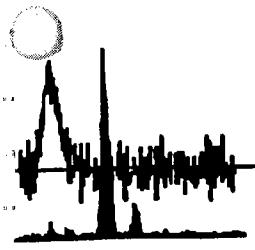
Date of Report: 07/17/95
Project Number: 95063933
Lab ID: 95-0026426
Date Collected: 06/13/95 06:05
Collected By: Client
Date Received: 06/13/95 18:50

Attention: Charles Appleby
U.S. Army - Fort Monmouth
SELFM-PW-EV
Building 173
Fort Monmouth NJ 07703

Client Project: 931021191016

Client Designation: Bldg #206,Trip Blank

	Conc.	Unit
ORGANIC		
Volatiles		
Volatiles by 524.2 w/ Library Search	see attached	ug/l



Ft. Monmouth NJ FMETL# 1861.1
U.S. Army
TRIP BLANK

1A
VOLATILE ORGANIC ANALYSIS DATA SHEET
EPA 524.2

Lab Name: EMSL ANALYTICAL
Matrix (soil/water): WATER
Sample wt/vol: 25 mL
Level (low/med): LOW
% Moisture: not dec.: NA
GC Column: DB-624 x 75m ID: 0.53mm
Soil Extract Volume: NA

Lab Sample ID: 9526426
Lab File ID: C8623.D
Date Received: 06/13/95
Date Analyzed: 06/21/95
Dilution Factor: 1
Soil Aliquot Volume: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	COMMENT
75-71-8	Dichlorodifluoromethane	.50	U
74-87-3	Chloromethane	.50	U
74-83-9	Bromomethane	.50	U
75-01-4	Vinyl Chloride	.50	U
75-00-3	Chloroethane	.50	U
75-69-4	Trichlorofluoromethane	.50	U
75-09-2	Methylene Chloride	2.3	B
156-60-65	trans-1,2-Dichloroethene	.50	U
75-35-4	1,1-Dichloroethene	.50	U
75-34-3	1,1-Dichloroethane	.50	U
594-20-7	2,2-Dichloropropane	.50	U
74-97-1	Bromochloromethane	.50	U
156-59-2	cis-1,2-Dichloroethene	.50	U
67-66-3	Chloroform	.50	U
563-58-6	1,1-Dichloropropene	.50	U
107-06-2	1,2-Dichloroethane	.50	U
71-55-6	1,1,1-Trichloroethane	.50	U
74-95-3	Dibromomethane	.50	U
56-23-1	Carbon Tetrachloride	.50	U
75-27-4	Bromodichloromethane	.50	U
78-87-1	1,2-Dichloropropane	.50	U
10061-01-1	cis-1,3-Dichloropropene	.50	U
142-28-9	1,3-Dichloropropane	.50	U
79-01-6	Trichloroethene	.50	U
124-48-1	Dibromochloromethane	.50	U
79-00-1	1,1,2-Trichloroethane	.50	U
71-43-2	Benzene	.50	U
10061-02-6	trans-1,3-Dichloropropene	.50	U
75-25-2	Bromoform	.50	U
630-20-6	1,1,1,2-Tetrachloroethane	.50	U
127-18-4	Tetrachloroethene	.50	U
79-34-1	1,1,2,2-Tetrachloroethane	.50	U
108-88-3	Toluene	.50	U
106-93-4	1,2-Dibromoethane	.50	U
108-90-7	Chlorobenzene	.50	U
100-41-4	Ethylbenzene	.50	U
1330-29-7	Xylene(total)	.50	U

U - Not Detected

Ft. Monmouth NJ FMETLF 1861
U.S. Army
TRIP BLANK

006

1A
VOLATILE ORGANIC ANALYSIS DATA SHEET
EPA 524.2

Lab Name: EMSL ANALYTICAL
Matrix (soil/water): WATER
Sample wt/vol: 25 mL
Level (low/med): LOW
% Moisture: not dec.: NA
GC Column: DB-624 x 75m ID: 0.53mm
Soil Extract Volume: NA

Lab Sample ID: 9526426
Lab File ID: C8623.D
Date Received: 06/13/95
Date Analyzed: 06/21/95
Dilution Factor: 1
Soil Aliquot Volume: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	COMMENT
100-42-1	Styrene	.50	U
98-82-8	Isopropylbenzene	.50	U
108-86-1	Bromobenzene	.50	U
96-18-4	1,2,3-Trichloropropane	.50	U
103-65-1	n-Propylbenzene	.50	U
95-49-8	2-Chlorotoluene	.50	U
106-43-4	4-Chlorotoluene	.50	U
108-67-8	1,3,5-Trimethylbenzene	.50	U
98-06-6	tert-Butylbenzene	.50	U
95-63-6	1,2,4-Trimethylbenzene	.50	U
135-98-8	sec-Butylbenzene	.50	U
541-73-1	1,3-Dichlorobenzene	.50	U
106-46-7	1,4-Dichlorobenzene	.50	U
99-87-6	4-Isopropyltoluene	.50	U
95-50-1	1,2-Dichlorobenzene	.50	U
104-51-8	n-Butylbenzene	.50	U
96-12-8	1,2-Dibromo-3-chloropropane	.50	U
120-82-1	1,2,4-Trichlorobenzene	.50	U
87-68-3	Hexachlorobutadiene	.50	U
91-20-3	Naphthalene	.50	U
87-61-6	1,2,3-Trichlorobenzene	.50	U

COMMENT
U= Not Detected

Army
TRIP BLANK

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.
9526426V

007

Lab Name: EMSL ANALYTICAL Contract: _____

Project No. _____ Site: _____ Location: _____ Group: _____

Matrix: (soil/water) WATER Lab Sample ID: 9526426V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C8623.D

Level: (low/med) LOW Date Received: 6/13/95

% Moisture: not dec. NA Date Analyzed: 6/21/95

GC Column: DB-624 X 75M ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Concentration Units:

Number TICs found: 0 (ug/L or ug/Kg) ug/L

CAS Number	Compound Name	RT	Est. Conc.	Q
1.	NONE FOUND			
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

EMSL

Date of Report: 07/17/95
Project Number: 95063933
Lab ID: 95-0026427
Date Collected: 06/13/95 15:35
Collected By: Client
Date Received: 06/13/95 18:50

Attention: Charles Appleby
U.S. Army - Fort Monmouth
SELFM-PW-EV
Building 173
Fort Monmouth NJ 07703

Client Project: 931021191016

Client Designation: Bldg #206,Field Blank

	Conc.	Unit
ORGANIC		
Semi-Volatiles		
BN by 625 with Library Search	see attached	ug/l
Volatiles		
Volatiles by 524.2 w/ Library Search	see attached	ug/l

Monmouth NJ - FMEC CA 7061.2

U.S. Army

Field Blank

1A

VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA 524.2

Lab Name: EMSL ANALYTICAL | Lab Sample ID: 9526427

Matrix (soil/water): WATER | Lab File ID: C8624.D

Sample wt/vol: 25 mL | Date Received: 06/13/95

Level (low/med): LOW | Date Analyzed: 06/21/95

% Moisture: not dec.: NA | Dilution Factor: 1

GC Column: DB-624 x 75m ID: 0.53mm | Soil Aliquot Volume: NA

Soil Extract Volume: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	COMMENT
75-71-8	Dichlorodifluoromethane	.50	U
74-87-3	Chloromethane	.50	U
74-83-9	Bromomethane	.50	U
75-01-4	Vinyl Chloride	.50	U
75-00-3	Chloroethane	.50	U
75-69-4	Trichlorofluoromethane	.50	U
75-09-2	Methylene Chloride	2.1	B
156-60-65	trans-1,2-Dichloroethene	.50	U
75-35-4	1,1-Dichloroethene	.50	U
75-34-3	1,1-Dichloroethane	.50	U
594-20-7	2,2-Dichloropropane	.50	U
74-97-1	Bromochloromethane	.50	U
156-59-2	cis-1,2-Dichloroethene	.50	U
67-66-3	Chloroform	.50	U
563-58-6	1,1-Dichloropropene	.50	U
107-06-2	1,2-Dichloroethane	.50	U
71-55-6	1,1,1-Trichloroethane	.50	U
74-95-3	Dibromomethane	.50	U
56-23-1	Carbon Tetrachloride	.50	U
75-27-4	Bromodichloromethane	.50	U
78-87-1	1,2-Dichloropropane	.50	U
10061-01-1	cis-1,3-Dichloropropene	.50	U
142-28-9	1,3-Dichloropropane	.50	U
79-01-6	Trichloroethene	.50	U
124-48-1	Dibromochloromethane	.50	U
79-00-1	1,1,2-Trichloroethane	.50	U
71-43-2	Benzene	.50	U
10061-02-6	trans-1,3-Dichloropropene	.50	U
75-25-2	Bromoform	.50	U
630-20-6	1,1,1,2-Tetrachloroethane	.50	U
127-18-4	Tetrachloroethene	.50	U
79-34-1	1,1,2,2-Tetrachloroethane	.50	U
108-88-3	Toluene	.50	U
106-93-4	1,2-Dibromoethane	.50	U
108-90-7	Chlorobenzene	.50	U
100-41-4	Ethylbenzene	.50	U
1330-29-7	Xylene(total)	.50	U

U Not Detected

Ft. Monmouth NJ FMETC# 1861.2

U.S. Army

FIELD BLANK

010

1A

VOLATILE ORGANIC ANALYSIS DATA SHEET
EPA 524.2

Lab Name: EMSL ANALYTICAL
Matrix (soil/water): WATER
Sample wt/vol: 25 mL
Level (low/med): LOW
% Moisture: not dec.: NA
GC Column: DB-624 x 75m ID: 0.53mm
Soil Extract Volume: NA

Lab Sample ID: 9526427
Lab File ID: C8624.D
Date Received: 06/13/95
Date Analyzed: 06/21/95
Dilution Factor: 1
Soil Aliquot Volume: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	COMMENT
100-42-1	Styrene	.50	U
98-82-8	Isopropylbenzene	.50	U
108-86-1	Bromobenzene	.50	U
96-18-4	1,2,3-Trichloropropane	.50	U
103-65-1	n-Propylbenzene	.50	U
95-49-8	2-Chlorotoluene	.50	U
106-43-4	4-Chlorotoluene	.50	U
108-67-8	1,3,5-Trimethylbenzene	.50	U
98-06-6	tert-Butylbenzene	.50	U
95-63-6	1,2,4-Trimethylbenzene	.50	U
135-98-8	sec-Butylbenzene	.50	U
541-73-1	1,3-Dichlorobenzene	.50	U
106-46-7	1,4-Dichlorobenzene	.50	U
99-87-6	4-Isopropyltoluene	.50	U
95-50-1	1,2-Dichlorobenzene	.50	U
104-51-8	n-Butylbenzene	.50	U
96-12-8	1,2-Dibromo-3-chloropropane	.50	U
120-82-1	1,2,4-Trichlorobenzene	.50	U
87-68-3	Hexachlorobutadiene	.50	U
91-20-3	Naphthalene	.50	U
87-61-6	1,2,3-Trichlorobenzene	.50	U

COMMENT
U= Not Detected

Monmouth NJ
FIELD BLANK

1061.2

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.
9526427V 011

Lab Name: EMSL ANALYTICAL Contract:

Project No. Site: Location: Group:

Matrix: (soil/water) WATER Lab Sample ID: 9526427V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C8624.D

Level: (low/med) LOW Date Received: 6/13/95

% Moisture: not dec. NA Date Analyzed: 6/21/95

GC Column: DB-624 X 75M ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Number TICs found: 0 Concentration Units: (ug/L or ug/Kg) ug/L

CAS Number	Compound Name	RT	Est. Conc.	Q
1.	NONE FOUND			
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

SAMPLE NO. 012

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

FORT MONMOUTH, NJ

9526427B

Lab Name: EMSL ANALYTICAL US ARMY

FMETL# 1861.2 Site: BLDG# 206 NJDEP#

Matrix: (soil/water) WATER Lab Sample ID: 9526427B

Sample wt/vol: 1000.0 (g/mL ML Lab File ID: B8025.D

Level: (low/med) Date Received: 6/13/95

% Moisture: decanted: (Y/N): N Date Extracted: 6/19/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 6/26/95

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
62-75-9	N-nitrosodimethylamine	2	U
111-44-4	bis(2-Chloroethyl)ether	1	U
541-73-1	1,3-Dichlorobenzene	2	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	2	U
108-60-1	bis(2-chloroisopropyl)ether	5	U
621-64-7	N-Nitroso-Di-n-propylamine	2	U
67-72-1	Hexachloroethane	1	U
98-95-3	Nitrobenzene	2	U
78-59-1	Isophorone	1	U
111-91-1	bis(2-Chloroethoxy)methane	3	U
120-82-1	1,2,4-Trichlorobenzene	2	U
91-20-3	Naphthalene	2	U
87-68-3	Hexachlorobutadiene	2	U
77-47-4	Hexachlorocyclopentadiene	12	U
91-58-7	2-Chloronaphthalene	1	U
131-11-3	Dimethylphthalate	1	U
208-96-8	Acenaphthylene	5	U
606-20-2	2,6-Dinitrotoluene	2	U
83-32-9	Acenaphthene	3	U
121-14-2	2,4-Dinitrotoluene	3	U
84-66-2	Diethylphthalate	1	U
86-73-7	Fluorene	3	U
7005-72-3	4-Chlorophenyl-phenylether	3	U
86-30-6	n-Nitrosodiphenylamine	6	U
122-66-7	1,2-Diphenylhydrazine(as azo)	6	U
101-55-3	4-Bromophenyl-phenylether	2	U
118-74-1	Hexachlorobenzene	2	U
85-01-08	Phenanthrene	2	U
120-12-7	Anthracene	2	U
84-74-2	Di-n-butylphthalate	5	U
206-44-0	Fluoranthene	1	U
92-87-5	Benzidine	1	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

FORT MONMOUTH, NJ

SAMPLE NO. 013

9526427B

Lab Name: EMSL ANALYTICAL US ARMY

FMETL# 1861.2 Site: BLDG# 206 NJDEP#

Matrix: (soil/water) WATER Lab Sample ID: 9526427B

Sample wt/vol: 1000.0 (g/mL ML Lab File ID: B8025.D

Level: (low/med) Date Received: 6/13/95

% Moisture: decanted: (Y/N): N Date Extracted: 6/19/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 6/26/95

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
129-00-0	Pyrene	2	U
85-68-7	Butylbenzylphthalate	9	U
56-55-3	Benzo[a]anthracene	2	U
91-94-1	3,3'-Dichlorobenzidine	15	U
218-01-9	Chrysene	2	U
117-81-7	bis(2-Ethylhexyl)phthalate	4	U
117-84-0	Di-n-octylphthalate	2	U
205-99-2	Benzo[b]fluoranthene	1	U
207-08-9	Benzo[k]fluoranthene	2	U
50-32-8	Benzo[a]pyrene	2	U
193-39-5	Indeno[1,2,3-cd]pyrene	2	U
53-70-3	Dibenz[a,h]anthracene	3	U
191-24-2	Benzo[g,h,i]perylene	2	U

FORT MONMOUTH NJ 1F SAMPLE NO. 014

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

9526427B

Lab Name: EMSL ANALYTICAL US ARMY

FMETL# 1861.2 Site: BLDG# 226 NJDEP#

Matrix: (soil/water) WATER Lab Sample ID: 9526427B

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: B8025.D

Level: (low/med) Date Received: 6/13/95

% Moisture: decanted: (Y/N) N Date Extracted: 6/19/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 6/26/95

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 0 Concentration Units: (ug/L or ug/Kg) ug/L

CAS Number	Compound Name	RT	Est. Conc	Q
1.	NONE FOUND			
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

Attention: Charles Appleby
U.S. Army - Fort Monmouth
SELFM-PW-EV
Building 173
Fort Monmouth, NJ 07703

Project #: 95063937
Date Received: 06/13/95 18:50

The following results are for BN by 625 with Library Search

Lab #	Conc.	Unit	Client Designation
95 0026434	;see attached	ug/l	Bldg.1108,MW1-2931785

The following results are for Volatiles by 524.2 w/ Library Search

Lab #	Conc.	Unit	Client Designation
95 0026434	;see attached	ug/l	Bldg.1108,MW1-2931785

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL# 18625.1

016

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No.: FT. MONMOUTH NJ Bldg#: 1108 NJDEP MW#: 1-2931785

Matrix: (soil/water) WATER Lab Sample ID: 9526434

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C8640.D

Level: (low/med) LOW Date Received: 6/13/95

% Moisture: not dec. NA Date Analyzed: 6/22/95

GC Column: DB-624 x 75m ID: 0.53 (mm) Dilution Factor: 1.0

Concentration Units: (ug/L or ug/Kg) ug/L

CAS No.	Compound		Q
75-71-8	Dichlorodifluoromethane	.50	U
74-87-3	Chloromethane	.50	U
75-01-4	Vinyl chloride	.50	U
74-83-9	Bromomethane	.50	U
75-00-3	Chloroethane	.50	U
75-69-4	Trichlorofluoromethane	.50	U
75-35-4	1,1-Dichloroethene	.50	U
75-09-2	Methylene chloride	1.3	B
156-60-65	trans-1,2-Dichloroethene	.50	U
75-34-3	1,1-Dichloroethane	.50	U
594-20-7	2,2-Dichloropropane	.50	U
156-59-2	cis-1,2-Dichloroethene	.50	U
74-97-1	Bromochloromethane	.50	U
67-66-3	Chloroform	.50	U
71-55-6	1,1,1-Trichloroethane	.50	U
56-23-1	Carbon tetrachloride	.50	U
563-58-6	1,1-Dichloropropene	.50	U
71-43-2	Benzene	.50	U
107-06-2	1,2-Dichloroethane	.50	U
79-01-6	Trichloroethene	.50	U
78-87-1	1,2-Dichloropropane	.50	U
74-95-3	Dibromomethane	.50	U
75-27-4	Bromodichloromethane	.50	U
10061-01-1	cis-1,3-Dichloropropene	.50	U
108-88-3	Toluene	.50	U
10061-02-6	trans-1,3-Dichloropropene	.50	U
79-00-1	1,1,2-Trichloroethane	.50	U
127-18-4	Tetrachloroethene	.50	U
142-28-9	1,3-Dichloropropane	.50	U
124-48-1	Dibromochloromethane	.50	U
106-93-4	1,2-Dibromomethane	.50	U
108-90-7	Chlorobenzene	.50	U
630-20-6	1,1,1,2-Tetrachloroethane	.50	U

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL# 017

1865.1

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No.: FT. MONMOUTH NJ Bldg#: 1108 NJDEP MW#: 1-2931785

Matrix: (soil/water) WATER Lab Sample ID: 9526434

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C8640.D

Level: (low/med) LOW Date Received: 6/13/95

% Moisture: not dec. NA Date Analyzed: 6/22/95

GC Column: DB-624 x 75m ID: 0.53 (mm) Dilution Factor: 1.0

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
100-41-4	Ethylbenzene	.50	U
1330-29-7	Xylene (total)	.50	U
100-42-1	Styrene	.50	U
75-25-2	Bromoform	.50	U
98-82-8	Isopropylbenzene	.50	U
108-86-1	Bromobenzene	.50	U
79-34-1	1,1,2,2-Tetrachloroethane	.50	U
96-18-4	1,2,3-Trichloropropane	.50	U
103-65-1	n-Propylbenzene	.50	U
95-49-8	2-Chlorotoluene	.50	U
106-43-4	4-Chlorotoluene	.50	U
108-67-8	1,3,5-Trimethylbenzene	.50	U
98-06-6	tert-Butylbenzene	.50	U
95-63-6	1,2,4-Trimethylbenzene	.50	U
135-98-8	sec-Butylbenzene	.50	U
541-73-1	1,3-Dichlorobenzene	.50	U
99-87-6	4-Isopropyltoluene	.50	U
106-46-7	1,4-Dichlorobenzene	.50	U
95-50-1	1,2-Dichlorobenzene	.50	U
104-51-8	n-Butylbenzene	.50	U
96-12-8	1,2-Dibromo-3-chloropropane	.50	U
120-82-1	1,2,4-Trichlorobenzene	.50	U
87-68-3	Hexachlorobutadiene	.50	U
91-20-3	Naphthalene	.50	U
87-61-6	1,2,3-Trichlorobenzene	.50	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FMETL# 1865.1

018

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No. FT. MONMOUTH NJ Bldg# 1108 NJDEP MW#: 1-2931785

Matrix: (soil/water) WATER Lab Sample ID: 9526434V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C8640.D

Level: (low/med) LOW Date Received: 6/13/95

% Moisture: not dec. NA Date Analyzed: 6/22/95

GC Column: DB-624 X 75M ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Number TICs found: 0 Concentration Units: (ug/L or ug/Kg) ug/L

CAS Number	Compound Name	RT	Est. Conc.	Q
1.	NONE FOUND			
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

SAMPLE NO. 019

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

FORT MONMOUTH, NJ

9526434B

Lab Name: EMSL ANALYTICAL US ARMY

FMETL# 1865.1 Site: BLDG# 1108 NJDEP# MW1-2931785

Matrix: (soil/water) WATER Lab Sample ID: 9526434B

Sample wt/vol: 1000.0 (g/mL ML Lab File ID: B8032.D

Level: (low/med) Date Received: 6/13/95

% Moisture: decanted: (Y/N): N Date Extracted: 6/19/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 6/26/95

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
62-75-9	N-nitrosodimethylamine	2	U
111-44-4	bis(2-Chloroethyl)ether	1	U
541-73-1	1,3-Dichlorobenzene	2	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	2	U
108-60-1	bis(2-chloroisopropyl)ether	5	U
621-64-7	N-Nitroso-Di-n-propylamine	2	U
67-72-1	Hexachloroethane	1	U
98-95-3	Nitrobenzene	2	U
78-59-1	Isophorone	1	U
111-91-1	bis(2-Chloroethoxy)methane	3	U
120-82-1	1,2,4-Trichlorobenzene	2	U
91-20-3	Naphthalene	2	U
87-68-3	Hexachlorobutadiene	2	U
77-47-4	Hexachlorocyclopentadiene	12	U
91-58-7	2-Chloronaphthalene	1	U
131-11-3	Dimethylphthalate	1	U
208-96-8	Acenaphthylene	5	U
606-20-2	2,6-Dinitrotoluene	2	U
83-32-9	Acenaphthene	3	U
121-14-2	2,4-Dinitrotoluene	3	U
84-66-2	Diethylphthalate	1	U
86-73-7	Fluorene	3	U
7005-72-3	4-Chlorophenyl-phenylether	3	U
86-30-6	n-Nitrosodiphenylamine	6	U
122-66-7	1,2-Diphenylhydrazine(as azo)	6	U
101-55-3	4-Bromophenyl-phenylether	2	U
118-74-1	Hexachlorobenzene	2	U
85-01-08	Phenanthrene	2	U
120-12-7	Anthracene	2	U
84-74-2	Di-n-butylphthalate	5	U
206-44-0	Fluoranthene	1	U
92-87-5	Benzidine	1	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

FORT MONMOUTH, NJ

SAMPLE NO. 020

9526434B

Lab Name: EMSL ANALYTICAL US ARMY

FMETL# 1865.1 Site: BLDG# 1108 NJDEP# MD1293/785

Matrix: (soil/water) WATER Lab Sample ID: 9526434B

Sample wt/vol: 1000.0 (g/mL ML Lab File ID: B8032.D

Level: (low/med) Date Received: 6/13/95

% Moisture: decanted: (Y/N): N Date Extracted: 6/19/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 6/26/95

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
129-00-0	Pyrene	2	U
85-68-7	Butylbenzylphthalate	9	U
56-55-3	Benzo[a]anthracene	2	U
91-94-1	3,3'-Dichlorobenzidine	15	U
218-01-9	Chrysene	2	U
117-81-7	bis(2-Ethylhexyl)phthalate	4	U
117-84-0	Di-n-octylphthalate	2	U
205-99-2	Benzo[b]fluoranthene	1	U
207-08-9	Benzo[k]fluoranthene	2	U
50-32-8	Benzo[a]pyrene	2	U
193-39-5	Indeno[1,2,3-cd]pyrene	2	U
53-70-3	Dibenz[a,h]anthracene	3	U
191-24-2	Benzo[g,h,i]perylene	2	U

FORT MONMOUTH NJ 1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO. 021

9526434B

Lab Name: EMSL ANALYTICAL US ARMY

FMETL# 1865.1 Site: BLDG# 1108 NJDEP# MDI-2931785

Matrix: (soil/water) WATER Lab Sample ID: 9526434B

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: B8032.D

Level: (low/med) Date Received: 6/13/95

% Moisture: decanted: (Y/N) N Date Extracted: 6/19/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 6/26/95

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 0 Concentration Units: (ug/L or ug/Kg) ug/L

CAS Number	Compound Name	RT	Est. Conc	Q
1.	NONE FOUND			
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

BLDG.#: 1108 MW#: 1 NJDEPE WELL ID # 2931785 022

U.S. ARMY FORT MONMOUTH

MONITORING WELL SAMPLING DATASHEET

DATE: 6-13-95

IJO#95-0091

SAMPLING CONTRACTOR: EMSL Analytical Services Inc.

LABORATORY: EMSL Analytical Services, NJDEP CERT #: 04653

SAMPLERS NAMES: Susan Palilonis, Tom Baxter

WEATHER CONDITIONS: Cool, cloudy,

ELEVATION OF CASING SURVEY MARK: ____.____

TOTAL DEPTH OF WELL FROM TOP OF SURVEYORS MARK: 14.93 FT

DEPTH FROM SURVEYORS MARK TO SCREEN: ____.____FT

LENGTH OF SCREENED SECTION: ____FT.

DEPTH TO WATER PRIOR TO PURGING AND SAMPLING: 7.38 FT from sheen

ELEVATION OF GW PRIOR TO PURGING: ____.___FT

THICKNESS OF LNAPL PRIOR TO PURGING : ____.~~0~~FT

PID/Hnu READING IMMEDIATELY AFTER THE WELL CAP IS REMOVED: <10 PPM 1403 None Detected. D.O. 2.3 ppm

① pH: 5.05 TEMP: 15.7 °C, SPECIFIC CONDUCTIVITY: 159 µS

DEPTH OF WELL: ____.___FT

HEIGHT OF WATER: ____.___FT

EVACUATED GAL. H2O: 15 GAL (7.55 X .65 X 3 = 14.7225)

PURGING START TIME: 14:15 END TIME: 14:45

PURGE METHOD: (FLOW RATE OF <0.5 GPM TO >5.0 GPM) Pump

PURGE RATE (<0.5 GPM): 2 GPM

TOTAL VOLUME PURGED: 10 GAL * see comments

DEPTH TO WATER AFTER PURGING AND BEFORE SAMPLING: 12.29 FT

② DISSOLVED OXYGEN: 3.5 ppm pH: 4.98 TEMP: 15.9 °C

SPECIFIC CONDUCTIVITY: 164 µS/cm

SAMPLING METHOD: DEDICATED, DECONTAMINATED (IAW NJDEP FSPM 1992) TEFLON® BAILER

START TIME OF SAMPLING: 1449 END TIME: 1454

③ DISSOLVED OXYGEN: 3.10 pH: 4.99 TEMP: 15.9 °C

SPECIFIC CONDUCTIVITY: 163 µS/cm

Color none ODOR none

COMMENTS: on site 1402, flush surface well,

Recharge < 0.5 gpm → purged 2 times volume & allowed to recharge

EMSL

LABORATORY DELIVERABLES

THIS FORM MUST BE COMPLETED BY THE LABORATORY OR
ENVIRONMENTAL CONSULTANT AND ACCOMPANY ALL DATA SUBMISSIONS

The following laboratory deliverables shall be included in the data submission. All deviations from the accepted methodology and procedures, or performance values outside acceptable ranges shall be summarized in the Non-Conformance Summary. The proposed "Technical Requirements for Site Remediation" rules, which appeared in the May 4, 1992 New Jersey Register, provides further details. The document shall be bound and paginated, contain a table of contents, and all pages shall be legible. Incomplete packages will be returned or held without review until the data package is completed.

It is recommended that the analytical results summary sheets listing all targeted and non-targeted compounds with the method detection limits be included in one section of the data package and in the main body of the report.

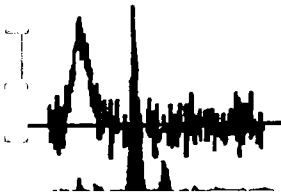
		Check If Complete
1.	Cover Page, Title Page listing Lab Certification #, facility name, address & date of report.	X
2.	Table of Contents	X
3.	Summary Sheets listing analytical results for all targeted and non-targeted compounds.	X
4.	Summary Table cross-referencing field ID #'s vs. Lab ID #'s.	X
5.	Document bound, paginated and legible.	X
6.	Chain of Custody	X
7.	Methodology Summary	X
8.	Laboratory Chronicle and Holding Time Check.	X
9.	Results submitted on a dry weight basis (if applicable).	X
10	Method Detection Limits.	X
11	Lab certified by NJDEP for parameters or appropriate category of parameters or a member of the USEP CLP.	X
12	Non-Conformance Summary	X

Paul Farag

Laboratory Manager or Environmental Consultant's Signature

07-17-95

Date



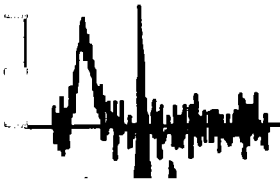
EMSL

QUALITY ASSURANCE/QUALITY CONTROL (QA/QC)

A. Checklist which must be attached to the Summary

The following information must be reported in the Closure Plan Implementation Summary for all laboratory analyses performed in the compliance with the site assessment requirements:

Page #		
1	1.	Name and address of the facility.
1	2.	Name of the laboratory performing the sample analysis.
1	3.	NJDEP certification number assigned to the laboratory pursuant to N.J.A.C. 7:18.
1	4.	Laboratory sample identification number.
1	5.	Customer sample identification number corresponding to the laboratory sample identification.
1	6.	Sample Location (also on the site diagram).
1	7.	Matrix of the sample analyzed (i.e., water or sediments; including soil, sediment, and sludges). All sediment results must be reported on a dry weight basis.
30-31	8.	The reference for the method used (e.g., EPA Method 625, 40 CFR Part 136).
1	9.	The signature of the person completing the report form.
1	10.	The dates the laboratory report form was prepared, as well as the dates the sample were collected, submitted and analyzed.
32	11.	A list of all parameters (constituents and conditions) for which the analyses were performed.
3-22	12.	Sample results and corresponding units for each parameter.



EMSL

CHAIN OF CUSTODY

EMSL ANALYTICAL, INC.

INTERNAL CHAIN OF CUSTODY

EMSL

EMSL LAB ID NO. 95-26426, 95-26427, 95-26434 PROJECT NO. 95063937

SAMPLE/CONTAINERS

PARAMETERS

DATE	TIME	ANALYSIS	NAME (PRINT)	SIGNATURE
6/19/95		BN Extraction Prep.	Charles Bartolone	SV for CB

INTERNAL CUSTODY

Project #: 95063937

Lab ID #'s: 95-26426, 95-26427, 95-26434

Analyst

	Name (please print)	Signature	Date
1. Base/Neutrals	Scott Van Etten	SV	6/26/95
2. Acids			
3. Volatiles (GC)			
4. Volatiles (GC/MS)	Scott Kessler	SK.	6/27/95
5. Base Neutrals/Acids			
6. Gasoline			

U.S. ARMY FORT MONMOUTH

Q06937

P.O. #: IJO # 95-0091 / SAI

Chain of Custody

Project #: 945130933229	Sampler: EMSL (Baxter)	Date / Time 6/13/95	Analysis Parameters
Customer: Charles Appleby SELFM-RO-EV	Site Name: Bldg. #1108 MW Sampling		Start: / Finish:
Phone: 908-532-6024			Preservation Method

Lab Sample ID Number	Date/Time		Customer Sample Location/ID Number	Sample Matrix	# of Bottles	VOA 524.2 + 4 Ketones	BN+15 methods 625						Remarks
1861.1	6/13	0054m	TRIP BLANK	aq.	3	X			26+26				Samples Kept at 4 °C
1861.2	↓	1535	Field Blank	aq.	6	X	X		26+27				
1865.1	↓	1457	Bldg. #1103 MW1-29 31785	aq.	6	X	X		2643				

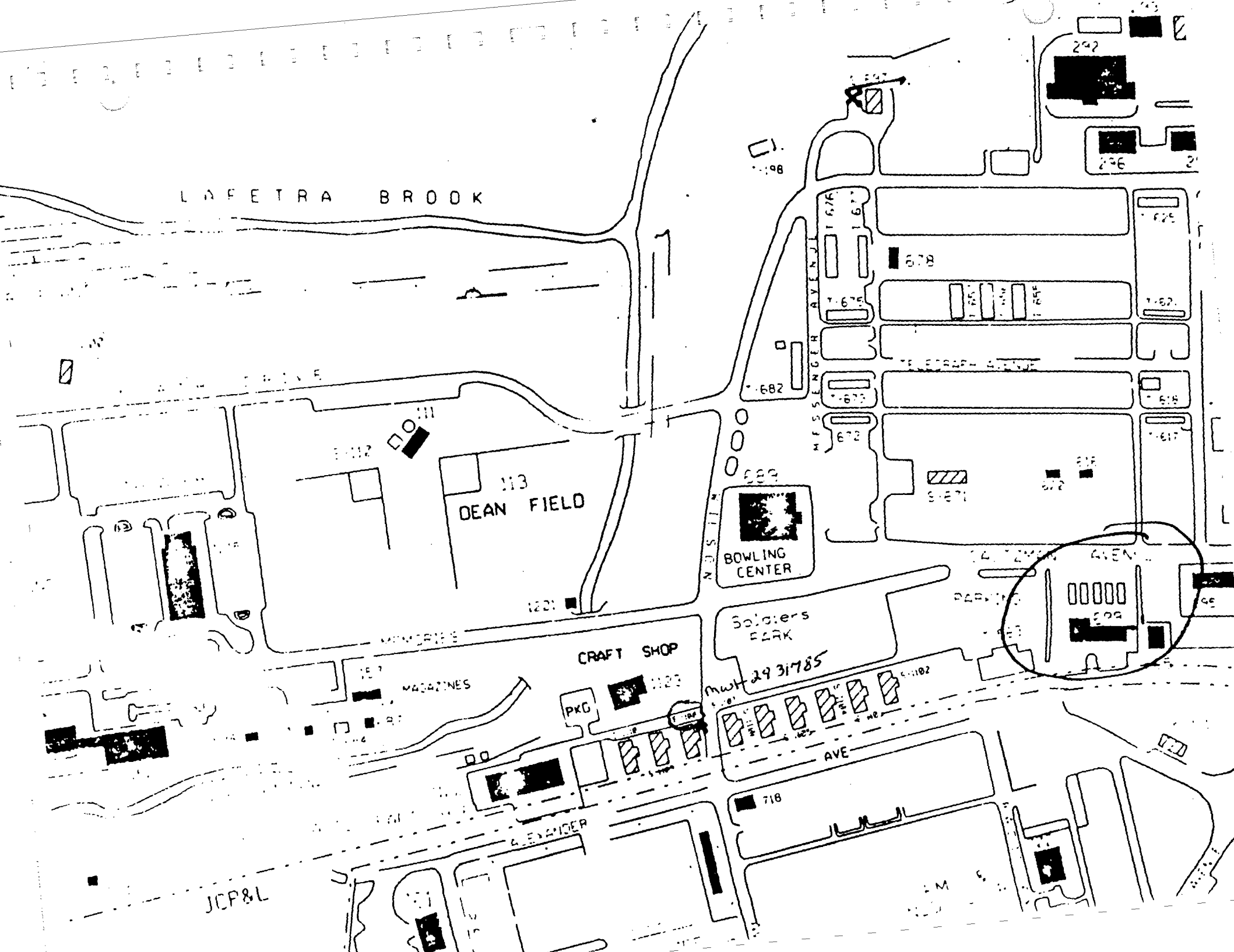
Relinquished By (signature) X	Date / Time 6-13-95 1535	Received By (signature) X	Shipped By: EMSL
Relinquished By (signature)	Date / Time 6/13/95 1850	Received for Lab by (signature):	Date / Time

Note: A drawing depicting sample location should be attached or drawn on the reverse side of this chain of custody. (ORIGINAL on Reverse Side)

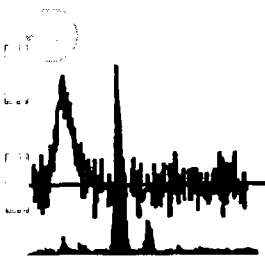
Enviornmental Laboratory

028

Certification Numb


LAFETRA BROOK
DEAN FIELD
BOWLING CENTER
CRAFT SHOP
MAGAZINES
PKG
Soldiers PARK
AVE
JCP&L
MESSENGER AVENUE
mwlt 29 31785

METHODOLOGY SUMMARY



METHODOLOGY SUMMARY

EPA Method 524.2 - Aqueous

This is a purge and trap gas chromatograph/mass spectrometer (GC/MS) method. The organic compounds are separated by the gas chromatograph and detected using the mass spectrometer.

An HP5890/5970 GC/MS was used with a capiullary column (DB-624 0.53 mn ID).

Method detection limits are as stated.

Semivolatiles by GC/MS - Aqueous

EPA Method 625 - This is a gas chromatograph/mass spectrometer (GC/MS) method applicable to the determination of a number of organic compounds that are partitioned in an organic solvent and amenable to gas chromatography. Reference is Federal Register, Vol. 40, No. 136, July, 1988.

An HP5890/5970B GC/MS is used with a DB-5 fused silica capillary column.

If tentatively identified compounds are requested, a computer program analyzes the non-priority pollutant/HSL/TCL compounds with standard mass spectra found in the latest version of the NIH/NBS/EPA mass spectral library.

Method detection limits are as stated.

EMSL

LABORATORY CHRONICLE

Lab ID: **95-26426, 95-26427, 95-26434** Client: **U.S. Army, Fort Monmouth**

	I DATE	II Hold Time
Date Sampled	**6/13/95**	
Receipt/Refrigeration	**6/13/95**	
Extractions		
1. Semivolatile Organics, aqueous	**6/19/95**	**7 days**
Analyses		
1. Volatile Organics, aqueous	**6/21, 22/95**	**14 days**
2. Semivolatile Organics, aqueous	**6/26/95**	**40 days**

QC Supervisor
Review & Approval

(Signature) Peter B. Panton
(Printed Name) Peter B. Panton
(Date) 07/17/95

NOTE: If fractions are re-extracted and re-analyzed because the initial endeavors failed to meet the required Quality Control Criteria, the dates of re-extraction and/or re-analysis will be entered in Column II Additionally.

EMSL

GC/MS ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY FORMAT

		No	Yes
1.	Chromatograms Labeled/Compounds Identified (Field Samples and Method Blanks)		X
2.	GC/MS Tune Specifications		
	a. BFB Meet Criteria		X
	b. DFTPP Meet Criteria		X
3.	GC/MS Tuning Frequency - Performed every 24 hours for 600 series and 12 hours for 8000 series.		X
4,	GC/MS Calibration - Initial Calibration performed within 30 days before sample analysis and continuing calibration performed within 24 hours of. sample analysis for 600 series and 12 hours for 8000 series.		X
5.	GC/MS Calibration - Initial Requirements		
	a. Calibration Check Compounds		X
	b. System Performance Check Compounds		X
6.	Blank Contamination - If yes, list compounds and concentrations in each blank:		X
	a. VOA Fraction **Methylene Chloride 1.5-2.0 ppb.**		
	b. B/N Fraction		
	c. Acid Fraction		
7.	Surrogate Recoveries Meet Criteria		X
	If not met, list those compounds and their recoveries which fall outside the acceptable range:		
	a. VOA Fraction		
	b. B/N Fraction		
	c. Acid Fraction		
	If not met, were the calculations checked and the results qualified as "estimated"?		
8.	Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria (If not met, list those compounds and their recoveries which fall outside the acceptable range)	X	
	a. VOA Fraction **Methylene Chloride 73% and 77%.**		
	b. B/N Fraction		
	c. Acid Fraction		
9.	Internal Standard Area/Retention Time Shift Meet Criteria		X

EMSL

GC/MS ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY FORMAT, cont.

		No	Yes
10.	Extraction Holding Time Met		X

If not met, list number of days exceeded for each sample:

_____

_____

		No	Yes
11.	Analysis Holding Time Met		X

If not met, list number of days exceeded for each sample:

_____

_____

12. Definitions:
U=Not Detected. J=Detected, but below report detection limit.
B=Compound found in blank. E=Estimated concentration. NA=Not Applicable

Additional Comments: _____

_____

Laboratory Manager Paul Toraia Date: 07-17-95

GC/MS VOLATILE ORGANIC DATA PACKAGE

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: EMSL ANALYTICAL Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

Lab File ID: C8236.D BFB Injection Date: 05/26/95

Instrument ID: 5972-INSTRUMENT-1 BFB Injection Time: 0953

GC Column DB-62 ID: 0.53 (mm) Heated Purge: (Y / N) _____

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	21.8
75	30.0 - 60.0% of mass 95	52.3
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	57.2
175	5.0 - 9.0% of mass 174	4.2 (7.4)1
176	95.0 - 101.0% of mass 174	55.4 (96.9)1
177	5.0 - 9.0% of mass 176	3.2 (5.8)2

1-Value is % mass 174 2-Value is % mass 176

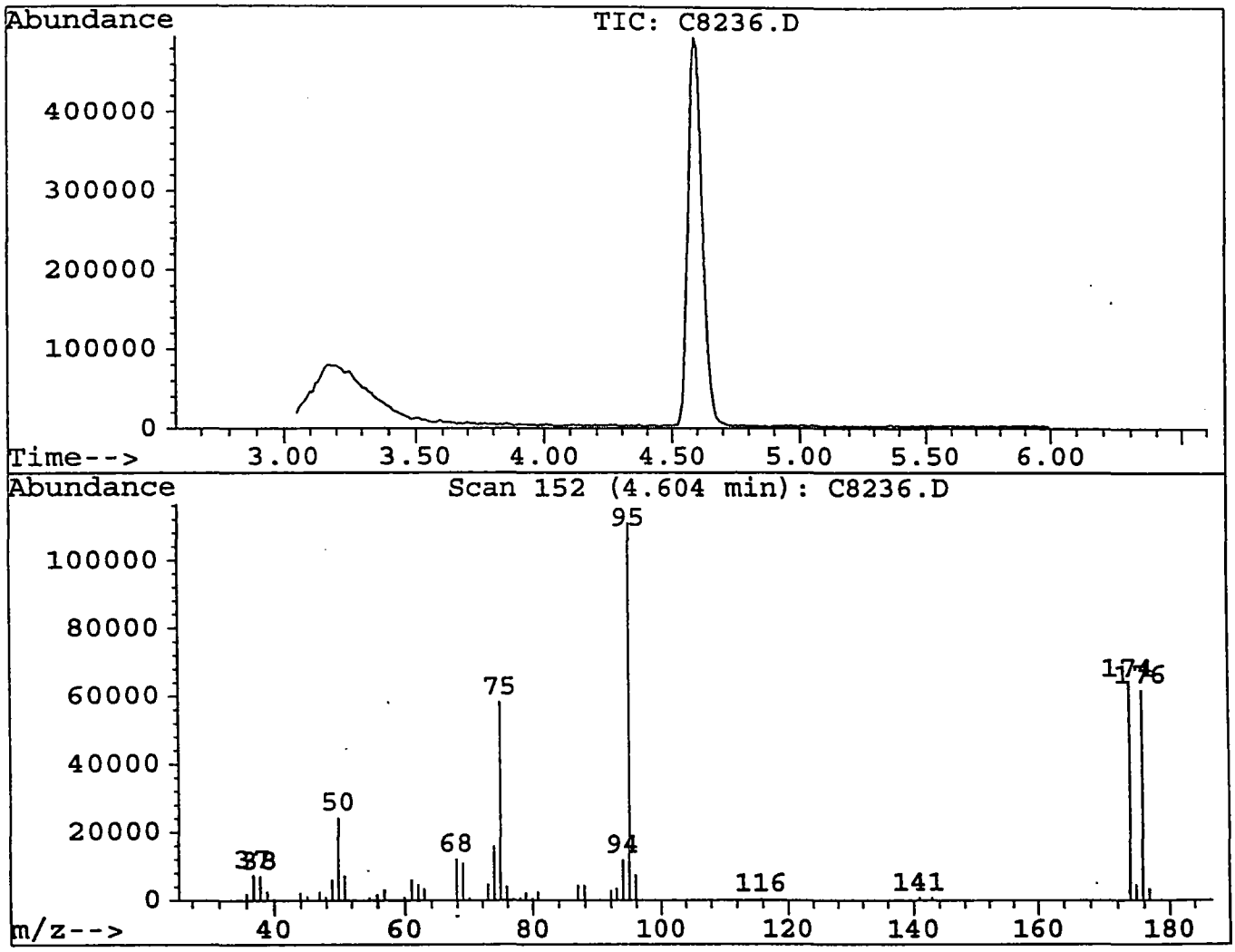
THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01		4 PPB STANDARD	C8237.D	05/26/95	1035
02		10 PPB STANDARD	C8238.D	05/26/95	1117
03		20 PPB STANDARD	C8239.D	05/26/95	1151
04		30 PPB STANDARD	C8240.D	05/26/95	1226
05		40 PPB STANDARD	C8241.D	05/26/95	1300
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

Data File : D:\HPCHEM\1\DATA\C8236.D
Acq On : 26 May 95 9:53 am
Sample : BFB TUNE
Misc : 25 NG INJECTION

Vial: 1
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics



Peak Apex is scan: 152

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	21.8	24232	PASS
75	95	30	60	52.3	58152	PASS
95	95	100	100	100.0	111200	PASS
96	95	5	9	6.8	7580	PASS
173	174	0	2	0.0	0	PASS
174	95	50	100	57.2	63568	PASS
175	174	5	9	7.4	4678	PASS
176	174	95	101	96.9	61624	PASS
177	176	5	9	5.8	3577	PASS

can 152 (4.604 min): C8236.D
BFB TUNE

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	1948	50.95	7307	72.95	4912	92.05	2865
37.00	7455	54.75	959	73.95	15989	92.95	3574
38.00	7055	55.95	1728	74.95	58152	93.95	11832
9.00	2560	57.00	3162	75.95	4270	94.95	111200
0.00	629	59.90	1118	76.95	625	95.95	7580
43.90	2201	61.00	6169	78.00	812	115.75	506
45.00	1268	62.00	4780	78.90	2214	140.90	844
46.95	2491	62.90	3458	79.90	782	142.80	807
47.95	1002	67.95	12140	80.80	2619	173.95	63568
48.95	6125	68.95	11009	86.90	4356	174.85	4678
49.95	24232	69.95	836	87.95	4439	175.85	61624

n 152 (4.604 min): C8236.D
BFB TUNE

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
176.85	3577						

Response Factor Report 5972 - In

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Fri May 26 16:05:53 1995
Response via : Initial Calibration

Calibration Files
4 =C8237.D 10 =C8238.D 20 =C8239.D
30 =C8240.D 40 =C8241.D

		Compound	4	10	20	30	40	Avg	%RSD
)		Fluorobenzene	----------ISTD----------						
2)	M	Dichlorodifluorometha	0.410	0.422	0.387	0.385	0.379	0.396	4.69
3)	M	Chloromethane	0.227	0.249	0.227	0.232	0.232	0.233	3.89
4)	M	Vinyl chloride	0.262	0.275	0.259	0.260	0.259	0.263	2.58
5)	M	Bromomethane	0.193	0.197	0.170	0.166	0.164	0.178	8.95
6)	M	Chloroethane	0.164	0.171	0.161	0.152	0.122	0.154	12.48
7)	M	Trichlorofluoromethan	0.583	0.600	0.585	0.589	0.581	0.588	1.25
8)	M	1,1-Dichloroethene	0.255	0.266	0.258	0.257	0.254	0.258	1.92
9)	M	Methylene chloride		0.352	0.271	0.240	0.232	0.274	19.95
0)	M	trans-1,2-Dichloroeth	0.274	0.279	0.270	0.271	0.270	0.273	1.39
1)		Hexane						0.000#	-1.00
12)	M	1,1-Dichloroethane	0.547	0.545	0.539	0.543	0.552	0.545	0.89
13)	M	2,2-Dichloropropane	0.561	0.546	0.527	0.525	0.514	0.534	3.50
14)	M	cis-1,2-Dichloroethen	0.263	0.262	0.253	0.251	0.256	0.257	2.11
15)		2-Butanone						0.000#	-1.00
16)	M	Bromochloromethane	0.089	0.088	0.089	0.089	0.094	0.090	2.82
17)	M	Chloroform	0.511	0.509	0.507	0.507	0.524	0.512	1.38
18)	M	1,1,1-Trichloroethane	0.573	0.566	0.561	0.564	0.567	0.566	0.77
19)	M	Carbon tetrachloride	0.537	0.520	0.520	0.526	0.526	0.526	1.35
20)	M	1,1-Dichloropropene	0.498	0.506	0.486	0.494	0.488	0.495	1.59
21)	M	Benzene	0.874	0.885	0.858	0.866	0.870	0.871	1.14
22)	M	1,2-Dichloroethane	0.206	0.210	0.214	0.214	0.225	0.214	3.36
23)	M	Trichloroethene	0.387	0.388	0.383	0.386	0.386	0.386	0.51
24)	M	1,2-Dichloropropane	0.282	0.281	0.283	0.286	0.293	0.285	1.76
25)	M	Dibromomethane	0.112	0.113	0.112	0.117	0.124	0.115	4.28
26)	M	Bromodichloromethane	0.388	0.385	0.398	0.397	0.412	0.396	2.72
27)	M	cis-1,3-Dichloroprope	0.338	0.335	0.343	0.340	0.356	0.342	2.38
28)	M	Toluene	0.646	0.605	0.610	0.613	0.619	0.619	2.61
29)	M	trans-1,3-Dichloropro	0.226	0.229	0.236	0.239	0.252	0.236	4.31
30)	M	1,1,2-Trichloroethane	0.107	0.107	0.109	0.110	0.118	0.110	4.12
31)	M	Tetrachloroethene	0.395	0.386	0.380	0.388	0.389	0.388	1.40
32)	M	1,3-Dichloropropane	0.217	0.213	0.221	0.218	0.226	0.219	2.24
33)	M	Dibromochloromethane	0.208	0.205	0.215	0.216	0.231	0.215	4.72
34)	M	1,2-Dibromomethane	0.145	0.145	0.153	0.153	0.166	0.152	5.54
35)	M	Chlorobenzene	0.650	0.638	0.636	0.640	0.657	0.644	1.38
36)	M	1,1,1,2-Tetrachloroet	0.256	0.247	0.253	0.257	0.265	0.256	2.62
37)	M	Ethylbenzene	1.316	1.279	1.288	1.308	1.320	1.302	1.38
38)	M	Xylene (para & meta)	0.479	0.463	0.465	0.465	0.466	0.468	1.38
39)	M	Xylene (Ortho)	0.417	0.409	0.412	0.413	0.418	0.414	0.93
40)	M	Styrene	0.634	0.626	0.639	0.643	0.663	0.641	2.12
41)	M	Bromoform	0.098	0.099	0.107	0.106	0.117	0.105	7.26
42)	M	Isopropylbenzene	1.330	1.302	1.317	1.350	1.352	1.330	1.60
43)	S	4-Bromofluorobenzene	0.498	0.480	0.493	0.500	0.522	0.499	3.05

(#) = Out of Range

Response Factor Report 5972 - In

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Fri May 26 16:05:53 1995
Response via : Initial Calibration

Calibration Files
4 =C8237.D 10 =C8238.D 20 =C8239.D
30 =C8240.D 40 =C8241.D

		Compound	4	10	20	30	40	Avg	%RSD
44)	M	Bromobenzene	0.236	0.232	0.239	0.242	0.251	0.240	3.08
45)	M	1,1,2,2-Tetrachloroet	0.110	0.112	0.121	0.120	0.127	0.118	6.04
46)	M	1,2,3-Trichloropropan	0.143	0.138	0.144	0.141	0.150	0.143	2.93
47)	M	n-Propylbenzene	1.736	1.684	1.719	1.754	1.761	1.731	1.79
48)	M	2-Chlorotoluene	0.967	0.923	0.956	0.968	0.988	0.960	2.50
49)	M	4-Chlorotoluene	1.153	1.113	1.108	1.151	1.176	1.140	2.54
50)	M	1,3,5-Trimethylbenzen	1.107	1.066	1.095	1.117	1.122	1.101	2.04
51)	M	tert-Butylbenzene	1.149	1.111	1.135	1.158	1.157	1.142	1.71
52)	M	1,2,4-Trimethylbenzen	1.012	0.993	1.014	1.002	1.025	1.009	1.21
53)	M	sec-Butylbenzene	1.707	1.634	1.688	1.722	1.715	1.693	2.10
54)	M	1,3-Dichlorobenzene	0.481	0.468	0.490	0.495	0.511	0.489	3.28
55)	M	4-Isopropyltoluene	1.257	1.228	1.267	1.280	1.290	1.264	1.88
56)	M	1,4-Dichlorobenzene	0.483	0.464	0.482	0.487	0.510	0.485	3.39
57)	S	1,2-Dichlorobenzene-d	0.223	0.219	0.228	0.230	0.238	0.228	3.15
58)	M	1,2-Dichlorobenzene	0.371	0.351	0.359	0.366	0.374	0.364	2.53
59)	M	n-Butylbenzene	1.362	1.297	1.353	1.381	1.382	1.355	2.55
60)	M	1,2-Dibromo-3-chlorop	0.027	0.027	0.030	0.031	0.034	0.030	10.29
61)	M	1,2,4-Trichlorobenzen	0.254	0.256	0.266	0.271	0.293	0.268	5.88
62)	M	Hexachlorobutadiene	0.317	0.304	0.330	0.331	0.334	0.323	3.81
63)	M	Naphthalene	0.219	0.220	0.225	0.233	0.262	0.232	7.66
64)	M	1,2,3-Trichlorobenzen	0.183	0.175	0.184	0.186	0.207	0.187	6.31
65)		Methyl-tert butyl eth	0.289	0.286	0.292	0.288	0.306	0.292	2.82
66)		tert-Butyl Alcohol		0.004	0.005	0.005	0.005	0.004	8.73

#) = Out of Range

Quantitation Report

041

Data File : d:\hpchem\1\data\c8237.d
Acq On : 26 May 95 10:35 am
Sample : 4 PPB STANDARD
Misc :
Quant Time: May 26 15:22 1995

Vial: 2
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Fri May 26 16:05:53 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	11.84	96	695393	5.00	ug/L	-0.09
System Monitoring Compounds						%Recovery
43) 4-Bromofluorobenzene	19.10	95	138448	2.12	ug/L	42.31%
57) 1,2-Dichlorobenzene-d4	21.88	152	62134	1.72	ug/L	34.47%
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.28	85	227954	3.55	ug/L	92
3) Chloromethane	3.65	50	126260	3.35	ug/L	100
4) Vinyl chloride	3.86	62	145560	3.46	ug/L	97
5) Bromomethane	4.54	94	107256	3.74	ug/L	100
6) Chloroethane	4.76	64	91319	3.57	ug/L	90
7) Trichlorofluoromethane	5.35	101	324396	3.90	ug/L	91
8) 1,1-Dichloroethene	6.42	96	141941	3.68	ug/L	98
9) Methylene chloride	7.41	84	319236	9.50	ug/L	100
10) trans-1,2-Dichloroethene	7.97	96	152530	3.73	ug/L	94
12) 1,1-Dichloroethane	8.76	63	304419	3.74	ug/L	95
13) 2,2-Dichloropropane	9.82	77	311983	4.42	ug/L	99
14) cis-1,2-Dichloroethene	9.82	96	146539	3.80	ug/L	99
16) Bromochloromethane	10.24	128	49545	3.27	ug/L	88
17) Chloroform	10.40	83	284036	3.95	ug/L	99
18) 1,1,1-Trichloroethane	10.73	97	318569	4.20	ug/L	98
19) Carbon tetrachloride	11.03	117	299000	4.01	ug/L	97
20) 1,1-Dichloropropene	11.01	75	277299	3.91	ug/L	96
21) Benzene	11.35	78	486262	3.81	ug/L	99
22) 1,2-Dichloroethane	11.36	62	114527	4.02	ug/L	98
23) Trichloroethene	12.48	95	215417	3.81	ug/L	92
24) 1,2-Dichloropropane	12.83	63	156823	3.58	ug/L	99
25) Dibromomethane	13.02	93	62165	3.54	ug/L	95
26) Bromodichloromethane	13.30	83	215761	3.85	ug/L	95
27) cis-1,3-Dichloropropene	14.06	75	187920	3.78	ug/L	99
28) Toluene	14.64	92	359379	4.19	ug/L	98
29) trans-1,3-Dichloropropene	14.99	75	125469	3.72	ug/L	96
30) 1,1,2-Trichloroethane	15.30	83	59496	3.61	ug/L	98
31) Tetrachloroethene	15.60	166	219930	3.61	ug/L	90
32) 1,3-Dichloropropane	15.58	76	120535	3.72	ug/L	100
33) Dibromochloromethane	15.99	129	115733	3.36	ug/L	99
34) 1,2-Dibromomethane	16.19	107	80701	3.46	ug/L	99
35) Chlorobenzene	17.07	112	361810	3.72	ug/L	96
36) 1,1,1,2-Tetrachloroethane	17.20	131	142326	3.50	ug/L	95
37) Ethylbenzene	17.26	91	732369	4.06	ug/L	98
38) Xylene (para & meta)	17.47	106	533017	7.95	ug/L	92
39) Xylene (Ortho)	18.17	106	231743	3.89	ug/L	90
40) Styrene	18.18	104	352838	3.78	ug/L	87

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c8237.d
Acq On : 26 May 95 10:35 am
Sample : 4 PPB STANDARD
Misc :
Quant Time: May 26 15:22 1995

Vial: 2
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Fri May 26 16:05:53 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
41)	Bromoform	18.51	173	54547	3.31	ug/L		97
42)	Isopropylbenzene	18.83	105	739665	3.93	ug/L		89
44)	Bromobenzene	19.38	156	131056	3.44	ug/L	#	86
45)	1,1,2,2-Tetrachloroethane	19.32	83	61247	3.65	ug/L		98
46)	1,2,3-Trichloropropane	19.40	75	79406	3.74	ug/L		97
47)	n-Propylbenzene	19.56	91	965762	4.01	ug/L		99
48)	2-Chlorotoluene	19.73	91	538039	4.23	ug/L		92
49)	4-Chlorotoluene	19.91	91	641340	4.20	ug/L	m	96
50)	1,3,5-Trimethylbenzene	19.88	105	616118	4.04	ug/L		96
51)	tert-Butylbenzene	20.48	119	639160	3.80	ug/L		88
52)	1,2,4-Trimethylbenzene	20.57	105	562733	3.89	ug/L		91
53)	sec-Butylbenzene	20.88	105	949602	3.96	ug/L		97
54)	1,3-Dichlorobenzene	21.08	146	267522	3.41	ug/L		98
55)	4-Isopropyltoluene	21.14	119	699174	3.73	ug/L		95
56)	1,4-Dichlorobenzene	21.23	146	268966	3.43	ug/L	m	96
58)	1,2-Dichlorobenzene	21.91	146	206476	3.45	ug/L		95
59)	n-Butylbenzene	21.89	91	757856	3.95	ug/L		95
60)	1,2-Dibromo-3-chloropropan	23.32	75	15013	3.81	ug/L		81
61)	1,2,4-Trichlorobenzene	24.89	180	141353	3.40	ug/L		93
62)	Hexachlorobutadiene	25.23	225	176270	4.13	ug/L		97
63)	Naphthalene	25.35	128	122077	3.12	ug/L		100
64)	1,2,3-Trichlorobenzene	25.82	180	101707	3.60	ug/L		99
65)	Methyl-tert butyl ether	8.01	73	160639	4.38	ug/L	#	100
66)	tert-Butyl Alcohol	7.72	59	2491	0.68	ug/L	m	100

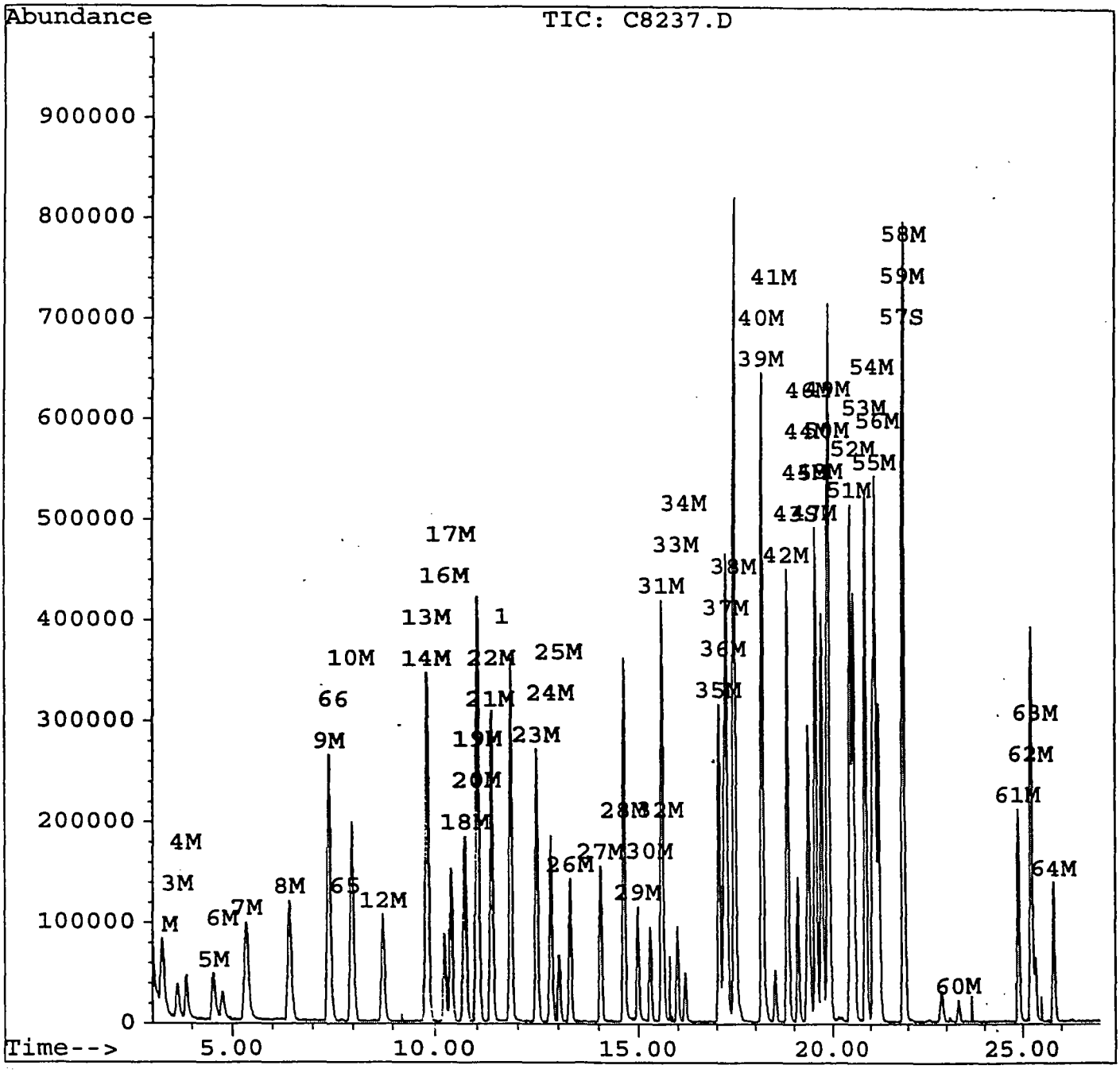
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c8237.d
Acq On : 26 May 95 10:35 am
Sample : 4 PPB STANDARD
Misc :
Quant Time: May 26 15:22 1995

Vial: 2
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Fri May 26 16:05:53 1995
Response via : Multiple Level Calibration



Quantitation Report

Data File : d:\hpchem\1\data\c8238.d
Acq On : 26 May 95 11:17 am
Sample : 10 PPB STANDARD
Misc :
Quant Time: May 26 15:59 1995

Vial: 3
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Fri May 26 16:05:53 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	11.84	96	770985	5.00	ug/L		-0.09
System Monitoring Compounds							%Recovery
43) 4-Bromofluorobenzene	19.09	95	370331	5.10	ug/L		102.07%
57) 1,2-Dichlorobenzene-d4	21.88	152	169129	4.23	ug/L		84.62%
Target Compounds							Qvalue
2) Dichlorodifluoromethane	3.28	85	650612	9.13	ug/L		100
3) Chloromethane	3.64	50	383966	9.18	ug/L		96
4) Vinyl chloride	3.87	62	423851	9.09	ug/L		98
5) Bromomethane	4.52	94	303978	9.57	ug/L		93
6) Chloroethane	4.76	64	264421	9.32	ug/L		94
7) Trichlorofluoromethane	5.34	101	924458	10.04	ug/L		100
8) 1,1-Dichloroethene	6.42	96	410654	9.60	ug/L		96
9) Methylene chloride	7.41	84	542259	14.55	ug/L	m	99
10) trans-1,2-Dichloroethene	7.97	96	429522	9.48	ug/L		100
12) 1,1-Dichloroethane	8.76	63	840489	9.32	ug/L		97
13) 2,2-Dichloropropane	9.83	77	841576	10.74	ug/L		96
14) cis-1,2-Dichloroethene	9.83	96	403406	9.42	ug/L		98
16) Bromochloromethane	10.24	128	135650	8.08	ug/L	#	88
17) Chloroform	10.40	83	785334	9.85	ug/L		99
18) 1,1,1-Trichloroethane	10.73	97	873470	10.39	ug/L		99
19) Carbon tetrachloride	11.03	117	801421	9.70	ug/L		100
20) 1,1-Dichloropropene	11.01	75	780145	9.93	ug/L		96
21) Benzene	11.35	78	1364187	9.64	ug/L		99
22) 1,2-Dichloroethane	11.36	62	323971	10.26	ug/L		99
23) Trichloroethene	12.48	95	597831	9.52	ug/L		92
24) 1,2-Dichloropropane	12.83	63	432807	8.91	ug/L		99
25) Dibromomethane	13.03	93	174304	8.95	ug/L		99
26) Bromodichloromethane	13.29	83	593524	9.55	ug/L		96
27) cis-1,3-Dichloropropene	14.06	75	516054	9.37	ug/L		96
28) Toluene	14.64	92	932739	9.81	ug/L		100
29) trans-1,3-Dichloropropene	14.98	75	353858	9.46	ug/L		95
30) 1,1,2-Trichloroethane	15.30	83	165554	9.05	ug/L		98
31) Tetrachloroethene	15.61	166	594723	8.81	ug/L		97
32) 1,3-Dichloropropane	15.58	76	328378	9.15	ug/L		99
33) Dibromochloromethane	15.99	129	315396	8.25	ug/L		98
34) 1,2-Dibromomethane	16.19	107	223316	8.62	ug/L		93
35) Chlorobenzene	17.07	112	983363	9.11	ug/L		94
36) 1,1,1,2-Tetrachloroethane	17.20	131	380569	8.45	ug/L	m	0
37) Ethylbenzene	17.26	91	1971808	9.86	ug/L		99
38) Xylene (para & meta)	17.47	106	1428718	19.21	ug/L		96
39) Xylene (Ortho)	18.17	106	630244	9.53	ug/L		96
40) Styrene	18.19	104	965656	9.34	ug/L		94

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c8238.d
Acq On : 26 May 95 11:17 am
Sample : 10 PPB STANDARD
Misc :
Quant Time: May 26 15:59 1995

Vial: 3
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Fri May 26 16:05:53 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
41)	Bromoform	18.51	173	153005	8.38	ug/L	m	0
42)	Isopropylbenzene	18.83	105	2008385	9.63	ug/L	m	45
44)	Bromobenzene	19.38	156	357587	8.46	ug/L		94
45)	1,1,2,2-Tetrachloroethane	19.32	83	171968	9.24	ug/L		97
46)	1,2,3-Trichloropropane	19.40	75	213285	9.05	ug/L		98
47)	n-Propylbenzene	19.57	91	2596029	9.72	ug/L		97
48)	2-Chlorotoluene	19.73	91	1422833	10.08	ug/L		95
49)	4-Chlorotoluene	19.91	91	1716410	10.14	ug/L	m	98
50)	1,3,5-Trimethylbenzene	19.89	105	1643038	9.71	ug/L		98
51)	tert-Butylbenzene	20.48	119	1713787	9.19	ug/L		90
52)	1,2,4-Trimethylbenzene	20.56	105	1530473	9.54	ug/L		94
53)	sec-Butylbenzene	20.88	105	2518935	9.48	ug/L		98
54)	1,3-Dichlorobenzene	21.08	146	722076	8.30	ug/L		96
55)	4-Isopropyltoluene	21.14	119	1893823	9.12	ug/L		95
56)	1,4-Dichlorobenzene	21.24	146	715067	8.22	ug/L	m	94
58)	1,2-Dichlorobenzene	21.91	146	541575	8.16	ug/L		95
59)	n-Butylbenzene	21.89	91	2000405	9.41	ug/L		96
60)	1,2-Dibromo-3-chloropropan	23.31	75	41781	9.56	ug/L		95
61)	1,2,4-Trichlorobenzene	24.89	180	394479	8.55	ug/L		99
62)	Hexachlorobutadiene	25.23	225	469504	9.93	ug/L		98
63)	Naphthalene	25.34	128	339645	7.82	ug/L		100
64)	1,2,3-Trichlorobenzene	25.81	180	269640	8.61	ug/L		95
65)	Methyl-tert butyl ether	7.99	73	440628	10.83	ug/L	#	100
66)	tert-Butyl Alcohol	7.72	59	12035	2.96	ug/L		100

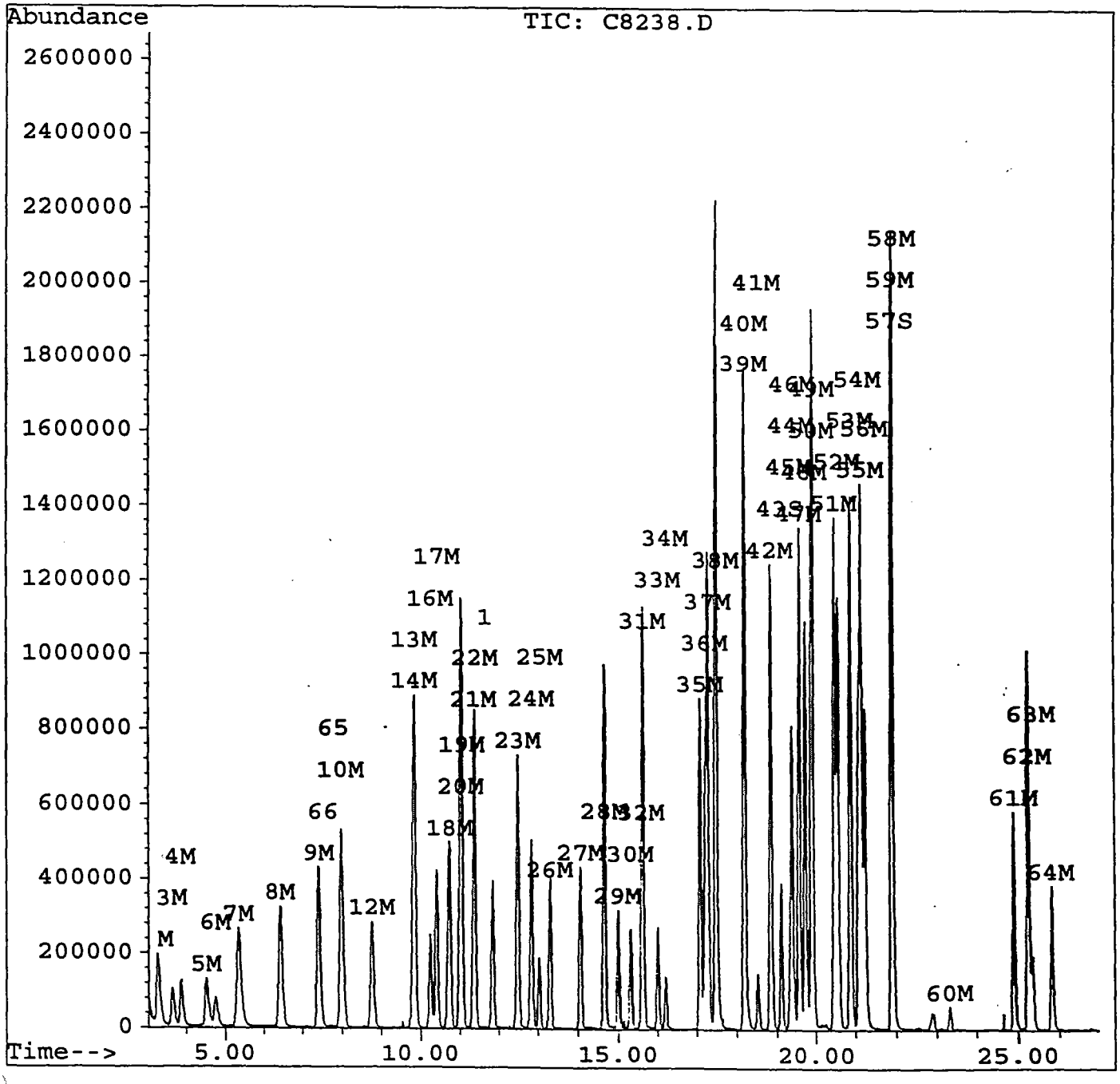
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c8238.d
Acq On : 26 May 95 11:17 am
Sample : 10 PPB STANDARD
Misc :
Quant Time: May 26 15:59 1995

Vial: 3
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Fri May 26 16:05:53 1995
Response via : Multiple Level Calibration



Quantitation Report

Data File : d:\hpchem\1\data\c8239.d
Acq On : 26 May 95 11:51 am
Sample : 20 PPB STANDARD
Misc :
Quant Time: May 26 15:53 1995

Vial: 4
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Fri May 26 16:05:53 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	11.84	96	715239	5.00	ug/L		-0.09
System Monitoring Compounds							%Recovery
43) 4-Bromofluorobenzene	19.10	95	705539	10.48	ug/L		209.62%
57) 1,2-Dichlorobenzene-d4	21.88	152	325789	8.79	ug/L		175.71%
Target Compounds							Qvalue
2) Dichlorodifluoromethane	3.29	85	1105977	16.74	ug/L		99
3) Chloromethane	3.66	50	650013	16.75	ug/L		99
4) Vinyl chloride	3.89	62	740002	17.11	ug/L		100
5) Bromomethane	4.52	94	485674	16.48	ug/L		93
6) Chloroethane	4.74	64	459311	17.45	ug/L		92
7) Trichlorofluoromethane	5.35	101	1674654	19.60	ug/L		95
8) 1,1-Dichloroethene	6.43	96	738739	18.61	ug/L		98
9) Methylene chloride	7.40	84	775969	22.45	ug/L		96
10) trans-1,2-Dichloroethene	7.98	96	771488	18.36	ug/L		100
12) 1,1-Dichloroethane	8.76	63	1541660	18.42	ug/L		99
13) 2,2-Dichloropropane	9.84	77	1507599	20.74	ug/L		95
14) cis-1,2-Dichloroethene	9.83	96	723609	18.22	ug/L		95
16) Bromochloromethane	10.24	128	255840	16.43	ug/L	#	87
17) Chloroform	10.40	83	1450799	19.62	ug/L	m	0
18) 1,1,1-Trichloroethane	10.72	97	1604334	20.57	ug/L	m	0
19) Carbon tetrachloride	11.03	117	1488607	19.42	ug/L		99
20) 1,1-Dichloropropene	11.01	75	1391827	19.09	ug/L		99
21) Benzene	11.36	78	2454890	18.69	ug/L		98
22) 1,2-Dichloroethane	11.36	62	611769	20.89	ug/L		98
23) Trichloroethene	12.48	95	1094910	18.80	ug/L		90
24) 1,2-Dichloropropane	12.84	63	809803	17.96	ug/L		99
25) Dibromomethane	13.03	93	321601	17.80	ug/L		98
26) Bromodichloromethane	13.30	83	1137821	19.73	ug/L		96
27) cis-1,3-Dichloropropene	14.05	75	981011	19.20	ug/L		95
28) Toluene	14.64	92	1745202	19.79	ug/L		98
29) trans-1,3-Dichloropropene	14.98	75	675693	19.48	ug/L	m	53
30) 1,1,2-Trichloroethane	15.30	83	312764	18.44	ug/L		95
31) Tetrachloroethene	15.61	166	1088014	17.38	ug/L		97
32) 1,3-Dichloropropane	15.59	76	630863	18.95	ug/L		96
33) Dibromochloromethane	16.00	129	614117	17.31	ug/L		97
34) 1,2-Dibromomethane	16.20	107	438464	18.25	ug/L		97
35) Chlorobenzene	17.06	112	1819994	18.18	ug/L		94
36) 1,1,1,2-Tetrachloroethane	17.20	131	725017	17.35	ug/L	m	0
37) Ethylbenzene	17.26	91	3685485	19.86	ug/L		98
38) Xylene (para & meta)	17.47	106	2660124	38.56	ug/L		90
39) Xylene (Ortho)	18.17	106	1177400	19.20	ug/L		88
40) Styrene	18.19	104	1828264	19.06	ug/L		91

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c8239.d
Acq On : 26 May 95 11:51 am
Sample : 20 PPB STANDARD
Misc :
Quant Time: May 26 15:53 1995

Vial: 4
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Fri May 26 16:05:53 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
41)	Bromoform	18.50	173	304765	18.00	ug/L	m	0
42)	Isopropylbenzene	18.83	105	3768696	19.48	ug/L	m	45
44)	Bromobenzene	19.37	156	682381	17.40	ug/L	#	89
45)	1,1,2,2-Tetrachloroethane	19.32	83	345604	20.02	ug/L		97
46)	1,2,3-Trichloropropane	19.39	75	411958	18.84	ug/L		97
47)	n-Propylbenzene	19.57	91	4919179	19.86	ug/L		98
48)	2-Chlorotoluene	19.72	91	2734593	20.88	ug/L		93
49)	4-Chlorotoluene	19.91	91	3170150	20.18	ug/L		92
50)	1,3,5-Trimethylbenzene	19.89	105	3133027	19.95	ug/L		97
51)	tert-Butylbenzene	20.48	119	3247650	18.76	ug/L		89
52)	1,2,4-Trimethylbenzene	20.56	105	2901790	19.49	ug/L		97
53)	sec-Butylbenzene	20.88	105	4827977	19.58	ug/L		99
54)	1,3-Dichlorobenzene	21.08	146	1403188	17.40	ug/L		97
55)	4-Isopropyltoluene	21.15	119	3624786	18.82	ug/L		95
56)	1,4-Dichlorobenzene	21.24	146	1378003	17.08	ug/L	m	96
58)	1,2-Dichlorobenzene	21.91	146	1028245	16.71	ug/L		97
59)	n-Butylbenzene	21.89	91	3870404	19.62	ug/L		97
60)	1,2-Dibromo-3-chloropropan	23.31	75	87006	21.47	ug/L		87
61)	1,2,4-Trichlorobenzene	24.89	180	759956	17.76	ug/L		99
62)	Hexachlorobutadiene	25.23	225	943039	21.49	ug/L		97
63)	Naphthalene	25.33	128	643210	15.97	ug/L		100
64)	1,2,3-Trichlorobenzene	25.81	180	527272	18.16	ug/L		99
65)	Methyl-tert butyl ether	8.01	73	836258	22.17	ug/L	#	100
66)	tert-Butyl Alcohol	7.73	59	26154	6.93	ug/L		100

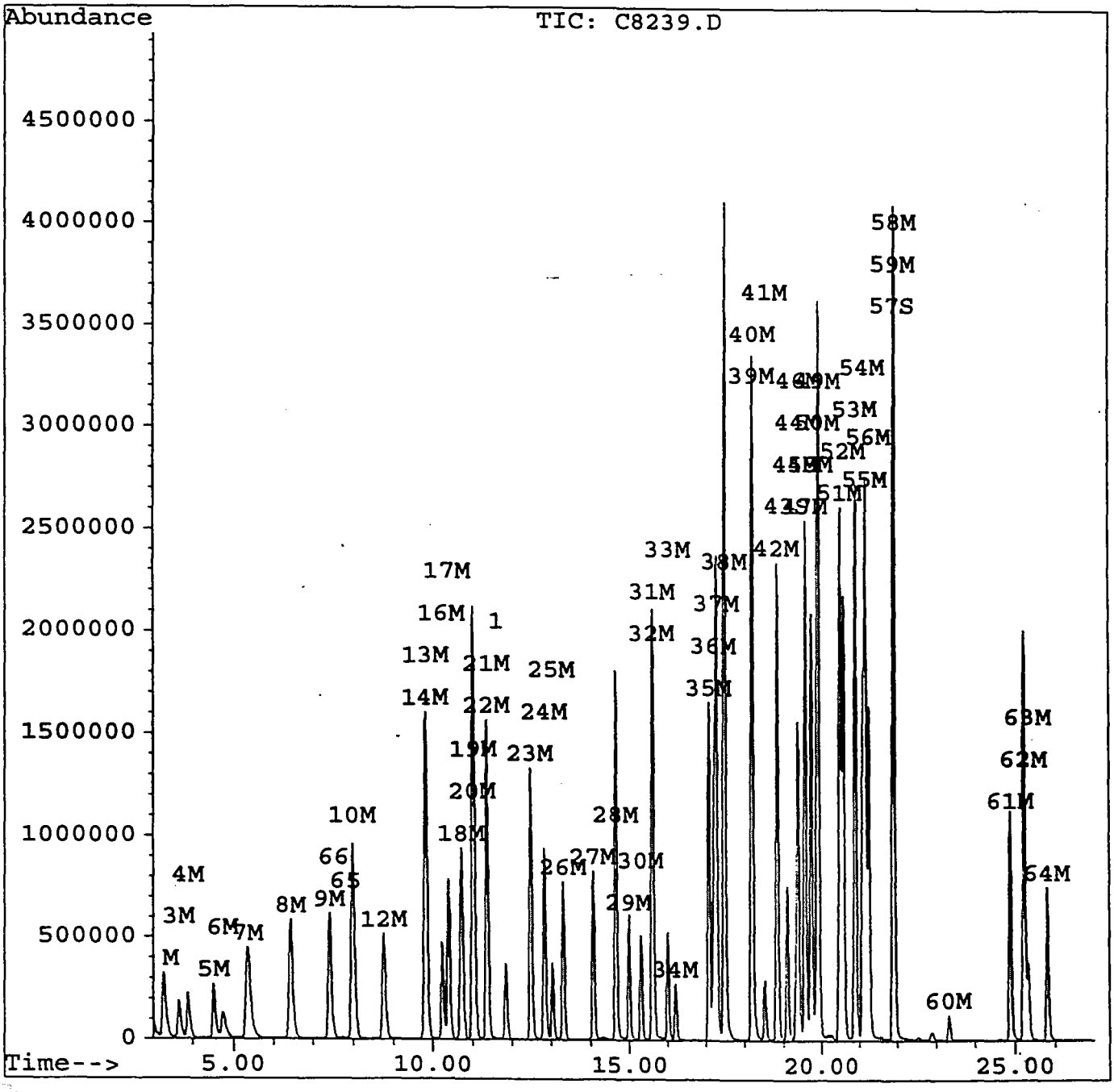
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c8239.d
Acq On : 26 May 95 11:51 am
Sample : 20 PPB STANDARD
Misc :
Quant Time: May 26 15:53 1995

Vial: 4 049
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Fri May 26 16:05:53 1995
Response via : Multiple Level Calibration



Quantitation Report

Data File : d:\hpchem\1\data\c8240.d
Acq On : 26 May 95 12:26 pm
Sample : 30 PPB STANDARD
Misc :
Quant Time: May 26 15:31 1995

Vial: 5 050
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Fri May 26 16:05:53 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	11.83	96	707858	5.00	ug/L		-0.10
System Monitoring Compounds							%Recovery
43) 4-Bromofluorobenzene	19.09	95	1062620	15.95	ug/L		319.00%
57) 1,2-Dichlorobenzene-d4	21.88	152	489408	13.34	ug/L		266.70%
Target Compounds							Qvalue
2) Dichlorodifluoromethane	3.29	85	1634270	24.99	ug/L		98
3) Chloromethane	3.66	50	984170	25.63	ug/L		100
4) Vinyl chloride	3.88	62	1106079	25.84	ug/L		100
5) Bromomethane	4.50	94	702972	24.10	ug/L		92
6) Chloroethane	4.72	64	647108	24.84	ug/L		99
7) Trichlorofluoromethane	5.32	101	2502534	29.59	ug/L		99
8) 1,1-Dichloroethene	6.42	96	1092314	27.81	ug/L		94
9) Methylene chloride	7.40	84	1020488	29.83	ug/L		97
10) trans-1,2-Dichloroethene	7.96	96	1150685	27.67	ug/L		95
12) 1,1-Dichloroethane	8.76	63	2307375	27.86	ug/L		98
13) 2,2-Dichloropropane	9.83	77	2228288	30.98	ug/L		97
14) cis-1,2-Dichloroethene	9.83	96	1065313	27.11	ug/L		93
16) Bromochloromethane	10.24	128	379255	24.61	ug/L	#	82
17) Chloroform	10.40	83	2154764	29.45	ug/L		99
18) 1,1,1-Trichloroethane	10.72	97	2396695	31.05	ug/L		99
19) Carbon tetrachloride	11.03	117	2233730	29.45	ug/L		100
20) 1,1-Dichloropropene	11.02	75	2098843	29.09	ug/L		98
21) Benzene	11.36	78	3677001	28.29	ug/L		99
22) 1,2-Dichloroethane	11.37	62	906868	31.29	ug/L		98
23) Trichloroethene	12.48	95	1640085	28.46	ug/L		91
24) 1,2-Dichloropropane	12.83	63	1214345	27.22	ug/L		100
25) Dibromomethane	13.03	93	494826	27.67	ug/L		97
26) Bromodichloromethane	13.30	83	1685621	29.53	ug/L	m	66
27) cis-1,3-Dichloropropene	14.06	75	1443936	28.55	ug/L	m	0
28) Toluene	14.64	92	2604382	29.84	ug/L		97
29) trans-1,3-Dichloropropene	14.98	75	1013926	29.53	ug/L		98
30) 1,1,2-Trichloroethane	15.30	83	468063	27.88	ug/L		99
31) Tetrachloroethene	15.60	166	1648174	26.60	ug/L		97
32) 1,3-Dichloropropane	15.58	76	925183	28.08	ug/L		100
33) Dibromochloromethane	16.00	129	918828	26.18	ug/L		99
34) 1,2-Dibromomethane	16.19	107	650390	27.36	ug/L		94
35) Chlorobenzene	17.07	112	2720037	27.45	ug/L	m	0
36) 1,1,1,2-Tetrachloroethane	17.20	131	1093624	26.44	ug/L	m	0
37) Ethylbenzene	17.26	91	5555166	30.24	ug/L		97
38) Xylene (para & meta)	17.47	106	3951154	57.87	ug/L		91
39) Xylene (Ortho)	18.17	106	1755270	28.92	ug/L		92
40) Styrene	18.18	104	2731131	28.76	ug/L		87

(#) = qualifier out of range (m) = manual integration

Data File : d:\hpchem\1\data\c8240.d
Acq On : 26 May 95 12:26 pm
Sample : 30 PPB STANDARD
Misc :
Quant Time: May 26 15:31 1995

Vial: 5
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Fri May 26 16:05:53 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
41)	Bromoform	18.50	173	450885	26.90	ug/L	m	0
42)	Isopropylbenzene	18.83	105	5734485	29.95	ug/L	m	45
44)	Bromobenzene	19.37	156	1026534	26.45	ug/L	#	88
45)	1,1,2,2-Tetrachloroethane	19.33	83	508409	29.75	ug/L	m	0
46)	1,2,3-Trichloropropane	19.39	75	599222	27.69	ug/L	#	57
47)	n-Propylbenzene	19.57	91	7449042	30.39	ug/L		99
48)	2-Chlorotoluene	19.73	91	4112354	31.73	ug/L		93
49)	4-Chlorotoluene	19.91	91	4889333	31.45	ug/L	m	98
50)	1,3,5-Trimethylbenzene	19.88	105	4744702	30.53	ug/L		95
51)	tert-Butylbenzene	20.48	119	4918253	28.71	ug/L		86
52)	1,2,4-Trimethylbenzene	20.56	105	4256753	28.89	ug/L		95
53)	sec-Butylbenzene	20.88	105	7312067	29.96	ug/L		99
54)	1,3-Dichlorobenzene	21.08	146	2102035	26.33	ug/L		97
55)	4-Isopropyltoluene	21.14	119	5435557	28.52	ug/L		94
56)	1,4-Dichlorobenzene	21.23	146	2067871	25.90	ug/L	m	96
58)	1,2-Dichlorobenzene	21.91	146	1555987	25.55	ug/L	m	44
59)	n-Butylbenzene	21.89	91	5865257	30.04	ug/L		97
60)	1,2-Dibromo-3-chloropropan	23.32	75	130755	32.60	ug/L		85
61)	1,2,4-Trichlorobenzene	24.89	180	1151444	27.19	ug/L		97
62)	Hexachlorobutadiene	25.22	225	1405948	32.37	ug/L		97
63)	Naphthalene	25.34	128	988735	24.80	ug/L		100
64)	1,2,3-Trichlorobenzene	25.81	180	788297	27.43	ug/L		97
65)	Methyl-tert butyl ether	8.01	73	1221403	32.71	ug/L	#	100
66)	tert-Butyl Alcohol	7.76	59	39667	10.62	ug/L		100

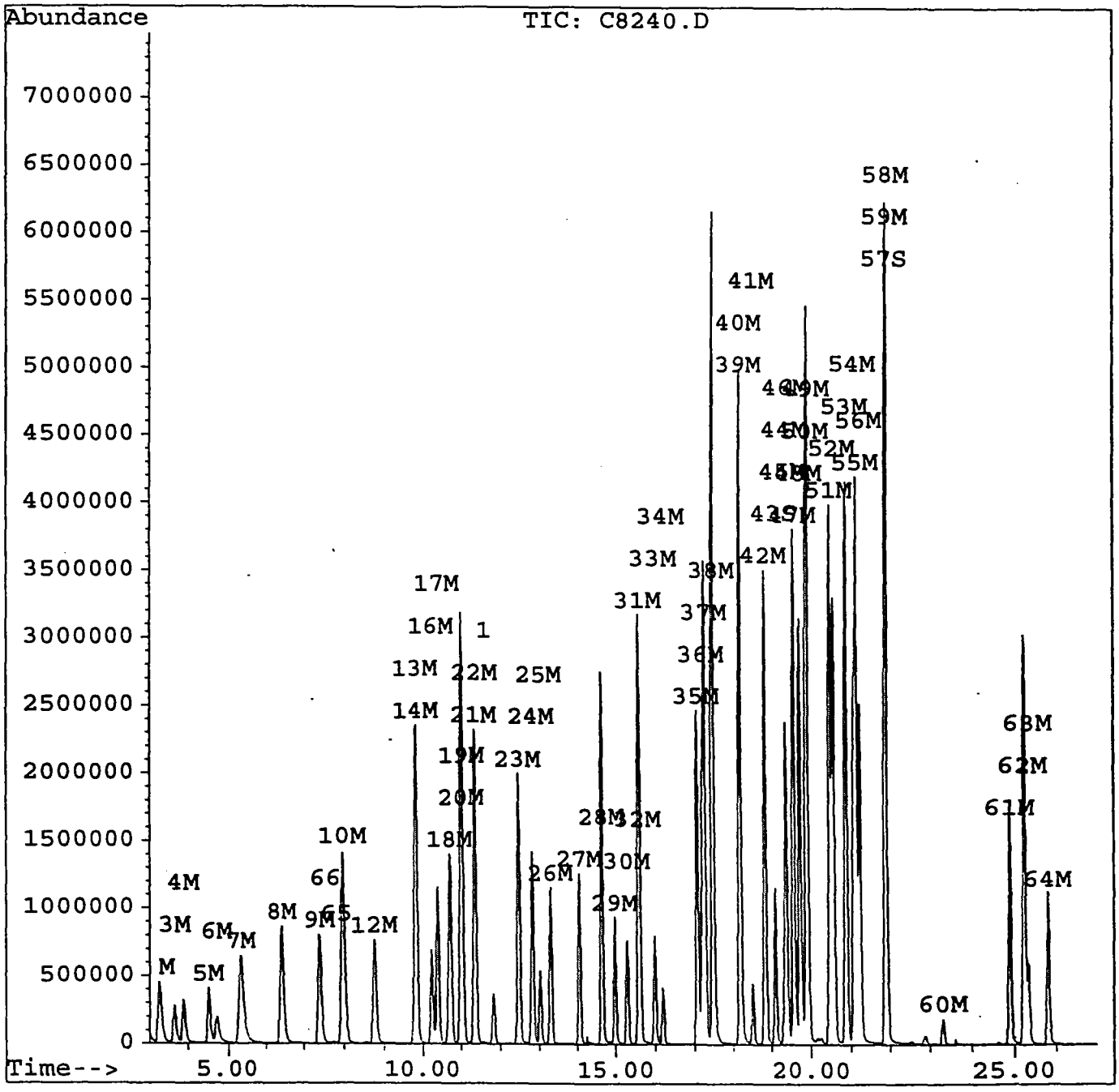
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c8240.d
Acq On : 26 May 95 12:26 pm
Sample : 30 PPB STANDARD
Misc :
Quant Time: May 26 15:31 1995

Vial: 5
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Fri May 26 16:05:53 1995
Response via : Multiple Level Calibration



Quantitation Report

Data File : d:\hpchem\1\data\c8241.d
Acq On : 26 May 95 1:00 pm
Sample : 40 PPB STANDARD
Misc :
Quant Time: May 26 15:35 1995

Vial: 6
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Fri May 26 16:05:53 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	11.83	96	677208	5.00	ug/L		-0.10
System Monitoring Compounds							%Recovery
43) 4-Bromofluorobenzene	19.10	95	1414597	22.19	ug/L		443.88%
57) 1,2-Dichlorobenzene-d4	21.88	152	645268	18.38	ug/L		367.55%
Target Compounds							Qvalue
2) Dichlorodifluoromethane	3.29	85	2050828	32.77	ug/L		99
3) Chloromethane	3.66	50	1255453	34.18	ug/L		98
4) Vinyl chloride	3.88	62	1403518	34.27	ug/L		99
5) Bromomethane	4.50	94	887089	31.79	ug/L		95
6) Chloroethane	4.68	64	660776	26.52	ug/L		99
7) Trichlorofluoromethane	5.29	101	3146458	38.89	ug/L		98
8) 1,1-Dichloroethene	6.40	96	1373656	36.56	ug/L		94
9) Methylene chloride	7.39	84	1256580	38.40	ug/L		93
10) trans-1,2-Dichloroethene	7.96	96	1461616	36.74	ug/L	m	0
12) 1,1-Dichloroethane	8.74	63	2990291	37.74	ug/L	m	0
13) 2,2-Dichloropropane	9.82	77	2784319	40.46	ug/L		96
14) cis-1,2-Dichloroethene	9.83	96	1387660	36.91	ug/L		95
16) Bromochloromethane	10.23	128	511825	34.71	ug/L	#	88
17) Chloroform	10.39	83	2839115	40.56	ug/L		100
18) 1,1,1-Trichloroethane	10.71	97	3074057	41.62	ug/L		100
19) Carbon tetrachloride	11.02	117	2848789	39.26	ug/L		100
20) 1,1-Dichloropropene	11.00	75	2646146	38.33	ug/L		97
21) Benzene	11.35	78	4715775	37.92	ug/L		98
22) 1,2-Dichloroethane	11.36	62	1219926	43.99	ug/L		100
23) Trichloroethene	12.48	95	2092020	37.94	ug/L		92
24) 1,2-Dichloropropane	12.83	63	1588792	37.22	ug/L		100
25) Dibromomethane	13.02	93	670030	39.16	ug/L		97
26) Bromodichloromethane	13.30	83	2234626	40.92	ug/L	m	85
27) cis-1,3-Dichloropropene	14.05	75	1927356	39.84	ug/L		97
28) Toluene	14.64	92	3353871	40.17	ug/L		99
29) trans-1,3-Dichloropropene	14.98	75	1365218	41.56	ug/L		97
30) 1,1,2-Trichloroethane	15.30	83	640167	39.86	ug/L		96
31) Tetrachloroethene	15.60	166	2106507	35.54	ug/L		98
32) 1,3-Dichloropropane	15.58	76	1225150	38.86	ug/L		98
33) Dibromochloromethane	15.99	129	1250833	37.25	ug/L		99
34) 1,2-Dibromomethane	16.19	107	896884	39.43	ug/L		97
35) Chlorobenzene	17.07	112	3558221	37.53	ug/L	m	0
36) 1,1,1,2-Tetrachloroethane	17.20	131	1437465	36.33	ug/L	m	0
37) Ethylbenzene	17.26	91	7148780	40.68	ug/L		98
38) Xylene (para & meta)	17.47	106	5046126	77.25	ug/L		90
39) Xylene (Ortho)	18.17	106	2266726	39.03	ug/L		90
40) Styrene	18.19	104	3590160	39.52	ug/L		90

(#) = qualifier out of range (m) = manual integration

Data File : d:\hpchem\1\data\c8241.d
Acq On : 26 May 95 1:00 pm
Sample : 40 PPB STANDARD
Misc :
Quant Time: May 26 15:35 1995

Vial: 6
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Fri May 26 16:05:53 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
41)	Bromoform	18.51	173	635283	39.62	ug/L	m	0
42)	Isopropylbenzene	18.83	105	7325849	39.99	ug/L	m	45
44)	Bromobenzene	19.37	156	1361555	36.68	ug/L	#	90
45)	1,1,2,2-Tetrachloroethane	19.32	83	689989	42.21	ug/L	m	0
46)	1,2,3-Trichloropropane	19.40	75	810580	39.16	ug/L		97
47)	n-Propylbenzene	19.57	91	9540387	40.68	ug/L		98
48)	2-Chlorotoluene	19.73	91	5352127	43.16	ug/L		92
49)	4-Chlorotoluene	19.92	91	6372870	42.85	ug/L	m	98
50)	1,3,5-Trimethylbenzene	19.89	105	6077505	40.88	ug/L		95
51)	tert-Butylbenzene	20.48	119	6270177	38.26	ug/L		87
52)	1,2,4-Trimethylbenzene	20.56	105	5551247	39.38	ug/L		93
53)	sec-Butylbenzene	20.88	105	9291157	39.79	ug/L		97
54)	1,3-Dichlorobenzene	21.08	146	2769985	36.27	ug/L		96
55)	4-Isopropyltoluene	21.15	119	6986951	38.31	ug/L		95
56)	1,4-Dichlorobenzene	21.08	146	2761726	36.15	ug/L		96
58)	1,2-Dichlorobenzene	21.91	146	2026169	34.77	ug/L		97
59)	n-Butylbenzene	21.89	91	7484823	40.07	ug/L		96
60)	1,2-Dibromo-3-chloropropan	23.31	75	186592	48.63	ug/L		86
61)	1,2,4-Trichlorobenzene	24.88	180	1588732	39.22	ug/L		98
62)	Hexachlorobutadiene	25.23	225	1808777	43.53	ug/L		98
63)	Naphthalene	25.32	128	1420685	37.25	ug/L		100
64)	1,2,3-Trichlorobenzene	25.81	180	1119071	40.70	ug/L		100
65)	Methyl-tert butyl ether	8.00	73	1658962	46.44	ug/L	#	100
66)	tert-Butyl Alcohol	7.77	59	51615	14.45	ug/L		100

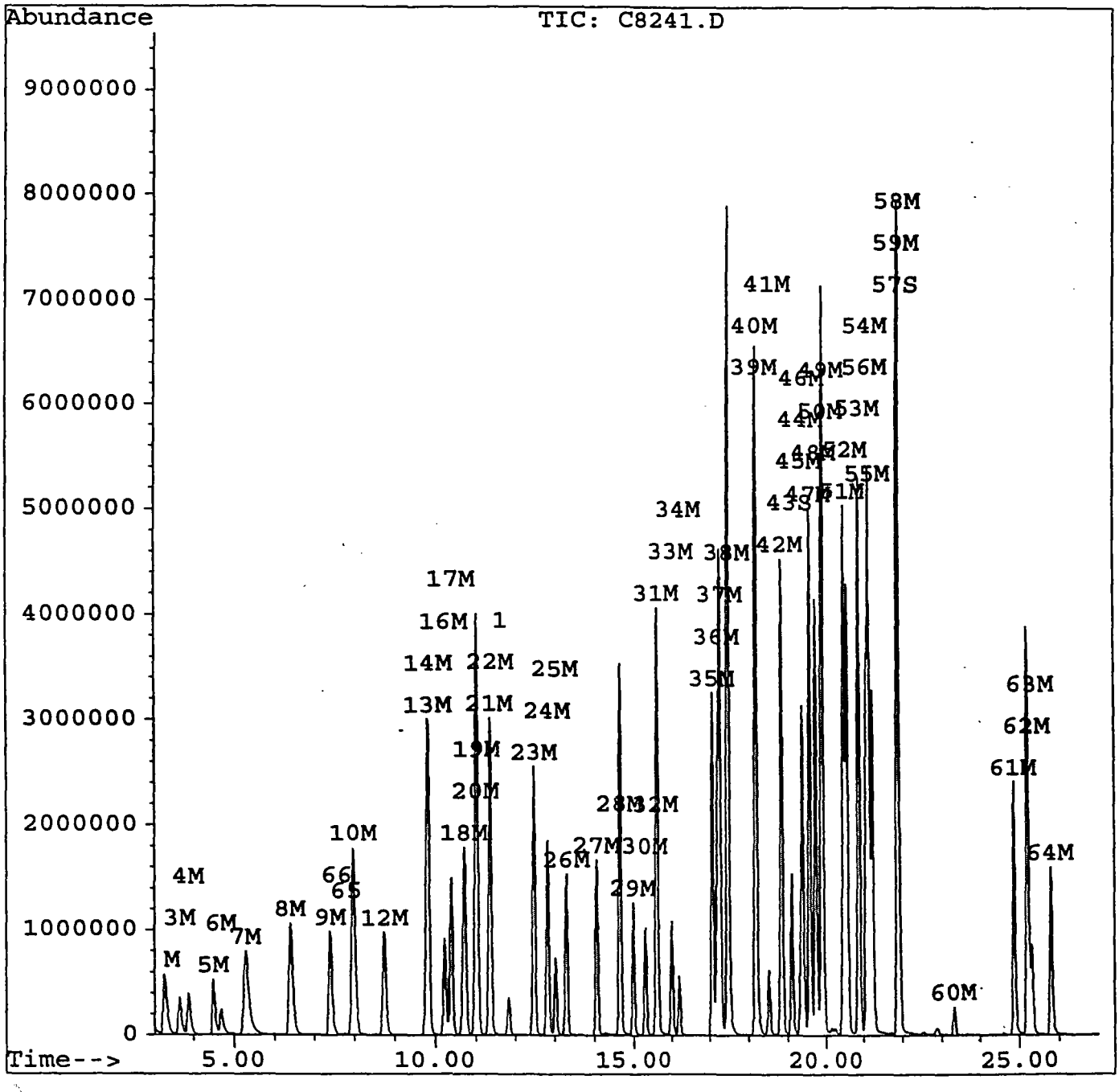
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c8241.d
Acq On : 26 May 95 1:00 pm
Sample : 40 PPB STANDARD
Misc :
Quant Time: May 26 15:35 1995

Vial: 6
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Fri May 26 16:05:53 1995
Response via : Multiple Level Calibration



VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name : EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Lab File ID: C8617.D BFB Injection Date: 6/21/95

Instrument ID: 5972-INSTRUMENT 1 BFB Injection Time: 1548

GC Column: DB-624 X 75M ID: 0.53 (mm) Heated Purge: (Y/N) _____

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	22.7
75	30.0 - 66.0% of mass 95	52.5
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.6
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 120.0% of mass 95	52.8
175	4.0 - 9.0% of mass 174	3.1 (6.0)1
176	93.0 - 101.0% of mass 174	52.3 (99.1)1
177	5.0 - 9.0% of mass 176	3.7 (7.1)2

1-Value is % mass 174 2-Value is % mass 176

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

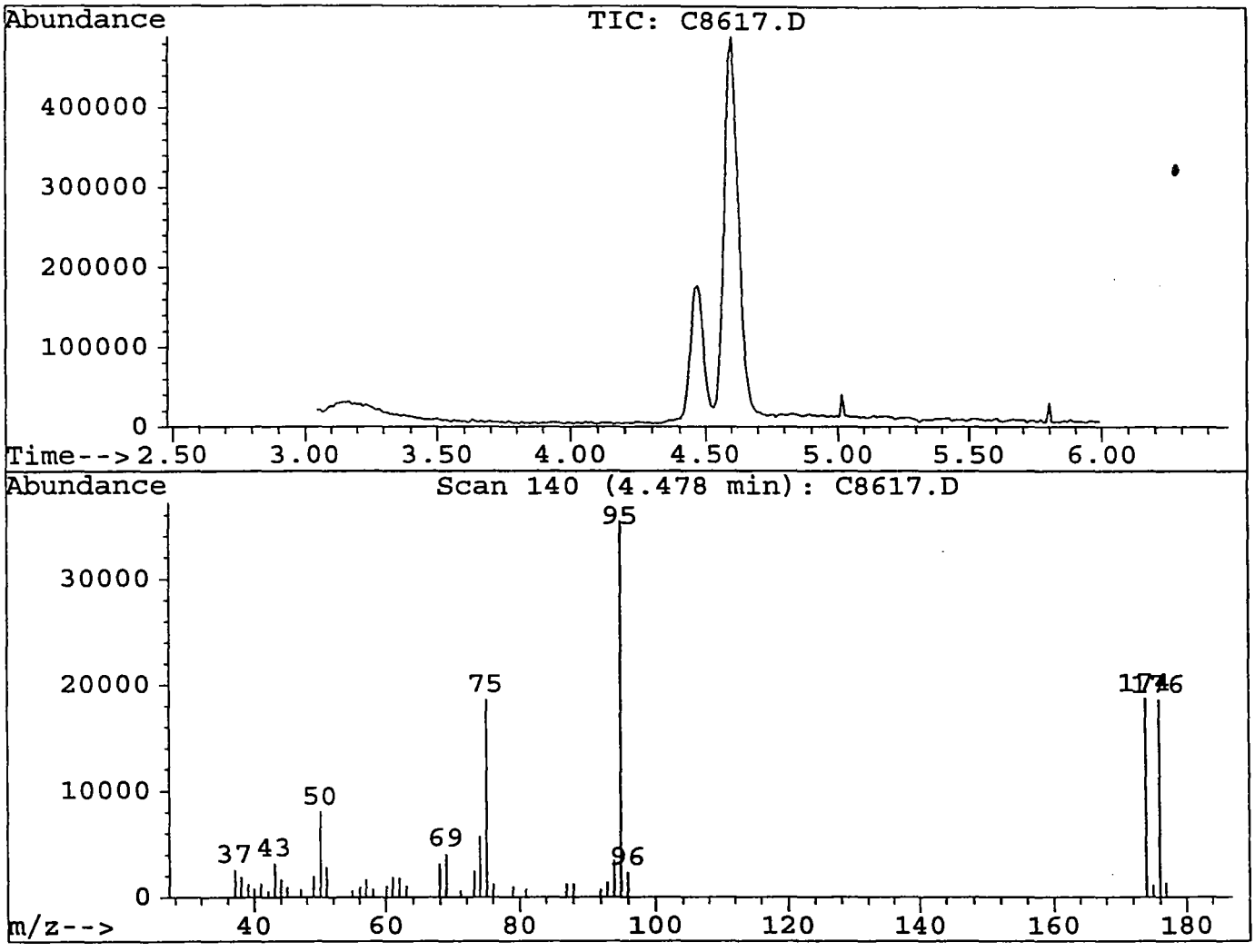
	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD010	10 STND	C8618.D	6/21/95	1601
02	1PPB STD	1PPB STD	C8619.D	6/21/95	1637
03	VBLK01	M. BLANK	C8620.D	6/21/95	1712
04	9525784V	9525784V	C8621.D	6/21/95	1748
05	9527186V	9527186V	C8622.D	6/21/95	1823
06	9526426V	9526426V	C8623.D	6/21/95	1857
07	9526427V	9526427V	C8624.D	6/21/95	1932
08	9526428V	9526428V	C8625.D	6/21/95	2006
09	9526429V	9526429V	C8626.D	6/21/95	2040
10	9526430V	9526430V	C8627.D	6/21/95	2114
11	9526431V	9526431V	C8628.D	6/21/95	2148
12	9526431MS	26431MS	C8629.D	6/21/95	2223
13	9526431MSD	26431MSD	C8630.D	6/21/95	2257
14	10PPBQCS	10PPBQCS	C8631.D	6/21/95	2331
15					
16					
17					
18					
19					
20					
21					
22					

CLPBFB

Data File : D:\HPCHEM\1\DATA\C8617.D
Acq On : 21 Jun 95 3:48 pm
Sample : BFB TUNE
Misc : 25 NG INJECTION

Vial: 1
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics



Peak Apex is scan: 140

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	22.7	8038	PASS
75	95	30	60	52.5	18608	PASS
95	95	100	100	100.0	35472	PASS
96	95	5	9	6.6	2335	PASS
173	174	0	2	0.0	0	PASS
174	95	50	100	52.8	18728	PASS
175	174	5	9	6.0	1115	PASS
176	174	95	101	99.1	18568	PASS
177	176	5	9	7.1	1317	PASS

C8617.D VOA524.M Thu Jun 22 15:04:30 1995 VOA

an 140 (4.478 min): C8617.D
BFB TUNE

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
37.10	2582	50.05	8038	68.95	4073	92.95	1384
38.00	1896	50.95	2821	71.05	628	93.95	3516
39.10	1222	54.95	608	73.05	2451	94.95	35472
0.00	774	56.10	965	73.95	5684	95.95	2335
41.00	1262	57.00	1666	74.95	18608	173.95	18728
42.10	564	58.10	792	75.95	1241	174.95	1115
43.10	3189	60.10	1073	78.90	994	175.95	18568
44.00	1668	61.00	1890	80.90	802	176.85	1317
45.00	963	62.00	1866	87.00	1251		
47.05	720	63.00	1078	87.95	1250		
48.95	1948	67.95	3154	91.95	733		

VOLATILE CONTINUING CALIBRATION CHECK

059

Lab Name: EMSL ANALYTICAL Contract: _____

Project No. _____ Site: _____ Location: _____ Group: _____

Instrument ID: 5972-INSTRUMENT 1 Calibration Date: 6/21/95 Time: 1601

Lab File ID: C8618.D Init. Calib. Date(s): 5/26/95 _____

Heated Purge: (Y/N) N Init. Calib. Times: _____ _____

GC Column: DB-624 X 7 ID: 0.53 (mm)

COMPOUND	$\overline{RRF}$	RRF10	MIN RRF	%D	MAX %D
Dichlorodifluoromethane	0.396	0.347		12.4	30.0
Chloromethane	0.233	0.227		2.6	30.0
Vinyl chloride	0.263	0.264		-0.4	30.0
Bromomethane	0.178	0.181		-1.7	30.0
Chloroethane	0.154	0.172		-11.7	30.0
Trichlorofluoromethane	0.588	0.604		-2.7	30.0
1,1-Dichloroethene	0.258	0.262		-1.6	30.0
Methylene chloride	0.274	0.340		-24.1	30.0
trans-1,2-Dichloroethene	0.273	0.280		-2.6	30.0
1,1-Dichloroethane	0.545	0.596		-9.4	30.0
2,2-Dichloropropane	0.534	0.564		-5.6	30.0
cis-1,2-Dichloroethene	0.257	0.268		-4.3	30.0
Bromochloromethane	0.090	0.091		-1.1	30.0
Chloroform	0.512	0.547		-6.8	30.0
1,1,1-Trichloroethane	0.566	0.590		-4.2	30.0
Carbon tetrachloride	0.526	0.530		-0.8	30.0
1,1-Dichloropropene	0.495	0.528		-6.7	30.0
Benzene	0.871	0.902		-3.6	30.0
1,2-Dichloroethane	0.214	0.244		-14.0	30.0
Trichloroethene	0.386	0.391		-1.3	30.0
1,2-Dichloropropane	0.285	0.315		-10.5	30.0
Dibromomethane	0.115	0.127		-10.4	30.0
Bromodichloromethane	0.396	0.442		-11.6	30.0
cis-1,3-Dichloropropene	0.342	0.379		-10.8	30.0
Toluene	0.619	0.636		-2.7	30.0
trans-1,3-Dichloropropene	0.236	0.268		-13.6	30.0
1,1,2-Trichloroethane	0.110	0.126		-14.5	30.0
Tetrachloroethene	0.388	0.362		6.7	30.0
1,3-Dichloropropane	0.219	0.244		-11.4	30.0
Dibromochloromethane	0.215	0.227		-5.6	30.0
1,2-Dibromomethane	0.152	0.169		-11.2	30.0
Chlorobenzene	0.644	0.644		0.0	30.0
1,1,1,2-Tetrachloroethane	0.256	0.260		-1.6	30.0
Ethylbenzene	1.302	1.343		-3.1	30.0
Xylene (para & meta)	0.468	0.468		0.0	30.0
Xylene (Ortho)	0.414	0.415		-0.2	30.0

VOLATILE CONTINUING CALIBRATION CHECK

060

Lab Name: EMSL ANALYTICAL Contract: _____

Project No. _____ Site: _____ Location: _____ Group: _____

Instrument ID: 5972-INSTRUMENT 1 Calibration Date: 6/21/95 Time: 1601

Lab File ID: C8618.D Init. Calib. Date(s): 5/26/95 _____

Heated Purge: (Y/N) N Init. Calib. Times: _____ _____

GC Column: DB-624 X 7 ID: 0.53 (mm)

COMPOUND	$\overline{RRF}$	RRF10	MIN RRF	%D	MAX %D
Styrene	0.641	0.655		-2.2	30.0
Bromoform	0.105	0.112		-6.7	30.0
Isopropylbenzene	1.330	1.308		1.7	30.0
Bromobenzene	0.240	0.241		-0.4	30.0
1,1,2,2-Tetrachloroethane	0.118	0.147		-24.6	30.0
1,2,3-Trichloropropane	0.143	0.162		-13.3	30.0
n-Propylbenzene	1.731	1.760		-1.7	30.0
2-Chlorotoluene	0.960	1.058		-10.2	30.0
4-Chlorotoluene	1.140	1.143		-0.3	30.0
1,3,5-Trimethylbenzene	1.101	1.060		3.7	30.0
tert-Butylbenzene	1.142	1.116		2.3	30.0
1,2,4-Trimethylbenzene	1.009	1.011		-0.2	30.0
sec-Butylbenzene	1.693	1.623		4.1	30.0
1,3-Dichlorobenzene	0.489	0.472		3.5	30.0
4-Isopropyltoluene	1.264	1.224		3.2	30.0
1,4-Dichlorobenzene	0.485	0.474		2.3	30.0
1,2-Dichlorobenzene	0.364	0.363		0.3	30.0
n-Butylbenzene	1.355	1.345		0.7	30.0
1,2-Dibromo-3-chloropropane	0.030	0.037		-23.3	30.0
1,2,4-Trichlorobenzene	0.268	0.236		11.9	30.0
Hexachlorobutadiene	0.323	0.275		14.9	30.0
Naphthalene	0.232	0.223		3.9	30.0
1,2,3-Trichlorobenzene	0.187	0.175		6.4	30.0
4-Bromofluorobenzene	0.499	0.515		-3.2	30.0
1,2-Dichlorobenzene-d4	0.228	0.227		0.4	30.0

Evaluate Continuing Calibration Report

061

Data File : D:\HPCHEM\1\DATA\C8618.D
Acq On : 21 Jun 95 4:01 pm
Sample : 10 PPB CHK STANDARD
Misc :

Vial: 2
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue May 30 13:15:19 1995
Response via : Multiple Level Calibration

Min. RRF : 0.001 Min. Rel. Area : 50% Max. R.T. Dev 0.30min
Max. RRF Dev : 30% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
1		Fluorobenzene	1.000	1.000	0.0	94	0.05
2	M	Dichlorodifluoromethane	0.396	0.347	12.3	78	0.05
3	M	Chloromethane	0.233	0.227	2.9	86	0.06
4	M	Vinyl chloride	0.263	0.264	-0.5	91	0.06
5	M	Bromomethane	0.178	0.181	-2.0	87	0.06
6	M	Chloroethane	0.154	0.172	-11.8	95	0.06
7	M	Trichlorofluoromethane	0.588	0.604	-2.9	95	0.08
8	M	1,1-Dichloroethene	0.258	0.262	-1.5	93	0.09
9	M	Methylene chloride	0.274	0.340	-24.1	91	0.07
10	M	trans-1,2-Dichloroethene	0.273	0.280	-2.6	95	0.06
11		Hexane	0.000	0.000#	0.0	0#	0.47#
12	M	1,1-Dichloroethane	0.545	0.596	-9.3	103	0.07
13	M	2,2-Dichloropropane	0.534	0.564	-5.6	98	0.06
14	M	cis-1,2-Dichloroethene	0.257	0.268	-4.4	97	0.06
15		2-Butanone	0.000	0.000#	0.0	0#	-0.05
16	M	Bromochloromethane	0.090	0.091	-0.9	97	0.07
17	M	Chloroform	0.512	0.547	-6.8	101	0.07
18	M	1,1,1-Trichloroethane	0.566	0.590	-4.2	98	0.05
19	M	Carbon tetrachloride	0.526	0.530	-0.8	96	0.05
20	M	1,1-Dichloropropene	0.495	0.528	-6.7	98	0.06
21	M	Benzene	0.871	0.902	-3.6	96	0.06
22	M	1,2-Dichloroethane	0.214	0.244	-14.3	110	0.06
23	M	Trichloroethene	0.386	0.391	-1.4	95	0.05
24	M	1,2-Dichloropropane	0.285	0.315	-10.7	106	0.05
25	M	Dibromomethane	0.115	0.127	-10.4	106	0.04
26	M	Bromodichloromethane	0.396	0.442	-11.7	108	0.06
27	M	cis-1,3-Dichloropropene	0.342	0.379	-10.8	107	0.05
28	M	Toluene	0.619	0.636	-2.8	99	0.05
29	M	trans-1,3-Dichloropropene	0.236	0.268	-13.4	110	0.05
30	M	1,1,2-Trichloroethane	0.110	0.126	-13.8	110	0.05
31	M	Tetrachloroethene	0.388	0.362	6.7	88	0.04
32	M	1,3-Dichloropropane	0.219	0.244	-11.3	108	0.05
33	M	Dibromochloromethane	0.215	0.227	-5.7	105	0.05
34	M	1,2-Dibromomethane	0.152	0.169	-11.1	110	0.05
35	M	Chlorobenzene	0.644	0.644	0.1	95	0.05
36	M	1,1,1,2-Tetrachloroethane	0.256	0.260	-1.8	100	0.04
37	M	Ethylbenzene	1.302	1.343	-3.1	99	0.04
38	M	Xylene (para & meta)	0.468	0.468	-0.1	95	0.04
39	M	Xylene (Ortho)	0.414	0.415	-0.4	96	0.04
40	M	Styrene	0.641	0.655	-2.2	99	0.04
41	M	Bromoform	0.105	0.112	-6.1	106	0.04
42	M	Isopropylbenzene	1.330	1.308	1.7	95	0.04

(#) = Out of Range

Evaluate Continuing Calibration Report

062

Data File : D:\HPCHEM\1\DATA\C8618.D Vial: 2
Acq On : 21 Jun 95 4:01 pm Operator: SRK
Sample : 10 PPB CHK STANDARD Inst : 5972 - In
Misc : Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue May 30 13:15:19 1995
Response via : Multiple Level Calibration

Min. RRF : 0.001 Min. Rel. Area : 50% Max. R.T. Dev 0.30min
Max. RRF Dev : 30% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
1	S	4-Bromofluorobenzene	0.499	0.515	-3.3	101	0.05
4	M	Bromobenzene	0.240	0.241	-0.4	98	0.04
45	M	1,1,2,2-Tetrachloroethane	0.118	0.147	-24.4	124	0.03
46	M	1,2,3-Trichloropropane	0.143	0.162	-13.2	111	0.04
4	M	n-Propylbenzene	1.731	1.760	-1.7	99	0.04
48	M	2-Chlorotoluene	0.960	1.058	-10.2	108	0.04
49	M	4-Chlorotoluene	1.140	1.143	-0.3	97	0.05
5	M	1,3,5-Trimethylbenzene	1.101	1.060	3.7	94	0.04
5	M	tert-Butylbenzene	1.142	1.116	2.3	95	0.04
52	M	1,2,4-Trimethylbenzene	1.009	1.011	-0.2	96	0.04
5	M	sec-Butylbenzene	1.693	1.623	4.1	94	0.04
5	M	1,3-Dichlorobenzene	0.489	0.472	3.4	95	0.04
55	M	4-Isopropyltoluene	1.264	1.224	3.2	94	0.04
56	M	1,4-Dichlorobenzene	0.485	0.474	2.2	97	0.04
5	S	1,2-Dichlorobenzene-d4	0.228	0.227	0.4	98	0.03
58	M	1,2-Dichlorobenzene	0.364	0.363	0.3	98	0.04
59	M	n-Butylbenzene	1.355	1.345	0.7	98	0.04
6	M	1,2-Dibromo-3-chloropropane	0.030	0.037	-22.8	128	0.03
6	M	1,2,4-Trichlorobenzene	0.268	0.236	12.1	87	0.04
62	M	Hexachlorobutadiene	0.323	0.275	14.9	85	0.03
6	M	Naphthalene	0.232	0.223	4.0	95	0.03
6	M	1,2,3-Trichlorobenzene	0.187	0.175	6.5	94	0.04
65		Methyl-tert butyl ether	0.292	0.338	-15.8	112	0.06
66		tert-Butyl Alcohol	0.004	0.006	-23.2	133	0.06

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report

063

Data File : d:\hpchem\1\data\c8618.d
Acq On : 21 Jun 95 4:01 pm
Sample : 10 PPB CHK STANDARD
Misc :
Quant Time: Jun 22 15:05 1995

Vial: 2
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue May 30 13:15:19 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	11.89	96	727435	5.00	ug/L		0.05
System Monitoring Compounds							%Recovery
43) 4-Bromofluorobenzene	19.14	95	374679	5.16	ug/L		103.27%
57) 1,2-Dichlorobenzene-d4	21.91	152	165031	4.98	ug/L		99.58%
Target Compounds							Qvalue
2) Dichlorodifluoromethane	3.33	85	505478	8.77	ug/L		96
3) Chloromethane	3.70	50	329716	9.71	ug/L		98
4) Vinyl chloride	3.93	62	384395	10.05	ug/L		98
5) Bromomethane	4.58	94	263783	10.20	ug/L		96
6) Chloroethane	4.82	64	250557	11.18	ug/L		94
7) Trichlorofluoromethane	5.42	101	879391	10.29	ug/L		97
8) 1,1-Dichloroethene	6.51	96	380949	10.15	ug/L	#	84
9) Methylene chloride	7.48	84	494356	12.41	ug/L		93
10) trans-1,2-Dichloroethene	8.03	96	407093	10.26	ug/L		91
12) 1,1-Dichloroethane	8.83	63	867301	10.93	ug/L		98
13) 2,2-Dichloropropane	9.89	77	821160	10.56	ug/L		100
14) cis-1,2-Dichloroethene	9.89	96	390466	10.44	ug/L		92
16) Bromochloromethane	10.31	128	132118	10.09	ug/L		93
17) Chloroform	10.46	83	795103	10.68	ug/L		98
18) 1,1,1-Trichloroethane	10.78	97	858453	10.42	ug/L		96
19) Carbon tetrachloride	11.09	117	771119	10.08	ug/L		99
20) 1,1-Dichloropropene	11.08	75	767707	10.67	ug/L		98
21) Benzene	11.42	78	1311720	10.36	ug/L		96
22) 1,2-Dichloroethane	11.43	62	355255	11.43	ug/L		99
23) Trichloroethene	12.53	95	569557	10.14	ug/L		93
24) 1,2-Dichloropropane	12.88	63	458759	11.07	ug/L		98
25) Dibromomethane	13.08	93	185487	11.04	ug/L		89
26) Bromodichloromethane	13.35	83	643204	11.17	ug/L		100
27) cis-1,3-Dichloropropene	14.11	75	551896	11.08	ug/L		98
28) Toluene	14.69	92	925447	10.28	ug/L		99
29) trans-1,3-Dichloropropene	15.03	75	390135	11.34	ug/L		98
30) 1,1,2-Trichloroethane	15.35	83	182729	11.38	ug/L		98
31) Tetrachloroethene	15.65	166	526003	9.33	ug/L		95
32) 1,3-Dichloropropane	15.63	76	354394	11.13	ug/L		96
33) Dibromochloromethane	16.04	129	330529	10.57	ug/L		97
34) 1,2-Dibromomethane	16.24	107	246309	11.11	ug/L		97
35) Chlorobenzene	17.12	112	936565	9.99	ug/L		93
36) 1,1,1,2-Tetrachloroethane	17.24	131	378896	10.18	ug/L		97
37) Ethylbenzene	17.30	91	1953647	10.31	ug/L		98
38) Xylene (para & meta)	17.51	106	1362492	20.03	ug/L		94
39) Xylene (Ortho)	18.21	106	604490	10.04	ug/L	#	87
40) Styrene	18.23	104	952735	10.22	ug/L		94

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c8618.d
Acq On : 21 Jun 95 4:01 pm
Sample : 10 PPB CHK STANDARD
Misc :
Quant Time: Jun 22 15:05 1995

Vial: 2
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue May 30 13:15:19 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
41)	Bromoform	18.55	173	162779	10.61	ug/L		87
42)	Isopropylbenzene	18.87	105	1902422	9.83	ug/L		91
44)	Bromobenzene	19.42	156	350317	10.04	ug/L	#	87
45)	1,1,2,2-Tetrachloroethane	19.35	83	213325	12.44	ug/L		99
46)	1,2,3-Trichloropropane	19.44	75	235860	11.32	ug/L		94
47)	n-Propylbenzene	19.61	91	2561118	10.17	ug/L		100
48)	2-Chlorotoluene	19.77	91	1539557	11.02	ug/L		98
49)	4-Chlorotoluene	19.96	91	1663477	10.03	ug/L		81
50)	1,3,5-Trimethylbenzene	19.93	105	1542800	9.63	ug/L		95
51)	tert-Butylbenzene	20.52	119	1624320	9.77	ug/L		97
52)	1,2,4-Trimethylbenzene	20.60	105	1470730	10.02	ug/L		97
53)	sec-Butylbenzene	20.92	105	2361702	9.59	ug/L		98
54)	1,3-Dichlorobenzene	21.12	146	687196	9.66	ug/L		95
55)	4-Isopropyltoluene	21.18	119	1780582	9.68	ug/L		98
56)	1,4-Dichlorobenzene	21.28	146	690249	9.78	ug/L		90
58)	1,2-Dichlorobenzene	21.95	146	528489	9.97	ug/L	m	0
59)	n-Butylbenzene	21.93	91	1956991	9.93	ug/L		98
60)	1,2-Dibromo-3-chloropropan	23.34	75	53519	12.28	ug/L	#	69
61)	1,2,4-Trichlorobenzene	24.93	180	342709	8.79	ug/L		96
62)	Hexachlorobutadiene	25.26	225	400127	8.51	ug/L		100
63)	Naphthalene	25.37	128	323794	9.60	ug/L		100
64)	1,2,3-Trichlorobenzene	25.85	180	254279	9.35	ug/L		96
65)	Methyl-tert butyl ether	8.05	73	491969	11.58	ug/L		100
66)	tert-Butyl Alcohol	7.79	59	16053	24.65	ug/L		100

(#) = qualifier out of range (m) = manual integration

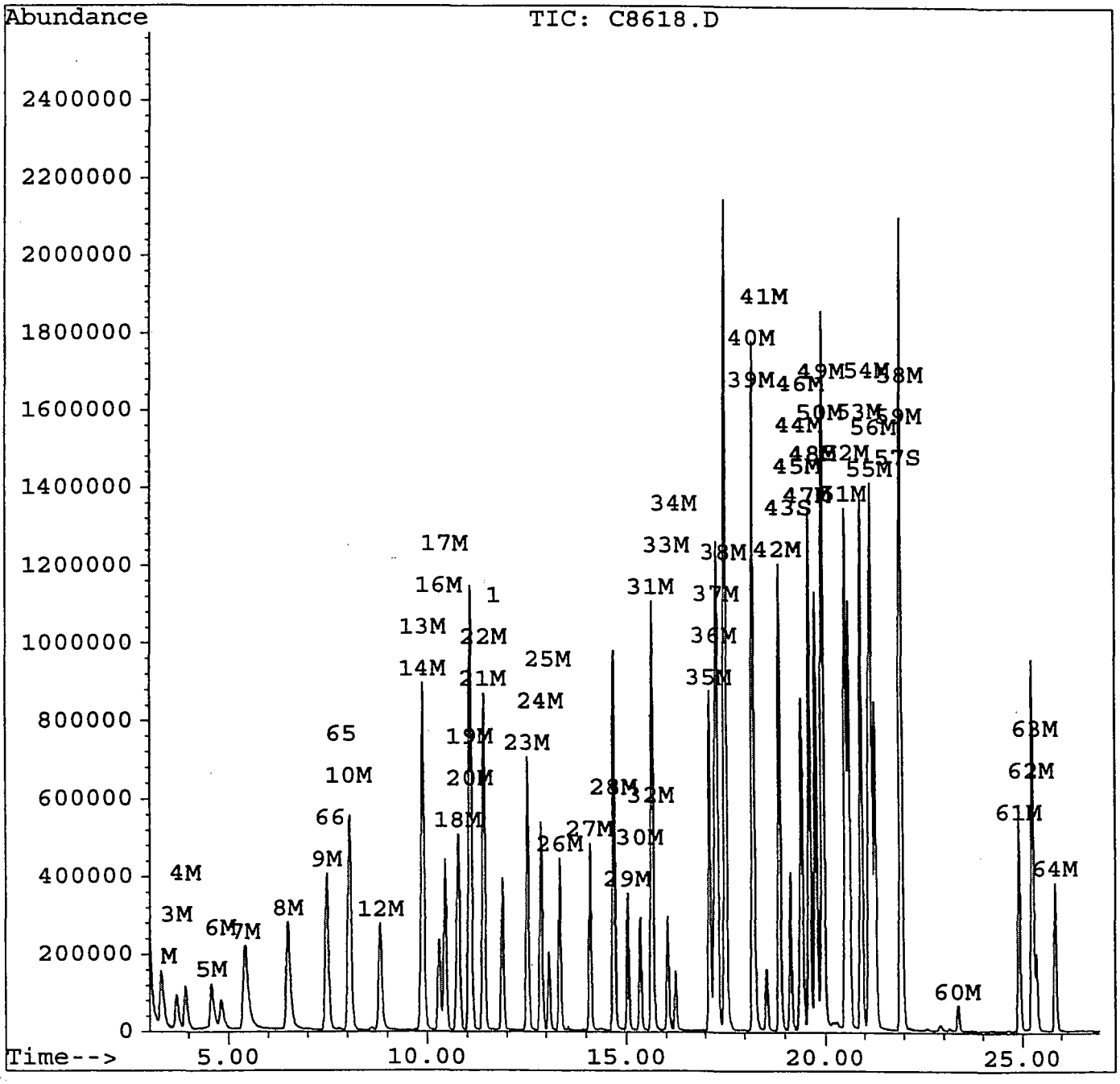
Quantitation Report

065

Data File : d:\hpchem\1\data\c8618.d
Acq On : 21 Jun 95 4:01 pm
Sample : 10 PPB CHK STANDARD
Misc :
Quant Time: Jun 22 15:05 1995

Vial: 2
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue May 30 13:15:19 1995
Response via : Multiple Level Calibration



Data File : d:\hpchem\1\data\c8619.d
Acq On : 21 Jun 95 4:37 pm
Sample : 1 PPB CHK STANDARD
Misc :
Quant Time: Jun 21 17:05 1995

Vial: 3
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue May 30 13:15:19 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	11.89	96	711692	5.00	ug/L	0.05
System Monitoring Compounds						%Recovery
43) 4-Bromofluorobenzene	19.13	95	373846	5.27	ug/L	105.32%
57) 1,2-Dichlorobenzene-d4	21.91	152	171123	5.28	ug/L	105.54%
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.33	85	52705	0.93	ug/L	97
3) Chloromethane	3.71	50	34122	1.03	ug/L	91
4) Vinyl chloride	3.92	62	39999	1.07	ug/L	93
5) Bromomethane	4.60	94	30920	1.22	ug/L	93
6) Chloroethane	4.84	64	26096	1.19	ug/L	98
7) Trichlorofluoromethane	5.41	101	91090	1.09	ug/L	93
8) 1,1-Dichloroethene	6.50	96	40718	1.11	ug/L	88
9) Methylene chloride	7.48	84	229773	5.90	ug/L	97
10) trans-1,2-Dichloroethene	8.05	96	42393	1.09	ug/L	90
12) 1,1-Dichloroethane	8.83	63	91491	1.18	ug/L	96
13) 2,2-Dichloropropane	9.90	77	86898	1.14	ug/L	91
14) cis-1,2-Dichloroethene	9.89	96	42670	1.17	ug/L	98
16) Bromochloromethane	10.30	128	13459	1.05	ug/L	88
17) Chloroform	10.46	83	89000	1.22	ug/L	95
18) 1,1,1-Trichloroethane	10.79	97	89755	1.11	ug/L	91
19) Carbon tetrachloride	11.09	117	80493	1.08	ug/L	99
20) 1,1-Dichloropropene	11.07	75	81335	1.16	ug/L	97
21) Benzene	11.42	78	146383	1.18	ug/L	97
22) 1,2-Dichloroethane	11.43	62	36522	1.20	ug/L	94
23) Trichloroethene	12.54	95	61000	1.11	ug/L	91
24) 1,2-Dichloropropane	12.89	63	50473	1.24	ug/L	89
25) Dibromomethane	13.09	93	19444	1.18	ug/L	93
26) Bromodichloromethane	13.35	83	68252	1.21	ug/L	92
27) cis-1,3-Dichloropropene	14.12	75	58043	1.19	ug/L	90
28) Toluene	14.70	92	98298	1.12	ug/L	98
29) trans-1,3-Dichloropropene	15.03	75	42089	1.25	ug/L	95
30) 1,1,2-Trichloroethane	15.35	83	20122	1.28	ug/L	91
31) Tetrachloroethene	15.66	166	57565	1.04	ug/L	97
32) 1,3-Dichloropropane	15.64	76	38747	1.24	ug/L	92
33) Dibromochloromethane	16.03	129	33999	1.11	ug/L	97
34) 1,2-Dibromomethane	16.24	107	24143	1.11	ug/L	92
35) Chlorobenzene	17.12	112	108772	1.19	ug/L	96
36) 1,1,1,2-Tetrachloroethane	17.25	131	41627	1.14	ug/L	96
37) Ethylbenzene	17.30	91	213908	1.15	ug/L	95
38) Xylene (para & meta)	17.52	106	147039	2.21	ug/L	89
39) Xylene (Ortho)	18.21	106	66862	1.14	ug/L	97
40) Styrene	18.22	104	100466	1.10	ug/L	96

(#) = qualifier out of range (m) = manual integration

Data File : d:\hpchem\1\data\c8619.d
Acq On : 21 Jun 95 4:37 pm
Sample : 1 PPB CHK STANDARD
Misc :
Quant Time: Jun 21 17:05 1995

Vial: 3
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue May 30 13:15:19 1995
Response via : Multiple Level Calibration

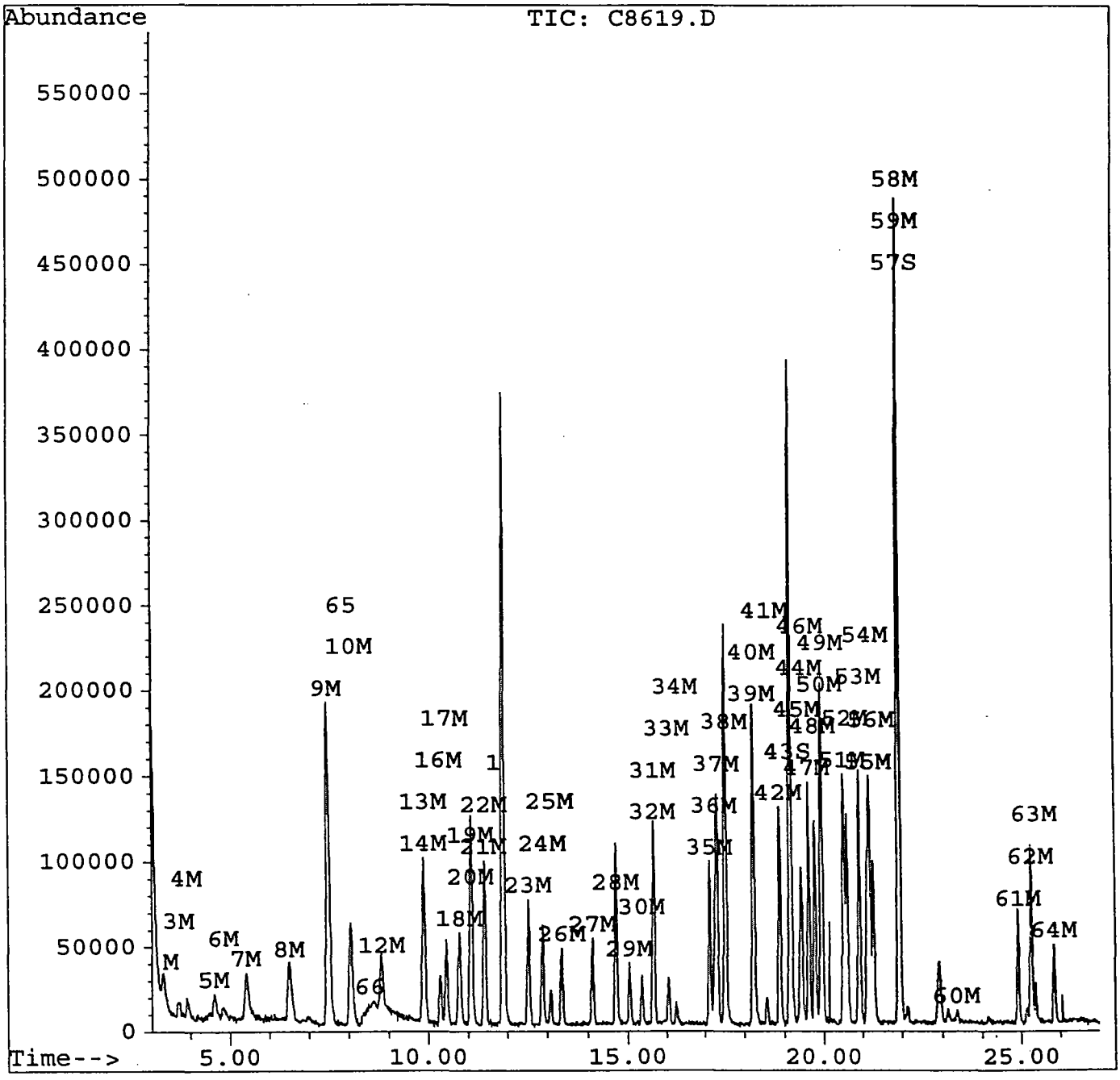
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
41)	Bromoform	18.55	173	16015	1.07	ug/L		99
42)	Isopropylbenzene	18.87	105	209607	1.11	ug/L		88
44)	Bromobenzene	19.42	156	38827	1.14	ug/L		91
45)	1,1,2,2-Tetrachloroethane	19.36	83	22067	1.31	ug/L		95
46)	1,2,3-Trichloropropane	19.44	75	27469	1.35	ug/L	#	68
47)	n-Propylbenzene	19.60	91	280035	1.14	ug/L		97
48)	2-Chlorotoluene	19.76	91	175076	1.28	ug/L		93
49)	4-Chlorotoluene	19.96	91	191455	1.18	ug/L		78
50)	1,3,5-Trimethylbenzene	19.93	105	171669	1.10	ug/L		100
51)	tert-Butylbenzene	20.52	119	180983	1.11	ug/L		98
52)	1,2,4-Trimethylbenzene	20.60	105	161019	1.12	ug/L		99
53)	sec-Butylbenzene	20.92	105	263359	1.09	ug/L		100
54)	1,3-Dichlorobenzene	21.12	146	79914	1.15	ug/L		94
55)	4-Isopropyltoluene	21.18	119	188397	1.05	ug/L		97
56)	1,4-Dichlorobenzene	21.27	146	81648	1.18	ug/L		91
58)	1,2-Dichlorobenzene	21.95	146	62416	1.20	ug/L		95
59)	n-Butylbenzene	21.93	91	211185	1.09	ug/L		97
60)	1,2-Dibromo-3-chloropropan	23.35	75	5150	1.21	ug/L	#	69
61)	1,2,4-Trichlorobenzene	24.93	180	44250	1.16	ug/L		95
62)	Hexachlorobutadiene	25.27	225	47861	1.04	ug/L		95
63)	Naphthalene	25.38	128	43576	1.32	ug/L		100
64)	1,2,3-Trichlorobenzene	25.85	180	33571	1.26	ug/L		91
65)	Methyl-tert butyl ether	8.07	73	59856	1.44	ug/L		94
66)	tert-Butyl Alcohol	8.76	59	1029	1.61	ug/L		100

(#) = qualifier out of range (m) = manual integration

Data File : d:\hpchem\1\data\c8619.d
Acq On : 21 Jun 95 4:37 pm
Sample : 1 PPB CHK STANDARD
Misc :
Quant Time: Jun 21 17:05 1995

Vial: 3
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue May 30 13:15:19 1995
Response via : Multiple Level Calibration



Data File : d:\hpchem\1\data\c8631.d
Acq On : 21 Jun 95 11:31 pm
Sample : 10 PPB QCS
Misc : 25 ML
Quant Time: Jun 22 15:30 1995

Vial: 15
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue May 30 13:15:19 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	11.91	96	733483	5.00	ug/L	0.07
System Monitoring Compounds						%Recovery
43) 4-Bromofluorobenzene	19.15	95	362015	4.95	ug/L	98.95%
57) 1,2-Dichlorobenzene-d4	21.93	152	162941	4.88	ug/L	97.50%
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.34	85	500381	8.61	ug/L	98
3) Chloromethane	3.72	50	325700	9.52	ug/L	96
4) Vinyl chloride	3.94	62	387791	10.05	ug/L	99
5) Bromomethane	4.59	94	283025	10.85	ug/L	98
6) Chloroethane	4.85	64	251852	11.14	ug/L	98
7) Trichlorofluoromethane	5.44	101	890835	10.33	ug/L	99
8) 1,1-Dichloroethene	6.52	96	385360	10.18	ug/L	87
9) Methylene chloride	7.49	84	503026	12.52	ug/L	98
10) trans-1,2-Dichloroethene	8.05	96	405437	10.14	ug/L	91
12) 1,1-Dichloroethane	8.84	63	851504	10.65	ug/L	97
13) 2,2-Dichloropropane	9.91	77	675028	8.61	ug/L	99
14) cis-1,2-Dichloroethene	9.90	96	373225	9.90	ug/L	89
16) Bromochloromethane	10.32	128	124422	9.42	ug/L	92
17) Chloroform	10.47	83	777600	10.36	ug/L	99
18) 1,1,1-Trichloroethane	10.80	97	859952	10.35	ug/L	97
19) Carbon tetrachloride	11.10	117	769602	9.98	ug/L	98
20) 1,1-Dichloropropene	11.09	75	748160	10.31	ug/L	98
21) Benzene	11.44	78	1294310	10.13	ug/L	97
22) 1,2-Dichloroethane	11.44	62	320034	10.21	ug/L	96
23) Trichloroethene	12.54	95	565141	9.98	ug/L	94
24) 1,2-Dichloropropane	12.90	63	436019	10.43	ug/L	100
25) Dibromomethane	13.10	93	166666	9.84	ug/L	97
26) Bromodichloromethane	13.36	83	588379	10.13	ug/L	99
27) cis-1,3-Dichloropropene	14.12	75	480682	9.57	ug/L	99
28) Toluene	14.71	92	913030	10.06	ug/L	97
29) trans-1,3-Dichloropropene	15.05	75	330498	9.53	ug/L	100
30) 1,1,2-Trichloroethane	15.36	83	163045	10.07	ug/L	98
31) Tetrachloroethene	15.67	166	540500	9.50	ug/L	99
32) 1,3-Dichloropropane	15.65	76	317615	9.89	ug/L	96
33) Dibromochloromethane	16.06	129	297857	9.45	ug/L	100
34) 1,2-Dibromomethane	16.26	107	217360	9.72	ug/L	100
35) Chlorobenzene	17.13	112	922575	9.76	ug/L	95
36) 1,1,1,2-Tetrachloroethane	17.26	131	358768	9.56	ug/L	95
37) Ethylbenzene	17.32	91	1937349	10.14	ug/L	96
38) Xylene (para & meta)	17.53	106	1345139	19.61	ug/L	95
39) Xylene (Ortho)	18.22	106	598062	9.85	ug/L	89
40) Styrene	18.24	104	905261	9.63	ug/L	91

(#) = qualifier out of range (m) = manual integration

Data File : d:\hpchem\1\data\c8631.d
Acq On : 21 Jun 95 11:31 pm
Sample : 10 PPB QCS
Misc : 25 ML
Quant Time: Jun 22 15:30 1995

Vial: 15
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue May 30 13:15:19 1995
Response via : Multiple Level Calibration

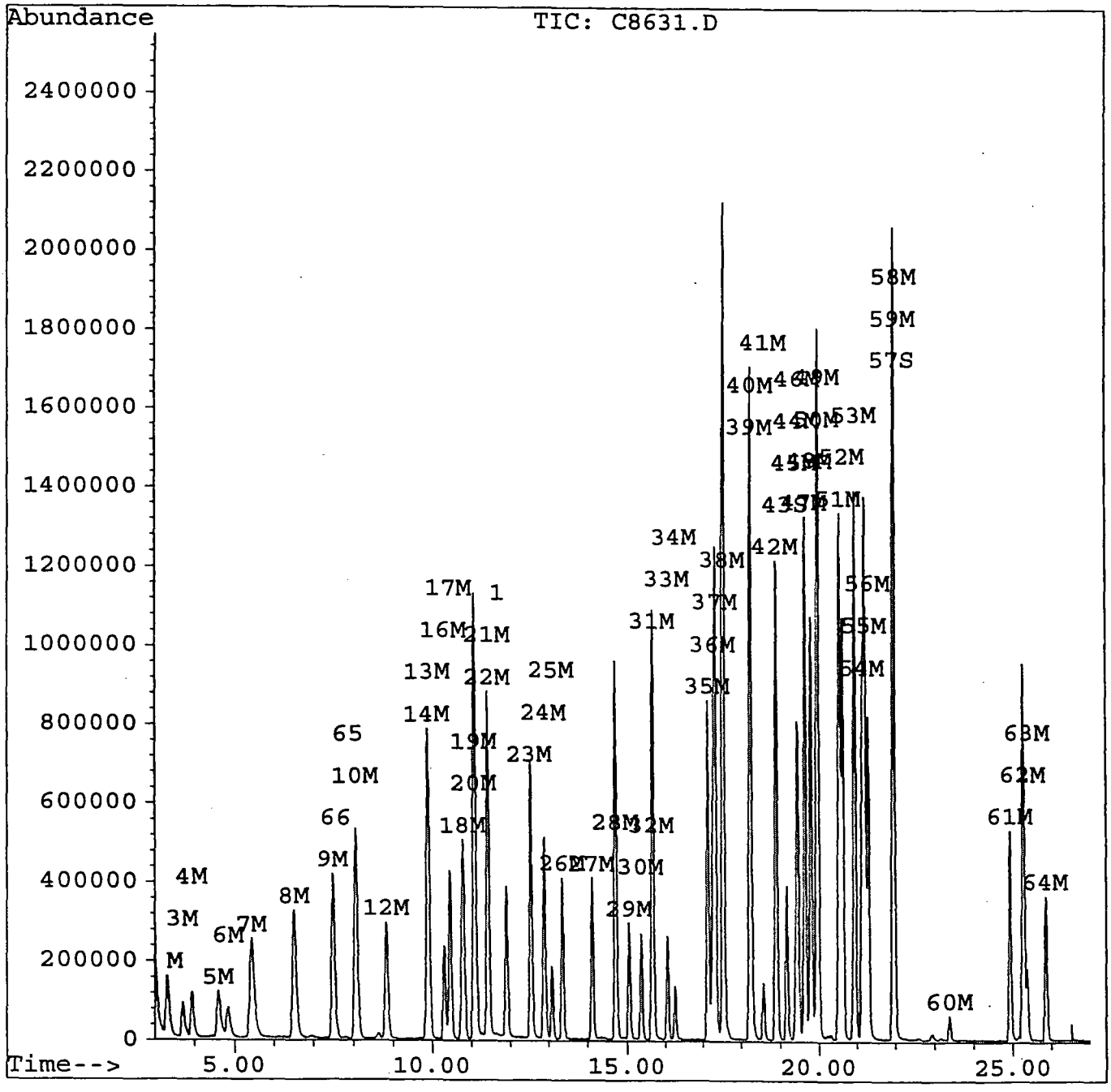
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
41)	Bromoform	18.57	173	142040	9.18	ug/L		90
42)	Isopropylbenzene	18.88	105	1910855	9.79	ug/L		89
44)	Bromobenzene	19.43	156	331439	9.42	ug/L	#	83
45)	1,1,2,2-Tetrachloroethane	19.38	83	187588	10.85	ug/L		92
46)	1,2,3-Trichloropropane	19.45	75	194036	9.24	ug/L	#	73
47)	n-Propylbenzene	19.62	91	2551376	10.05	ug/L		98
48)	2-Chlorotoluene	19.78	91	1481631	10.52	ug/L		95
49)	4-Chlorotoluene	19.97	91	1669667	9.98	ug/L	m	83
50)	1,3,5-Trimethylbenzene	19.94	105	1547260	9.58	ug/L		96
51)	tert-Butylbenzene	20.53	119	1656024	9.88	ug/L		96
52)	1,2,4-Trimethylbenzene	20.62	105	1430247	9.66	ug/L		97
53)	sec-Butylbenzene	20.93	105	2400184	9.66	ug/L		98
54)	1,3-Dichlorobenzene	21.14	146	667496	9.30	ug/L		98
55)	4-Isopropyltoluene	21.20	119	1779229	9.59	ug/L		97
56)	1,4-Dichlorobenzene	21.29	146	669011	9.40	ug/L		91
58)	1,2-Dichlorobenzene	21.97	146	505440	9.45	ug/L		97
59)	n-Butylbenzene	21.94	91	1948201	9.80	ug/L		99
60)	1,2-Dibromo-3-chloropropan	23.38	75	41556	9.46	ug/L		86
61)	1,2,4-Trichlorobenzene	24.94	180	342967	8.72	ug/L		99
62)	Hexachlorobutadiene	25.28	225	415162	8.76	ug/L		99
63)	Naphthalene	25.39	128	305525	8.98	ug/L		100
64)	1,2,3-Trichlorobenzene	25.86	180	244831	8.93	ug/L		100
65)	Methyl-tert butyl ether	8.09	73	421895	9.85	ug/L		96
66)	tert-Butyl Alcohol	7.78	59	12136	18.48	ug/L		100

(#) = qualifier out of range (m) = manual integration

Data File : d:\hpchem\1\data\c8631.d
Acq On : 21 Jun 95 11:31 pm
Sample : 10 PPB QCS
Misc : 25 ML
Quant Time: Jun 22 15:30 1995

Vial: 15 071
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue May 30 13:15:19 1995
Response via : Multiple Level Calibration



VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

BROMOFLUOROBENZENE (BFB)

072

Lab Name : EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Lab File ID: C8632.D BFB Injection Date: 6/22/95

Instrument ID: 5972-INSTRUMENT 1 BFB Injection Time: 1746

GC Column: DB-624 X 75M ID: 0.53 (mm) Heated Purge: (Y/N) _____

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	22.4
75	30.0 - 66.0% of mass 95	47.5
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.4
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 120.0% of mass 95	55.3
175	4.0 - 9.0% of mass 174	3.9 (7.0)1
176	93.0 - 101.0% of mass 174	53.4 (96.5)1
177	5.0 - 9.0% of mass 176	3.3 (6.1)2

1-Value is % mass 174 2-Value is % mass 176

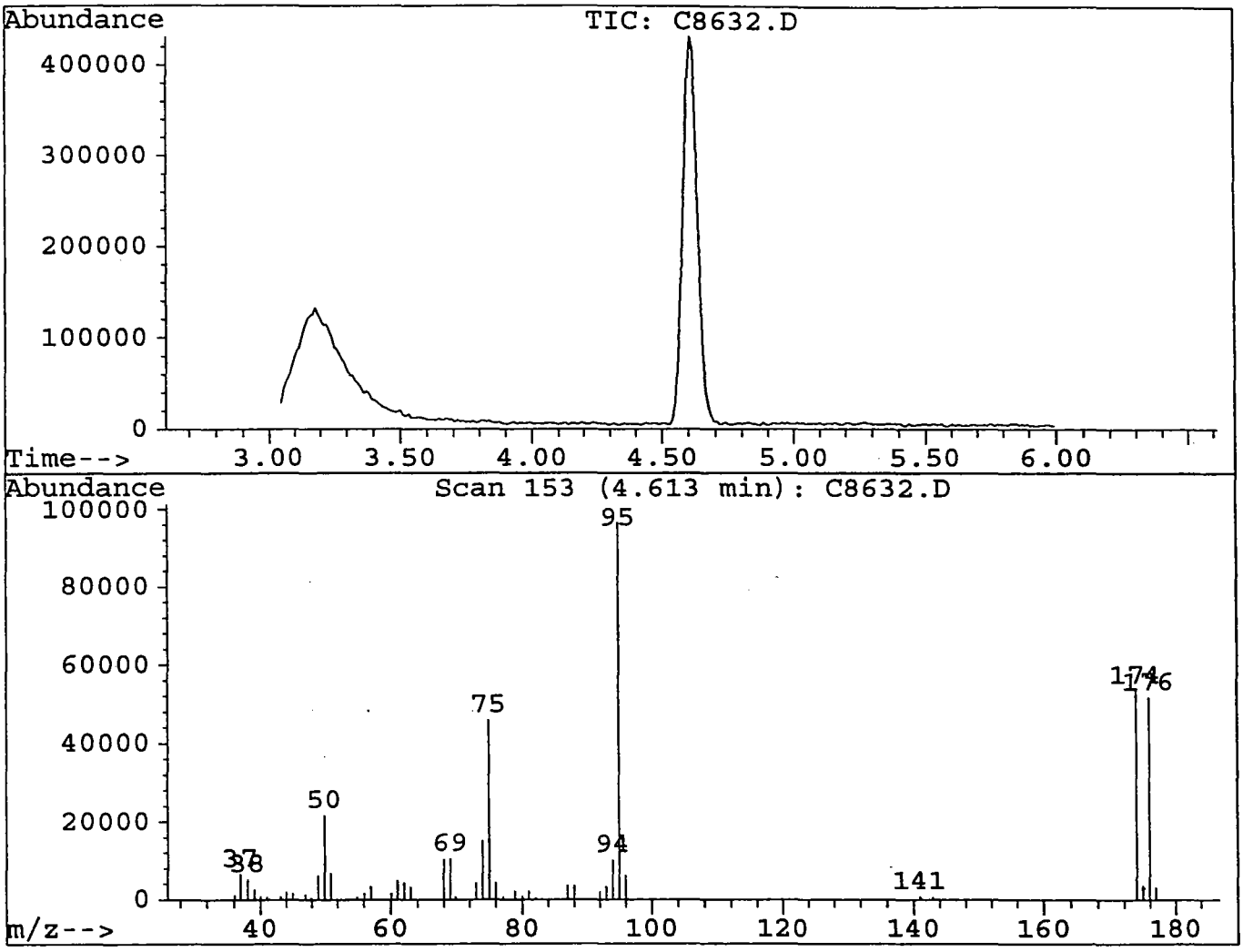
This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD010	10 STND	C8633.D	6/22/95	1803
02	1PPB STD	1PPB STD	C8634.D	6/22/95	1838
03	VBLK01	M. BLANK	C8635.D	6/22/95	1913
04	9526458V	9526458V	C8636.D	6/22/95	1948
05	9526459V	9526459V	C8637.D	6/22/95	2023
06	9526432V	9526432V	C8638.D	6/22/95	2058
07	9526433V	9526443V	C8639.D	6/22/95	2133
08	9526434V	9526434V	C8640.D	6/22/95	2207
09	9526436V	9526436V	C8641.D	6/22/95	2242
10	9526462V	9526462V	C8644.D	6/23/95	0027
11	9526435V	9526435V	C8645.D	6/23/95	0101
12	1PPB QCS	1PPB QCS	C8646.D	6/23/95	0136
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

Data File : D:\HPCHEM\1\DATA\C8632.D
Acq On : 22 Jun 95 5:46 pm
Sample : BFB TUNE
Misc : 25 NG INJECTION

Vial: 1
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics



Peak Apex is scan: 153

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	22.4	21680	PASS
75	95	30	60	47.5	45872	PASS
95	95	100	100	100.0	96592	PASS
96	95	5	9	6.4	6166	PASS
173	174	0	2	0.0	0	PASS
174	95	50	100	55.3	53416	PASS
175	174	5	9	7.0	3757	PASS
176	174	95	101	96.5	51568	PASS
177	176	5	9	6.1	3141	PASS

C8632.D VOA524.M Thu Jun 22 18:01:26 1995 VOA

BFB TUNE

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.10	1309	49.05	6139	69.05	10498	87.00	3698
37.00	6616	50.05	21680	69.85	728	88.05	3578
38.10	5252	51.05	6857	73.05	4310	92.05	1911
39.10	2549	55.05	749	74.05	15122	93.05	3422
0.00	861	56.10	1702	75.05	45872	94.05	10205
1.00	715	57.10	3366	76.05	4336	95.05	96592
43.10	986	60.10	1695	77.10	741	96.05	6166
44.00	1910	61.00	4996	78.90	2177	141.00	777
45.00	1645	62.00	4444	80.00	901	142.90	596
47.05	1395	63.00	3334	81.00	2125	173.95	53416
47.95	587	68.05	10391	82.00	541	174.95	3757

n 153 (4.613 min): C8632.D

BFB TUNE

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
175.95	51568						
176.95	3141						

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: EMSL ANALYTICAL Contract: _____

Project No. _____ Site: _____ Location: _____ Group: _____

Instrument ID: 5972-INSTRUMENT 1 Calibration Date: 6/22/95 Time: 1803

Lab File ID: C8633.D Init. Calib. Date(s): 5/26/95 _____

Heated Purge: (Y/N) N Init. Calib. Times: _____ _____

GC Column: DB-624 X 7 ID: 0.53 (mm)

COMPOUND	$\overline{RRF}$	RRF10	MIN RRF	%D	MAX %D
Dichlorodifluoromethane	0.396	0.283		28.5	30.0
Chloromethane	0.233	0.178		23.6	30.0
Vinyl chloride	0.263	0.225		14.4	30.0
Bromomethane	0.178	0.174		2.2	30.0
Chloroethane	0.154	0.160		-3.9	30.0
Trichlorofluoromethane	0.588	0.565		3.9	30.0
1,1-Dichloroethene	0.258	0.252		2.3	30.0
Methylene chloride	0.274	0.341		-24.5	30.0
trans-1,2-Dichloroethene	0.273	0.276		-1.1	30.0
1,1-Dichloroethane	0.545	0.573		-5.1	30.0
2,2-Dichloropropane	0.534	0.561		-5.1	30.0
cis-1,2-Dichloroethene	0.257	0.257		0.0	30.0
Bromochloromethane	0.090	0.086		4.4	30.0
Chloroform	0.512	0.532		-3.9	30.0
1,1,1-Trichloroethane	0.566	0.588		-3.9	30.0
Carbon tetrachloride	0.526	0.526		0.0	30.0
1,1-Dichloropropene	0.495	0.516		-4.2	30.0
Benzene	0.871	0.880		-1.0	30.0
1,2-Dichloroethane	0.214	0.230		-7.5	30.0
Trichloroethene	0.386	0.395		-2.3	30.0
1,2-Dichloropropane	0.285	0.308		-8.1	30.0
Dibromomethane	0.115	0.120		-4.3	30.0
Bromodichloromethane	0.396	0.420		-6.1	30.0
cis-1,3-Dichloropropene	0.342	0.361		-5.6	30.0
Toluene	0.619	0.634		-2.4	30.0
trans-1,3-Dichloropropene	0.236	0.251		-6.4	30.0
1,1,2-Trichloroethane	0.110	0.116		-5.5	30.0
Tetrachloroethene	0.388	0.374		3.6	30.0
1,3-Dichloropropane	0.219	0.229		-4.6	30.0
Dibromochloromethane	0.215	0.217		-0.9	30.0
1,2-Dibromomethane	0.152	0.156		-2.6	30.0
Chlorobenzene	0.644	0.643		0.2	30.0
1,1,1,2-Tetrachloroethane	0.256	0.256		0.0	30.0
Ethylbenzene	1.302	1.372		-5.4	30.0
Xylene (para & meta)	0.468	0.469		-0.2	30.0
Xylene (Ortho)	0.414	0.422		-1.9	30.0

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: EMSL ANALYTICAL Contract: _____

Project No. _____ Site: _____ Location: _____ Group: _____

Instrument ID: 5972-INSTRUMENT 1 Calibration Date: 6/22/95 Time: 1803

Lab File ID: C8633.D Init. Calib. Date(s): 5/26/95 _____

Heated Purge: (Y/N) N Init. Calib. Times: _____ _____

GC Column: DB-624 X 7 ID: 0.53 (mm)

COMPOUND	$\overline{RRF}$	RRF10	MIN RRF	%D	MAX %D
Styrene	0.641	0.649		-1.2	30.0
Bromoform	0.105	0.107		-1.9	30.0
Isopropylbenzene	1.330	1.353		-1.7	30.0
Bromobenzene	0.240	0.240		0.0	30.0
1,1,2,2-Tetrachloroethane	0.118	0.141		-19.5	30.0
1,2,3-Trichloropropane	0.143	0.143		0.0	30.0
n-Propylbenzene	1.731	1.816		-4.9	30.0
2-Chlorotoluene	0.960	1.081		-12.6	30.0
4-Chlorotoluene	1.140	1.195		-4.8	30.0
1,3,5-Trimethylbenzene	1.101	1.104		-0.3	30.0
tert-Butylbenzene	1.142	1.167		-2.2	30.0
1,2,4-Trimethylbenzene	1.009	1.039		-3.0	30.0
sec-Butylbenzene	1.693	1.712		-1.1	30.0
1,3-Dichlorobenzene	0.489	0.486		0.6	30.0
4-Isopropyltoluene	1.264	1.288		-1.9	30.0
1,4-Dichlorobenzene	0.485	0.480		1.0	30.0
1,2-Dichlorobenzene	0.364	0.371		-1.9	30.0
n-Butylbenzene	1.355	1.426		-5.2	30.0
1,2-Dibromo-3-chloropropane	0.030	0.032		-6.7	30.0
1,2,4-Trichlorobenzene	0.268	0.251		6.3	30.0
Hexachlorobutadiene	0.323	0.299		7.4	30.0
Naphthalene	0.232	0.221		4.7	30.0
1,2,3-Trichlorobenzene	0.187	0.174		7.0	30.0
4-Bromofluorobenzene	0.499	0.521		-4.4	30.0
1,2-Dichlorobenzene-d4	0.228	0.239		-4.8	30.0

Data File : D:\HPCHEM\1\DATA\C8633.D
Acq On : 22 Jun 95 6:03 pm
Sample : 10 PPB CHK STANDARD
Misc :

Vial: 2
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue May 30 13:15:19 1995
Response via : Multiple Level Calibration

Min. RRF : 0.001 Min. Rel. Area : 50% Max. R.T. Dev 0.30min
Max. RRF Dev : 30% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
1		Fluorobenzene	1.000	1.000	0.0	92	0.06
2	M	Dichlorodifluoromethane	0.396	0.283	28.6	61	0.05
	M	Chloromethane	0.233	0.178	23.7	66	0.07
	M	Vinyl chloride	0.263	0.225	14.5	75	0.06
5	M	Bromomethane	0.178	0.174	1.9	81	0.06
	M	Chloroethane	0.154	0.160	-3.9	86	0.07
	M	Trichlorofluoromethane	0.588	0.565	3.9	86	0.07
8	M	1,1-Dichloroethene	0.258	0.252	2.3	87	0.09
9	M	Methylene chloride	0.274	0.341	-24.7	89	0.07
	M	trans-1,2-Dichloroethene	0.273	0.276	-1.3	91	0.07
11		Hexane	0.000	0.000#	0.0	0#	-0.19
12	M	1,1-Dichloroethane	0.545	0.573	-5.1	96	0.07
	M	2,2-Dichloropropane	0.534	0.561	-5.0	94	0.06
	M	cis-1,2-Dichloroethene	0.257	0.257	-0.1	90	0.06
15		2-Butanone	0.000	0.000#	0.0	0#	-0.03
	M	Bromochloromethane	0.090	0.086	4.1	90	0.06
	M	Chloroform	0.512	0.532	-4.0	96	0.07
18	M	1,1,1-Trichloroethane	0.566	0.588	-3.8	95	0.05
19	M	Carbon tetrachloride	0.526	0.526	0.1	93	0.06
	M	1,1-Dichloropropene	0.495	0.516	-4.3	93	0.06
21	M	Benzene	0.871	0.880	-1.0	91	0.07
22	M	1,2-Dichloroethane	0.214	0.230	-7.8	101	0.06
	M	Trichloroethene	0.386	0.395	-2.3	93	0.05
	M	1,2-Dichloropropane	0.285	0.308	-8.2	101	0.06
25	M	Dibromomethane	0.115	0.120	-3.7	97	0.05
	M	Bromodichloromethane	0.396	0.420	-6.1	100	0.06
	M	cis-1,3-Dichloropropene	0.342	0.361	-5.4	99	0.06
28	M	Toluene	0.619	0.634	-2.5	96	0.05
29	M	trans-1,3-Dichloropropene	0.236	0.251	-6.3	100	0.06
	M	1,1,2-Trichloroethane	0.110	0.116	-5.1	99	0.05
31	M	Tetrachloroethene	0.388	0.374	3.5	89	0.05
32	M	1,3-Dichloropropane	0.219	0.229	-4.8	99	0.06
	M	Dibromochloromethane	0.215	0.217	-0.8	97	0.05
	M	1,2-Dibromomethane	0.152	0.156	-2.2	99	0.05
35	M	Chlorobenzene	0.644	0.643	0.2	92	0.04
36	M	1,1,1,2-Tetrachloroethane	0.256	0.256	-0.1	95	0.05
	M	Ethylbenzene	1.302	1.372	-5.4	98	0.04
38	M	Xylene (para & meta)	0.468	0.469	-0.4	93	0.05
39	M	Xylene (Ortho)	0.414	0.422	-1.9	95	0.04
	M	Styrene	0.641	0.649	-1.2	95	0.04
41	M	Bromoform	0.105	0.107	-1.2	99	0.05
42		Isopropylbenzene	1.330	1.353	-1.7	95	0.04

#) = Out of Range

Data File : D:\HPCHEM\1\DATA\C8633.D
Acq On : 22 Jun 95 6:03 pm
Sample : 10 PPB CHK STANDARD
Misc :

Vial: 2 078
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue May 30 13:15:19 1995
Response via : Multiple Level Calibration

Min. RRF : 0.001 Min. Rel. Area : 50% Max. R.T. Dev 0.30min
Max. RRF Dev : 30% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
43	S	4-Bromofluorobenzene	0.499	0.521	-4.5	100	0.05
44	M	Bromobenzene	0.240	0.240	-0.1	95	0.04
5	M	1,1,2,2-Tetrachloroethane	0.118	0.141	-19.5	116	0.04
6	M	1,2,3-Trichloropropane	0.143	0.143	0.4	94	0.05
47	M	n-Propylbenzene	1.731	1.816	-4.9	99	0.04
8	M	2-Chlorotoluene	0.960	1.081	-12.5	107	0.04
9	M	4-Chlorotoluene	1.140	1.195	-4.8	98	0.05
50	M	1,3,5-Trimethylbenzene	1.101	1.104	-0.2	95	0.04
51	M	tert-Butylbenzene	1.142	1.167	-2.2	96	0.04
2	M	1,2,4-Trimethylbenzene	1.009	1.039	-3.0	96	0.04
53	M	sec-Butylbenzene	1.693	1.712	-1.1	96	0.04
54	M	1,3-Dichlorobenzene	0.489	0.486	0.6	95	0.04
5	M	4-Isopropyltoluene	1.264	1.288	-1.9	96	0.04
6	M	1,4-Dichlorobenzene	0.485	0.480	1.1	95	0.03
57	S	1,2-Dichlorobenzene-d4	0.228	0.239	-4.7	100	0.04
8	M	1,2-Dichlorobenzene	0.364	0.371	-1.9	97	0.04
9	M	n-Butylbenzene	1.355	1.426	-5.2	101	0.04
60	M	1,2-Dibromo-3-chloropropane	0.030	0.032	-7.9	109	0.04
61	M	1,2,4-Trichlorobenzene	0.268	0.251	6.4	90	0.04
2	M	Hexachlorobutadiene	0.323	0.299	7.5	90	0.04
63	M	Naphthalene	0.232	0.221	4.5	92	0.03
64	M	1,2,3-Trichlorobenzene	0.187	0.174	6.8	91	0.04
5		Methyl-tert butyl ether	0.292	0.311	-6.5	100	0.08
6		tert-Butyl Alcohol	0.004	0.005	-16.2	122	0.04

Data File : d:\hpchem\1\data\c8633.d
Acq On : 22 Jun 95 6:03 pm
Sample : 10 PPB CHK STANDARD
Misc :
Quant Time: Jun 26 15:05 1995

Vial: 2
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue May 30 13:15:19 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	11.90	96	707039	5.00	ug/L		0.06
System Monitoring Compounds							%Recovery
43) 4-Bromofluorobenzene	19.14	95	368561	5.23	ug/L		104.51%
57) 1,2-Dichlorobenzene-d4	21.92	152	168699	5.24	ug/L		104.73%
Target Compounds							Qvalue
2) Dichlorodifluoromethane	3.33	85	400026	7.14	ug/L	m	95
3) Chloromethane	3.71	50	251760	7.63	ug/L		96
4) Vinyl chloride	3.93	62	318010	8.55	ug/L		99
5) Bromomethane	4.58	94	246681	9.81	ug/L		96
6) Chloroethane	4.83	64	226466	10.39	ug/L		98
7) Trichlorofluoromethane	5.41	101	798701	9.61	ug/L		98
8) 1,1-Dichloroethene	6.51	96	356524	9.77	ug/L		86
9) Methylene chloride	7.48	84	482732	12.47	ug/L		98
10) trans-1,2-Dichloroethene	8.04	96	390349	10.13	ug/L		95
12) 1,1-Dichloroethane	8.83	63	810081	10.51	ug/L		98
13) 2,2-Dichloropropane	9.89	77	793543	10.50	ug/L		99
14) cis-1,2-Dichloroethene	9.89	96	363873	10.01	ug/L		91
16) Bromochloromethane	10.30	128	122124	9.59	ug/L		97
17) Chloroform	10.46	83	752542	10.40	ug/L		95
18) 1,1,1-Trichloroethane	10.78	97	831201	10.38	ug/L		98
19) Carbon tetrachloride	11.10	117	743107	9.99	ug/L		99
20) 1,1-Dichloropropene	11.07	75	729360	10.43	ug/L		100
21) Benzene	11.43	78	1243746	10.10	ug/L		97
22) 1,2-Dichloroethane	11.43	62	325721	10.78	ug/L		97
23) Trichloroethene	12.53	95	558357	10.23	ug/L		90
24) 1,2-Dichloropropane	12.89	63	436098	10.82	ug/L		100
25) Dibromomethane	13.09	93	169354	10.37	ug/L		93
26) Bromodichloromethane	13.35	83	594136	10.61	ug/L		97
27) cis-1,3-Dichloropropene	14.12	75	509835	10.54	ug/L		98
28) Toluene	14.69	92	896828	10.25	ug/L		98
29) trans-1,3-Dichloropropene	15.04	75	355482	10.63	ug/L		98
30) 1,1,2-Trichloroethane	15.35	83	164061	10.51	ug/L		98
31) Tetrachloroethene	15.66	166	529027	9.65	ug/L		97
32) 1,3-Dichloropropane	15.64	76	324439	10.48	ug/L		98
33) Dibromochloromethane	16.04	129	306176	10.08	ug/L		97
34) 1,2-Dibromomethane	16.24	107	220188	10.22	ug/L		99
35) Chlorobenzene	17.11	112	909215	9.98	ug/L		96
36) 1,1,1,2-Tetrachloroethane	17.25	131	361982	10.01	ug/L		98
37) Ethylbenzene	17.30	91	1940679	10.54	ug/L		96
38) Xylene (para & meta)	17.52	106	1327243	20.07	ug/L		91
39) Xylene (Ortho)	18.21	106	596072	10.19	ug/L		88
40) Styrene	18.23	104	917813	10.12	ug/L		96

(#) = qualifier out of range (m) = manual integration

Data File : d:\hpchem\1\data\c8633.d
Acq On : 22 Jun 95 6:03 pm
Sample : 10 PPB CHK STANDARD
Misc :
Quant Time: Jun 26 15:05 1995

Vial: 2
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue May 30 13:15:19 1995
Response via : Multiple Level Calibration

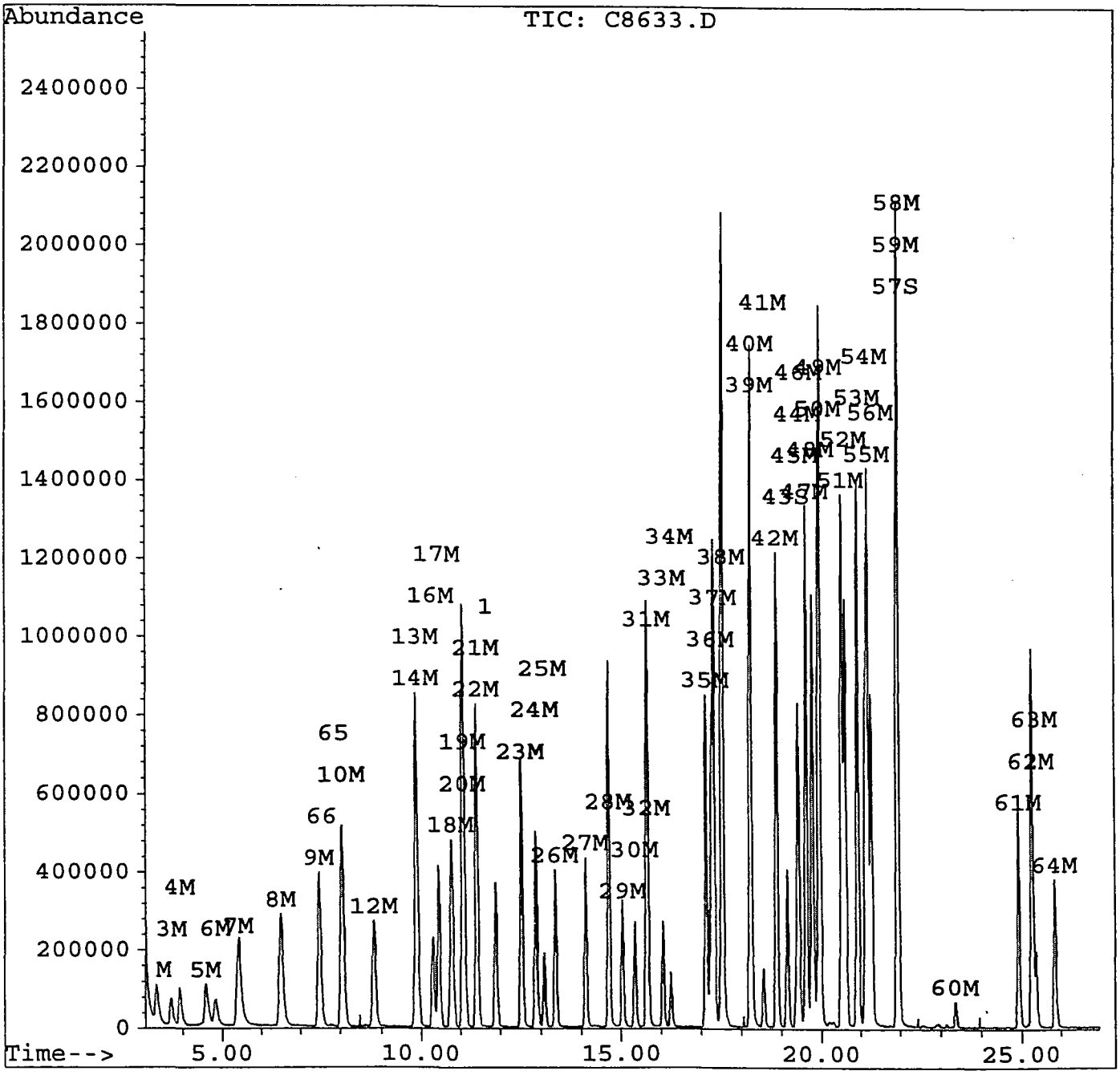
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
41)	Bromoform	18.56	173	150927	10.12	ug/L		84
42)	Isopropylbenzene	18.87	105	1913330	10.17	ug/L	m	0
44)	Bromobenzene	19.42	156	339430	10.01	ug/L	#	89
45)	1,1,2,2-Tetrachloroethane	19.36	83	199232	11.95	ug/L		91
46)	1,2,3-Trichloropropane	19.45	75	201552	9.96	ug/L	#	61
47)	n-Propylbenzene	19.61	91	2567426	10.49	ug/L		99
48)	2-Chlorotoluene	19.77	91	1528233	11.25	ug/L		98
49)	4-Chlorotoluene	19.96	91	1689980	10.48	ug/L		81
50)	1,3,5-Trimethylbenzene	19.93	105	1561186	10.02	ug/L		99
51)	tert-Butylbenzene	20.52	119	1650806	10.22	ug/L		96
52)	1,2,4-Trimethylbenzene	20.60	105	1469615	10.30	ug/L		98
53)	sec-Butylbenzene	20.92	105	2421034	10.11	ug/L		98
54)	1,3-Dichlorobenzene	21.12	146	687840	9.94	ug/L		96
55)	4-Isopropyltoluene	21.18	119	1821304	10.19	ug/L		98
56)	1,4-Dichlorobenzene	21.27	146	678755	9.89	ug/L		91
58)	1,2-Dichlorobenzene	21.95	146	525244	10.19	ug/L		98
59)	n-Butylbenzene	21.93	91	2015880	10.52	ug/L		97
60)	1,2-Dibromo-3-chloropropan	23.35	75	45709	10.79	ug/L		94
61)	1,2,4-Trichlorobenzene	24.93	180	354576	9.36	ug/L		98
62)	Hexachlorobutadiene	25.27	225	422912	9.25	ug/L		99
63)	Naphthalene	25.36	128	313116	9.55	ug/L		100
64)	1,2,3-Trichlorobenzene	25.85	180	246300	9.32	ug/L		97
65)	Methyl-tert butyl ether	8.07	73	439747	10.65	ug/L		98
66)	tert-Butyl Alcohol	7.77	59	14710	23.24	ug/L		100

(#) = qualifier out of range (m) = manual integration

Data File : d:\hpchem\1\data\c8633.d
Acq On : 22 Jun 95 6:03 pm
Sample : 10 PPB CHK STANDARD
Misc :
Quant Time: Jun 26 15:05 1995

Vial: 2
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue May 30 13:15:19 1995
Response via : Multiple Level Calibration



Data File : d:\hpchem\1\data\c8634.d
Acq On : 22 Jun 95 6:38 pm
Sample : 1 PPB CHK STANDARD
Misc :
Quant Time: Jun 26 15:07 1995

Vial: 3
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

082

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue May 30 13:15:19 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	11.89	96	720869	5.00	ug/L	0.05
System Monitoring Compounds						%Recovery
43) 4-Bromofluorobenzene	19.14	95	376881	5.24	ug/L	104.82%
57) 1,2-Dichlorobenzene-d4	21.93	152	173226	5.27	ug/L	105.47%
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.35	85	52366	0.92	ug/L m	89
3) Chloromethane	3.71	50	28443	0.85	ug/L	89
4) Vinyl chloride	3.93	62	34951	0.92	ug/L	97
5) Bromomethane	4.60	94	30255	1.18	ug/L	100
6) Chloroethane	4.84	64	24217	1.09	ug/L	96
7) Trichlorofluoromethane	5.44	101	87747	1.04	ug/L	89
8) 1,1-Dichloroethene	6.51	96	38723	1.04	ug/L	98
9) Methylene chloride	7.48	84	253233	6.42	ug/L	97
10) trans-1,2-Dichloroethene	8.05	96	40344	1.03	ug/L	95
12) 1,1-Dichloroethane	8.82	63	91237	1.16	ug/L	94
13) 2,2-Dichloropropane	9.88	77	88348	1.15	ug/L	97
14) cis-1,2-Dichloroethene	9.89	96	40721	1.10	ug/L	95
16) Bromochloromethane	10.31	128	13148	1.01	ug/L	89
17) Chloroform	10.46	83	84994	1.15	ug/L	93
18) 1,1,1-Trichloroethane	10.79	97	91676	1.12	ug/L	93
19) Carbon tetrachloride	11.10	117	82388	1.09	ug/L	91
20) 1,1-Dichloropropene	11.08	75	80332	1.13	ug/L	92
21) Benzene	11.42	78	140363	1.12	ug/L	98
22) 1,2-Dichloroethane	11.42	62	38349	1.24	ug/L	97
23) Trichloroethene	12.53	95	61556	1.11	ug/L	95
24) 1,2-Dichloropropane	12.88	63	47333	1.15	ug/L	89
25) Dibromomethane	13.08	93	20228	1.22	ug/L	93
26) Bromodichloromethane	13.36	83	67212	1.18	ug/L	95
27) cis-1,3-Dichloropropene	14.12	75	57322	1.16	ug/L	98
28) Toluene	14.70	92	101219	1.13	ug/L	95
29) trans-1,3-Dichloropropene	15.03	75	40716	1.19	ug/L	96
30) 1,1,2-Trichloroethane	15.35	83	18476	1.16	ug/L	96
31) Tetrachloroethene	15.66	166	57016	1.02	ug/L	99
32) 1,3-Dichloropropane	15.64	76	36752	1.16	ug/L	92
33) Dibromochloromethane	16.04	129	34925	1.13	ug/L	89
34) 1,2-Dibromomethane	16.24	107	24435	1.11	ug/L	80
35) Chlorobenzene	17.11	112	100462	1.08	ug/L	94
36) 1,1,1,2-Tetrachloroethane	17.24	131	40882	1.11	ug/L	90
37) Ethylbenzene	17.31	91	210773	1.12	ug/L	95
38) Xylene (para & meta)	17.51	106	144321	2.14	ug/L	95
39) Xylene (Ortho)	18.21	106	64567	1.08	ug/L	94
40) Styrene	18.22	104	99352	1.07	ug/L	95

(#) = qualifier out of range (m) = manual integration

Data File : d:\hpchem\1\data\c8634.d
Acq On : 22 Jun 95 6:38 pm
Sample : 1 PPB CHK STANDARD
Misc :
Quant Time: Jun 26 15:07 1995

Vial: 3
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue May 30 13:15:19 1995
Response via : Multiple Level Calibration

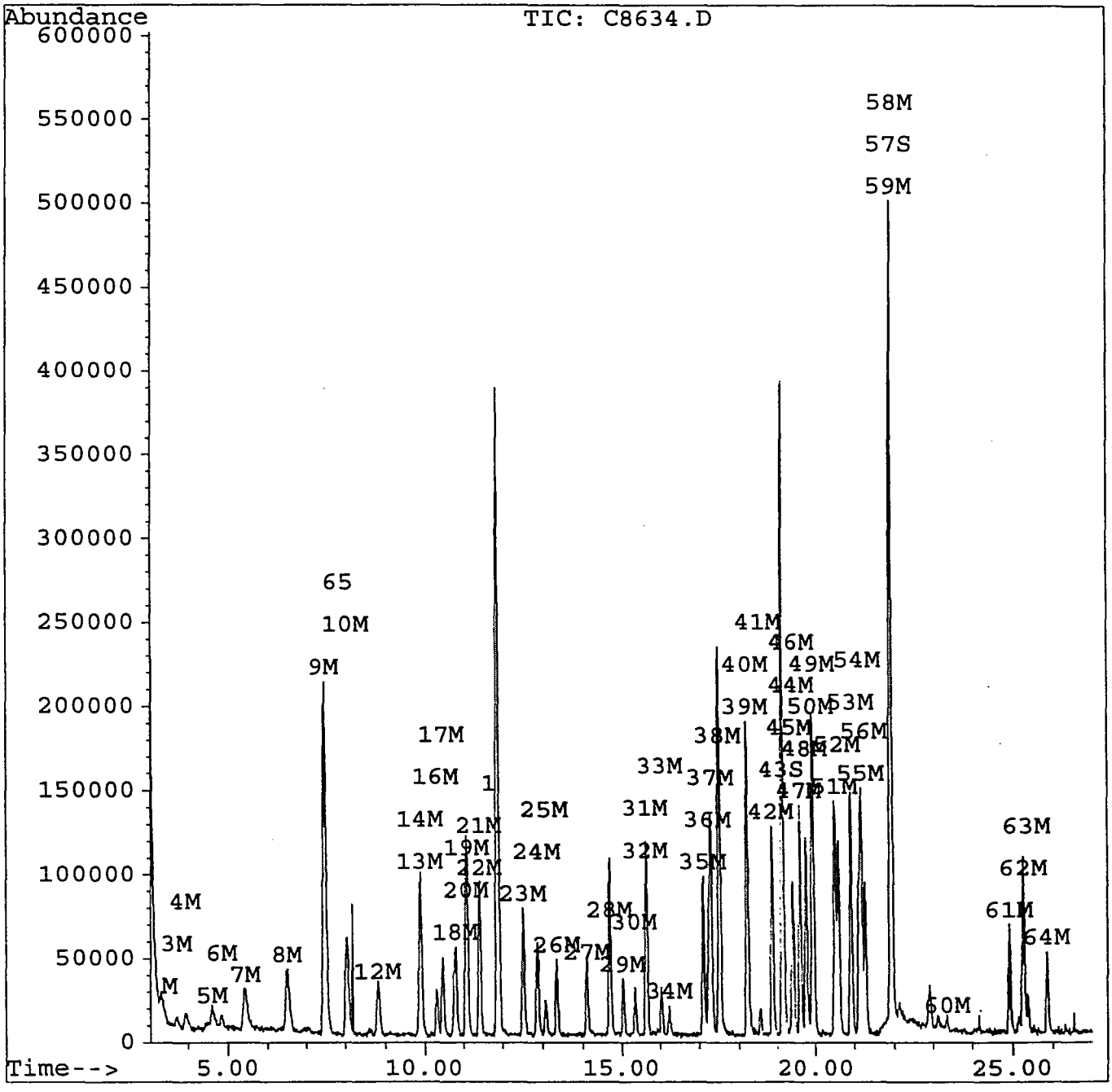
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
41)	Bromoform	18.56	173	15703	1.03	ug/L		78
42)	Isopropylbenzene	18.86	105	200540	1.05	ug/L		91
44)	Bromobenzene	19.41	156	38255	1.11	ug/L		94
45)	1,1,2,2-Tetrachloroethane	19.36	83	22919	1.35	ug/L		91
46)	1,2,3-Trichloropropane	19.43	75	27287	1.32	ug/L	#	69
47)	n-Propylbenzene	19.61	91	274490	1.10	ug/L		96
48)	2-Chlorotoluene	19.77	91	167511	1.21	ug/L		98
49)	4-Chlorotoluene	19.96	91	189324	1.15	ug/L		83
50)	1,3,5-Trimethylbenzene	19.93	105	167955	1.06	ug/L		96
51)	tert-Butylbenzene	20.52	119	171971	1.04	ug/L		94
52)	1,2,4-Trimethylbenzene	20.61	105	156608	1.08	ug/L		97
53)	sec-Butylbenzene	20.93	105	255796	1.05	ug/L		96
54)	1,3-Dichlorobenzene	21.12	146	75763	1.07	ug/L		91
55)	4-Isopropyltoluene	21.18	119	187739	1.03	ug/L		98
56)	1,4-Dichlorobenzene	21.28	146	75376	1.08	ug/L		83
58)	1,2-Dichlorobenzene	21.96	146	59073	1.12	ug/L		96
59)	n-Butylbenzene	21.93	91	212368	1.09	ug/L		94
60)	1,2-Dibromo-3-chloropropan	23.37	75	5121	1.19	ug/L	#	78
61)	1,2,4-Trichlorobenzene	24.93	180	43546	1.13	ug/L		97
62)	Hexachlorobutadiene	25.28	225	46685	1.00	ug/L		94
63)	Naphthalene	25.37	128	41411	1.24	ug/L		100
64)	1,2,3-Trichlorobenzene	25.84	180	32738	1.22	ug/L		96
65)	Methyl-tert butyl ether	8.06	73	59365	1.41	ug/L		96

(#) = qualifier out of range (m) = manual integration

Data File : d:\hpchem\1\data\c8634.d
Acq On : 22 Jun 95 6:38 pm
Sample : 1 PPB CHK STANDARD
Misc :
Quant Time: Jun 26 15:07 1995

Vial: 3 084
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue May 30 13:15:19 1995
Response via : Multiple Level Calibration



Data File : d:\hpchem\1\data\c8646.d
Acq On : 23 Jun 95 1:36 am
Sample : 10 PPB QCS
Misc :
Quant Time: Jun 26 15:56 1995

Vial: 15
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue May 30 13:15:19 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	11.90	96	695431	5.00	ug/L	0.06
System Monitoring Compounds						%Recovery
43) 4-Bromofluorobenzene	19.14	95	347953	5.02	ug/L	100.31%
57) 1,2-Dichlorobenzene-d4	21.92	152	156489	4.94	ug/L	98.77%
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.33	85	390498	7.08	ug/L m	96
3) Chloromethane	3.71	50	257383	7.93	ug/L	92
4) Vinyl chloride	3.93	62	323389	8.84	ug/L	98
5) Bromomethane	4.58	94	236508	9.56	ug/L	99
6) Chloroethane	4.82	64	226428	10.56	ug/L	96
7) Trichlorofluoromethane	5.42	101	794677	9.72	ug/L	96
8) 1,1-Dichloroethene	6.51	96	350042	9.75	ug/L	92
9) Methylene chloride	7.49	84	473820	12.44	ug/L	96
10) trans-1,2-Dichloroethene	8.04	96	382661	10.09	ug/L	94
12) 1,1-Dichloroethane	8.84	63	806763	10.64	ug/L	97
13) 2,2-Dichloropropane	9.90	77	628678	8.46	ug/L	97
14) cis-1,2-Dichloroethene	9.90	96	358518	10.03	ug/L	98
16) Bromochloromethane	10.31	128	122183	9.76	ug/L	96
17) Chloroform	10.47	83	742106	10.43	ug/L	98
18) 1,1,1-Trichloroethane	10.79	97	814794	10.34	ug/L	97
19) Carbon tetrachloride	11.10	117	720919	9.86	ug/L	98
20) 1,1-Dichloropropene	11.08	75	697799	10.14	ug/L	96
21) Benzene	11.43	78	1224257	10.11	ug/L	96
22) 1,2-Dichloroethane	11.43	62	316751	10.66	ug/L	98
23) Trichloroethene	12.54	95	551232	10.27	ug/L	93
24) 1,2-Dichloropropane	12.89	63	428157	10.80	ug/L	100
25) Dibromomethane	13.09	93	169571	10.56	ug/L	95
26) Bromodichloromethane	13.36	83	588926	10.69	ug/L	96
27) cis-1,3-Dichloropropene	14.12	75	474061	9.96	ug/L	96
28) Toluene	14.71	92	871313	10.13	ug/L	99
29) trans-1,3-Dichloropropene	15.05	75	328750	10.00	ug/L	94
30) 1,1,2-Trichloroethane	15.35	83	165350	10.77	ug/L	97
31) Tetrachloroethene	15.66	166	502766	9.33	ug/L	99
32) 1,3-Dichloropropane	15.64	76	318676	10.47	ug/L	97
33) Dibromochloromethane	16.06	129	299426	10.02	ug/L	99
34) 1,2-Dibromomethane	16.25	107	218305	10.30	ug/L	94
35) Chlorobenzene	17.12	112	886608	9.89	ug/L	97
36) 1,1,1,2-Tetrachloroethane	17.26	131	360221	10.13	ug/L	94
37) Ethylbenzene	17.31	91	1852028	10.23	ug/L	96
38) Xylene (para & meta)	17.52	106	1270205	19.53	ug/L	91
39) Xylene (Ortho)	18.22	106	571959	9.94	ug/L	89
40) Styrene	18.23	104	881566	9.89	ug/L	94

(#) = qualifier out of range (m) = manual integration

Data File : d:\hpchem\1\data\c8646.d
Acq On : 23 Jun 95 1:36 am
Sample : 10 PPB QCS
Misc :
Quant Time: Jun 26 15:56 1995

Vial: 15
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue May 30 13:15:19 1995
Response via : Multiple Level Calibration

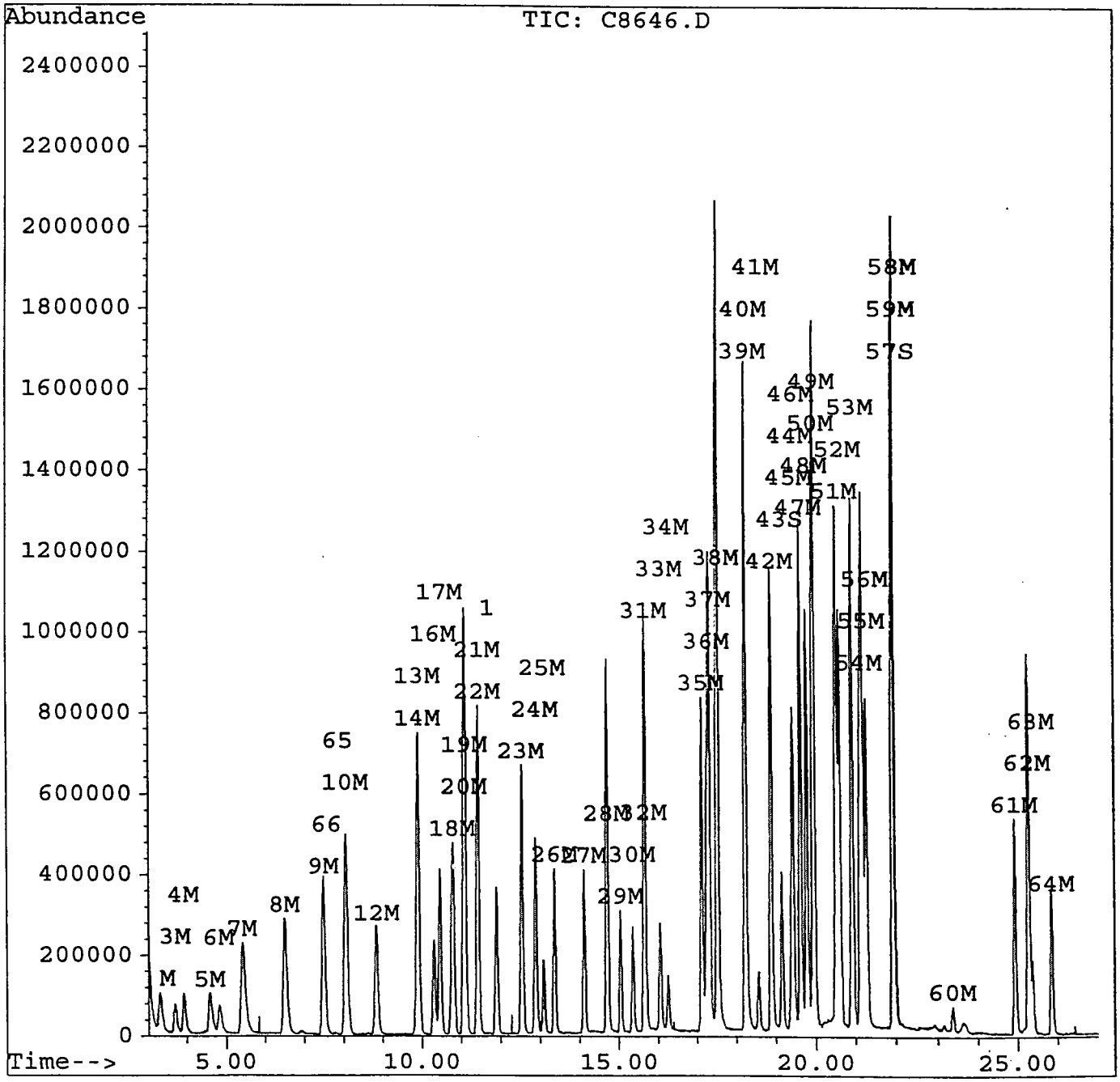
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
41)	Bromoform	18.55	173	147081	10.03	ug/L		88
42)	Isopropylbenzene	18.88	105	1821526	9.84	ug/L	m	0
44)	Bromobenzene	19.42	156	326558	9.79	ug/L		91
45)	1,1,2,2-Tetrachloroethane	19.38	83	210572	12.84	ug/L		100
46)	1,2,3-Trichloropropane	19.44	75	194455	9.77	ug/L	#	74
47)	n-Propylbenzene	19.61	91	2414660	10.03	ug/L		99
48)	2-Chlorotoluene	19.77	91	1339438	10.03	ug/L		96
49)	4-Chlorotoluene	19.96	91	1589209	10.02	ug/L		83
50)	1,3,5-Trimethylbenzene	19.93	105	1475207	9.63	ug/L		98
51)	tert-Butylbenzene	20.52	119	1568275	9.87	ug/L		96
52)	1,2,4-Trimethylbenzene	20.61	105	1387022	9.88	ug/L		99
53)	sec-Butylbenzene	20.92	105	2264992	9.62	ug/L		99
54)	1,3-Dichlorobenzene	21.13	146	652659	9.59	ug/L		96
55)	4-Isopropyltoluene	21.19	119	1709595	9.72	ug/L		96
56)	1,4-Dichlorobenzene	21.28	146	638409	9.46	ug/L		90
58)	1,2-Dichlorobenzene	21.96	146	492347	9.71	ug/L	m	0
59)	n-Butylbenzene	21.93	91	1889166	10.02	ug/L		97
60)	1,2-Dibromo-3-chloropropan	23.37	75	43161	10.36	ug/L		87
61)	1,2,4-Trichlorobenzene	24.93	180	334388	8.97	ug/L		99
62)	Hexachlorobutadiene	25.27	225	414343	9.22	ug/L		99
63)	Naphthalene	25.38	128	292892	9.08	ug/L		100
64)	1,2,3-Trichlorobenzene	25.86	180	238903	9.19	ug/L		98
65)	Methyl-tert butyl ether	8.07	73	421695	10.38	ug/L		94
66)	tert-Butyl Alcohol	7.78	59	12439	19.98	ug/L		100

(#) = qualifier out of range (m) = manual integration

Data File : d:\hpchem\1\data\c8646.d
Acq On : 23 Jun 95 1:36 am
Sample : 10 PPB QCS
Misc :
Quant Time: Jun 26 15:56 1995

Vial: 15 087
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue May 30 13:15:19 1995
Response via : Multiple Level Calibration



VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Lab File ID (Standard): C8618.D Date Analyzed: 6/21/95

Instrument ID: 5972-INSTRUMENT 1 Time Analyzed: 1601

GC Column: DB-624 X 75M ID: 0.53 (mm) Heated Purge (Y/N) N

		IS1 (FBZ) AREA #	RT #	AREA #	RT #	AREA #	RT #
	8 HOUR STD	727435	11.89				
	UPPER LIMIT	1454870	12.39				
	LOWER LIMIT	363718	11.39				
	SAMPLE NO.						
01	1PPB STD	711692	11.89				
02	VBLK01	698713	11.89				
03	9525784V	704279	11.89				
04	9527186V	683434	11.90				
05	9526426V	698303	11.90				
06	9526427V	692402	11.90				
07	9526428V	710683	11.91				
08	9526429V	725048	11.91				
09	9526430V	719132	11.91				
10	9526431V	725948	11.91				
11	9526431MS	724230	11.91				
12	9526431MSD	717343	11.91				
13	10PPBQCS	733483	11.91				
14							
15							
16							
17							
18							
19							
20							
21							
22							

IS1 (FBZ) = Fluorobenzene

AREA UPPER LIMIT = +30% of internal standard area
AREA LOWER LIMIT = -30% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Lab File ID (Standard): C8633.D Date Analyzed: 6/22/95

Instrument ID: 5972-INSTRUMENT 1 Time Analyzed: 1803

GC Column: DB-624 X 75M ID: 0.53 (mm) Heated Purge (Y/N) N

		IS1 (FBZ) AREA #	RT #	AREA #	RT #	AREA #	RT #
	8 HOUR STD	707039	11.90				
	UPPER LIMIT	1414078	12.40				
	LOWER LIMIT	353520	11.40				
	SAMPLE NO.						
01	1PPB STD	720869	11.89				
02	VBLK01	699604	11.89				
03	9526458V	689776	11.90				
04	9526459V	693766	11.90				
05	9526432V	686954	11.90				
06	9526433V	675700	11.90				
07	9526434V	699291	11.89				
08	9526436V	718684	11.89				
09	9526462V	679803	11.90				
10	9526435V	592434	11.90				
11	1PPB QCS	695431	11.90				
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

IS1 (FBZ) = Fluorobenzene

AREA UPPER LIMIT = +30% of internal standard area
AREA LOWER LIMIT = -30% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

1A
VOLATILE ORGANIC ANALYSIS DATA SHEET
EPA 524.2

Lab Name: EMSL ANALYTICAL
Matrix (soil/water): WATER
Sample wt/vol: 25 mL
Level (low/med): LOW
% Moisture: not dec.: NA
GC Column: DB-624 x 75m ID: 0.53mm
Soil Extract Volume: NA

Lab Sample ID: 9526426 Bldg 206 TB
Lab File ID: C8623.D
Date Received: 06/13/95
Date Analyzed: 06/21/95
Dilution Factor: 1
Soil Aliquot Volume: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	COMMENT
75-71-8	Dichlorodifluoromethane	.50	U
74-87-3	Chloromethane	.50	U
74-83-9	Bromomethane	.50	U
75-01-4	Vinyl Chloride	.50	U
75-00-3	Chloroethane	.50	U
75-69-4	Trichlorofluoromethane	.50	U
75-09-2	Methylene Chloride	2.3	B
156-60-65	trans-1,2-Dichloroethene	.50	U
75-35-4	1,1-Dichloroethene	.50	U
75-34-3	1,1-Dichloroethane	.50	U
594-20-7	2,2-Dichloropropane	.50	U
74-97-1	Bromochloromethane	.50	U
156-59-2	cis-1,2-Dichloroethene	.50	U
67-66-3	Chloroform	.50	U
563-58-6	1,1-Dichloropropene	.50	U
107-06-2	1,2-Dichloroethane	.50	U
71-55-6	1,1,1-Trichloroethane	.50	U
74-95-3	Dibromomethane	.50	U
56-23-1	Carbon Tetrachloride	.50	U
75-27-4	Bromodichloromethane	.50	U
78-87-1	1,2-Dichloropropane	.50	U
10061-01-1	cis-1,3-Dichloropropene	.50	U
142-28-9	1,3-Dichloropropane	.50	U
79-01-6	Trichloroethene	.50	U
124-48-1	Dibromochloromethane	.50	U
79-00-1	1,1,2-Trichloroethane	.50	U
71-43-2	Benzene	.50	U
10061-02-6	trans-1,3-Dichloropropene	.50	U
75-25-2	Bromoform	.50	U
630-20-6	1,1,1,2-Tetrachloroethane	.50	U
127-18-4	Tetrachloroethene	.50	U
79-34-1	1,1,2,2-Tetrachloroethane	.50	U
108-88-3	Toluene	.50	U
106-93-4	1,2-Dibromoethane	.50	U
108-90-7	Chlorobenzene	.50	U
100-41-4	Ethylbenzene	.50	U
1330-29-7	Xylene(total)	.50	U

U= Not Detected

1A
VOLATILE ORGANIC ANALYSIS DATA SHEET
EPA 524.2

Lab Name: EMSL ANALYTICAL
Matrix (soil/water): WATER
Sample wt/vol: 25 mL
Level (low/med): LOW
% Moisture: not dec.: NA
GC Column: DB-624 x 75m ID: 0.53mm
Soil Extract Volume: NA

Lab Sample ID: 9526426 Bldg 206TB
Lab File ID: C8623.D
Date Received: 06/13/95
Date Analyzed: 06/21/95
Dilution Factor: 1
Soil Aliquot Volume: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	COMMENT
100-42-1	Styrene	.50	U
98-82-8	Isopropylbenzene	.50	U
108-86-1	Bromobenzene	.50	U
96-18-4	1,2,3-Trichloropropane	.50	U
103-65-1	n-Propylbenzene	.50	U
95-49-8	2-Chlorotoluene	.50	U
106-43-4	4-Chlorotoluene	.50	U
108-67-8	1,3,5-Trimethylbenzene	.50	U
98-06-6	tert-Butylbenzene	.50	U
95-63-6	1,2,4-Trimethylbenzene	.50	U
135-98-8	sec-Butylbenzene	.50	U
541-73-1	1,3-Dichlorobenzene	.50	U
106-46-7	1,4-Dichlorobenzene	.50	U
99-87-6	4-Isopropyltoluene	.50	U
95-50-1	1,2-Dichlorobenzene	.50	U
104-51-8	n-Butylbenzene	.50	U
96-12-8	1,2-Dibromo-3-chloropropane	.50	U
120-82-1	1,2,4-Trichlorobenzene	.50	U
87-68-3	Hexachlorobutadiene	.50	U
91-20-3	Naphthalene	.50	U
87-61-6	1,2,3-Trichlorobenzene	.50	U

COMMENT
U= Not Detected

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

9526426V
Blds 20 TB

Lab Name: EMSL ANALYTICAL Contract:

Project No. Site: Location: Group:

Matrix: (soil/water) WATER Lab Sample ID: 9526426V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C8623.D

Level: (low/med) LOW Date Received: 6/13/95

% Moisture: not dec. NA Date Analyzed: 6/21/95

GC Column: DB-624 X 75M ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Number TICs found: 0 Concentration Units: (ug/L or ug/Kg) ug/L

CAS Number	Compound Name	RT	Est. Conc.	Q
1.	NONE FOUND			
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

Data File : d:\hpchem\1\data\c8623.d
Acq On : 21 Jun 95 6:57 pm
Sample : 9526426
Misc : 25 ML
Quant Time: Jun 22 15:11 1995

Vial: 7
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue May 30 13:15:19 1995
Response via : Multiple Level Calibration

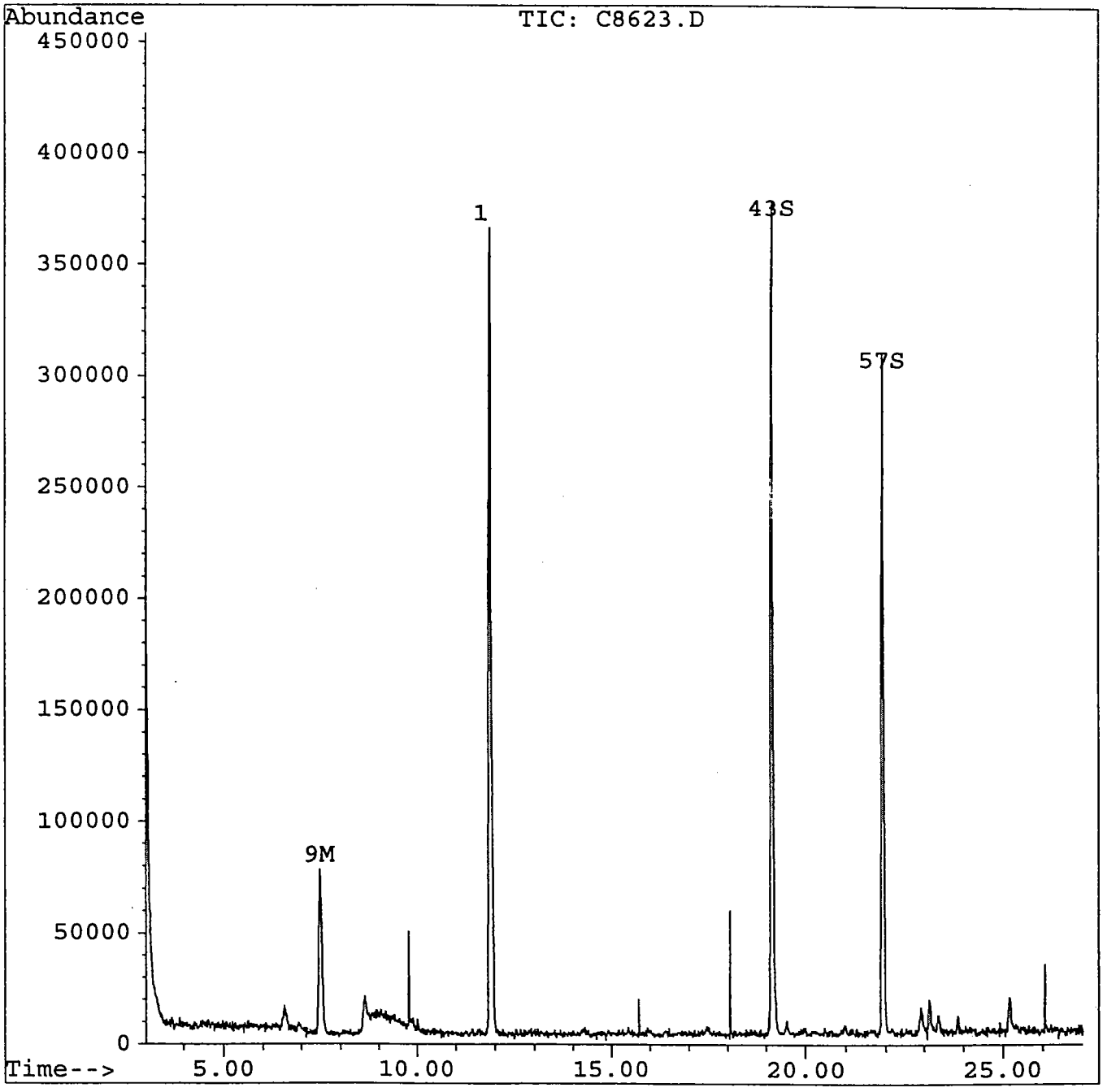
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	11.90	96	698303	5.00	ug/L	0.06
System Monitoring Compounds						%Recovery
43) 4-Bromofluorobenzene	19.15	95	355680	5.11	ug/L	102.12%
57) 1,2-Dichlorobenzene-d4	21.94	152	166590	5.24	ug/L	104.71%
Target Compounds						Qvalue
9) Methylene chloride	7.48	84	87937	2.30	ug/L	96

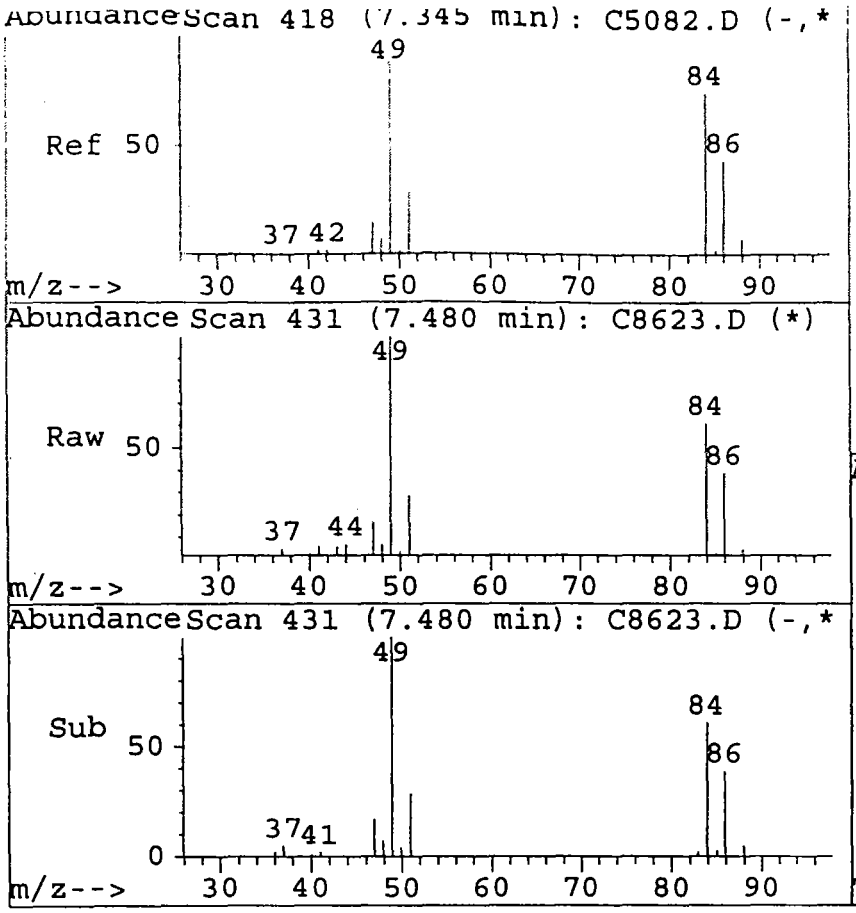
(#) = qualifier out of range (m) = manual integration

Data File : d:\hpchem\1\data\c8623.d
Acq On : 21 Jun 95 6:57 pm
Sample : 9526426
Misc : 25 ML
Quant Time: Jun 22 15:11 1995

Vial: 7
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue May 30 13:15:19 1995
Response via : Multiple Level Calibration





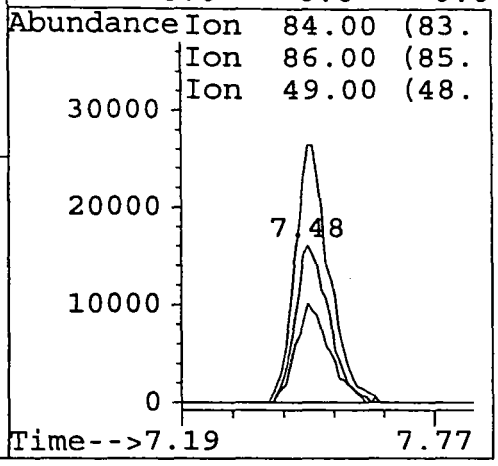
#9
Methylene chloride

095

Concen: 2.30 ug/L
RT: 7.48 min Scan# 431
Delta R.T. 0.07 min
Lab File: c8623.d
Acq: 21 Jun 95 6:57 pm

Tgt Ion:84 Resp: 87937

Ion	Ratio	Lower	Upper
84	100		
86	63.4	43.1	83.1
49	164.2	136.3	176.3
0	0.0	0.0	0.0



Data File : d:\hpchem\1\data\c8623.d
Acq On : 21 Jun 95 6:57 pm
Sample : 9526426
Misc : 25 ML

Vial: 7
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Library : NBS75K.L

No Library Search Compounds Detected

1A
VOLATILE ORGANIC ANALYSIS DATA SHEET
EPA 524.2

Lab Name: EMSL ANALYTICAL
Matrix (soil/water): WATER
Sample wt/vol: 25 mL
Level (low/med): LOW
% Moisture: not dec.: NA
GC Column: DB-624 x 75m ID: 0.53mm
Soil Extract Volume: NA

Lab Sample ID: 9526427 BLK 206 FB
Lab File ID: C8624.D
Date Received: 06/13/95
Date Analyzed: 06/21/95
Dilution Factor: 1
Soil Aliquot Volume: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	COMMENT
75-71-8	Dichlorodifluoromethane	.50	U
74-87-3	Chloromethane	.50	U
74-83-9	Bromomethane	.50	U
75-01-4	Vinyl Chloride	.50	U
75-00-3	Chloroethane	.50	U
75-69-4	Trichlorofluoromethane	.50	U
75-09-2	Methylene Chloride	2.1	B
156-60-65	trans-1,2-Dichloroethene	.50	U
75-35-4	1,1-Dichloroethene	.50	U
75-34-3	1,1-Dichloroethane	.50	U
594-20-7	2,2-Dichloropropane	.50	U
74-97-1	Bromochloromethane	.50	U
156-59-2	cis-1,2-Dichloroethene	.50	U
67-66-3	Chloroform	.50	U
563-58-6	1,1-Dichloropropene	.50	U
107-06-2	1,2-Dichloroethane	.50	U
71-55-6	1,1,1-Trichloroethane	.50	U
74-95-3	Dibromomethane	.50	U
56-23-1	Carbon Tetrachloride	.50	U
75-27-4	Bromodichloromethane	.50	U
78-87-1	1,2-Dichloropropane	.50	U
10061-01-1	cis-1,3-Dichloropropene	.50	U
142-28-9	1,3-Dichloropropane	.50	U
79-01-6	Trichloroethene	.50	U
124-48-1	Dibromochloromethane	.50	U
79-00-1	1,1,2-Trichloroethane	.50	U
71-43-2	Benzene	.50	U
10061-02-6	trans-1,3-Dichloropropene	.50	U
75-25-2	Bromoform	.50	U
630-20-6	1,1,1,2-Tetrachloroethane	.50	U
127-18-4	Tetrachloroethene	.50	U
79-34-1	1,1,2,2-Tetrachloroethane	.50	U
108-88-3	Toluene	.50	U
106-93-4	1,2-Dibromoethane	.50	U
108-90-7	Chlorobenzene	.50	U
100-41-4	Ethylbenzene	.50	U
1330-29-7	Xylene(total)	.50	U

U= Not Detected

1A
VOLATILE ORGANIC ANALYSIS DATA SHEET
EPA 524.2

Lab Name: EMSL ANALYTICAL
Matrix (soil/water): WATER
Sample wt/vol: 25 mL
Level (low/med): LOW
% Moisture: not dec.: NA
GC Column: DB-624 x 75m ID: 0.53mm
Soil Extract Volume: NA

Lab Sample ID: 9526427 Bldg 206 FB
Lab File ID: C8624.D
Date Received: 06/13/95
Date Analyzed: 06/21/95
Dilution Factor: 1
Soil Aliquot Volume: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	COMMENT
100-42-1	Styrene	.50	U
98-82-8	Isopropylbenzene	.50	U
108-86-1	Bromobenzene	.50	U
96-18-4	1,2,3-Trichloropropane	.50	U
103-65-1	n-Propylbenzene	.50	U
95-49-8	2-Chlorotoluene	.50	U
106-43-4	4-Chlorotoluene	.50	U
108-67-8	1,3,5-Trimethylbenzene	.50	U
98-06-6	tert-Butylbenzene	.50	U
95-63-6	1,2,4-Trimethylbenzene	.50	U
135-98-8	sec-Butylbenzene	.50	U
541-73-1	1,3-Dichlorobenzene	.50	U
106-46-7	1,4-Dichlorobenzene	.50	U
99-87-6	4-Isopropyltoluene	.50	U
95-50-1	1,2-Dichlorobenzene	.50	U
104-51-8	n-Butylbenzene	.50	U
96-12-8	1,2-Dibromo-3-chloropropane	.50	U
120-82-1	1,2,4-Trichlorobenzene	.50	U
87-68-3	Hexachlorobutadiene	.50	U
91-20-3	Naphthalene	.50	U
87-61-6	1,2,3-Trichlorobenzene	.50	U

COMMENT
U= Not Detected

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

9526427V
Blk 20 FB

Lab Name: EMSL ANALYTICAL Contract:

Project No. Site: Location: Group:

Matrix: (soil/water) WATER Lab Sample ID: 9526427V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C8624.D

Level: (low/med) LOW Date Received: 6/13/95

% Moisture: not dec. NA Date Analyzed: 6/21/95

GC Column: DB-624 X 75M ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Number TICs found: 0 Concentration Units: (ug/L or ug/Kg) ug/L

CAS Number	Compound Name	RT	Est. Conc.	Q
1.	NONE FOUND			
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

100

Data File : d:\hpchem\1\data\c8624.d
Acq On : 21 Jun 95 7:32 pm
Sample : 9526427
Misc : 25 ML
Quant Time: Jun 22 15:12 1995

Vial: 8
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue May 30 13:15:19 1995
Response via : Multiple Level Calibration

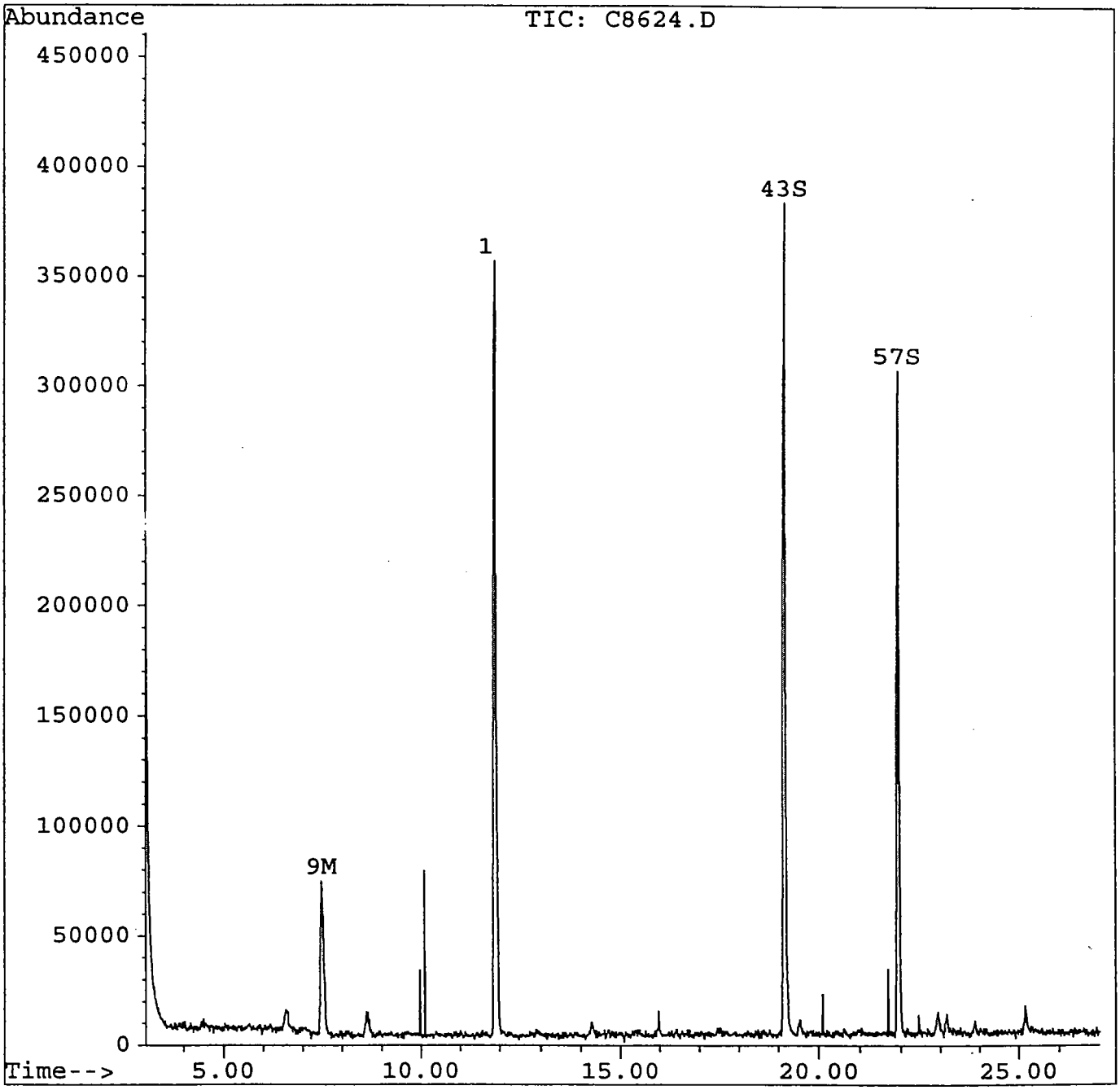
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	11.90	96	692402	5.00	ug/L	0.06
System Monitoring Compounds						%Recovery
43) 4-Bromofluorobenzene	19.15	95	355942	5.15	ug/L	103.07%
57) 1,2-Dichlorobenzene-d4	21.93	152	166107	5.26	ug/L	105.30%
Target Compounds						Qvalue
9) Methylene chloride	7.49	84	80575	2.13	ug/L	95

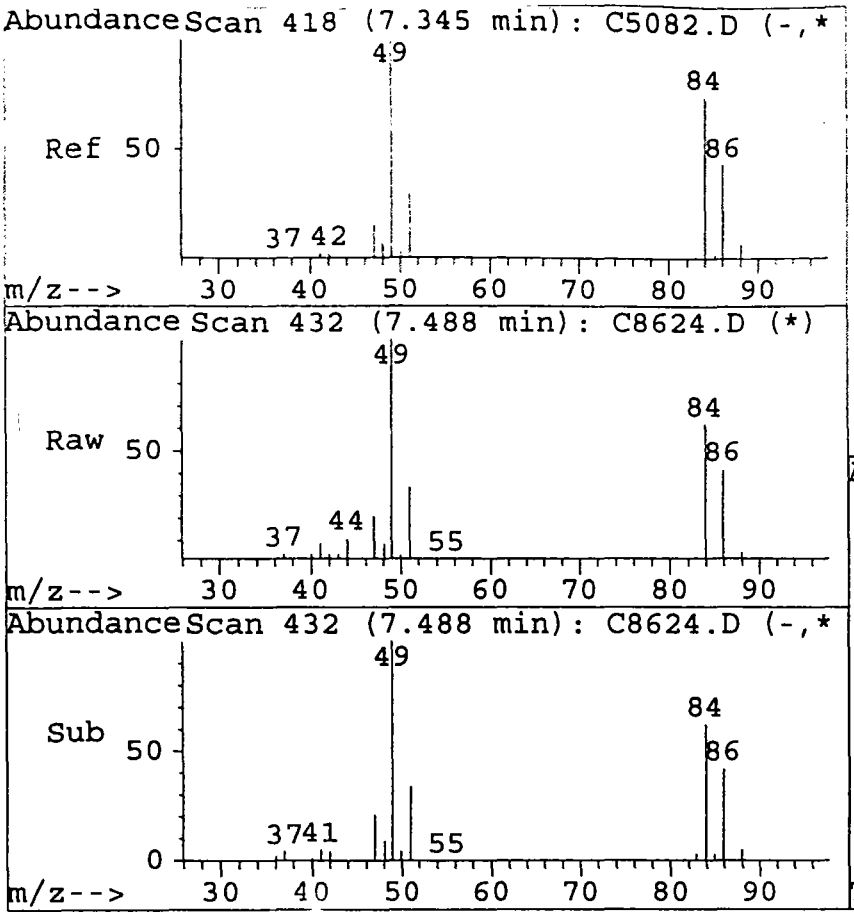
(#) = qualifier out of range (m) = manual integration

Data File : d:\hpchem\1\data\c8624.d
Acq On : 21 Jun 95 7:32 pm
Sample : 9526427
Misc : 25 ML
Quant Time: Jun 22 15:12 1995

Vial: 8
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue May 30 13:15:19 1995
Response via : Multiple Level Calibration

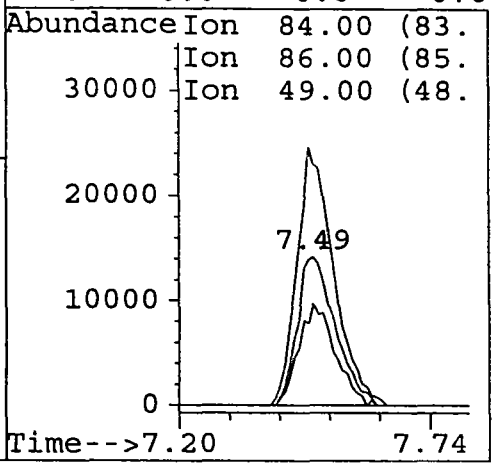




#9
Methylene chloride 102
Concen: 2.13 ug/L
RT: 7.49 min Scan# 432
Delta R.T. 0.08 min
Lab File: c8624.d
Acq: 21 Jun 95 7:32 pm

Tgt Ion:84 Resp: 80575

Ion	Ratio	Lower	Upper
84	100		
86	68.9	43.1	83.1
49	162.3	136.3	176.3
0	0.0	0.0	0.0



Data File : d:\hpchem\1\data\c8624.d
Acq On : 21 Jun 95 7:32 pm
Sample : 9526427
Misc : 25 ML

Vial: 8
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Library : NBS75K.L

No Library Search Compounds Detected

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL# mw1-293785

104

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No.: FT. MONMOUTH NJ Bldg#: 1108 NJDEP MW#: 1

Matrix: (soil/water) WATER Lab Sample ID: 9526434

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C8640.D

Level: (low/med) LOW Date Received: 6/13/95

% Moisture: not dec. NA Date Analyzed: 6/22/95

GC Column: DB-624 x 75m ID: 0.53 (mm) Dilution Factor: 1.0

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	.50	U
74-87-3	Chloromethane	.50	U
75-01-4	Vinyl chloride	.50	U
74-83-9	Bromomethane	.50	U
75-00-3	Chloroethane	.50	U
75-69-4	Trichlorofluoromethane	.50	U
75-35-4	1,1-Dichloroethene	.50	U
75-09-2	Methylene chloride	1.3	B
156-60-65	trans-1,2-Dichloroethene	.50	U
75-34-3	1,1-Dichloroethane	.50	U
594-20-7	2,2-Dichloropropane	.50	U
156-59-2	cis-1,2-Dichloroethene	.50	U
74-97-1	Bromochloromethane	.50	U
67-66-3	Chloroform	.50	U
71-55-6	1,1,1-Trichloroethane	.50	U
56-23-1	Carbon tetrachloride	.50	U
563-58-6	1,1-Dichloropropene	.50	U
71-43-2	Benzene	.50	U
107-06-2	1,2-Dichloroethane	.50	U
79-01-6	Trichloroethene	.50	U
78-87-1	1,2-Dichloropropane	.50	U
74-95-3	Dibromomethane	.50	U
75-27-4	Bromodichloromethane	.50	U
10061-01-1	cis-1,3-Dichloropropene	.50	U
108-88-3	Toluene	.50	U
10061-02-6	trans-1,3-Dichloropropene	.50	U
79-00-1	1,1,2-Trichloroethane	.50	U
127-18-4	Tetrachloroethene	.50	U
142-28-9	1,3-Dichloropropane	.50	U
124-48-1	Dibromochloromethane	.50	U
106-93-4	1,2-Dibromomethane	.50	U
108-90-7	Chlorobenzene	.50	U
630-20-6	1,1,1,2-Tetrachloroethane	.50	U

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL# 105

MW1-293785

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No.: FT. MONMOUTH NJ Bldg#: 1108 NJDEP MW#: 1

Matrix: (soil/water) WATER Lab Sample ID: 9526434

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C8640.D

Level: (low/med) LOW Date Received: 6/13/95

% Moisture: not dec. NA Date Analyzed: 6/22/95

GC Column: DB-624 x 75m ID: 0.53 (mm) Dilution Factor: 1.0

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
100-41-4	Ethylbenzene	.50	U
1330-29-7	Xylene (total)	.50	U
100-42-1	Styrene	.50	U
75-25-2	Bromoform	.50	U
98-82-8	Isopropylbenzene	.50	U
108-86-1	Bromobenzene	.50	U
79-34-1	1,1,2,2-Tetrachloroethane	.50	U
96-18-4	1,2,3-Trichloropropane	.50	U
103-65-1	n-Propylbenzene	.50	U
95-49-8	2-Chlorotoluene	.50	U
106-43-4	4-Chlorotoluene	.50	U
108-67-8	1,3,5-Trimethylbenzene	.50	U
98-06-6	tert-Butylbenzene	.50	U
95-63-6	1,2,4-Trimethylbenzene	.50	U
135-98-8	sec-Butylbenzene	.50	U
541-73-1	1,3-Dichlorobenzene	.50	U
99-87-6	4-Isopropyltoluene	.50	U
106-46-7	1,4-Dichlorobenzene	.50	U
95-50-1	1,2-Dichlorobenzene	.50	U
104-51-8	n-Butylbenzene	.50	U
96-12-8	1,2-Dibromo-3-chloropropane	.50	U
120-82-1	1,2,4-Trichlorobenzene	.50	U
87-68-3	Hexachlorobutadiene	.50	U
91-20-3	Naphthalene	.50	U
87-61-6	1,2,3-Trichlorobenzene	.50	U

1E

FMETL# 106

MW1-293785

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No. FT. MONMOUTH NJ Bldg# 1108 NJDEP MW#: 1

Matrix: (soil/water) WATER Lab Sample ID: 9526434V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C8640.D

Level: (low/med) LOW Date Received: 6/13/95

% Moisture: not dec. NA Date Analyzed: 6/22/95

GC Column: DB-624 X 75M ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: (uL) Soil Aliquot Volume: (uL)

Number TICs found: 0 Concentration Units: (ug/L or ug/Kg) ug/L

CAS Number	Compound Name	RT	Est. Conc.	Q
1.	NONE FOUND			
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

Quantitation Report

Data File : d:\hpchem\1\data\c8640.d
Acq On : 22 Jun 95 10:07 pm
Sample : 9526434
Misc : 25 ML
Quant Time: Jun 26 15:40 1995

Vial: 9
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue May 30 13:15:19 1995
Response via : Multiple Level Calibration

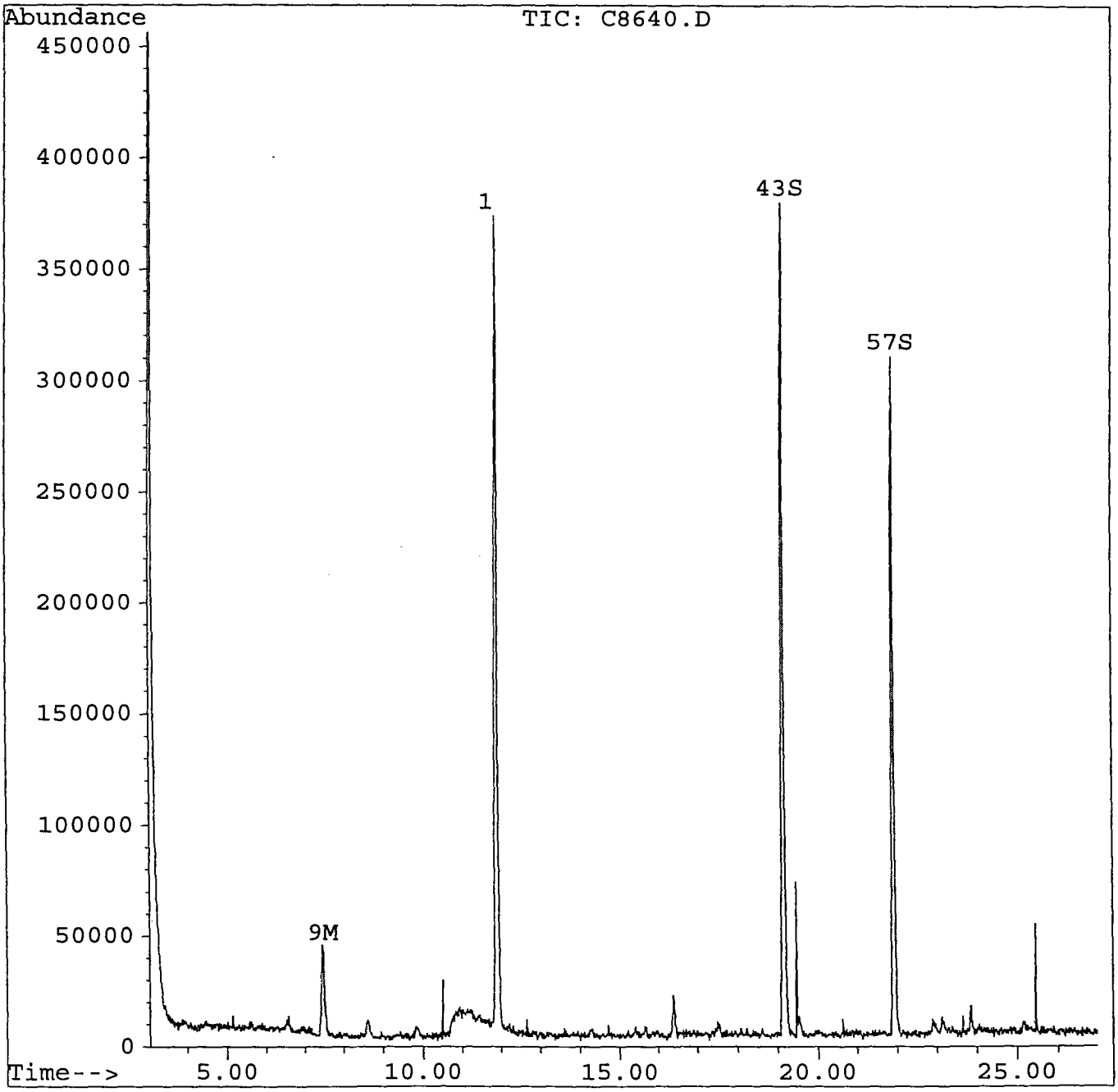
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	11.89	96	699291	5.00	ug/L	0.05
System Monitoring Compounds						%Recovery
43) 4-Bromofluorobenzene	19.14	95	367172	5.26	ug/L	105.27%
57) 1,2-Dichlorobenzene-d4	21.92	152	171367	5.38	ug/L	107.56%
Target Compounds						Qvalue
9) Methylene chloride	7.47	84	49174	1.28	ug/L	95

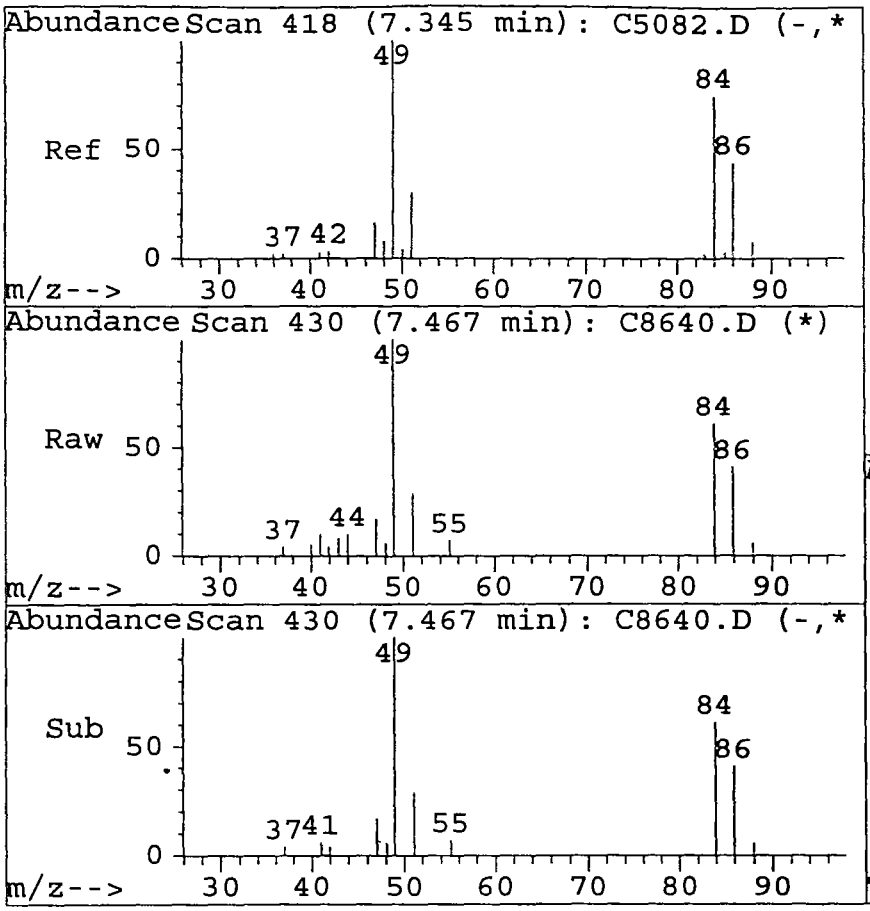
(#) = qualifier out of range (m) = manual integration

Data File : d:\hpchem\1\data\c8640.d
Acq On : 22 Jun 95 10:07 pm
Sample : 9526434
Misc : 25 ML
Quant Time: Jun 26 15:40 1995

Vial: 9
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue May 30 13:15:19 1995
Response via : Multiple Level Calibration

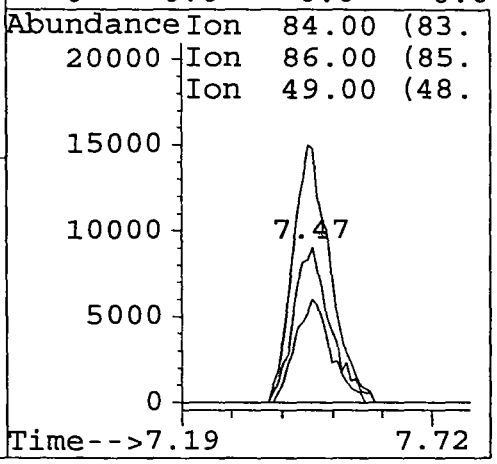




#9
Methylene chloride
Concen: 1.28 ug/L
RT: 7.47 min Scan# 430
Delta R.T. 0.06 min
Lab File: c8640.d
Acq: 22 Jun 95 10:07 pm

Tgt Ion:84 Resp: 49174

Ion	Ratio	Lower	Upper
84	100		
86	66.2	43.1	83.1
49	163.3	136.3	176.3
0	0.0	0.0	0.0



Data File : d:\hpchem\1\data\c8640.d
Acq On : 22 Jun 95 10:07 pm
Sample : 9526434
Misc : 25 ML

Vial: 9
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Library : NBS75K.L

No Library Search Compounds Detected

2A

WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

	SAMPLE NO.	SMC1 (BFB) #	SMC2 (DCB) #	#	OTHER #	TOT OUT
01	1PPB STD	105	106			
02	VBLK01	105	105			
03	9525784V	102	108			
04	9527186V	104	103			
05	9526426V	102	105			
06	9526427V	103	105			
07	9526428V	101	103			
08	9526429V	100	98			
09	9526430V	96	95			
10	9526431V	99	99			
11	9526431MS	101	101			
12	9526431MSD	100	99			
13	10PPBQCS	99	98			
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						

	QC LIMITS
SMC1 (BFB) = 4-Bromofluorobenzene	(80-120)
SMC2 (DCB) = 1,2-Dichlorobenzene-d4	(80-120)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

	SAMPLE NO.	SMC1 (BFB) #	SMC2 (DCB) #	#	OTHER #	TOT OUT
01	1PPB STD	105	105			
02	VBLK01	106	107			
03	9526458V	106	108			
04	9526459V	106	111			
05	9526432V	106	108			
06	9526433V	105	108			
07	9526434V	105	108			
08	9526436V	105	110			
09	9526462V	103	104			
10	9526435V	105	108			
11	1PPB QCS	100	99			
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						

QC LIMITS

SMC1 (BFB) = 4-Bromofluorobenzene (80-120)

SMC2 (DCB) = 1,2-Dichlorobenzene-d4 (80-120)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

4A

VOLATILE METHOD BLANK SUMMARY

SAMPLE NO.

VBLK01

Lab Name: EMSL ANALYTICAL Contract:

Project No.: Site: Location: Group:

Lab File ID: C8620.D Lab Sample ID: M. BLANK

Date Analyzed: 6/21/95 Time Analyzed: 1712

GC Column: DB-624 X 75M ID: 0.53 (mm) Heated Purge: (Y/N) N

Instrument ID: 5972-INSTRU

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	1PPB STD	1PPB STD	C8619.D	1637
02	9525784V	9525784V	C8621.D	1748
03	9527186V	9527186V	C8622.D	1823
04	9526426V	9526426V	C8623.D	1857
05	9526427V	9526427V	C8624.D	1932
06	9526428V	9526428V	C8625.D	2006
07	9526429V	9526429V	C8626.D	2040
08	9526430V	9526430V	C8627.D	2114
09	9526431V	9526431V	C8628.D	2148
10	9526431MS	26431MS	C8629.D	2223
11	9526431MSD	26431MSD	C8630.D	2257
12	10PPBQCS	10PPBQCS	C8631.D	2331
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

COMMENTS:

1A
VOLATILE ORGANIC ANALYSIS DATA SHEET
EPA 524.2

Lab Name: _EMSL ANALYTICAL_____ Lab Sample ID:_METHOD BLANK___
Matrix (soil/water): _WATER_____ Lab File ID:___C8620.D_____
Sample wt/vol: _25_mL_____ Date Received:_NA_____
Level (low/med): _LOW_____ Date Analyzed:_06/21/95_____
% Moisture: not dec.: _NA_____ Dilution Factor:__1_____
GC Column: _DB-624 x 75m_ ID:_0.53mm_ Soil Aliquot Volume:____NA____
Soil Extract Volume: ___NA____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) _ug/L__	COMMENT
75-71-8	Dichlorodifluoromethane	.50	U
74-87-3	Chloromethane	.50	U
74-83-9	Bromomethane	.50	U
75-01-4	Vinyl Chloride	.50	U
75-00-3	Chloroethane	.50	U
75-69-4	Trichlorofluoromethane	.50	U
75-09-2	Methylene Chloride	1.5	
156-60-65	trans-1,2-Dichloroethene	.50	U
75-35-4	1,1-Dichloroethene	.50	U
75-34-3	1,1-Dichloroethane	.50	U
594-20-7	2,2-Dichloropropane	.50	U
74-97-1	Bromochloromethane	.50	U
156-59-2	cis-1,2-Dichloroethene	.50	U
67-66-3	Chloroform	.50	U
563-58-6	1,1-Dichloropropene	.50	U
107-06-2	1,2-Dichloroethane	.50	U
71-55-6	1,1,1-Trichloroethane	.50	U
74-95-3	Dibromomethane	.50	U
56-23-1	Carbon Tetrachloride	.50	U
75-27-4	Bromodichloromethane	.50	U
78-87-1	1,2-Dichloropropane	.50	U
10061-01-1	cis-1,3-Dichloropropene	.50	U
142-28-9	1,3-Dichloropropane	.50	U
79-01-6	Trichloroethene	.50	U
124-48-1	Dibromochloromethane	.50	U
79-00-1	1,1,2-Trichloroethane	.50	U
71-43-2	Benzene	.50	U
10061-02-6	trans-1,3-Dichloropropene	.50	U
75-25-2	Bromoform	.50	U
630-20-6	1,1,1,2-Tetrachloroethane	.50	U
127-18-4	Tetrachloroethene	.50	U
79-34-1	1,1,2,2-Tetrachloroethane	.50	U
108-88-3	Toluene	.50	U
106-93-4	1,2-Dibromoethane	.50	U
108-90-7	Chlorobenzene	.50	U
100-41-4	Ethylbenzene	.50	U
1330-29-7	Xylene(total)	.50	U

U: Not Detected

1A
VOLATILE ORGANIC ANALYSIS DATA SHEET
EPA 524.2

Lab Name: EMSL ANALYTICAL
Matrix (soil/water): WATER
Sample wt/vol: 25 mL
Level (low/med): LOW
% Moisture: not dec.: NA
GC Column: DB-624 x 75m ID: 0.53mm
Soil Extract Volume: NA

Lab Sample ID: METHOD BLANK
Lab File ID: C8620.D
Date Received: NA
Date Analyzed: 06/21/95
Dilution Factor: 1
Soil Aliquot Volume: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	COMMENT
100-42-1	Styrene	.50	U
98-82-8	Isopropylbenzene	.50	U
108-86-1	Bromobenzene	.50	U
96-18-4	1,2,3-Trichloropropane	.50	U
103-65-1	n-Propylbenzene	.50	U
95-49-8	2-Chlorotoluene	.50	U
106-43-4	4-Chlorotoluene	.50	U
108-67-8	1,3,5-Trimethylbenzene	.50	U
98-06-6	tert-Butylbenzene	.50	U
95-63-6	1,2,4-Trimethylbenzene	.50	U
135-98-8	sec-Butylbenzene	.50	U
541-73-1	1,3-Dichlorobenzene	.50	U
106-46-7	1,4-Dichlorobenzene	.50	U
99-87-6	4-Isopropyltoluene	.50	U
95-50-1	1,2-Dichlorobenzene	.50	U
104-51-8	n-Butylbenzene	.50	U
96-12-8	1,2-Dibromo-3-chloropropane	.50	U
120-82-1	1,2,4-Trichlorobenzene	.50	U
87-68-3	Hexachlorobutadiene	.50	U
91-20-3	Naphthalene	.50	U
87-61-6	1,2,3-Trichlorobenzene	.50	U
1634-04-4	Methyl-tertiary butyl ether	.50	U
75-65-0	tertiary-Butyl alcohol	2.0	U

COMMENT
U= Not Detected

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO. **VBLK01**

Lab Name: EMSL ANALYTICAL Contract: _____

Project No. _____ Site: _____ Location: _____ Group: _____

Matrix: (soil/water) WATER Lab Sample ID: M. BLANK

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C8620.D

Level: (low/med) LOW Date Received: NA

% Moisture: not dec. NA Date Analyzed: 6/21/95

GC Column: DB-624 X 75M ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Concentration Units:

Number TICs found: 0 (ug/L or ug/Kg) ug/L

CAS Number	Compound Name	RT	Est. Conc.	Q
1.	NONE FOUND			
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

Quantitation Report

Data File : d:\hpchem\1\data\c8620.d
Acq On : 21 Jun 95 5:12 pm
Sample : METHOD BLANK
Misc : 25 ML
Quant Time: Jun 22 15:08 1995

Vial: 4
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue May 30 13:15:19 1995
Response via : Multiple Level Calibration

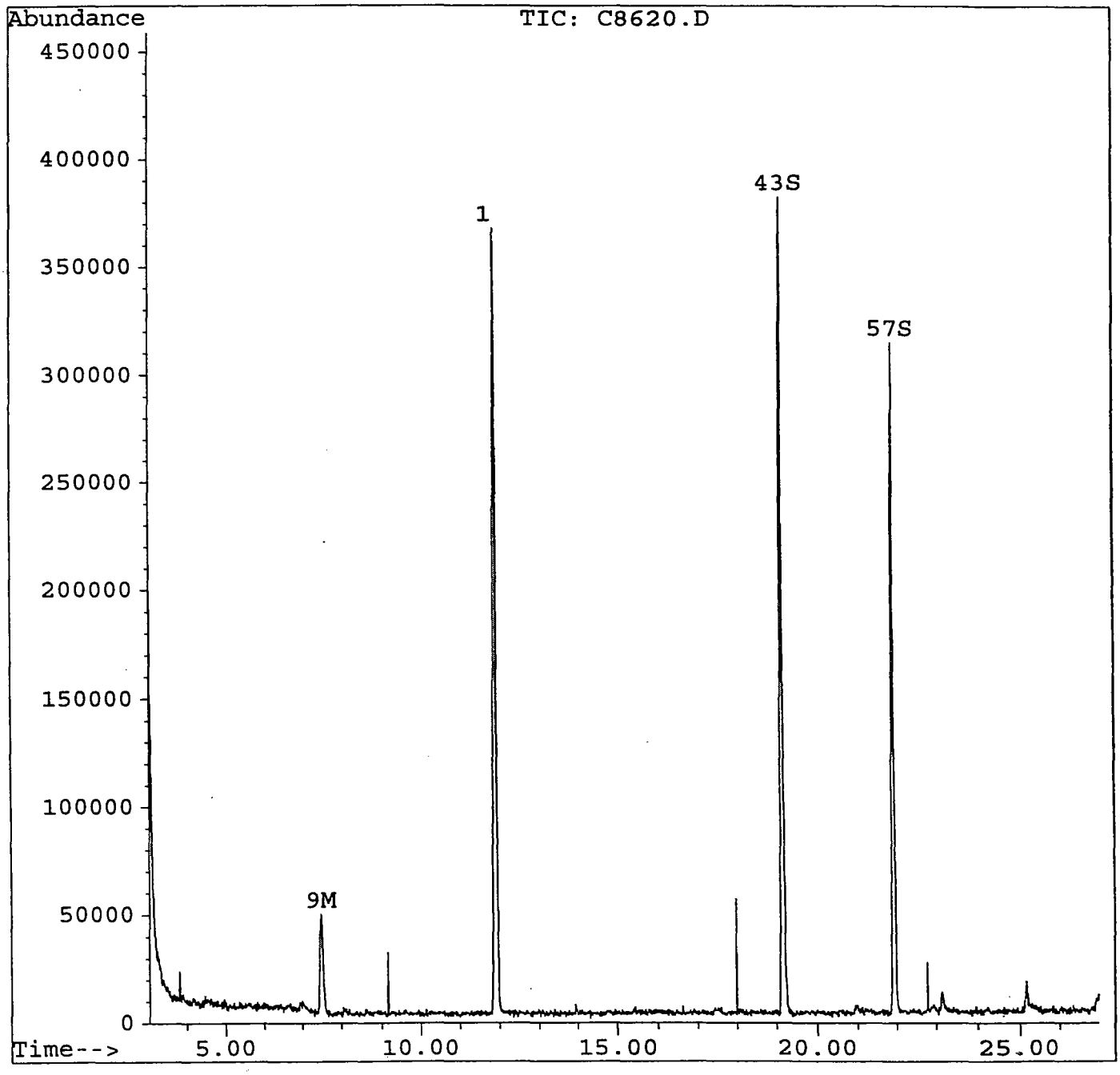
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	11.89	96	698713	5.00	ug/L	0.05
System Monitoring Compounds						%Recovery
43) 4-Bromofluorobenzene	19.14	95	365041	5.24	ug/L	104.75%
57) 1,2-Dichlorobenzene-d4	21.92	152	166792	5.24	ug/L	104.78%
Target Compounds						Qvalue
9) Methylene chloride	7.47	84	55780	1.46	ug/L	94

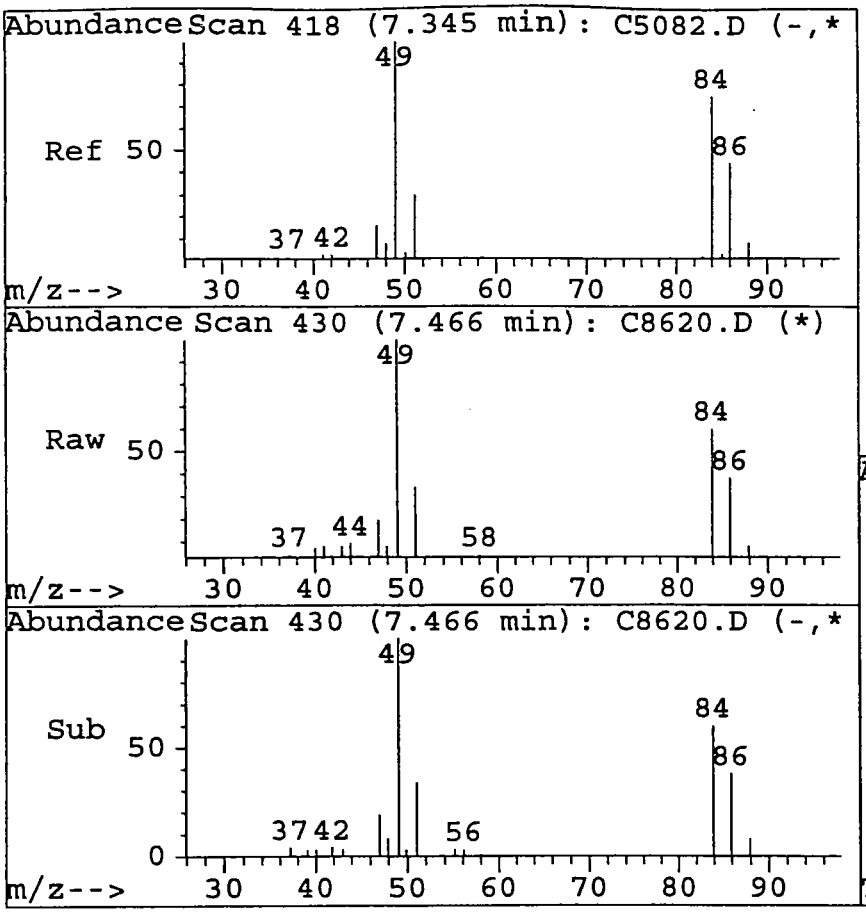
(#) = qualifier out of range (m) = manual integration

Data File : d:\hpchem\1\data\c8620.d
Acq On : 21 Jun 95 5:12 pm
Sample : METHOD BLANK
Misc : 25 ML
Quant Time: Jun 22 15:08 1995

Vial: 4
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue May 30 13:15:19 1995
Response via : Multiple Level Calibration

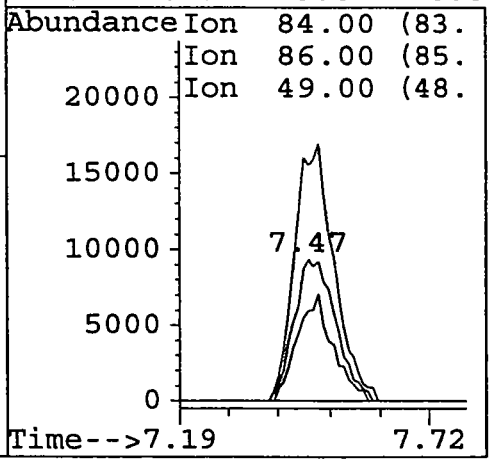




#9
Methylene chloride
Concen: 1.46 ug/L
RT: 7.47 min Scan# 430
Delta R.T. 0.06 min
Lab File: c8620.d
Acq: 21 Jun 95 5:12 pm

Tgt Ion:84 Resp: 55780

Ion	Ratio	Lower	Upper
84	100		
86	63.7	43.1	83.1
49	166.3	136.3	176.3
0	0.0	0.0	0.0



Library Search Compound Report

120

Data File : d:\hpchem\1\data\c8620.d
Acq On : 21 Jun 95 5:12 pm
Sample : METHOD BLANK
Misc : 25 ML

Vial: 4
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Library : NBS75K.L

No Library Search Compounds Detected

4A

VOLATILE METHOD BLANK SUMMARY

SAMPLE NO.

VBLK01 121

Lab Name: EMSL ANALYTICAL Contract: U.S ARM

Project No.: FT. MONMOUTH NJ Site: _____ Location: _____ Group: _____

Lab File ID: C8635.D Lab Sample ID: M. BLANK

Date Analyzed: 6/22/95 Time Analyzed: 1913

GC Column: DB-624 X 75M ID: 0.53 (mm) Heated Purge: (Y/N) N

Instrument ID: 5972-INSTRU

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	1PPB STD	1PPB STD	C8634.D	1838
02	9526458V	9526458V	C8636.D	1948
03	9526459V	9526459V	C8637.D	2023
04	9526432V	9526432V	C8638.D	2058
05	9526433V	9526443V	C8639.D	2133
06	9526434V	9526434V	C8640.D	2207
07	9526436V	9526436V	C8641.D	2242
08	9526462V	9526462V	C8644.D	0027
09	9526435V	9526435V	C8645.D	0101
10	1PPB QCS	1PPB QCS	C8646.D	0136
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

COMMENTS:

1A

FMETL# 122

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No.: FT. MONMOUTH NJ Bldg#: _____ NJDEP MW#: _____

Matrix: (soil/water) WATER Lab Sample ID: M. BLANK

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C8635.D

Level: (low/med) LOW Date Received: NA

% Moisture: not dec. NA Date Analyzed: 6/22/95

GC Column: DB-624 x 75m ID: 0.53 (mm) Dilution Factor: 1.0

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	.50	U
74-87-3	Chloromethane	.50	U
75-01-4	Vinyl chloride	.50	U
74-83-9	Bromomethane	.50	U
75-00-3	Chloroethane	.50	U
75-69-4	Trichlorofluoromethane	.50	U
75-35-4	1,1-Dichloroethene	.50	U
75-09-2	Methylene chloride	2.0	
156-60-65	trans-1,2-Dichloroethene	.50	U
75-34-3	1,1-Dichloroethane	.50	U
594-20-7	2,2-Dichloropropane	.50	U
156-59-2	cis-1,2-Dichloroethene	.50	U
74-97-1	Bromochloromethane	.50	U
67-66-3	Chloroform	.50	U
71-55-6	1,1,1-Trichloroethane	.50	U
56-23-1	Carbon tetrachloride	.50	U
563-58-6	1,1-Dichloropropene	.50	U
71-43-2	Benzene	.50	U
107-06-2	1,2-Dichloroethane	.50	U
79-01-6	Trichloroethene	.50	U
78-87-1	1,2-Dichloropropane	.50	U
74-95-3	Dibromomethane	.50	U
75-27-4	Bromodichloromethane	.50	U
10061-01-1	cis-1,3-Dichloropropene	.50	U
108-88-3	Toluene	.50	U
10061-02-6	trans-1,3-Dichloropropene	.50	U
79-00-1	1,1,2-Trichloroethane	.50	U
127-18-4	Tetrachloroethene	.50	U
142-28-9	1,3-Dichloropropane	.50	U
124-48-1	Dibromochloromethane	.50	U
106-93-4	1,2-Dibromomethane	.50	U
108-90-7	Chlorobenzene	.50	U
630-20-6	1,1,1,2-Tetrachloroethane	.50	U

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL# 123

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No.: FT. MONMOUTH NJ Bldg#: _____ NJDEP MW#: _____

Matrix: (soil/water) WATER Lab Sample ID: M. BLANK

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C8635.D

Level: (low/med) LOW Date Received: NA

% Moisture: not dec. NA Date Analyzed: 6/22/95

GC Column: DB-624 x 75m ID: 0.53 (mm) Dilution Factor: 1.0

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
100-41-4	Ethylbenzene	.50	U
1330-29-7	Xylene (total)	.50	U
100-42-1	Styrene	.50	U
75-25-2	Bromoform	.50	U
98-82-8	Isopropylbenzene	.50	U
108-86-1	Bromobenzene	.50	U
79-34-1	1,1,2,2-Tetrachloroethane	.50	U
96-18-4	1,2,3-Trichloropropane	.50	U
103-65-1	n-Propylbenzene	.50	U
95-49-8	2-Chlorotoluene	.50	U
106-43-4	4-Chlorotoluene	.50	U
108-67-8	1,3,5-Trimethylbenzene	.50	U
98-06-6	tert-Butylbenzene	.50	U
95-63-6	1,2,4-Trimethylbenzene	.50	U
135-98-8	sec-Butylbenzene	.50	U
541-73-1	1,3-Dichlorobenzene	.50	U
99-87-6	4-Isopropyltoluene	.50	U
106-46-7	1,4-Dichlorobenzene	.50	U
95-50-1	1,2-Dichlorobenzene	.50	U
104-51-8	n-Butylbenzene	.50	U
96-12-8	1,2-Dibromo-3-chloropropane	.50	U
120-82-1	1,2,4-Trichlorobenzene	.50	U
87-68-3	Hexachlorobutadiene	.50	U
91-20-3	Naphthalene	.50	U
87-61-6	1,2,3-Trichlorobenzene	.50	U
1634-04-4	Methy-tertiary butyl ether	.50	U
75-65-0	tertiary-Butyl alcohol	2.0	U

FMETL# 124

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: EMSL ANALYTICAL Contract: U.S ARMY

Project No. FT. MONMOUTH NJ Bldg# _____ NJDEP MW#: _____

Matrix: (soil/water) WATER Lab Sample ID: M. BLANK

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C8635.D

Level: (low/med) LOW Date Received: NA

% Moisture: not dec. NA Date Analyzed: 6/22/95

GC Column: DB-624 X 75M ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

Number TICs found: 0 Concentration Units: (ug/L or ug/Kg) ug/L

CAS Number	Compound Name	RT	Est. Conc.	Q
1.	NONE FOUND			
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

Quantitation Report

Data File : d:\hpchem\1\data\c8635.d
Acq On : 22 Jun 95 7:13 pm
Sample : METHOD BLANK
Misc : 25 ML
Quant Time: Jun 26 15:09 1995

Vial: 4
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue May 30 13:15:19 1995
Response via : Multiple Level Calibration

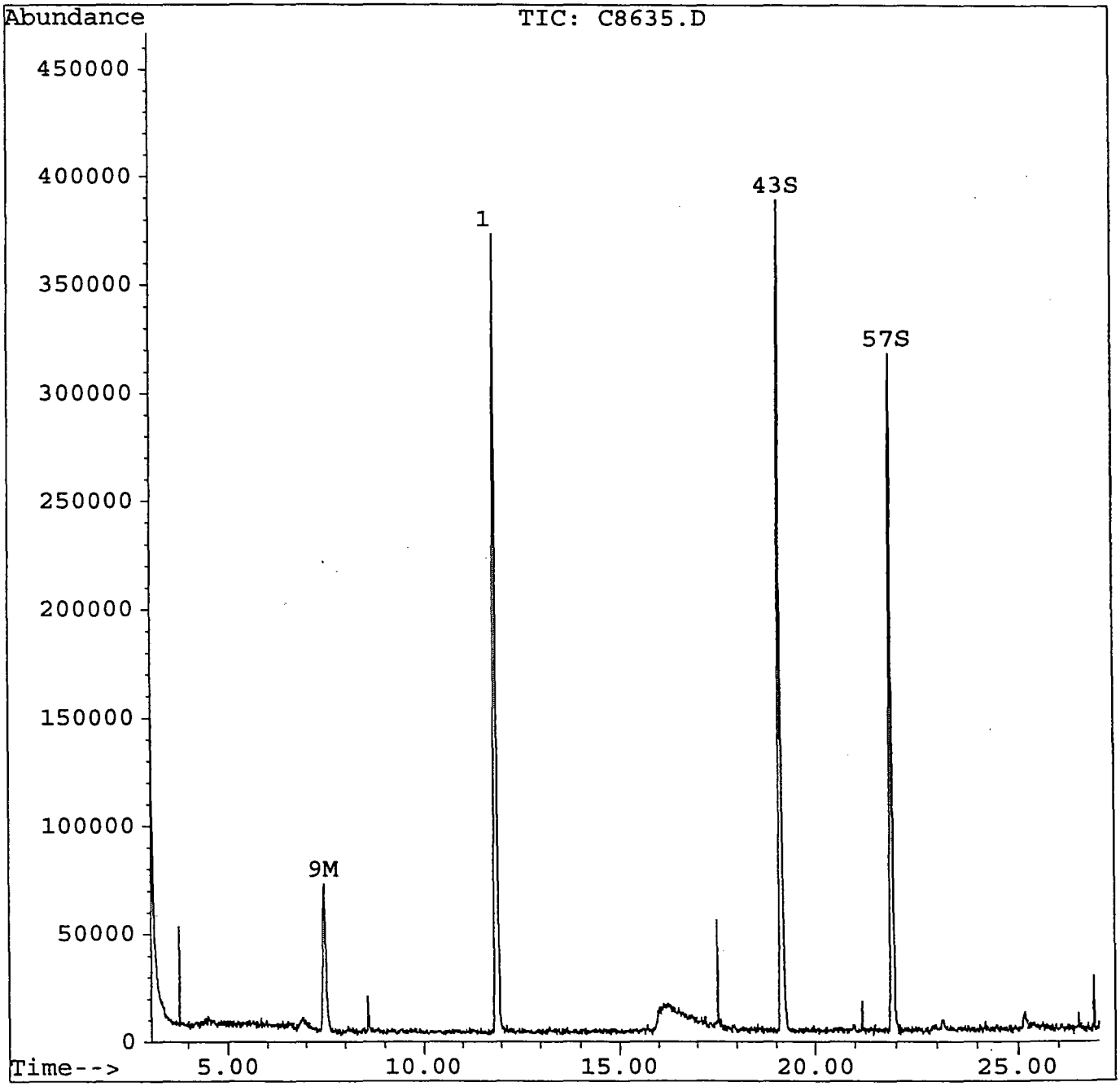
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	11.89	96	699604	5.00	ug/L	0.05
System Monitoring Compounds						%Recovery
43) 4-Bromofluorobenzene	19.14	95	369468	5.29	ug/L	105.88%
57) 1,2-Dichlorobenzene-d4	21.91	152	170413	5.35	ug/L	106.91%
Target Compounds						Qvalue
9) Methylene chloride	7.48	84	82521	2.15	ug/L	100

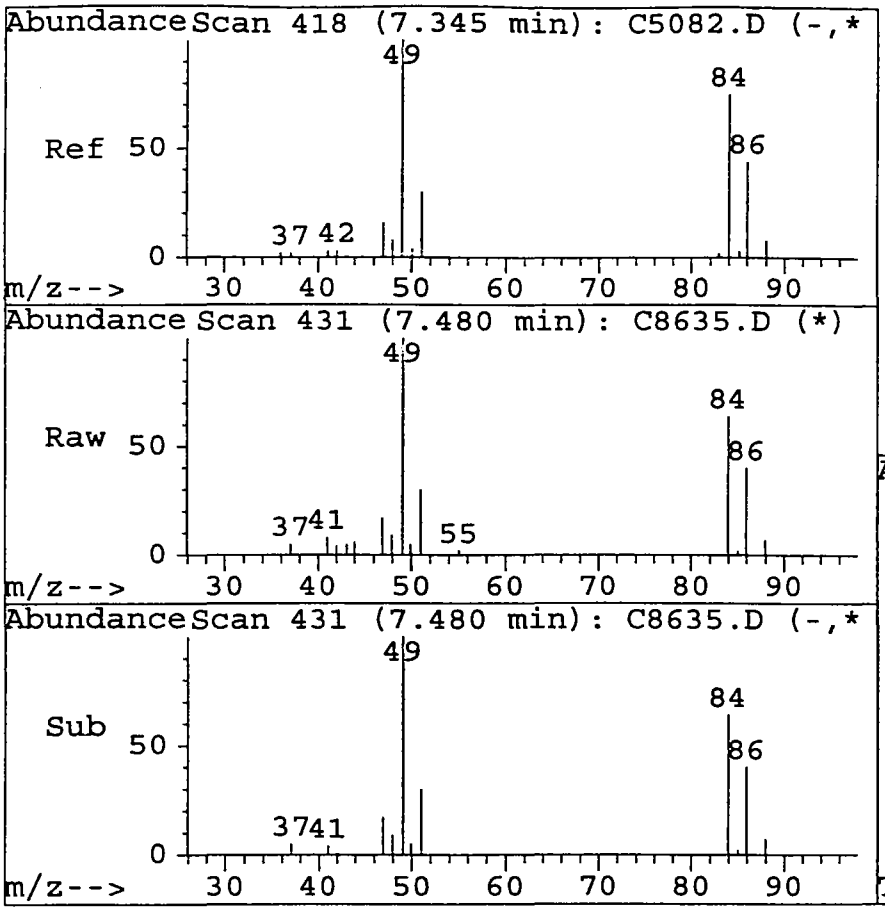
(#) = qualifier out of range (m) = manual integration

Data File : d:\hpchem\1\data\c8635.d
Acq On : 22 Jun 95 7:13 pm
Sample : METHOD BLANK
Misc : 25 ML
Quant Time: Jun 26 15:09 1995

Vial: 4 126
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue May 30 13:15:19 1995
Response via : Multiple Level Calibration

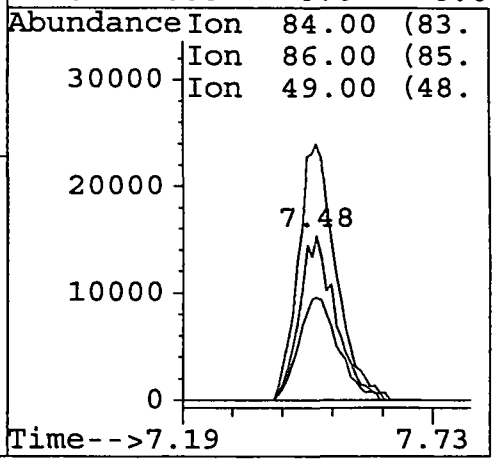




#9
Methylene chloride
Concen: 2.15 ug/L
RT: 7.48 min Scan# 431
Delta R.T. 0.07 min
Lab File: c8635.d
Acq: 22 Jun 95 7:13 pm

Tgt Ion:84 Resp: 82521

Ion	Ratio	Lower	Upper
84	100		
86	62.5	43.1	83.1
49	156.2	136.3	176.3
0	0.0	0.0	0.0



Data File : d:\hpchem\1\data\c8635.d
Acq On : 22 Jun 95 7:13 pm
Sample : METHOD BLANK
Misc : 25 ML

Vial: 4
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Library : NBS75K.L

No Library Search Compounds Detected

Spike Recovery and RPD Summary Report - WATER

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue May 30 13:15:19 1995
Response via : Initial Calibration

MS-Spiked Sample: C8628.D

	Spike Sample	Spike Duplicate Sample
File ID :	C8629.D	C8630.D
Sample :	9526431 MS	9526431 MSD
Acq Time:	21 Jun 95 10:23 pm	21 Jun 95 10:57 pm

Compound	Sample Conc	Spike Added	Spike Res	Dup Res	Spike %Rec	Dup %Rec	RPD	QC Limits RPD	QC Limits % Rec
Dichlorodifluorometh	0.1	10	9	9	87	88	1	25	80-120
Chloromethane	0.0	10	10	10	101	100	0	25	80-120
Vinyl chloride	0.0	10	10	10	102	103	1	25	80-120
Bromomethane	0.0	10	11	11	108	109	1	25	80-120
Chloroethane	0.0	10	11	12	114	115	1	25	80-120
Trichlorofluorometha	0.0	10	10	11	104	105	1	25	80-120
1,1-Dichloroethene	0.0	10	10	10	100	100	1	25	80-120
Methylene chloride	2.1	10	10	9	77#	73#	6	25	80-120
trans-1,2-Dichloroet	0.0	10	10	10	99	102	4	25	80-120
1,1-Dichloroethane	0.8	10	12	12	108	109	1	25	80-120
2,2-Dichloropropane	0.0	10	9	9	89	89	1	25	80-120
cis-1,2-Dichloroethe	0.0	10	11	10	103	101	2	25	80-120
Bromochloromethane	0.0	10	10	10	96	98	2	25	80-120
Chloroform	0.0	10	10	11	104	105	1	25	80-120
1,1,1-Trichloroethan	0.0	10	10	10	103	105	1	25	80-120
Carbon tetrachloride	0.0	10	10	10	100	100	0	25	80-120
1,1-Dichloropropene	0.0	10	10	11	102	107	5	25	80-120
Benzene	0.0	10	10	10	103	103	0	25	80-120
1,2-Dichloroethane	0.0	10	10	11	103	105	2	25	80-120
Trichloroethene	1.0	10	11	11	98	101	2	25	80-120
1,2-Dichloropropane	0.0	10	11	11	108	107	0	25	80-120
Dibromomethane	0.0	10	10	10	103	103	0	25	80-120
Bromodichloromethane	0.0	10	10	10	103	103	0	25	80-120
cis-1,3-Dichloroprop	0.0	10	10	10	100	100	0	25	80-120
Toluene	0.0	10	10	10	99	102	4	25	80-120
trans-1,3-Dichloropr	0.0	10	10	10	97	101	4	25	80-120
1,1,2-Trichloroethan	0.0	10	10	10	103	101	1	25	80-120
Tetrachloroethene	1.1	10	11	11	96	98	2	25	80-120
1,3-Dichloropropane	0.0	10	10	10	102	102	0	25	80-120
Dibromochloromethane	0.0	10	9	10	94	97	3	25	80-120
1,2-Dibromomethane	0.0	10	10	10	99	99	0	25	80-120
Chlorobenzene	0.0	10	10	10	100	100	0	25	80-120
1,1,1,2-Tetrachloroe	0.0	10	10	10	97	97	0	25	80-120
Ethylbenzene	0.0	10	10	10	98	103	5	25	80-120
Xylene (para & meta)	0.0	20	18	20	88	98	11	25	80-120
Xylene (Ortho)	0.0	10	9	10	89	99	11	25	80-120
Styrene	0.0	10	9	9	87	95	9	25	80-120
Bromoform	0.0	10	9	9	90	93	3	25	80-120
Isopropylbenzene	0.0	10	10	10	97	100	3	25	80-120
Bromobenzene	0.0	10	10	10	97	97	0	25	80-120
1,1,2,2-Tetrachloroe	0.0	10	12	11	116	114	2	25	80-120
1,2,3-Trichloropropa	0.0	10	10	9	103	93	10	25	80-120
n-Propylbenzene	0.0	10	10	10	99	103	4	25	80-120

2-Chlorotoluene	0.0	10	11	11	108	108	1	25	80-120
-Chlorotoluene	0.0	10	10	10	100	102	2	25	80-120
,3,5-Trimethylbenze	0.0	10	8	10	90	95	5	25	80-120
tert-Butylbenzene	0.0	10	10	10	100	100	0	25	80-120
,2,4-Trimethylbenze	0.0	10	9	10	87	99	13	25	80-120
ec-Butylbenzene	0.0	10	10	10	98	99	1	25	80-120
1,3-Dichlorobenzene	0.0	10	10	10	97	97	0	25	80-120
sopropyltoluene	0.0	10	9	10	89	97	9	25	80-120
,4-Dichlorobenzene	0.0	10	10	10	96	97	1	25	80-120
,2-Dichlorobenzene	0.0	10	10	10	98	99	2	25	80-120
n-Butylbenzene	0.0	10	10	10	99	101	2	25	80-120
,2-Dibromo-3-chloro	0.0	10	10	10	97	100	2	25	80-120
,2,4-Trichlorobenze	0.0	10	9	9	90	90	0	25	80-120
Hexachlorobutadiene	0.0	10	9	9	95	94	1	25	80-120
Naphthalene	0.0	10	9	10	91	95	4	25	80-120
,2,3-Trichlorobenze	0.0	10	9	9	93	92	2	25	80-120

Quantitation Report

Data File : d:\hpchem\1\data\c8629.d
Acq On : 21 Jun 95 10:23 pm
Sample : 9526431 MS
Misc : 25 ML
Quant Time: Jun 22 15:26 1995

Vial: 13
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue May 30 13:15:19 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	11.91	96	724230	5.00	ug/L		0.07
System Monitoring Compounds							%Recovery
43) 4-Bromofluorobenzene	19.15	95	363199	5.03	ug/L		100.54%
57) 1,2-Dichlorobenzene-d4	21.93	152	166204	5.04	ug/L		100.73%
Target Compounds							Qvalue
2) Dichlorodifluoromethane	3.34	85	507706	8.84	ug/L		95
3) Chloromethane	3.72	50	341144	10.09	ug/L		98
4) Vinyl chloride	3.94	62	388786	10.21	ug/L		98
5) Bromomethane	4.59	94	276878	10.75	ug/L		99
6) Chloroethane	4.84	64	254197	11.39	ug/L		94
7) Trichlorofluoromethane	5.44	101	889262	10.45	ug/L		97
8) 1,1-Dichloroethene	6.52	96	375620	10.05	ug/L	#	86
9) Methylene chloride	7.49	84	388425	9.79	ug/L		94
10) trans-1,2-Dichloroethene	8.04	96	390408	9.89	ug/L		91
12) 1,1-Dichloroethane	8.84	63	911424	11.54	ug/L		97
13) 2,2-Dichloropropane	9.91	77	692646	8.95	ug/L		100
14) cis-1,2-Dichloroethene	9.91	96	393804	10.58	ug/L		96
16) Bromochloromethane	10.32	128	125174	9.60	ug/L	#	89
17) Chloroform	10.48	83	768687	10.37	ug/L		99
18) 1,1,1-Trichloroethane	10.80	97	848337	10.34	ug/L		97
19) Carbon tetrachloride	11.11	117	761767	10.00	ug/L		99
20) 1,1-Dichloropropene	11.10	75	727926	10.16	ug/L		99
21) Benzene	11.44	78	1301213	10.32	ug/L		97
22) 1,2-Dichloroethane	11.44	62	322398	10.42	ug/L		97
23) Trichloroethene	12.55	95	608503	10.88	ug/L		93
24) 1,2-Dichloropropane	12.90	63	443934	10.76	ug/L		99
25) Dibromomethane	13.10	93	172354	10.30	ug/L		96
26) Bromodichloromethane	13.36	83	587880	10.25	ug/L		96
27) cis-1,3-Dichloropropene	14.12	75	493938	9.96	ug/L		97
28) Toluene	14.71	92	889375	9.93	ug/L		99
29) trans-1,3-Dichloropropene	15.04	75	331412	9.68	ug/L		98
30) 1,1,2-Trichloroethane	15.36	83	164536	10.29	ug/L		91
31) Tetrachloroethene	15.66	166	596030	10.62	ug/L		96
32) 1,3-Dichloropropane	15.64	76	324387	10.23	ug/L		97
33) Dibromochloromethane	16.06	129	292274	9.39	ug/L		98
34) 1,2-Dibromomethane	16.25	107	217921	9.87	ug/L		97
35) Chlorobenzene	17.13	112	937208	10.04	ug/L		98
36) 1,1,1,2-Tetrachloroethane	17.26	131	358271	9.67	ug/L		95
37) Ethylbenzene	17.31	91	1845979	9.79	ug/L		96
38) Xylene (para & meta)	17.53	106	1192303	17.60	ug/L		92
39) Xylene (Ortho)	18.23	106	533612	8.90	ug/L	#	88
40) Styrene	18.24	104	806023	8.68	ug/L	m	95

(#) = qualifier out of range (m) = manual integration

Data File : d:\hpchem\1\data\c8629.d
Acq On : 21 Jun 95 10:23 pm
Sample : 9526431 MS
Misc : 25 ML
Quant Time: Jun 22 15:26 1995

Vial: 13
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue May 30 13:15:19 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
41)	Bromoform	18.56	173	138006	9.04	ug/L		90
42)	Isopropylbenzene	18.88	105	1862329	9.66	ug/L	m	0
44)	Bromobenzene	19.43	156	337784	9.72	ug/L	#	89
45)	1,1,2,2-Tetrachloroethane	19.36	83	197805	11.58	ug/L		95
46)	1,2,3-Trichloropropane	19.45	75	214022	10.32	ug/L	#	78
47)	n-Propylbenzene	19.62	91	2472810	9.86	ug/L		99
48)	2-Chlorotoluene	19.78	91	1508455	10.84	ug/L		96
49)	4-Chlorotoluene	19.96	91	1649364	9.99	ug/L	m	85
50)	1,3,5-Trimethylbenzene	19.94	105	1367274	8.57	ug/L	m	99
51)	tert-Butylbenzene	20.53	119	1667250	10.08	ug/L		99
52)	1,2,4-Trimethylbenzene	20.62	105	1272782	8.71	ug/L		100
53)	sec-Butylbenzene	20.93	105	2478805	10.11	ug/L		99
54)	1,3-Dichlorobenzene	21.13	146	684058	9.65	ug/L		98
55)	4-Isopropyltoluene	21.19	119	1627495	8.89	ug/L		98
56)	1,4-Dichlorobenzene	21.29	146	677512	9.64	ug/L		89
58)	1,2-Dichlorobenzene	21.96	146	521231	9.87	ug/L		98
59)	n-Butylbenzene	21.94	91	1944083	9.91	ug/L		100
60)	1,2-Dibromo-3-chloropropan	23.37	75	42212	9.73	ug/L		90
61)	1,2,4-Trichlorobenzene	24.93	180	349185	9.00	ug/L		97
62)	Hexachlorobutadiene	25.27	225	444252	9.49	ug/L		100
63)	Naphthalene	25.38	128	307134	9.14	ug/L		100
64)	1,2,3-Trichlorobenzene	25.86	180	252836	9.34	ug/L		98
65)	Methyl-tert butyl ether	8.09	73	552420	13.06	ug/L		97
66)	tert-Butyl Alcohol	7.81	59	17145	26.44	ug/L		100

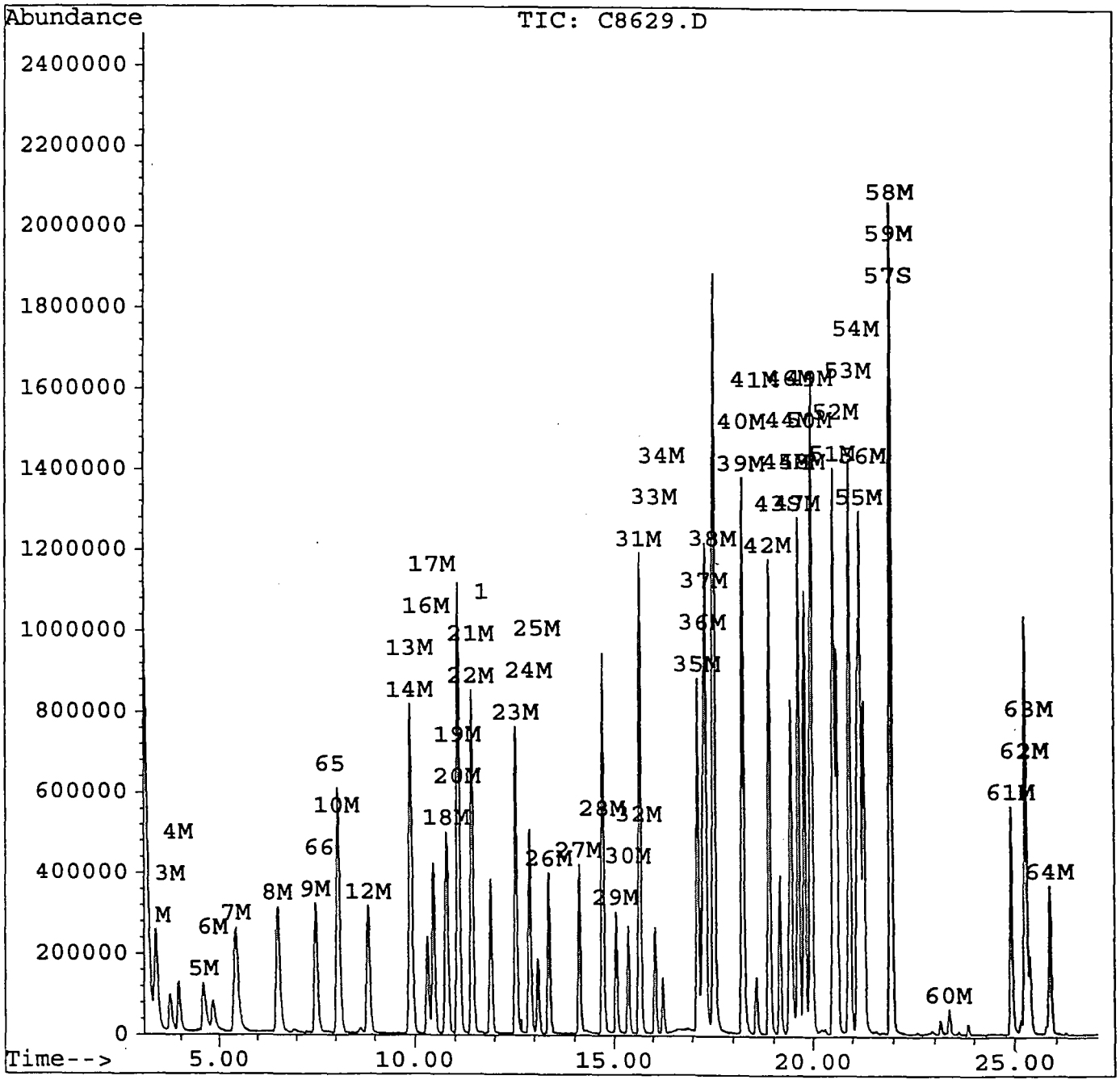
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c8629.d
Acq On : 21 Jun 95 10:23 pm
Sample : 9526431 MS
Misc : 25 ML
Quant Time: Jun 22 15:26 1995

Vial: 13
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue May 30 13:15:19 1995
Response via : Multiple Level Calibration



Quantitation Report

Data File : d:\hpchem\1\data\c8630.d
Acq On : 21 Jun 95 10:57 pm
Sample : 9526431 MSD
Misc : 25 ML
Quant Time: Jun 22 15:19 1995

Vial: 14
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue May 30 13:15:19 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	11.91	96	717343	5.00	ug/L		0.07
System Monitoring Compounds							%Recovery
43) 4-Bromofluorobenzene	19.15	95	358737	5.01	ug/L		100.26%
57) 1,2-Dichlorobenzene-d4	21.93	152	161994	4.96	ug/L		99.12%
Target Compounds							Qvalue
2) Dichlorodifluoromethane	3.34	85	508838	8.95	ug/L		99
3) Chloromethane	3.70	50	336876	10.06	ug/L		96
4) Vinyl chloride	3.94	62	390419	10.35	ug/L		98
5) Bromomethane	4.60	94	277061	10.86	ug/L		96
6) Chloroethane	4.83	64	255023	11.53	ug/L		94
7) Trichlorofluoromethane	5.42	101	888335	10.54	ug/L		99
8) 1,1-Dichloroethene	6.52	96	368492	9.95	ug/L		88
9) Methylene chloride	7.50	84	367763	9.36	ug/L		100
10) trans-1,2-Dichloroethene	8.05	96	400532	10.24	ug/L		90
12) 1,1-Dichloroethane	8.84	63	914463	11.69	ug/L		97
13) 2,2-Dichloropropane	9.90	77	681923	8.89	ug/L		98
14) cis-1,2-Dichloroethene	9.90	96	383613	10.40	ug/L		98
16) Bromochloromethane	10.31	128	126363	9.78	ug/L	#	89
17) Chloroform	10.47	83	772878	10.53	ug/L		98
18) 1,1,1-Trichloroethane	10.80	97	849134	10.45	ug/L		96
19) Carbon tetrachloride	11.11	117	754063	9.99	ug/L		98
20) 1,1-Dichloropropene	11.10	75	757429	10.67	ug/L		98
21) Benzene	11.44	78	1290261	10.33	ug/L		98
22) 1,2-Dichloroethane	11.44	62	324254	10.58	ug/L		96
23) Trichloroethene	12.55	95	615535	11.12	ug/L		97
24) 1,2-Dichloropropane	12.90	63	438654	10.73	ug/L		100
25) Dibromomethane	13.10	93	171417	10.35	ug/L		93
26) Bromodichloromethane	13.36	83	583692	10.27	ug/L		98
27) cis-1,3-Dichloropropene	14.13	75	489464	9.97	ug/L		99
28) Toluene	14.71	92	912224	10.28	ug/L		96
29) trans-1,3-Dichloropropene	15.04	75	341025	10.06	ug/L		99
30) 1,1,2-Trichloroethane	15.36	83	160629	10.14	ug/L		95
31) Tetrachloroethene	15.67	166	603739	10.86	ug/L		100
32) 1,3-Dichloropropane	15.64	76	320235	10.20	ug/L		100
33) Dibromochloromethane	16.06	129	297580	9.65	ug/L		99
34) 1,2-Dibromomethane	16.25	107	216314	9.90	ug/L		99
35) Chlorobenzene	17.13	112	924979	10.01	ug/L		96
36) 1,1,1,2-Tetrachloroethane	17.26	131	354121	9.65	ug/L		98
37) Ethylbenzene	17.32	91	1928537	10.32	ug/L		98
38) Xylene (para & meta)	17.53	106	1316729	19.63	ug/L		90
39) Xylene (Ortho)	18.23	106	589921	9.94	ug/L		94
40) Styrene	18.24	104	869540	9.45	ug/L		96

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c8630.d
Acq On : 21 Jun 95 10:57 pm
Sample : 9526431 MSD
Misc : 25 ML
Quant Time: Jun 22 15:19 1995

Vial: 14
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue May 30 13:15:19 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
41)	Bromoform	18.56	173	140370	9.28	ug/L		93
42)	Isopropylbenzene	18.88	105	1900648	9.96	ug/L		90
44)	Bromobenzene	19.43	156	335219	9.74	ug/L	#	84
45)	1,1,2,2-Tetrachloroethane	19.37	83	192628	11.39	ug/L		92
46)	1,2,3-Trichloropropane	19.44	75	191679	9.33	ug/L	#	14
47)	n-Propylbenzene	19.62	91	2545491	10.25	ug/L		99
48)	2-Chlorotoluene	19.78	91	1481385	10.75	ug/L		97
49)	4-Chlorotoluene	19.96	91	1665190	10.18	ug/L	m	87
50)	1,3,5-Trimethylbenzene	19.94	105	1501456	9.50	ug/L		99
51)	tert-Butylbenzene	20.53	119	1656874	10.11	ug/L		96
52)	1,2,4-Trimethylbenzene	20.61	105	1430110	9.88	ug/L		100
53)	sec-Butylbenzene	20.93	105	2490009	10.25	ug/L		97
54)	1,3-Dichlorobenzene	21.14	146	679634	9.68	ug/L		97
55)	4-Isopropyltoluene	21.19	119	1772010	9.77	ug/L		97
56)	1,4-Dichlorobenzene	21.29	146	678563	9.75	ug/L		93
58)	1,2-Dichlorobenzene	21.96	146	525641	10.05	ug/L		98
59)	n-Butylbenzene	21.94	91	1967170	10.12	ug/L		98
60)	1,2-Dibromo-3-chloropropan	23.37	75	42772	9.96	ug/L	#	73
61)	1,2,4-Trichlorobenzene	24.93	180	345906	9.00	ug/L		97
62)	Hexachlorobutadiene	25.27	225	435444	9.39	ug/L		99
63)	Naphthalene	25.38	128	318132	9.56	ug/L		100
64)	1,2,3-Trichlorobenzene	25.86	180	246700	9.20	ug/L		97
65)	Methyl-tert butyl ether	8.07	73	536946	12.81	ug/L		95
66)	tert-Butyl Alcohol	7.81	59	16303	25.38	ug/L		100

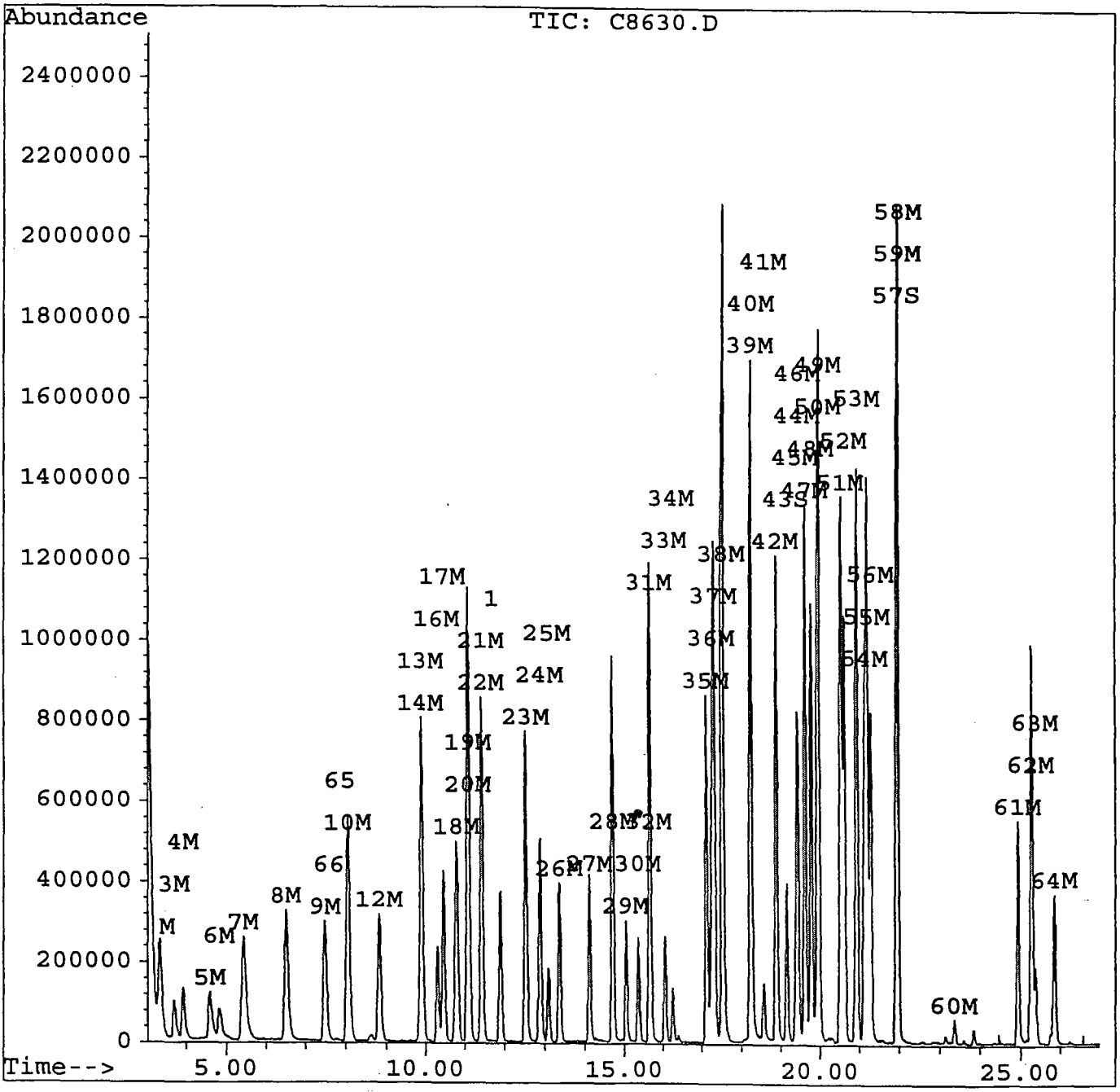
(#) = qualifier out of range (m) = manual integration

Data File : d:\hpchem\1\data\c8630.d
Acq On : 21 Jun 95 10:57 pm
Sample : 9526431 MSD
Misc : 25 ML
Quant Time: Jun 22 15:19 1995

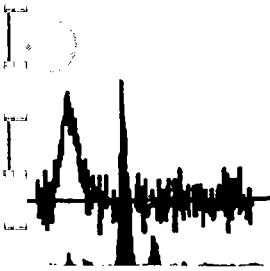
Vial: 14
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

136

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue May 30 13:15:19 1995
Response via : Multiple Level Calibration



GC/MS SEMIVOLATILE DATA PACKAGE



5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Nam EMSL Analytical Contract: _____

Lab Code: Case No.: _____ SAS No.: _____ SDG No.: _____

Lab File ID: B7750.D DFTPP Injection Date: 05/30/95

Instrument ID: ABNA DFTPP Injection Time: 0914

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE		
51	30.0 - 80.0% of mass 198	51.3		
68	Less than 2.0% of mass 69	0.0	0.0	)1
69	Mass 69 relative abundance	61.1		
70	Less than 2.0% of mass 69	0.3	0.6	)1
127	25.0 - 75.0% of mass 198	44.4		
197	Less than 1.0% of mass 198	0.0		
198	Base Peak, 100% relative abundance	100.0		
199	5.0 to 9.0% of mass 198	7.5		
275	10.0 - 30.0% of mass 198	23.1		
365	Greater than 0.75% of mass 198	2.8		
441	Present, but less than mass 443	9.3		
442	40.0 - 110.0% of mass 198	64.3		
443	15.0 - 24.0% of mass 442	13.1	20.3	)2

1-Value is % mass 69 2-Value is % mass 442

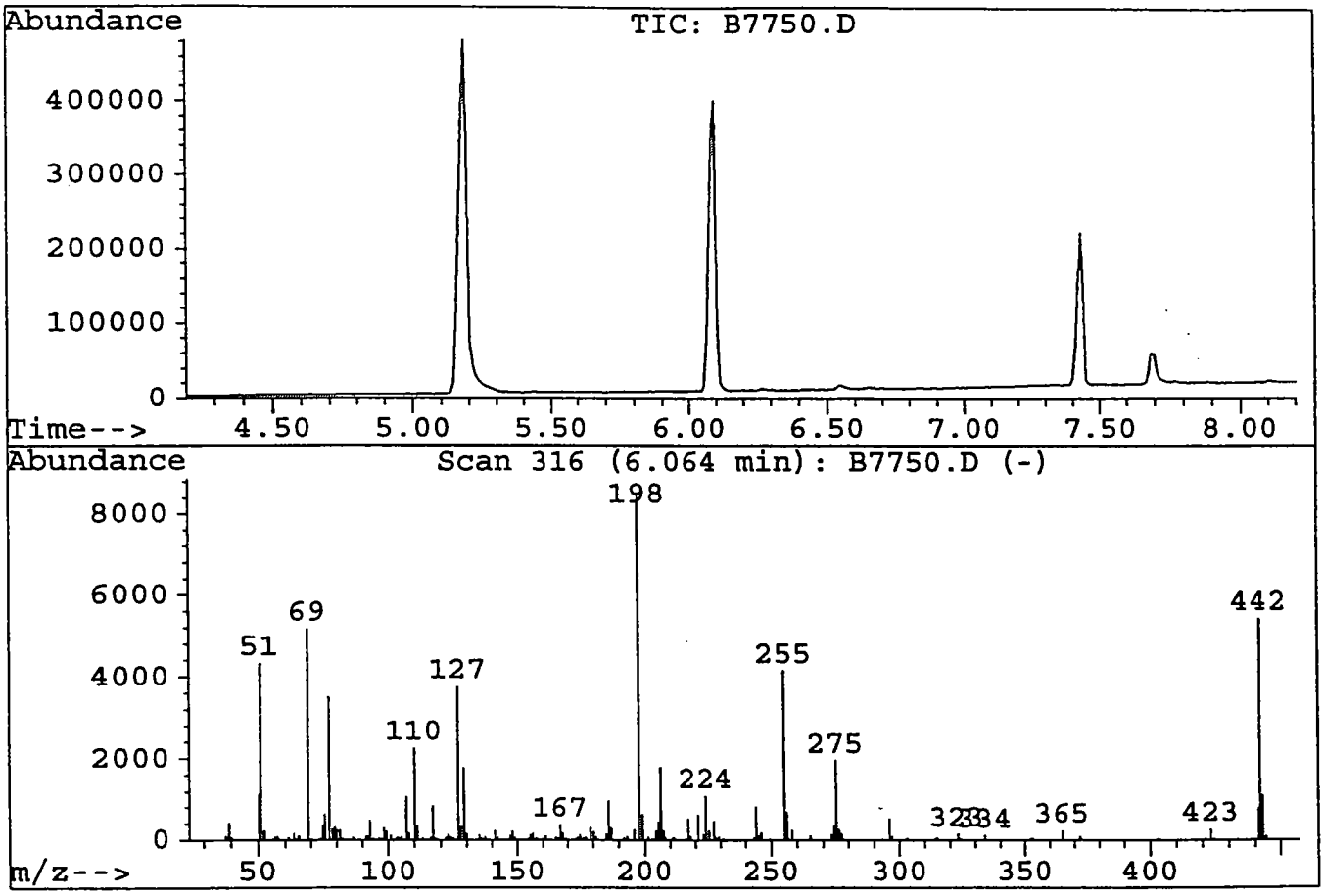
THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDAR

	EPA SAMPLE N	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
#		20 STANDARD	B7751.D	05/30/95	0944
#		50 STANDARD	B7752.D	05/30/95	1035
#		80 STANDARD	B7753.D	05/30/95	1127
#		120 STANDARD	B7754.D	05/30/95	1220
#		160 STANDARD	B7755.D	05/30/95	1312
#					
#					
#					
#					
#					
#					
#					
#					
#					
#					
#					
#					
#					
#					
#					
#					
#					

DFTPP

Data File : C:\HPCHEM\1\DATA2\B7750.D Vial: 1
Acq On : 30 May 95 9:14 am Operator: SCOTTV
Sample : DFTPP..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration



Peak Apex is scan: 330

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	51.3	4339	PASS
68	69	0	2	0.0	0	PASS
69	198	0	100	61.1	5169	PASS
70	69	0	2	0.6	29	PASS
127	198	40	60	44.4	3758	PASS
197	198	0	1	0.0	0	PASS
198	198	100	100	100.0	8456	PASS
199	198	5	9	7.5	631	PASS
275	198	10	30	23.1	1951	PASS
365	198	1	100	2.8	238	PASS
441	443	0	100	71.3	788	PASS
442	198	40	100	64.3	5436	PASS
443	442	17	23	20.3	1105	PASS

B7750.D BNACLP.M Tue May 30 08:40:10 1995 BNA

ified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
38.00	111	58.05	13	78.05	284	96.05	58
39.05	417	61.15	74	79.05	332	97.05	35
40.10	59	63.05	154	79.95	245	98.05	313
50.05	1128	64.05	37	81.05	252	99.05	224
.00	4339	65.05	105	82.05	44	100.95	120
2.05	241	68.95	5169	83.10	16	103.15	68
53.00	10	70.05	29	86.15	75	103.95	87
54.05	4	73.05	43	91.05	88	105.05	85
55.05	32	74.05	376	91.95	98	107.05	1091
56.05	93	75.05	636	92.95	482	107.95	178
57.05	94	77.00	3509	94.05	48	110.05	2258

n 316 (6.064 min): B7750.D

dified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
111.05	347	128.00	343	154.10	63	168.00	172
112.15	17	129.00	1776	155.00	140	169.10	54
113.05	65	130.00	152	156.00	177	173.00	40
116.15	81	135.00	123	157.10	46	173.90	77
117.05	837	136.00	50	157.80	35	175.00	147
118.05	55	137.10	72	158.00	32	176.10	56
121.90	87	141.00	242	160.00	52	177.10	85
123.00	132	142.00	80	161.10	108	179.00	311
124.00	82	147.00	121	165.00	75	180.10	207
124.90	49	148.00	213	166.20	66	181.10	81
127.00	3758	148.90	57	167.00	382	182.10	5

n 316 (6.064 min): B7750.D

ified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
185.10	155	205.05	451	222.95	151	249.05	34
186.10	970	206.05	1785	224.05	1088	255.05	4157
187.10	295	207.05	238	225.05	239	256.05	688
192.00	75	207.95	66	227.05	470	256.95	53
193.10	96	210.25	50	227.95	86	257.95	257
196.00	270	211.05	79	229.05	93	265.05	108
198.00	8456	211.65	38	230.95	42	273.05	139
199.00	631	215.95	52	243.05	75	274.05	352
201.35	77	216.95	525	244.05	828	275.05	1951
202.85	45	217.95	89	245.05	118	276.05	266
204.05	257	220.95	629	246.05	185	277.05	157

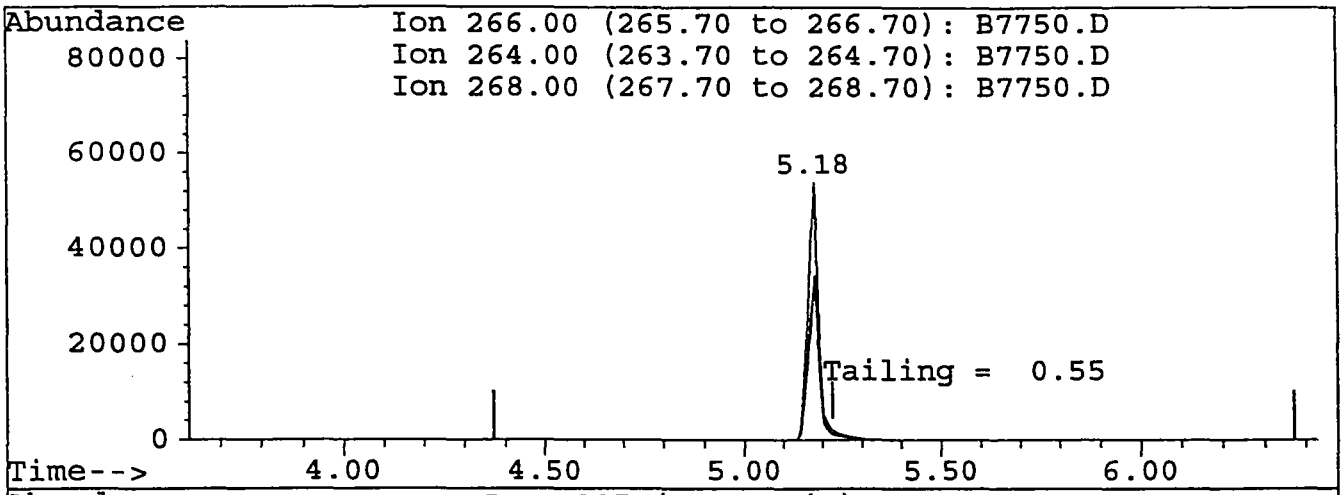
n 316 (6.064 min): B7750.D

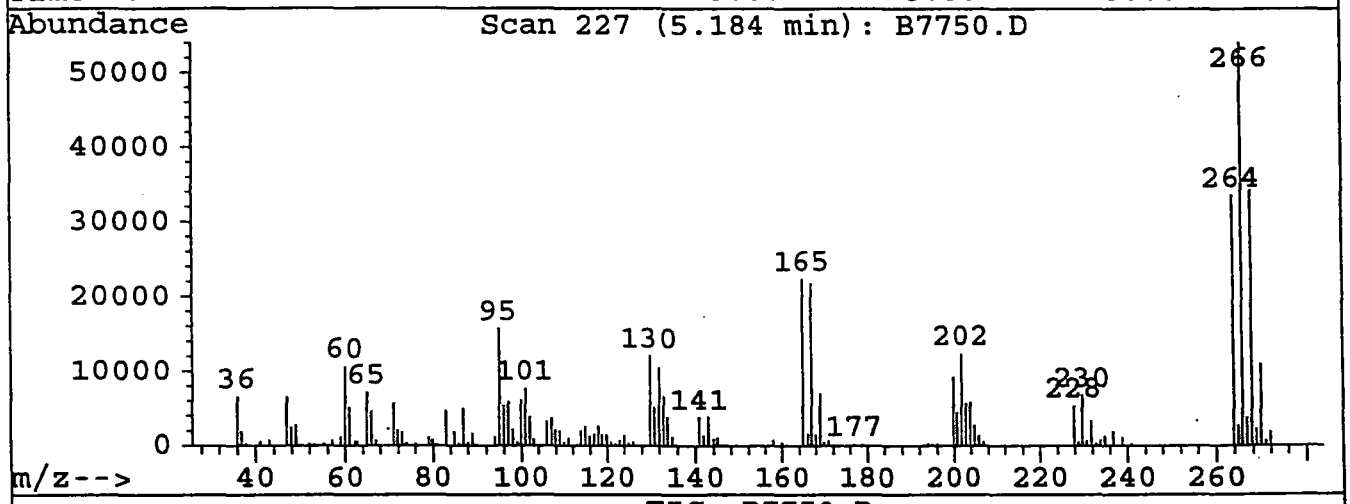
dified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
293.00	31	364.95	238				
296.00	527	372.05	89				
297.00	89	403.05	44				
303.00	67	420.95	40				
314.00	27	423.05	267				
314.90	61	424.05	52				
323.10	148	441.10	788				
324.10	39	442.00	5436				
4.00	124	443.00	1105				
2.10	49	444.10	101				
353.10	51						

Data File : C:\HPCHEM\1\DATA2\B7750.D Vial: 1
Acq On : 30 May 95 9:14 am Operator: SCOTTV
Sample : DFTPP..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: May 30 8:29 1995

Method : C:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Tue May 30 08:17:48 1995
Response via : Multiple Level Calibration





TIC: B7750.D

(1) Pentachlorophenol (CM)

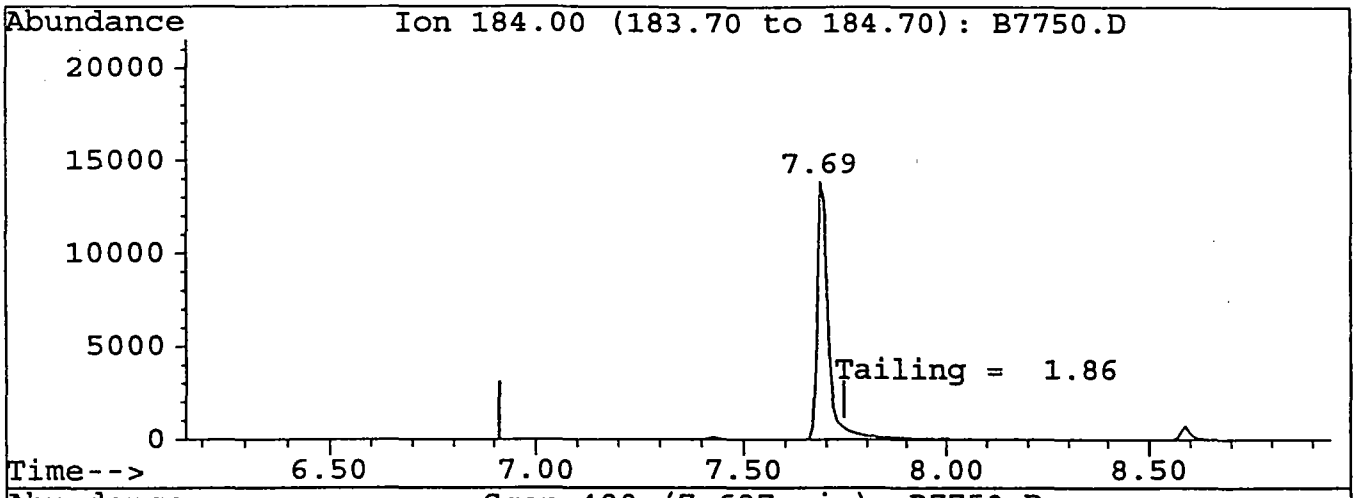
5.18min 321.74ug/mL

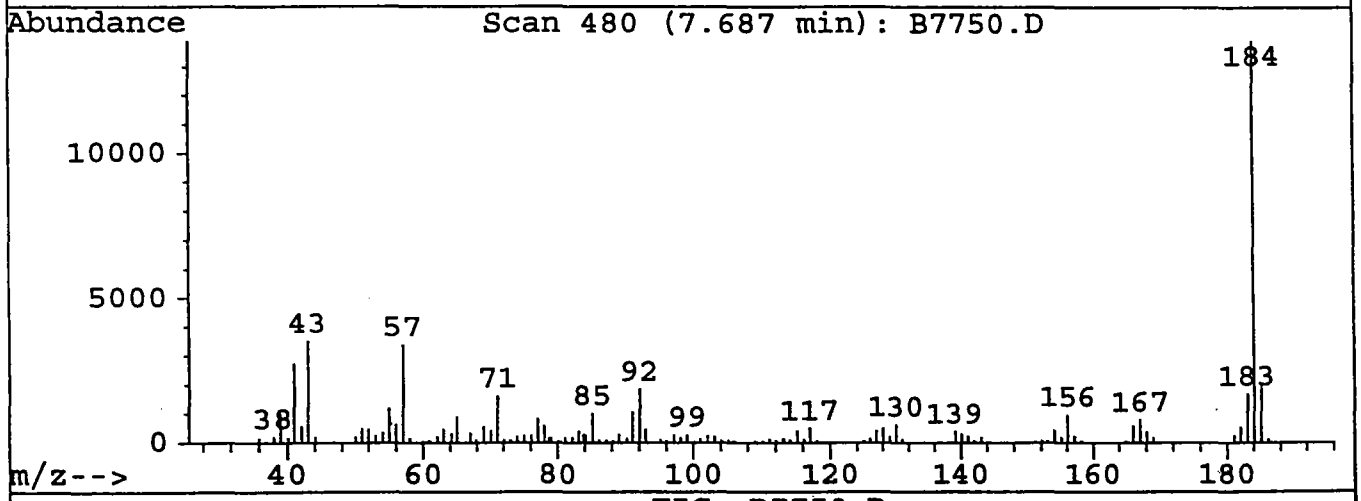
response 106272

Ion	Exp%	Act%
266.00	100	100
264.00	64.30	62.02
268.00	64.70	63.47
0.00	0.00	0.00

Data File : C:\HPCHEM\1\DATA2\B7750.D Vial: 1
Acq On : 30 May 95 9:14 am Operator: SCOTTV
Sample : DFTPP..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: May 30 8:29 1995

Method : C:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Tue May 30 08:17:48 1995
Response via : Multiple Level Calibration





TIC: B7750.D

(2) Benzidine
7.69min 86.22ug/ml
response 26489

Ion	Exp%	Act%
184.00	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

B7750.D BNACLP.M Tue May 30 08:43:11 1995 BNA

Response Factor Report ABNA

Method : C:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 09:37:17 1995
Response via : Initial Calibration

Calibration Files
160 =B7755.D 120 =B7754.D 80 =B7753.D
50 =B7752.D 20 =B7751.D

		Compound	160	120	80	50	20	Avg	%RSD
1)	I	1,4-Dichlorobenzene-d	ISTD						
2)	S	2-Fluorophenol	1.046	1.205	1.170	1.071	1.165	1.131	6.09
3)	S	Phenol-d5	1.808	2.019	1.924	1.724	1.888	1.873	6.00
4)	M	N-nitrosodimethylamin	0.599	0.546	0.436	0.731		0.578	21.22
5)		Pyridine	0.424	0.364	0.429	0.496		0.428	12.65
6)	CM	Phenol	1.442	1.792	1.686	1.698	1.721	1.668	7.94
7)	MT	bis(2-Chloroethyl)eth	1.893	2.082	2.104	2.042	2.008	2.026	4.10
8)	M	2-Chlorophenol	1.138	1.284	1.307	1.245	1.372	1.269	6.83
9)	MT	1,3-Dichlorobenzene	1.295	1.404	1.490	1.416	1.320	1.385	5.65
10)	CM	1,4-Dichlorobenzene	1.318	1.468	1.512	1.469	1.379	1.429	5.51
11)	M	1,2-Dichlorobenzene	1.255	1.391	1.452	1.374	1.315	1.357	5.54
12)	T	2-Methylphenol	1.109	1.268	1.262	1.164	1.220	1.204	5.61
13)	M	bis(2-chloroisopropyl	1.886	1.860	1.988	1.730	1.878	1.868	4.92
14)	T	4-Methylphenol	1.216	1.432	1.330	1.310	1.320	1.322	5.82
15)	PM	N-Nitroso-Di-n-propyl	1.289	1.444	1.471	1.267	1.257	1.346	7.68
16)	M	Hexachloroethane	0.691	0.756	0.792	0.747	0.701	0.737	5.65
17)	I	Naphthalene-d8	ISTD						
18)	S	Nitrobenzene-d5	0.437	0.466	0.478	0.437	0.460	0.456	4.02
19)	M	Nitrobenzene	0.398	0.409	0.461	0.436	0.416	0.424	5.86
20)	M	Isophorone	0.776	0.850	0.875	0.817	1.149	0.893	16.52
21)	MC	2-Nitrophenol	0.189	0.225	0.225	0.200	0.213	0.210	7.50
22)	M	2,4-Dimethylphenol	0.362	0.429	0.388	0.382	0.407	0.394	6.49
23)	M	bis(2-Chloroethoxy)me	0.441	0.448	0.467	0.455	0.469	0.456	2.57
24)	MC	2,4-Dichlorophenol	0.271	0.299	0.307	0.292	0.322	0.298	6.39
25)	M	1,2,4-Trichlorobenzen	0.293	0.318	0.326	0.322	0.326	0.317	4.42
26)	M	Naphthalene	0.922	0.948	1.039	0.963	1.023	0.979	5.12
27)	T	4-Chloroaniline	0.455	0.465	0.471	0.468	0.457	0.463	1.47
28)	MC	Hexachlorobutadiene	0.175	0.186	0.189	0.186	0.190	0.185	3.26
29)	MC	4-Chloro-3-methylphen	0.355	0.396	0.398	0.385	0.385	0.384	4.45
30)	M	2-Chloronaphthalene	0.672	0.680	0.719	0.700	0.709	0.696	2.81
31)	T	2-Methylnaphthalene	0.890	0.985	0.640	0.702	0.711	0.786	18.46
32)	I	Acenaphthene-d10	ISTD						
33)	P	Hexachlorocyclopentad	0.294	0.303	0.302	0.258	0.233	0.278	11.19
34)	MC	2,4,6-Trichlorophenol	0.470	0.452	0.413	0.381	0.361	0.415	11.10
35)	T	2,4,5-Trichlorophenol	0.221	0.317	0.348	0.370	0.365	0.324	18.94
36)	S	2-Fluorobiphenyl	1.163	1.254	1.230	1.178	1.174	1.200	3.30
37)	T	2-Nitroaniline	0.527	0.566	0.592	0.578	0.483	0.549	8.04
38)	M	Dimethylphthalate	1.233	1.348	1.373	1.295	1.248	1.299	4.68
39)	M	Acenaphthylene	1.606	1.717	1.805	1.711	1.683	1.704	4.20
40)	M	2,6-Dinitrotoluene	0.295	0.312	0.346	0.327	0.271	0.310	9.34
41)	T	3-Nitroaniline	0.279	0.370	0.403	0.363	0.315	0.346	14.10

(#) = Out of Range

Response Factor Report ABNA

Method : C:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 09:37:17 1995
Response via : Initial Calibration

Calibration Files
160 =B7755.D 120 =B7754.D 80 =B7753.D
50 =B7752.D 20 =B7751.D

		Compound	160	120	80	50	20	Avg	%RSD
42)	CM	Acenaphthene	0.982	1.056	1.036	1.024	1.028	1.025	2.65
43)	MP	2,4-Dinitrophenol	0.189	0.213	0.198	0.155	0.107	0.172	24.56
44)	PM	4-Nitrophenol	0.151	0.178	0.188	0.168	0.142	0.166	11.52
45)	T	Dibenzofuran	1.475	1.700	1.686	1.669	1.512	1.609	6.62
46)	M	2,4-Dinitrotoluene	1.132	1.243	1.193	1.143	1.125	1.167	4.29
47)	M	Diethylphthalate	1.274	1.533	1.576	1.452	1.379	1.443	8.38
48)	M	Fluorene	1.222	1.333	1.295	1.228	1.216	1.259	4.17
49)	M	4-Chlorophenyl-phenyl	0.554	0.608	0.613	0.591	0.615	0.596	4.25
50)		Phenanthrene-d10	----------ISTD----------						
51)	T	4-Nitroaniline	0.131	0.151	0.160	0.214	0.175	0.166	18.75
52)	MC	4,6-Dinitro-2-methylp	0.141	0.142	0.151	0.129	0.096	0.132	16.20
53)	T	n-Nitrosodiphenylamin	0.458	0.524	0.531	0.530	0.499	0.508	6.15
54)	S	2,4,6-Tribromophenol	0.098	0.113	0.112	0.106	0.111	0.108	5.77
55)		1,2-Diphenylhydrazine	1.065	1.251	1.281	1.312	1.147	1.211	8.48
56)	M	4-Bromophenyl-phenyle	0.186	0.198	0.212	0.220	0.213	0.206	6.61
57)	M	Hexachlorobenzene	0.138	0.231	0.244	0.228	0.233	0.215	20.20
58)	CM	Pentachlorophenol	0.131	0.150	0.154	0.133	0.119	0.137	10.26
59)	M	Phenanthrene	0.983	1.142	1.181	1.095	1.071	1.094	6.87
60)	M	Anthracene	0.809	1.021	1.128	1.028	1.059	1.009	11.85
61)		Carbazole	0.656	1.051	1.106	0.964	0.941	0.944	18.43
62)	M	Di-n-butylphthalate	1.441	1.645	1.749	1.638	1.559	1.606	7.11
63)	MC	Fluoranthene	0.922	0.947	1.162	1.124	1.019	1.035	10.22
64)	I	Chrysene-d12	----------ISTD----------						
65)		Benzidine	0.569	0.427	0.364	0.399	0.428	0.437	17.86
66)	M	Pyrene	1.857	1.452	1.658	1.267	1.273	1.502	16.98
67)	S	Terphenyl-d14	1.355	1.039	1.124	0.880	0.911	1.062	17.99
68)	M	Butylbenzylphthalate	1.130	0.958	1.080	0.843	0.796	0.962	15.08
69)	M	Benzo[a]anthracene	1.813	1.529	1.731	1.342	1.163	1.516	17.74
70)	M	3,3'-Dichlorobenzidin	0.345	0.347	0.471	0.353	0.416	0.386	14.47
71)	M	Chrysene	0.661	0.691	1.035	0.768	1.060	0.843	22.65
72)	M	bis(2-Ethylhexyl)phth	1.536	1.331	1.560	1.243	1.151	1.364	13.17
73)	I	Perylene-d12	----------ISTD----------						
74)	MC	Di-n-octylphthalate	4.287	5.460	5.911	4.718		5.094	14.31
75)	M	Benzo[b]fluoranthene	2.445	2.215	2.794	2.522	2.357	2.467	8.75
76)	m	Benzo[k]fluoranthene	1.248	0.961	1.258	1.108	1.376	1.190	13.40
77)	mc	Benzo[a]pyrene	1.114	0.945	1.269	1.355	1.450	1.227	16.33
78)	m	Indeno[1,2,3-cd]pyren	0.493	0.521	0.450	0.417	0.381	0.452	12.46
79)	m	Dibenz[a,h]anthracene	0.471	0.517	0.454	0.365	0.371	0.436	15.14
80)	M	Benzo[g,h,i]perylene	0.385	0.372	0.381	0.326	0.314	0.356	9.28
81)		1-Methyl naphthalene						0.000#	-1.00
82)		7,12-Dimethylbenz(a)a						0.000#	-1.00

(#) = Out of Range

Data File : c:\hpchem\1\data2\b7751.d Vial: 2
Acq On : 30 May 95 9:44 am Operator: SCOTTV
Sample : 20 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: May 31 10:03 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Tue May 30 08:17:48 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.05	152	25556	40.00	ug/mL	-0.26
17) Naphthalene-d8	12.74	136	103257	40.00	ug/mL	-0.28
32) Acenaphthene-d10	18.06	164	74029	40.00	ug/mL	-0.32
50) Phenanthrene-d10	22.53	188	123712	40.00	ug/ml	-0.36
64) Chrysene-d12	30.59	240	101227	40.00	ug/mL	-0.44
73) Perylene-d12	34.60	264	55866	40.00	ug/mL	-0.44
System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	5.47	112	37223	52.40	ug/mL	52.40%
3) Phenol-d5	8.39	99	60299	61.22	ug/mL	61.22%
18) Nitrobenzene-d5	10.70	82	59323	55.23	ug/mL	55.23%
36) 2-Fluorobiphenyl	16.21	172	108666	45.06	ug/mL	45.06%
54) 2,4,6-Tribromophenol	20.47	330	17160	50.11	ug/mL	50.11%
67) Terphenyl-d14	27.65	244	115295	44.07	ug/mL	44.07%
Target Compounds						Qvalue
4) N-nitrosodimethylamine	1.68	74	11819	64.09	ug/mlm	0
6) Phenol	8.41	94	21988	23.29	ug/mL	100
7) bis(2-Chloroethyl)ether	12.42	93	25656	25.13	ug/mL	94
8) 2-Chlorophenol	8.45	128	17535	22.70	ug/mL	91
9) 1,3-Dichlorobenzene	8.84	146	16873	19.30	ug/mL	95
10) 1,4-Dichlorobenzene	9.09	146	17619	19.90	ug/mL	99
11) 1,2-Dichlorobenzene	9.47	146	16808	18.80	ug/mL	99
12) 2-Methylphenol	10.13	108	15585	20.61	ug/mLm	62
13) bis(2-chloroisopropyl)ethe	10.13	45	23996	14.64	ug/mL#	8
14) 4-Methylphenol	10.63	108	16867	20.62	ug/mL	96
15) N-Nitroso-Di-n-propylamine	10.47	70	16063	19.56	ug/mL	95
16) Hexachloroethane	10.43	117	8960	16.89	ug/mL	93
19) Nitrobenzene	10.74	77	21469	22.12	ug/mL#	73
20) Isophorone	10.70	82	59319	34.39	ug/mL#	68
21) 2-Nitrophenol	11.70	139	11002	19.97	ug/mL	97
22) 2,4-Dimethylphenol	10.63	107	20989	21.66	ug/mL#	32
23) bis(2-Chloroethoxy)methane	8.16	93	24189	20.63	ug/mL#	42
24) 2,4-Dichlorophenol	12.47	162	16624	20.82	ug/mL	97
25) 1,2,4-Trichlorobenzene	12.65	180	16825	18.32	ug/mL	99
26) Naphthalene	12.80	128	52795	20.11	ug/mL#	89
27) 4-Chloroaniline	13.15	127	23600	19.35	ug/mL	98
28) Hexachlorobutadiene	13.32	225	9812	16.62	ug/mL	99
29) 4-Chloro-3-methylphenol	14.86	107	19868	19.58	ug/mL	90
30) 2-Chloronaphthalene	16.38	162	36612	17.42	ug/ml	97
31) 2-Methylnaphthalene	14.94	142	36729	19.16	ug/mL	98
33) Hexachlorocyclopentadiene	15.48	237	8635	12.84	ug/mL	99
34) 2,4,6-Trichlorophenol	15.92	196	13356	18.21	ug/mL	96
35) 2,4,5-Trichlorophenol	16.02	196	13494	17.54	ug/mL	98

(#) = qualifier out of range (m) = manual integration

Data File : c:\hpchem\1\data2\b7751.d Vial: 2
Acq On : 30 May 95 9:44 am Operator: SCOTTV
Sample : 20 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: May 31 10:03 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Tue May 30 08:17:48 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
37)	2-Nitroaniline	16.85	65	17876	21.08	ug/mL#	100
38)	Dimethylphthalate	17.62	163	46196	21.25	ug/mL	100
39)	Acenaphthylene	17.58	152	62290	16.75	ug/mL	98
40)	2,6-Dinitrotoluene	17.69	165	10022	19.61	ug/mL	99
41)	3-Nitroaniline	18.12	138	11669	15.38	ug/mL	98
42)	Acenaphthene	18.14	153	38044	16.56	ug/mL	99
43)	2,4-Dinitrophenol	18.44	184	3955	15.55	ug/mLm	95
44)	4-Nitrophenol	18.93	109	5206	21.05	ug/mL	91
45)	Dibenzofuran	18.69	168	55975	17.19	ug/mL	98
46)	2,4-Dinitrotoluene	19.73	165	41635	17.45	ug/mL#	34
47)	Diethylphthalate	19.83	149	51035	19.15	ug/mL	99
48)	Fluorene	19.73	166	45015	17.98	ug/mL	98
49)	4-Chlorophenyl-phenylether	19.93	204	22774	18.71	ug/mL	94
51)	4-Nitroaniline	19.95	138	10837	22.35	ug/mL	97
52)	4,6-Dinitro-2-methylphenol	20.06	198	5946	17.19	ug/mL	100
53)	n-Nitrosodiphenylamine	20.33	169	30841	25.02	ug/mL#	1
55)	1,2-Diphenylhydrazine (as	20.39	77	70933	22.38	ug/ml	100
56)	4-Bromophenyl-phenylether	21.37	248	13195	20.03	ug/mL#	89
57)	Hexachlorobenzene	21.35	284	14382	18.78	ug/mL#	51
58)	Pentachlorophenol	22.07	266	7390	16.37	ug/mL	99
59)	Phenanthrene	22.61	178	66272	19.37	ug/mL	98
60)	Anthracene	22.74	178	65476	19.46	ug/mLm	97
61)	Carbazole	23.40	167	58205	18.79	ug/ml	100
62)	Di-n-butylphthalate	24.92	149	96445	16.33	ug/mL	99
63)	Fluoranthene	26.19	202	63031	16.63	ug/mLm	93
65)	Benzidine	26.88	184	21650	24.83	ug/mlm	100
66)	Pyrene	26.83	202	64445	15.73	ug/mL#	87
68)	Butylbenzylphthalate	29.43	149	40290	16.46	ug/mL	90
69)	Benzo[a]anthracene	30.57	228	58860	18.72	ug/mL	99
70)	3,3'-Dichlorobenzidine	30.72	252	21074	24.51	ug/mL	98
71)	Chrysene	30.57	228	53653	19.46	ug/mLm	98
72)	bis(2-Ethylhexyl)phthalate	31.40	149	58259	15.97	ug/mL	100
74)	Di-n-octylphthalate	33.31	149	92370	9.30	ug/mL	98
75)	Benzo[b]fluoranthene	33.62	252	65848	26.94	ug/mLm	98
76)	Benzo[k]fluoranthene	33.70	252	38434	16.42	ug/mLm	91
77)	Benzo[a]pyrene	34.45	252	40502	24.28	ug/mLm	97
78)	Indeno[1,2,3-cd]pyrene	37.16	276	10646	15.19	ug/mL#	85
79)	Dibenz[a,h]anthracene	37.27	278	10355	16.78	ug/mL#	91
80)	Benzo[g,h,i]perylene	37.74	276	8780	14.39	ug/mLm	97

(#) = qualifier out of range (m) = manual integration

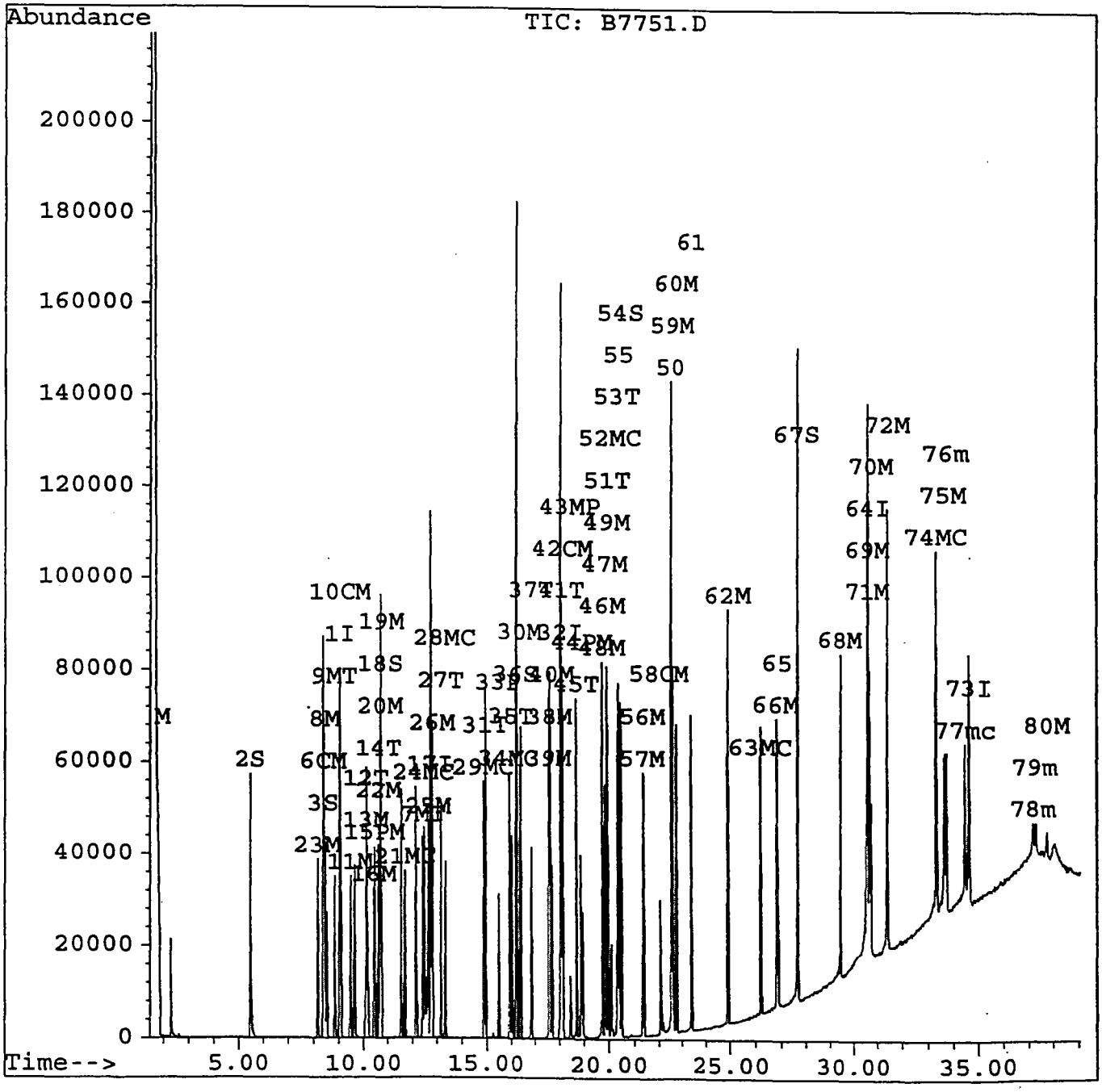
Quantitation Report

Data File : c:\hpchem\1\data2\b7751.d
Acq On : 30 May 95 9:44 am
Sample : 20 STD.....
Misc :
Quant Time: May 31 10:03 1995

Converted from RTE d

Vial: 2
Operator: SCOTTV
Inst : ABNA
BT Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Tue May 30 08:17:48 1995
Response via : Multiple Level Calibration



Data File : c:\hpchem\1\data2\b7752.d Vial: 3
Acq On : 30 May 95 10:35 am Operator: SCOTTV
Sample : 50 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: May 31 10:04 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Tue May 30 08:17:48 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.03	152	29664	40.00	ug/mL	-0.27
17) Naphthalene-d8	12.75	136	124059	40.00	ug/mL	-0.28
32) Acenaphthene-d10	18.05	164	81773	40.00	ug/mL	-0.33
50) Phenanthrene-d10	22.52	188	131721	40.00	ug/ml	-0.37
64) Chrysene-d12	30.58	240	118287	40.00	ug/mL	-0.45
73) Perylene-d12	34.60	264	45273	40.00	ug/mL	-0.45
System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	5.47	112	39705	48.15	ug/mL	48.15%
3) Phenol-d5	8.39	99	63940	55.92	ug/mL	55.92%
18) Nitrobenzene-d5	10.71	82	67799	52.53	ug/mL	52.53%
36) 2-Fluorobiphenyl	16.20	172	120432	45.21	ug/mL	45.21%
54) 2,4,6-Tribromophenol	20.46	330	17504	48.01	ug/mL	48.01%
67) Terphenyl-d14	27.65	244	130090	42.56	ug/mL	42.56%
Target Compounds						Qvalue
4) N-nitrosodimethylamine	1.70	74	27115	126.68	ug/mlm	0
6) Phenol	8.43	94	62958	57.46	ug/mL	100
7) bis(2-Chloroethyl)ether	12.42	93	75709	63.88	ug/mL	99
8) 2-Chlorophenol	8.45	128	46179	51.50	ug/mL#	84
9) 1,3-Dichlorobenzene	8.84	146	52488	51.73	ug/mL	98
10) 1,4-Dichlorobenzene	9.09	146	54452	52.99	ug/mL	99
11) 1,2-Dichlorobenzene	9.47	146	50964	49.12	ug/mL	99
12) 2-Methylphenol	10.13	108	43177	49.20	ug/mLm	65
13) bis(2-chloroisopropyl)ethe	10.09	45	64159	33.73	ug/mL#	67
14) 4-Methylphenol	10.63	108	48583	51.18	ug/mL	98
15) N-Nitroso-Di-n-propylamine	10.49	70	46969	49.27	ug/mL	99
16) Hexachloroethane	10.42	117	27701	44.99	ug/mL#	69
19) Nitrobenzene	10.76	77	67644	58.02	ug/mL	89
20) Isophorone	11.57	82	126657	61.12	ug/mL	97
21) 2-Nitrophenol	11.69	139	31019	46.87	ug/mL	88
22) 2,4-Dimethylphenol	10.63	107	59303	50.95	ug/mL#	32
23) bis(2-Chloroethoxy)methane	8.16	93	70617	50.13	ug/mL#	42
24) 2,4-Dichlorophenol	12.48	162	45218	47.12	ug/mL	98
25) 1,2,4-Trichlorobenzene	12.65	180	49933	45.25	ug/mL	98
26) Naphthalene	12.81	128	149358	47.34	ug/mL#	91
27) 4-Chloroaniline	13.15	127	72575	49.52	ug/mL	100
28) Hexachlorobutadiene	13.33	225	28798	40.59	ug/mL	98
29) 4-Chloro-3-methylphenol	14.87	107	59715	48.98	ug/mL	99
30) 2-Chloronaphthalene	16.37	162	108511	42.96	ug/ml	97
31) 2-Methylnaphthalene	14.94	142	108935	47.31	ug/mL	98
33) Hexachlorocyclopentadiene	15.46	237	26413	35.57	ug/mL	98
34) 2,4,6-Trichlorophenol	15.91	196	38933	48.06	ug/mL	99
35) 2,4,5-Trichlorophenol	16.00	196	37853	44.55	ug/mL	100

(#) = qualifier out of range (m) = manual integration

Data File : c:\hpchem\1\data2\b7752.d Vial: 3
Acq On : 30 May 95 10:35 am Operator: SCOTTV
Sample : 50 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: May 31 10:04 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Tue May 30 08:17:48 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
37)	2-Nitroaniline	16.85	65	59044	63.04	ug/mL#	100
38)	Dimethylphthalate	17.62	163	132350	55.11	ug/mL	99
39)	Acenaphthylene	17.58	152	174919	42.58	ug/mL	99
40)	2,6-Dinitrotoluene	17.70	165	33402	59.16	ug/mL	98
41)	3-Nitroaniline	18.12	138	37075	44.25	ug/mL	98
42)	Acenaphthene	18.14	153	104702	41.25	ug/mL	100
43)	2,4-Dinitrophenol	18.45	184	15812	56.30	ug/mL#	91
44)	4-Nitrophenol	18.93	109	17219	63.03	ug/mL#	83
45)	Dibenzofuran	18.70	168	170626	47.45	ug/mL	97
46)	2,4-Dinitrotoluene	19.72	165	116800	44.33	ug/mL#	32
47)	Diethylphthalate	19.86	149	148456	50.42	ug/mL	98
48)	Fluorene	19.72	166	125476	45.36	ug/mL	98
49)	4-Chlorophenyl-phenylether	19.92	204	60420	44.93	ug/mL	95
51)	4-Nitroaniline	19.99	138	35220	68.23	ug/mL	97
52)	4,6-Dinitro-2-methylphenol	20.09	198	21308	57.84	ug/mL	100
53)	n-Nitrosodiphenylamine	20.32	169	87310	66.53	ug/mL#	1
55)	1,2-Diphenylhydrazine (as	20.38	77	216080	64.04	ug/ml	100
56)	4-Bromophenyl-phenylether	21.36	248	36244	51.67	ug/mL#	89
57)	Hexachlorobenzene	21.34	284	37570	46.07	ug/mL#	76
58)	Pentachlorophenol	22.06	266	21962	45.70	ug/mL	98
59)	Phenanthrene	22.60	178	180287	49.49	ug/mL	100
60)	Anthracene	22.75	178	169255	47.24	ug/mLm	99
61)	Carbazole	23.39	167	158797	48.15	ug/ml	99
62)	Di-n-butylphthalate	24.91	149	269738	42.89	ug/mL	100
63)	Fluoranthene	26.20	202	185037	45.86	ug/mLm	81
65)	Benzidine	26.87	184	58973	57.88	ug/mlm	100
66)	Pyrene	26.84	202	187374	39.15	ug/mL	97
68)	Butylbenzylphthalate	29.42	149	124656	43.57	ug/mL	91
69)	Benzo[a]anthracene	30.56	228	198412	54.00	ug/mL	100
70)	3,3'-Dichlorobenzidine	30.71	252	52146	51.91	ug/mL	98
71)	Chrysene	30.66	228	113518	35.24	ug/mLm	98
72)	bis(2-Ethylhexyl)phthalate	31.39	149	183732	43.10	ug/mL	99
74)	Di-n-octylphthalate	33.30	149	267010	33.18	ug/mL	98
75)	Benzo[b]fluoranthene	33.63	252	142718	72.04	ug/mL	98
76)	Benzo[k]fluoranthene	33.71	252	62677	33.05	ug/mLm	95
77)	Benzo[a]pyrene	34.44	252	76698	56.74	ug/mLm	99
78)	Indeno[1,2,3-cd]pyrene	37.16	276	23591	41.53	ug/mLm	96
79)	Dibenz[a,h]anthracene	37.28	278	20678	41.35	ug/mL	96
80)	Benzo[g,h,i]perylene	37.74	276	18451	37.32	ug/mL	95

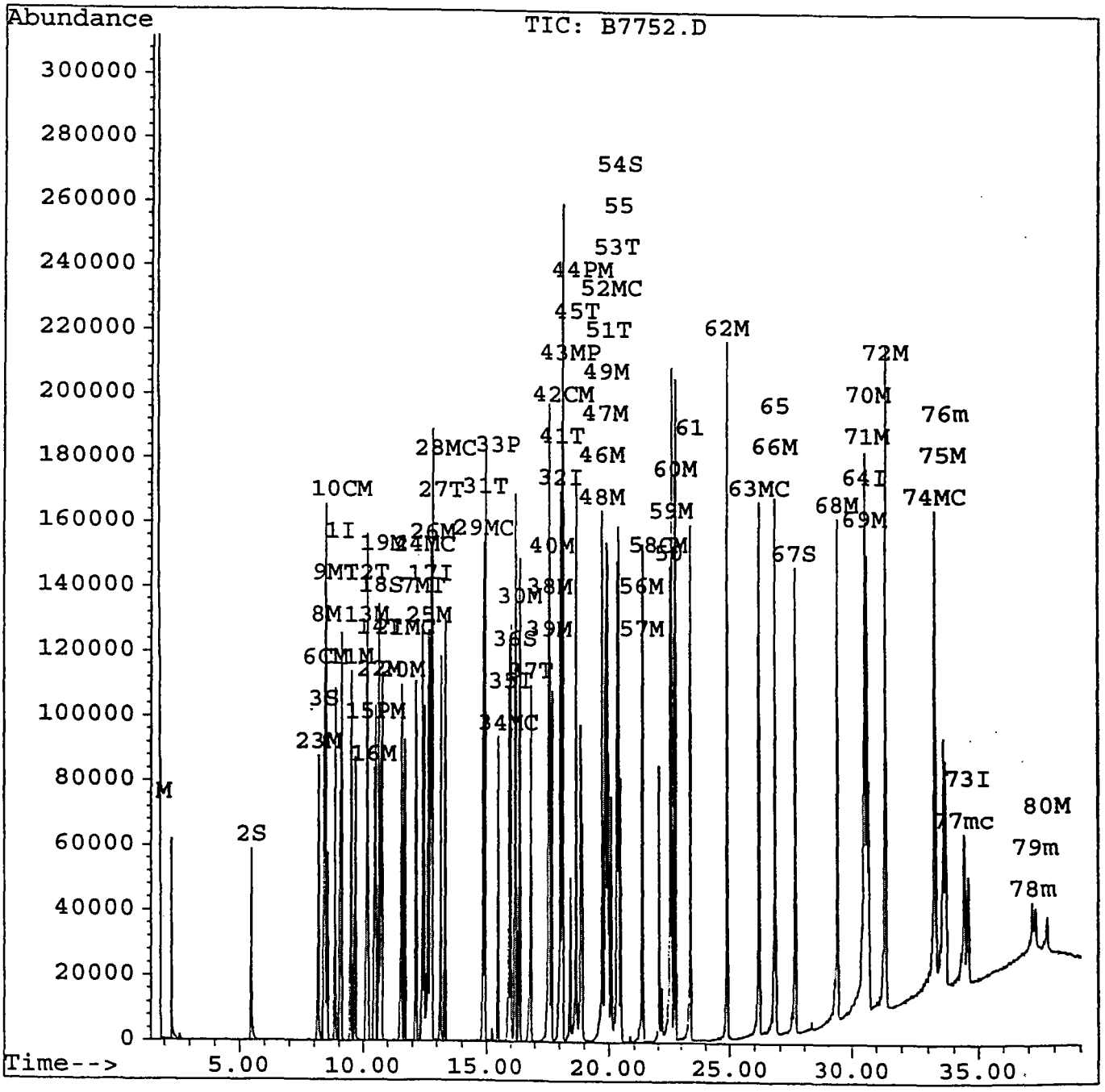
(#) = qualifier out of range (m) = manual integration

Data File : c:\hpchem\1\data2\b7752.d
Acq On : 30 May 95 10:35 am
Sample : 50 STD.....
Misc :
Quant Time: May 31 10:04 1995

Converted from RTE d

Vial: 3
Operator: SCOTTV
Inst : ABNA
BT Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Tue May 30 08:17:48 1995
Response via : Multiple Level Calibration



Data File : c:\hpchem\1\data2\b7753.d Vial: 4
Acq On : 30 May 95 11:27 am Operator: SCOTTV
Sample : 80 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: May 31 9:32 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Tue May 30 08:17:48 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.05	152	29814	40.00	ug/mL	-0.26
17) Naphthalene-d8	12.75	136	126317	40.00	ug/mL	-0.28
32) Acenaphthene-d10	18.05	164	87574	40.00	ug/mL	-0.33
50) Phenanthrene-d10	22.54	188	151522	40.00	ug/ml	-0.35
64) Chrysene-d12	30.60	240	106944	40.00	ug/mL	-0.42
73) Perylene-d12	34.60	264	39840	40.00	ug/mL	-0.45
System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	5.47	112	43593	52.60	ug/mL	52.60%
3) Phenol-d5	8.41	99	71703	62.40	ug/mL	62.40%
18) Nitrobenzene-d5	10.72	82	75552	57.49	ug/mL	57.49%
36) 2-Fluorobiphenyl	16.22	172	134602	47.18	ug/mL	47.18%
54) 2,4,6-Tribromophenol	20.48	330	21167	50.47	ug/mL	50.47%
67) Terphenyl-d14	27.65	244	150199	54.35	ug/mL	54.35%
Target Compounds						Qvalue
4) N-nitrosodimethylamine	1.62	74	25992	120.82	ug/ml	100
6) Phenol	8.45	94	100529	91.29	ug/mL	100
7) bis(2-Chloroethyl)ether	12.44	93	125480	105.34	ug/mL	99
8) 2-Chlorophenol	8.45	128	77924	86.47	ug/mL#	89
9) 1,3-Dichlorobenzene	8.86	146	88850	87.12	ug/mL	98
10) 1,4-Dichlorobenzene	9.09	146	90142	87.29	ug/mL	98
11) 1,2-Dichlorobenzene	9.49	146	86576	83.03	ug/mL	99
12) 2-Methylphenol	10.15	108	75232	85.29	ug/mLm	63
13) bis(2-chloroisopropyl)ethe	10.11	45	118548	62.01	ug/mL#	81
14) 4-Methylphenol	10.65	108	79296	83.11	ug/mL	97
15) N-Nitroso-Di-n-propylamine	10.53	70	87737	91.57	ug/mL	94
16) Hexachloroethane	10.44	117	47246	76.35	ug/mL	93
19) Nitrobenzene	10.78	77	116413	98.06	ug/mL#	86
20) Isophorone	11.61	82	221062	104.76	ug/mL	99
21) 2-Nitrophenol	11.71	139	56797	84.29	ug/mL	91
22) 2,4-Dimethylphenol	10.65	107	97981	82.67	ug/mL#	32
23) bis(2-Chloroethoxy)methane	8.18	93	117962	82.25	ug/mL#	42
24) 2,4-Dichlorophenol	12.50	162	77661	79.49	ug/mL	99
25) 1,2,4-Trichlorobenzene	12.65	180	82424	73.37	ug/mL	100
26) Naphthalene	12.83	128	262498	81.72	ug/mL#	92
27) 4-Chloroaniline	13.17	127	118867	79.65	ug/mL	99
28) Hexachlorobutadiene	13.33	225	47670	66.00	ug/mL	96
29) 4-Chloro-3-methylphenol	14.87	107	100652	81.09	ug/mL	90
30) 2-Chloronaphthalene	16.39	162	181668	70.65	ug/ml	100
31) 2-Methylnaphthalene	14.94	142	161698	68.97	ug/mL	98
33) Hexachlorocyclopentadiene	15.46	237	52969	66.60	ug/mL	100
34) 2,4,6-Trichlorophenol	15.93	196	72387	83.44	ug/mL	98
35) 2,4,5-Trichlorophenol	16.00	196	60973	67.01	ug/mL	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data2\b7753.d Vial: 4
Acq On : 30 May 95 11:27 am Operator: SCOTTV
Sample : 80 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: May 31 9:32 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Tue May 30 08:17:48 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
37)	2-Nitroaniline	16.87	65	103690	103.37	ug/mL#	100
38)	Dimethylphthalate	17.66	163	240471	93.49	ug/mL#	99
39)	Acenaphthylene	17.60	152	316138	71.86	ug/mL	99
40)	2,6-Dinitrotoluene	17.74	165	60631	100.28	ug/mL	92
41)	3-Nitroaniline	18.16	138	70580	78.65	ug/mL	92
42)	Acenaphthene	18.16	153	181405	66.74	ug/mL	99
43)	2,4-Dinitrophenol	18.47	184	34630	115.13	ug/mL	93
44)	4-Nitrophenol	18.95	109	33002	112.80	ug/mL	86
45)	Dibenzofuran	18.70	168	295374	76.70	ug/mL	95
46)	2,4-Dinitrotoluene	19.74	165	209002	74.07	ug/mL#	32
47)	Diethylphthalate	19.86	149	275990	87.53	ug/mL	98
48)	Fluorene	19.74	166	226899	76.60	ug/mL	99
49)	4-Chlorophenyl-phenylether	19.94	204	107387	74.57	ug/mL	95
51)	4-Nitroaniline	20.03	138	48638	81.91	ug/mL	96
52)	4,6-Dinitro-2-methylphenol	20.11	198	45736	107.93	ug/mL	100
53)	n-Nitrosodiphenylamine	20.34	169	161028	106.67	ug/mL#	1
55)	1,2-Diphenylhydrazine (as	20.40	77	388272	100.03	ug/ml	100
56)	4-Bromophenyl-phenylether	21.38	248	64383	79.79	ug/mL	94
57)	Hexachlorobenzene	21.37	284	73929	78.80	ug/mL#	70
58)	Pentachlorophenol	22.06	266	46630	84.35	ug/mL	97
59)	Phenanthrene	22.62	178	357765	85.38	ug/mL	99
60)	Anthracene	22.77	178	341982	82.98	ug/mLm	98
61)	Carbazole	23.41	167	335154	88.34	ug/ml	99
62)	Di-n-butylphthalate	24.91	149	529878	73.24	ug/mL	99
63)	Fluoranthene	26.20	202	352244	75.89	ug/mLm	91
65)	Benzidine	26.88	184	77859	84.53	ug/ml	100
66)	Pyrene	26.84	202	354638	81.96	ug/mL#	89
68)	Butylbenzylphthalate	29.42	149	231051	89.32	ug/mL	95
69)	Benzo[a]anthracene	30.58	228	370214	111.44	ug/mL	99
70)	3,3'-Dichlorobenzidine	30.72	252	100778	110.96	ug/mL	98
71)	Chrysene	30.68	228	221302	75.99	ug/mLm	98
72)	bis(2-Ethylhexyl)phthalate	31.39	149	333704	86.58	ug/mL	97
74)	Di-n-octylphthalate	33.30	149	471006	66.51	ug/mL	99
75)	Benzo[b]fluoranthene	33.63	252	222662	127.72	ug/mL	97
76)	Benzo[k]fluoranthene	33.71	252	100220	60.05	ug/mLm	94
77)	Benzo[a]pyrene	34.44	252	101126	85.01	ug/mLm	99
78)	Indeno[1,2,3-cd]pyrene	37.17	276	35858	71.73	ug/mL	88
79)	Dibenz[a,h]anthracene	37.28	278	36175	82.20	ug/mL	94
80)	Benzo[g,h,i]perylene	37.75	276	30352	69.77	ug/mLm	99

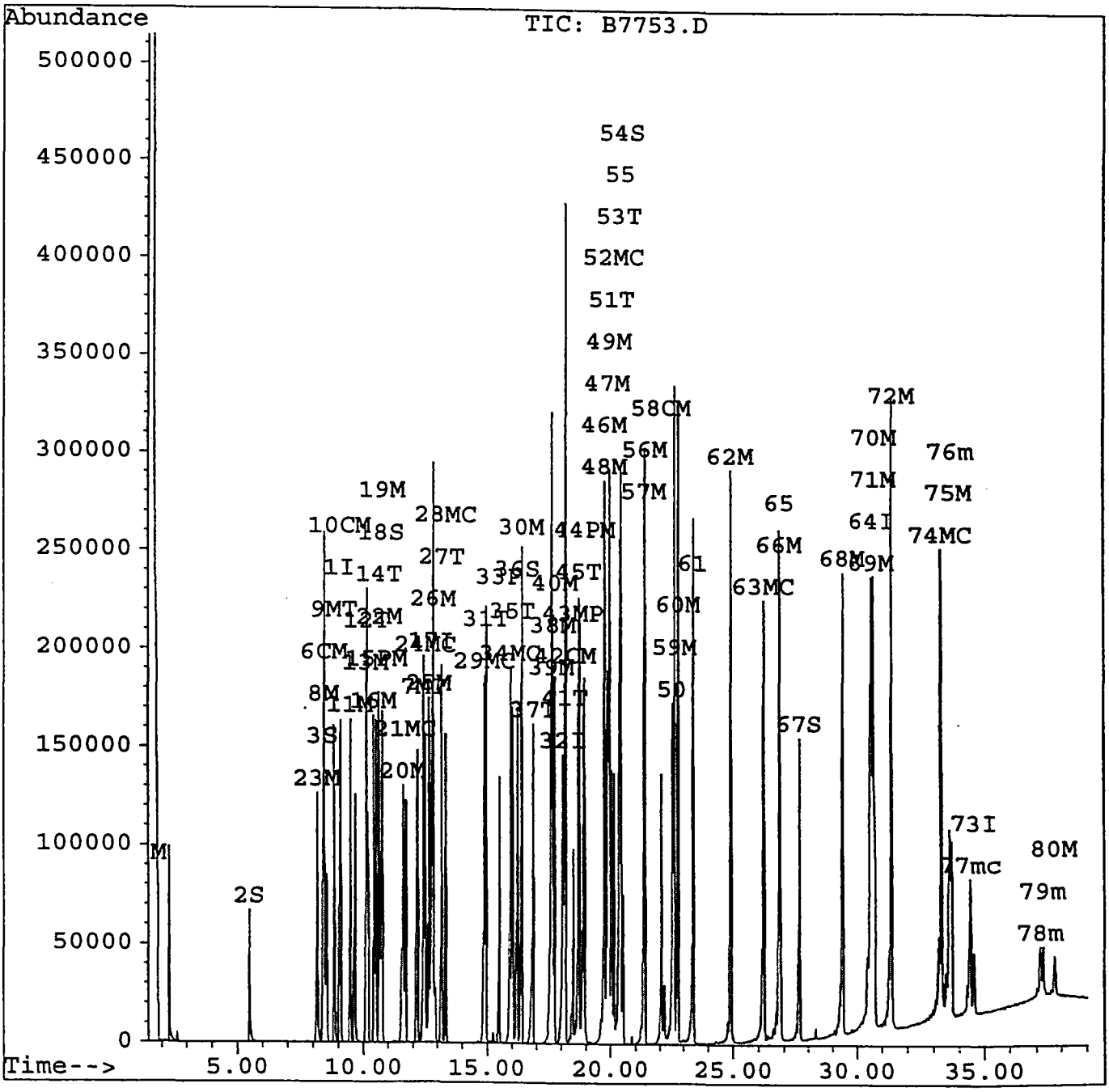
(#) = qualifier out of range (m) = manual integration

Data File : c:\hpchem\1\data2\b7753.d
Acq On : 30 May 95 11:27 am
Sample : 80 STD.....
Misc :
Quant Time: May 31 9:32 1995

Converted from RTE d

Vial: 4
Operator: SCOTTV
Inst : ABNA
BT Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Tue May 30 08:17:48 1995
Response via : Multiple Level Calibration



Data File : c:\hpchem\1\data2\b7754.d Vial: 5
Acq On : 30 May 95 12:20 pm Operator: SCOTTV
Sample : 120 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: May 31 9:49 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Tue May 30 08:17:48 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.05	152	27011	40.00	ug/mL	-0.26
17) Naphthalene-d8	12.77	136	112346	40.00	ug/mL	-0.26
32) Acenaphthene-d10	18.05	164	74142	40.00	ug/mL	-0.33
50) Phenanthrene-d10	22.53	188	133454	40.00	ug/ml	-0.36
64) Chrysene-d12	30.59	240	102268	40.00	ug/mL	-0.43
73) Perylene-d12	34.61	264	30843	40.00	ug/mL	-0.44
System Monitoring Compounds						**%Recovery**
2) 2-Fluorophenol	5.47	112	40691	54.19	ug/mL	54.19%
3) Phenol-d5	8.41	99	68173	65.48	ug/mL	65.48%
18) Nitrobenzene-d5	10.73	82	65499	56.04	ug/mL	56.04%
36) 2-Fluorobiphenyl	16.22	172	116201	48.11	ug/mL	48.11%
54) 2,4,6-Tribromophenol	20.48	330	18886	51.13	ug/mL	51.13%
67) Terphenyl-d14	27.64	244	132840	50.26	ug/mL	50.26%
Target Compounds						**Qvalue**
4) N-nitrosodimethylamine	1.64	74	44263	227.10	ug/ml	100
6) Phenol	8.47	94	145178	145.51	ug/mL	100
7) bis(2-Chloroethyl)ether	12.44	93	168732	156.34	ug/mL	98
8) 2-Chlorophenol	8.47	128	104043	127.43	ug/mL#	87
9) 1,3-Dichlorobenzene	8.86	146	113739	123.10	ug/mL	98
10) 1,4-Dichlorobenzene	9.11	146	118937	127.12	ug/mL	99
11) 1,2-Dichlorobenzene	9.49	146	112702	119.30	ug/mL	98
12) 2-Methylphenol	10.17	108	102718	128.54	ug/mLm	63
13) bis(2-chloroisopropyl)ethe	10.11	45	150752	87.04	ug/mL#	79
14) 4-Methylphenol	10.67	108	116050	134.26	ug/mL	97
15) N-Nitroso-Di-n-propylamine	10.53	70	117037	134.82	ug/mL	99
16) Hexachloroethane	10.44	117	61265	109.28	ug/mL#	81
19) Nitrobenzene	10.78	77	137726	130.44	ug/mL#	79
20) Isophorone	11.63	82	286449	152.63	ug/mL	100
21) 2-Nitrophenol	11.73	139	75814	126.50	ug/mL	95
22) 2,4-Dimethylphenol	10.67	107	144674	137.24	ug/mL#	32
23) bis(2-Chloroethoxy)methane	8.18	93	151120	118.47	ug/mL#	42
24) 2,4-Dichlorophenol	12.52	162	100762	115.96	ug/mL	99
25) 1,2,4-Trichlorobenzene	12.67	180	107106	107.19	ug/mL	98
26) Naphthalene	12.83	128	319371	111.79	ug/mL#	91
27) 4-Chloroaniline	13.17	127	156643	118.02	ug/mL	98
28) Hexachlorobutadiene	13.35	225	62689	97.58	ug/mL	98
29) 4-Chloro-3-methylphenol	14.89	107	133371	120.81	ug/mL#	86
30) 2-Chloronaphthalene	16.39	162	229152	100.19	ug/ml	100
31) 2-Methylnaphthalene	14.96	142	331843	159.13	ug/mL	97
33) Hexachlorocyclopentadiene	15.46	237	67420	100.13	ug/mL	97
34) 2,4,6-Trichlorophenol	15.93	196	100492	136.82	ug/mL	99
35) 2,4,5-Trichlorophenol	16.00	196	70403	91.40	ug/mL	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data2\b7754.d Vial: 5
Acq On : 30 May 95 12:20 pm Operator: SCOTTV
Sample : 120 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: May 31 9:49 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Tue May 30 08:17:48 1995
Response via : Multiple Level Calibration

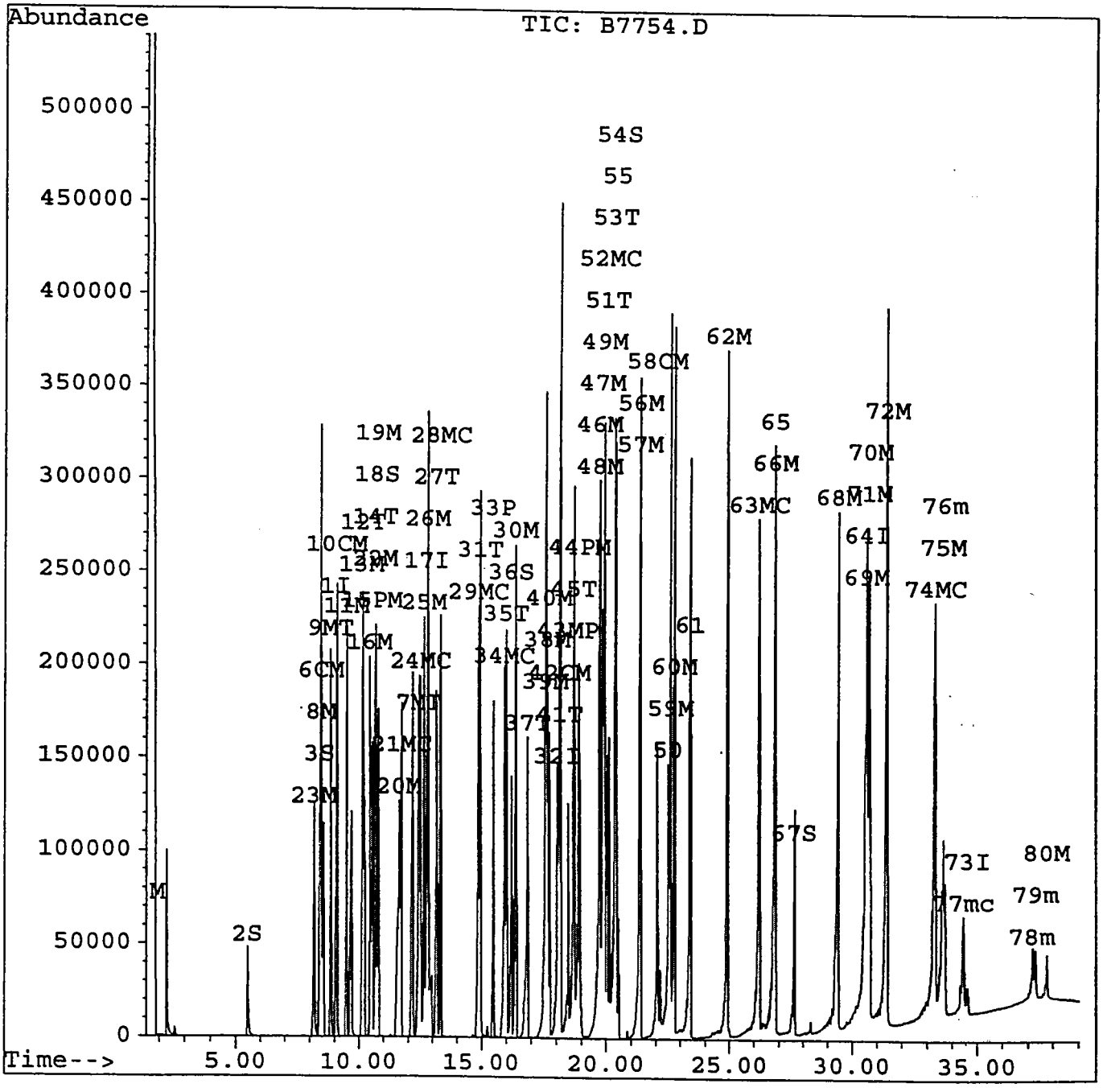
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
37)	2-Nitroaniline	16.87	65	125966	148.33	ug/mL#	100
38)	Dimethylphthalate	17.66	163	299887	137.71	ug/mL	99
39)	Acenaphthylene	17.61	152	381978	102.55	ug/mL	99
40)	2,6-Dinitrotoluene	17.74	165	69446	135.67	ug/mLm	93
41)	3-Nitroaniline	18.16	138	82189	108.18	ug/mL	95
42)	Acenaphthene	18.16	153	234884	102.07	ug/mL	99
43)	2,4-Dinitrophenol	18.49	184	47322	185.83	ug/mL	87
44)	4-Nitrophenol	18.96	109	39654	160.09	ug/mL	90
45)	Dibenzofuran	18.72	168	378169	115.99	ug/mL	98
46)	2,4-Dinitrotoluene	19.75	165	276442	115.72	ug/mL#	32
47)	Diethylphthalate	19.86	149	341020	127.75	ug/mL	99
48)	Fluorene	19.75	166	296520	118.24	ug/mL	98
49)	4-Chlorophenyl-phenylether	19.94	204	135159	110.86	ug/mL	94
51)	4-Nitroaniline	20.06	138	60415	115.52	ug/mL	95
52)	4,6-Dinitro-2-methylphenol	20.13	198	56816	152.23	ug/mLm	100
53)	n-Nitrosodiphenylamine	20.35	169	209653	157.68	ug/mL#	1
55)	1,2-Diphenylhydrazine (as	20.40	77	500723	146.47	ug/ml	100
56)	4-Bromophenyl-phenylether	21.39	248	79413	111.75	ug/mL	95
57)	Hexachlorobenzene	21.37	284	92449	111.89	ug/mL#	68
58)	Pentachlorophenol	22.06	266	59890	123.01	ug/mL	99
59)	Phenanthrene	22.62	178	457295	123.90	ug/mL	99
60)	Anthracene	22.78	178	408657	112.58	ug/mLm	99
61)	Carbazole	23.41	167	420878	125.96	ug/ml	99
62)	Di-n-butylphthalate	24.92	149	658579	103.35	ug/mL	100
63)	Fluoranthene	26.21	202	379190	92.76	ug/mLm	91
65)	Benzidine	26.87	184	131098	148.83	ug/mlm	100
66)	Pyrene	26.85	202	445627	107.70	ug/mL#	89
68)	Butylbenzylphthalate	29.43	149	293901	118.82	ug/mL	93
69)	Benzo[a]anthracene	30.57	228	469239	147.71	ug/mL	99
70)	3,3'-Dichlorobenzidine	30.73	252	106370	122.47	ug/mL#	97
71)	Chrysene	30.67	228	211972	76.11	ug/mLm	98
72)	bis(2-Ethylhexyl)phthalate	31.40	149	408257	110.77	ug/mL	98
74)	Di-n-octylphthalate	33.31	149	505170	92.14	ug/mL	100
75)	Benzo[b]fluoranthene	33.64	252	204971	151.87	ug/mLm	97
76)	Benzo[k]fluoranthene	33.72	252	88924	68.83	ug/mLm	96
77)	Benzo[a]pyrene	34.45	252	87415	94.92	ug/mLm	97
78)	Indeno[1,2,3-cd]pyrene	37.18	276	48224	124.60	ug/mL#	81
79)	Dibenz[a,h]anthracene	37.31	278	47851	140.44	ug/mL	98
80)	Benzo[g,h,i]perylene	37.76	276	34423	102.21	ug/mLm	95

(#) = qualifier out of range (m) = manual integration

Data File : c:\hpchem\1\data2\b7754.d
Acq On : 30 May 95 12:20 pm
Sample : 120 STD.....
Misc :
Quant Time: May 31 9:49 1995

Vial: 5
Operator: SCOTTV
Converted from RTE d Inst : ABNA
BT Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Tue May 30 08:17:48 1995
Response via : Multiple Level Calibration



Quantitation Report

Data File : c:\hpchem\1\data2\b7755.d Vial: 6
Acq On : 30 May 95 1:12 pm Operator: SCOTTV
Sample : 160 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: May 31 9:52 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Tue May 30 08:17:48 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.05	152	29361	40.00	ug/mL	-0.26
17) Naphthalene-d8	12.77	136	123075	40.00	ug/mL	-0.26
32) Acenaphthene-d10	18.07	164	86872	40.00	ug/mL	-0.31
50) Phenanthrene-d10	22.53	188	155037	40.00	ug/ml	-0.36
64) Chrysene-d12	30.60	240	82528	40.00	ug/mL	-0.43
73) Perylene-d12	34.62	264	32039	40.00	ug/mL	-0.43
System Monitoring Compounds						**%Recovery**
2) 2-Fluorophenol	5.47	112	38395	47.04	ug/mL	47.04%
3) Phenol-d5	8.43	99	66343	58.62	ug/mL	58.62%
18) Nitrobenzene-d5	10.73	82	67218	52.50	ug/mL	52.50%
36) 2-Fluorobiphenyl	16.22	172	126324	44.63	ug/mL	44.63%
54) 2,4,6-Tribromophenol	20.49	330	18970	44.21	ug/mL	44.21%
67) Terphenyl-d14	27.64	244	139748	65.52	ug/mL	65.52%
Target Compounds						**Qvalue**
4) N-nitrosodimethylamine	1.64	74	70397	332.28	ug/ml	100
6) Phenol	8.47	94	169408	156.21	ug/mL	100
7) bis(2-Chloroethyl)ether	12.46	93	222301	189.49	ug/mL	91
8) 2-Chlorophenol	8.47	128	133653	150.59	ug/mL#	88
9) 1,3-Dichlorobenzene	8.86	146	152142	151.49	ug/mL	97
10) 1,4-Dichlorobenzene	9.11	146	154778	152.19	ug/mL	98
11) 1,2-Dichlorobenzene	9.49	146	147372	143.51	ug/mL	99
12) 2-Methylphenol	10.17	108	130214	149.90	ug/mLm	63
13) bis(2-chloroisopropyl)ethe	10.13	45	221469	117.64	ug/mL	93
14) 4-Methylphenol	10.67	108	142777	151.95	ug/mL	97
15) N-Nitroso-Di-n-propylamine	10.55	70	151444	160.49	ug/mL	97
16) Hexachloroethane	10.44	117	81125	133.13	ug/mL#	82
19) Nitrobenzene	10.80	77	196043	169.49	ug/mL#	87
20) Isophorone	11.65	82	382084	185.84	ug/mL	99
21) 2-Nitrophenol	11.73	139	92995	141.64	ug/mL	89
22) 2,4-Dimethylphenol	10.67	107	178112	154.23	ug/mL#	32
23) bis(2-Chloroethoxy)methane	8.20	93	217251	155.46	ug/mL#	42
24) 2,4-Dichlorophenol	12.52	162	133269	140.00	ug/mL	99
25) 1,2,4-Trichlorobenzene	12.67	180	144061	131.61	ug/mL	99
26) Naphthalene	12.83	128	453739	144.98	ug/mL#	91
27) 4-Chloroaniline	13.19	127	223903	153.98	ug/mL	98
28) Hexachlorobutadiene	13.35	225	86033	122.24	ug/mL	97
29) 4-Chloro-3-methylphenol	14.89	107	174950	144.66	ug/mL#	75
30) 2-Chloronaphthalene	16.39	162	331044	132.12	ug/ml	99
31) 2-Methylnaphthalene	14.97	142	438189	191.81	ug/mL	98
33) Hexachlorocyclopentadiene	15.49	237	102334	129.71	ug/mL	99
34) 2,4,6-Trichlorophenol	15.95	196	163412	189.89	ug/mL	97
35) 2,4,5-Trichlorophenol	16.03	196	76742	85.03	ug/mL	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data2\b7755.d Vial: 6
Acq On : 30 May 95 1:12 pm Operator: SCOTTV
Sample : 160 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: May 31 9:52 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Tue May 30 08:17:48 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
37)	2-Nitroaniline	16.89	65	183241	184.15	ug/mL#	100
38)	Dimethylphthalate	17.67	163	428564	167.96	ug/mL	99
39)	Acenaphthylene	17.61	152	558058	127.87	ug/mL	99
40)	2,6-Dinitrotoluene	17.76	165	102561	171.00	ug/mLm	92
41)	3-Nitroaniline	18.17	138	96949	108.91	ug/mL	100
42)	Acenaphthene	18.17	153	341152	126.53	ug/mL	99
43)	2,4-Dinitrophenol	18.50	184	65640	219.99	ug/mL	88
44)	4-Nitrophenol	18.96	109	52458	180.75	ug/mL	93
45)	Dibenzofuran	18.73	168	512481	134.15	ug/mL	98
46)	2,4-Dinitrotoluene	19.77	165	393324	140.52	ug/mL#	35
47)	Diethylphthalate	19.89	149	442732	141.55	ug/mL	97
48)	Fluorene	19.77	166	424603	144.50	ug/mL	99
49)	4-Chlorophenyl-phenylether	19.94	204	192605	134.83	ug/mL	98
51)	4-Nitroaniline	20.08	138	81046	133.39	ug/mL	90
52)	4,6-Dinitro-2-methylphenol	20.16	198	87159	201.02	ug/mLm	100
53)	n-Nitrosodiphenylamine	20.37	169	283832	183.75	ug/mL#	1
55)	1,2-Diphenylhydrazine (as	20.41	77	660607	166.34	ug/ml	100
56)	4-Bromophenyl-phenylether	21.39	248	115508	139.91	ug/mLm	91
57)	Hexachlorobenzene	21.37	284	85494	89.06	ug/mLm	53
58)	Pentachlorophenol	22.09	266	81327	143.79	ug/mL	100
59)	Phenanthrene	22.63	178	609750	142.21	ug/mL	99
60)	Anthracene	22.78	178	501796	118.99	ug/mLm	99
61)	Carbazole	23.40	167	406913	104.82	ug/ml	98
62)	Di-n-butylphthalate	24.92	149	893793	120.74	ug/mL	99
63)	Fluoranthene	26.22	202	572007	120.45	ug/mLm	92
65)	Benzidine	26.87	184	187882	264.32	ug/ml	100
66)	Pyrene	26.85	202	612856	183.54	ug/mL#	89
68)	Butylbenzylphthalate	29.44	149	373168	186.95	ug/mL	91
69)	Benzo[a]anthracene	30.58	228	598348	233.40	ug/mL	99
70)	3,3'-Dichlorobenzidine	30.72	252	113910	162.52	ug/mL	99
71)	Chrysene	30.68	228	218157	97.07	ug/mLm	98
72)	bis(2-Ethylhexyl)phthalate	31.41	149	506955	170.44	ug/mL	96
74)	Di-n-octylphthalate	33.32	149	549407	96.47	ug/mL	99
75)	Benzo[b]fluoranthene	33.65	252	313299	223.47	ug/mLm	96
76)	Benzo[k]fluoranthene	33.65	252	159963	119.19	ug/mLm	96
77)	Benzo[a]pyrene	34.46	252	142747	149.22	ug/mLm	97
78)	Indeno[1,2,3-cd]pyrene	37.20	276	63169	157.13	ug/mL	98
79)	Dibenz[a,h]anthracene	37.32	278	60387	170.62	ug/mL	99
80)	Benzo[g,h,i]perylene	37.76	276	49358	141.09	ug/mLm	94

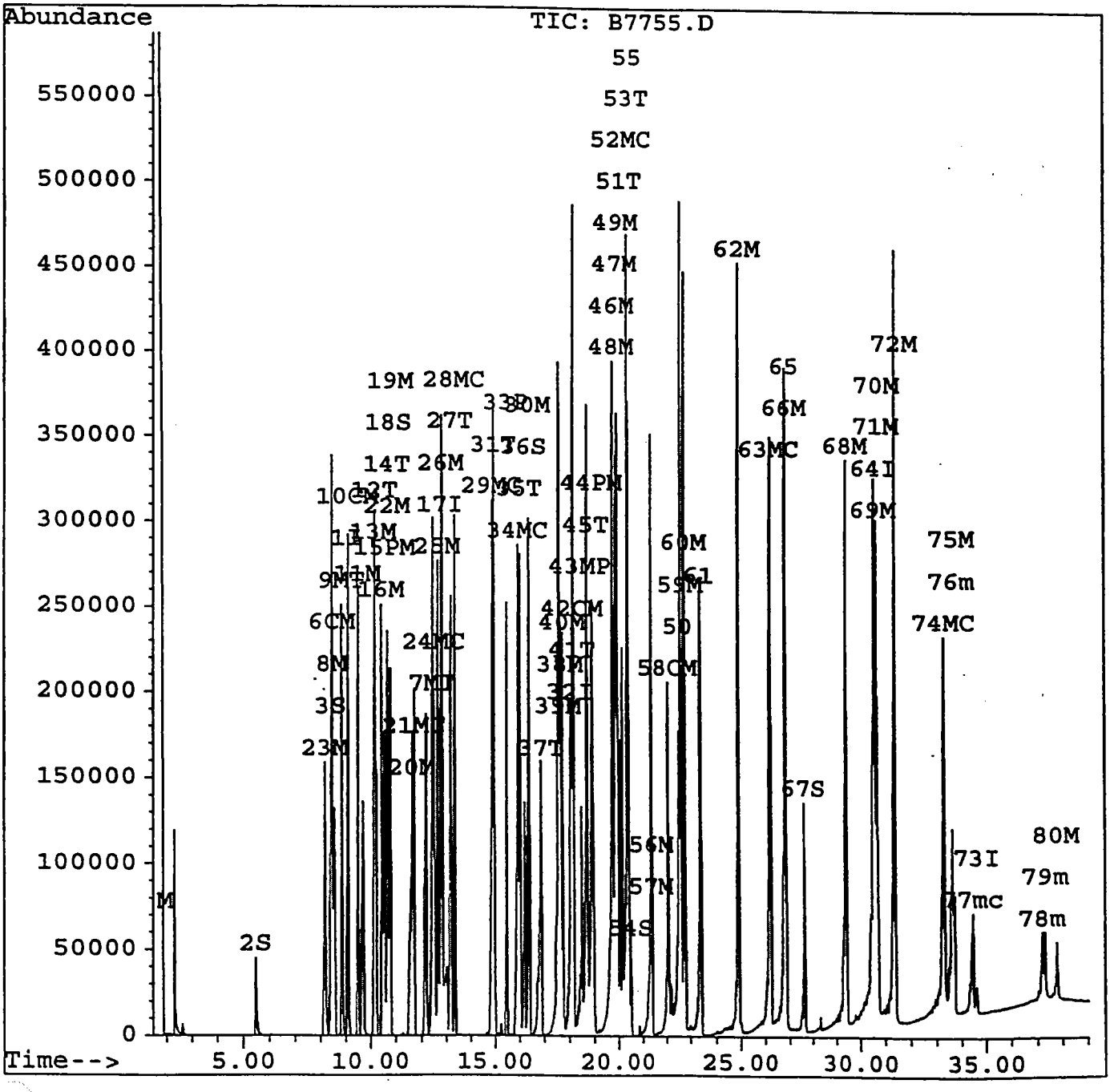
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data2\b7755.d
Acq On : 30 May 95 1:12 pm
Sample : 160 STD.....
Misc :
Quant Time: May 31 9:52 1995

Vial: 6
Operator: SCOTTV
Converted from RTE d Inst : ABNA
BT Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Tue May 30 08:17:48 1995
Response via : Multiple Level Calibration



SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name : EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Lab File ID: B7802.D DFTPP Injection Date: 6/3/95

Instrument ID: ABNA DFTPP Injection Time: 0953

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
51	30.0 - 80.0% of mass 198	53.6
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	60.9
70	Less than 2.0% of mass 69	0.0 (0.0)1
127	25.0 - 75.0% of mass 198	47.3
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100 % relative abundance	100.0
199	5.0 - 9.0% of mass 198	7.2
275	10.0 - 30.0% of mass 198	22.9
365	Greater than 0.75% of mass 198	2.8
441	Present, but less than mass 443	11.1
442	40.0 - 110.0% of mass 198	70.8
443	15.0 - 24.0% of mass 442	14.0 (19.8)2

1-Value is % mass 69 2-Value is % mass 442

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD050	50 STD	B7803.D	6/3/95	1013
02	SBLK01	BLANK1	B7804.D	6/3/95	1104
03	9521072B	9521072B	B7805.D	6/3/95	1154
04	9521073B	9521073B	B7806.D	6/3/95	1244
05	SBLK02	BLANK2	B7807.D	6/3/95	1334
06	9522265B	9522265B	B7808.D	6/3/95	1424
07	9522845B	9522845B	B7809.D	6/3/95	1515
08	SBLK03	BLANK3	B7810.D	6/3/95	1606
09	9523339B	9523339B	B7811.D	6/3/95	1656
10	9523341B	9523341B	B7812.D	6/3/95	1747
11	9523342B	9523342B	B7813.D	6/3/95	1838
12	9523343B	9523343B	B7814.D	6/3/95	1928
13	9523530B	9523530B	B7815.D	6/3/95	2018
14	9523531B	9523531B	B7816.D	6/3/95	2108
15	9523533B	9523533B	B7817.D	6/3/95	2158
16	9523534B	9523534B	B7818.D	6/3/95	2248
17	9523535B	9523535B	B7819.D	6/3/95	2337
18	9523536B	9523536B	B7820.D	6/4/95	0027
19	SBLK04	BLANK4	B7821.D	6/4/95	0117
20	9523789B	9523789B	B7822.D	6/4/95	0206
21	9523792B	9523792B	B7823.D	6/4/95	0256
22	9523787B	9523787B	B7824.D	6/4/95	0346

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name : EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Lab File ID: B7802.D DFTPP Injection Date: 6/3/95

Instrument ID: ABNA DFTPP Injection Time: 0953

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
51	30.0 - 80.0% of mass 198	53.6
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	60.9
70	Less than 2.0% of mass 69	0.0 (0.0)1
127	25.0 - 75.0% of mass 198	47.3
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100 % relative abundance	100.0
199	5.0 - 9.0% of mass 198	7.2
275	10.0 - 30.0% of mass 198	22.9
365	Greater than 0.75% of mass 198	2.8
441	Present, but less than mass 443	11.1
442	40.0 - 110.0% of mass 198	70.8
443	15.0 - 24.0% of mass 442	14.0 (19.8)2

1-Value is % mass 69 2-Value is % mass 442

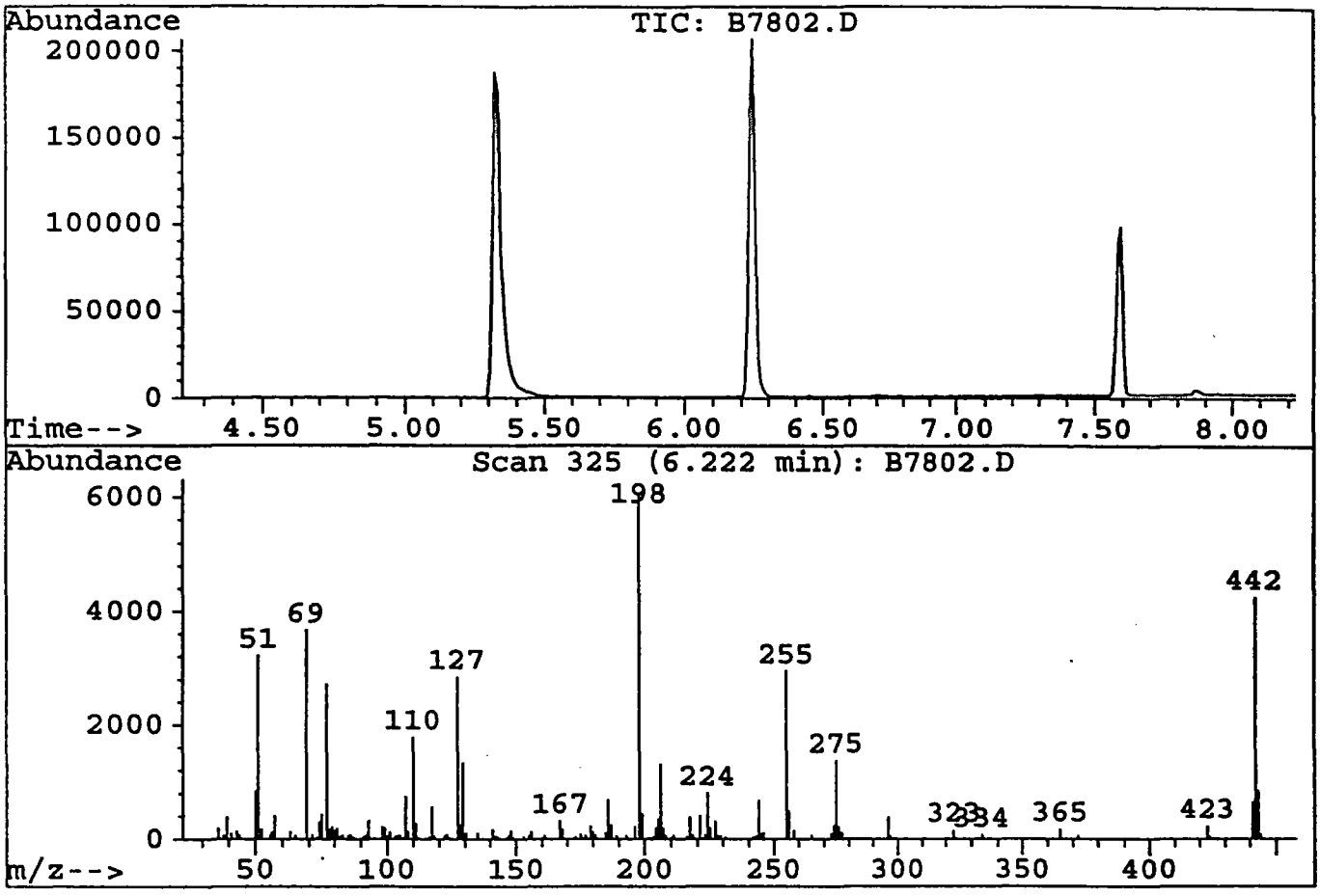
This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SBLK05	BLANK5	B7825.D	6/4/95	0435
02	22654MS	22654MS	B7826.D	6/4/95	0525
03	22654MSD	22654MSD	B7827.D	6/4/95	0615
04	22659MS	22659MS	B7828.D	6/4/95	0704
05	22659MSD	22659MSD	B7829.D	6/4/95	0754
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

DFTPP

Data File : C:\HPCHEM\1\DATA2\B7802.D Vial: 1
Acq On : 3 Jun 95 9:53 am Operator: SCOTTV
Sample : DFTPP..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration



Peak Apex is scan: 325

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	53.6	3226	PASS
68	69	0	2	0.0	0	PASS
69	198	0	100	60.9	3667	PASS
70	69	0	2	0.0	0	PASS
127	198	40	60	47.3	2846	PASS
197	198	0	1	0.0	0	PASS
198	198	100	100	100.0	6021	PASS
199	198	5	9	7.2	434	PASS
275	198	10	30	22.9	1379	PASS
365	198	1	100	2.8	170	PASS
441	443	0	100	79.3	669	PASS
442	198	40	100	70.8	4261	PASS
443	442	17	23	19.8	844	PASS

B7802.D BNACLP.M Sat Jun 03 09:48:56 1995 BNA

TPP..... Converted from RTE data file >B7802::D5

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.10	195	57.05	413	79.95	160	99.05	186
37.90	74	63.05	134	81.05	193	100.05	51
39.10	386	65.05	66	81.95	54	100.95	118
41.05	94	68.95	3667	82.95	76	102.95	50
43.05	140	71.15	74	85.05	67	103.95	70
43.95	71	73.05	38	85.95	78	105.05	69
50.05	844	74.05	294	87.05	29	106.15	34
51.05	3226	74.95	427	90.95	51	107.05	746
52.05	179	77.05	2720	92.05	75	107.95	136
55.15	74	78.05	169	92.95	316	109.95	1785
55.95	133	79.05	215	98.05	224	111.05	275

Scan 325 (6.222 min): B7802.D

TPP..... Converted from RTE data file >B7802::D5

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
111.85	36	134.90	114	160.00	39	186.00	683
116.05	42	140.90	173	161.00	63	187.00	242
117.05	564	142.10	53	167.00	318	188.90	51
118.05	51	142.90	34	168.00	162	193.00	70
121.90	66	145.90	30	173.00	42	196.10	225
123.00	89	147.00	83	175.00	88	198.00	6021
123.90	35	147.90	160	177.00	64	199.00	434
127.00	2846	149.00	36	179.00	216	201.65	29
128.10	250	152.90	50	180.00	127	202.95	41
128.90	1336	155.00	69	180.90	71	203.95	197
130.10	102	156.00	130	185.00	110	205.05	353

Scan 325 (6.222 min): B7802.D

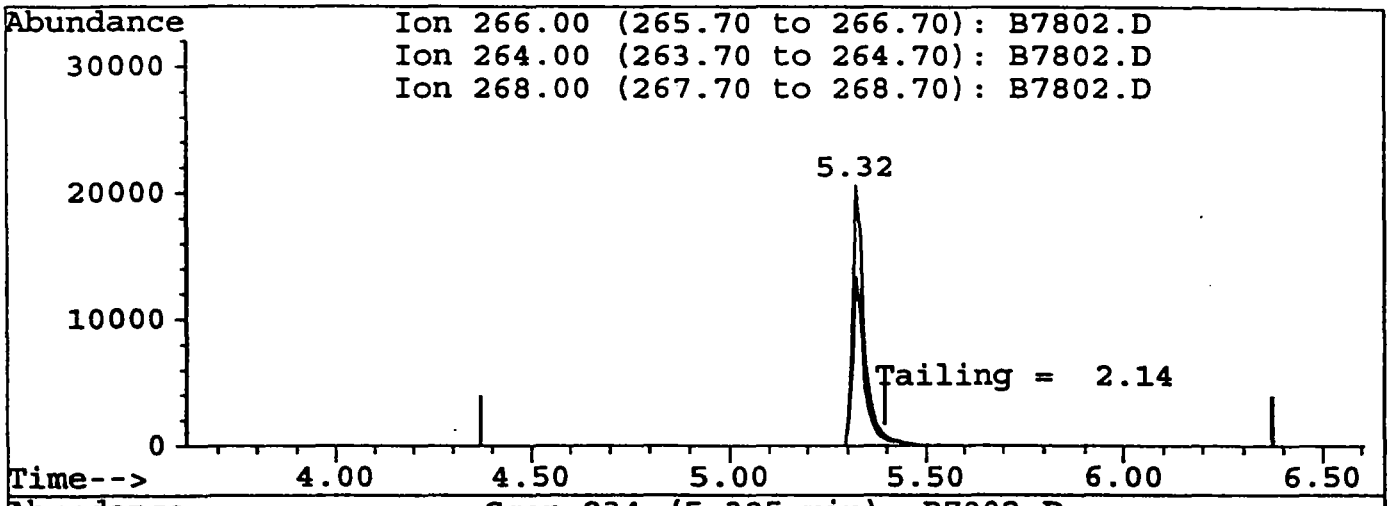
TPP..... Converted from RTE data file >B7802::D5

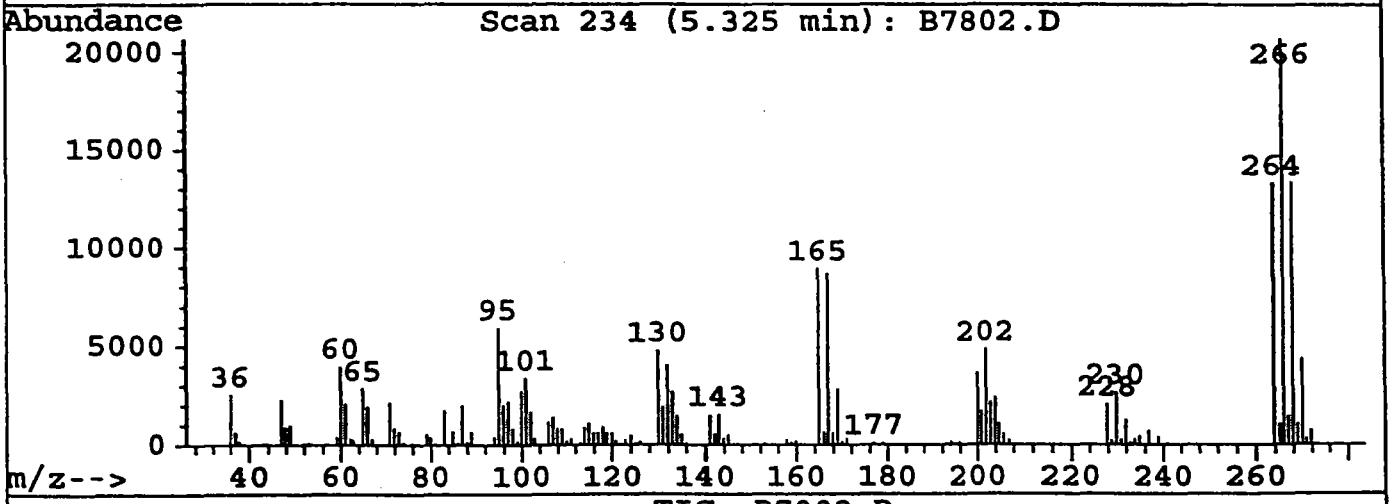
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
206.05	1320	224.95	192	255.95	487	334.00	73
207.05	189	226.95	305	258.05	143	364.95	170
207.95	55	227.95	55	264.95	68	372.05	67
210.15	33	228.85	61	272.95	102	423.05	224
211.05	66	231.05	37	274.05	239	423.95	49
216.15	46	242.05	44	275.05	1379	441.00	669
216.95	373	243.05	52	276.05	219	442.00	4261
217.95	69	244.05	676	277.05	109	443.00	844
220.95	411	245.05	91	296.00	378	444.00	72
222.95	81	245.95	117	297.00	45		
224.05	802	255.05	2950	323.10	156		

Data File : C:\HPCHEM\1\DATA2\B7802.D
Acq On : 3 Jun 95 9:53 am
Sample : DFTPP..... Converted from RTE d
Misc :
Quant Time: Jun 3 9:06 1995

Vial: 1
Operator: SCOTTV
Inst : ABNA
BT Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 10:06:36 1995
Response via : Multiple Level Calibration





TIC: B7802.D

(1) Pentachlorophenol (CM)

5.32min 133.02ug/mL

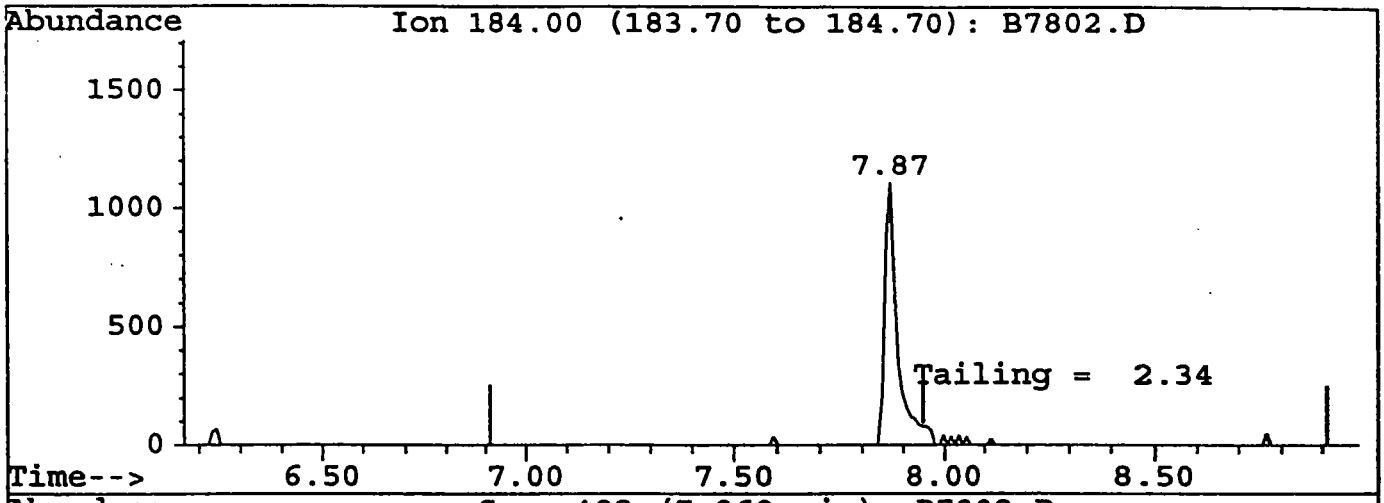
response 43936

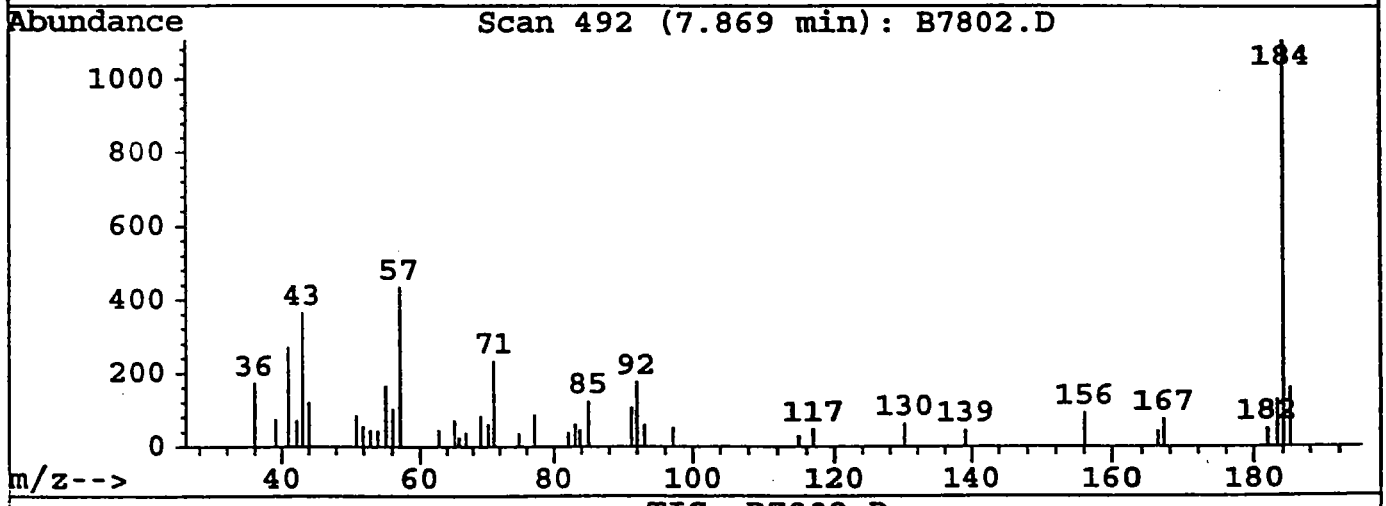
Ion	Exp%	Act%
266.00	100	100
264.00	64.30	64.30
268.00	64.70	64.53
0.00	0.00	0.00

Data File : C:\HPCHEM\1\DATA2\B7802.D
Acq On : 3 Jun 95 9:53 am
Sample : DFTPP..... Converted from RTE d
Misc :
Quant Time: Jun 3 9:06 1995

Vial: 1
Operator: SCOTTV
Inst : ABNA
BT Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 10:06:36 1995
Response via : Multiple Level Calibration





TIC: B7802.D

(2) Benzidine
7.87min 7.97ug/ml
response 2449

Ion	Exp%	Act%
184.00	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: EMSL ANALYTICAL Contract: _____

Project No. _____ Site: _____ Location: _____ Group: _____

Instrument ID: ABNA Calibration Date: 6/3/95 Time: 1013

Lab File ID: B7803.D Init. Calib. Date(s): 6/3/95 1/0/00

Init. Calib. Times: 1013 0000

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
bis(2-Chloroethyl)ether	2.026	2.027		0.0	
1,3-Dichlorobenzene	1.385	1.449		-4.6	
1,4-Dichlorobenzene	1.429	1.500		-5.0	30.0
1,2-Dichlorobenzene	1.357	1.424		-4.9	
bis(2-chloroisopropyl)ether	1.868	1.769		5.3	
N-Nitroso-Di-n-propylamine	1.346	1.315	0.050	2.3	
Hexachloroethane	0.737	0.736		0.1	
Nitrobenzene	0.424	0.446		-5.2	
Isophorone	0.893	0.814		8.8	
bis(2-Chloroethoxy)methane	0.456	0.453		0.7	
1,2,4-Trichlorobenzene	0.317	0.332		-4.7	
Naphthalene	0.979	1.023		-4.5	
4-Chloroaniline	0.463	0.464		-0.2	
Hexachlorobutadiene	0.185	0.191		-3.2	30.0
2-Methylnaphthalene	0.786	0.742		5.6	
Hexachlorocyclopentadiene	0.278	0.250	0.050	10.1	
2-Chloronaphthalene	0.696	0.716		-2.9	
2-Nitroaniline	0.549	0.487		11.3	
Dimethylphthalate	1.299	1.277		1.7	
Acenaphthylene	1.704	1.652		3.1	
2,6-Dinitrotoluene	0.310	0.301		2.9	
3-Nitroaniline	0.346	0.344		0.6	
Acenaphthene	1.025	1.040		-1.5	30.0
Dibenzofuran	1.609	1.625		-1.0	
2,4-Dinitrotoluene	1.167	1.125		3.6	
Diethylphthalate	1.443	1.376		4.6	
Fluorene	1.259	1.219		3.2	
4-Chlorophenyl-phenylether	0.596	0.628		-5.4	
4-Nitroaniline	0.166	0.194		-16.9	
n-Nitrosodiphenylamine	0.508	0.502		1.2	
4-Bromophenyl-phenylether	0.206	0.219		-6.3	
Hexachlorobenzene	0.215	0.232		-7.9	
Phenanthrene	1.094	1.129		-3.2	
Anthracene	1.009	1.064		-5.5	
Carbazole	0.944	1.015		-7.5	
Di-n-butylphthalate	1.606	1.633		-1.7	
Fluoranthene	1.035	1.139		-10.0	30.0

All other compounds must meet a minimum RRF of 0.010.

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: EMSL ANALYTICAL Contract: _____

Project No. _____ Site: _____ Location: _____ Group: _____

Instrument ID: ABNA Calibration Date: 6/3/95 Time: 1013

Lab File ID: B7803.D Init. Calib. Date(s): 6/3/95 1/0/00

Init. Calib. Times: 1013 0000

COMPOUND	RRF	RRF50	MIN RRF	%D	MAX %D
Pyrene	1.502	1.240		17.4	
Butylbenzylphthalate	0.962	0.769		20.1	
Benzo[a]anthracene	1.516	1.300		14.2	
3,3'-Dichlorobenzidine	0.386	0.357		7.5	
Chrysene	0.843	0.806		4.4	
bis(2-Ethylhexyl)phthalate	1.364	1.148		15.8	
Di-n-octylphthalate	5.094	4.570		10.3	30.0
Benzo[b]fluoranthene	2.467	2.153		12.7	
Benzo[k]fluoranthene	1.190	1.273		-7.0	
Benzo[a]pyrene	1.227	1.266		-3.2	30.0
Indeno[1,2,3-cd]pyrene	0.452	0.458		-1.3	
Dibenz[a,h]anthracene	0.436	0.384		11.9	
Benzo[g,h,i]perylene	0.356	0.291		18.3	
Nitrobenzene-d5	0.456	0.443		2.9	
2-Fluorobiphenyl	1.200	1.187		1.1	
Terphenyl-d14	1.062	0.881		17.0	

All other compounds must meet a minimum RRF of 0.010.

Data File : C:\HPCHEM\1\DATA2\B7803.D Vial: 2
Acq On : 3 Jun 95 10:13 am Operator: SCOTTV SUP
Sample : 50 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 10:06:36 1995
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	99	0.18
2	S	2-Fluorophenol	1.131	1.044	7.7	96	0.16
3	S	Phenol-d5	1.873	1.712	8.6	98	0.14
4	M	N-nitrosodimethylamine	0.578	0.585	-1.1	79	-0.10
5		Pyridine	0.428	0.000#	100.0#	0#	-1.62#
6	CM	Phenol	1.668	1.607	3.7	93	0.14
7	MT	bis(2-Chloroethyl)ether	2.026	2.027	-0.1	98	0.18
8	M	2-Chlorophenol	1.269	1.290	-1.6	102	0.16
9	MT	1,3-Dichlorobenzene	1.385	1.449	-4.6	101	0.18
0	CM	1,4-Dichlorobenzene	1.429	1.500	-5.0	101	0.18
11	M	1,2-Dichlorobenzene	1.357	1.424	-4.9	102	0.18
2	T	2-Methylphenol	1.204	1.299	-7.9	110	0.66#
3	M	bis(2-chloroisopropyl)ether	1.868	1.769	5.3	101	0.20
14	T	4-Methylphenol	1.322	1.299	1.7	98	0.16
15	PM	N-Nitroso-Di-n-propylamine	1.346	1.315	2.3	102	0.18
6	M	Hexachloroethane	0.737	0.736	0.1	97	0.19
17	I	Naphthalene-d8	1.000	1.000	0.0	94	0.18
8	S	Nitrobenzene-d5	0.456	0.443	2.8	96	0.18
9	M	Nitrobenzene	0.424	0.446	-5.2	96	0.18
20	M	Isophorone	0.893	0.814	8.8	94	0.16
1	MC	2-Nitrophenol	0.210	0.202	4.2	95	0.20
2	M	2,4-Dimethylphenol	0.394	0.392	0.4	97	0.16
23	M	bis(2-Chloroethoxy)methane	0.456	0.453	0.7	94	0.16
4	MC	2,4-Dichlorophenol	0.298	0.301	-0.8	97	0.18
5	M	1,2,4-Trichlorobenzene	0.317	0.332	-4.7	97	0.18
26	M	Naphthalene	0.979	1.023	-4.5	100	0.20
27	T	4-Chloroaniline	0.463	0.464	-0.1	93	0.20
8	MC	Hexachlorobutadiene	0.185	0.191	-3.3	97	0.18
9	MC	4-Chloro-3-methylphenol	0.384	0.376	2.0	92	0.18
30	M	2-Chloronaphthalene	0.696	0.716	-2.8	96	0.21
1	T	2-Methylnaphthalene	0.786	0.742	5.5	100	0.19
32	I	Acenaphthene-d10	1.000	1.000	0.0	99	0.21
3	P	Hexachlorocyclopentadiene	0.278	0.250	10.3	95	0.19
4	MC	2,4,6-Trichlorophenol	0.415	0.353	15.0	91	0.20
35	T	2,4,5-Trichlorophenol	0.324	0.384	-18.4	102	0.19
36	S	2-Fluorobiphenyl	1.200	1.187	1.1	99	0.19
7	T	2-Nitroaniline	0.549	0.487	11.3	83	0.19
8	M	Dimethylphthalate	1.299	1.277	1.8	97	0.19
3	M	Acenaphthylene	1.704	1.652	3.1	95	0.21
0	M	2,6-Dinitrotoluene	0.310	0.301	2.8	91	0.21

(#) = Out of Range

Data File : C:\HPCHEM\1\DATA2\B7803.D Vial: 2
Acq On : 3 Jun 95 10:13 am Operator: SCOTTV SUP
Sample : 50 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 10:06:36 1995
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
41	T	3-Nitroaniline	0.346	0.344	0.6	94	0.21
42	CM	Acenaphthene	1.025	1.040	-1.5	100	0.21
43	MP	2,4-Dinitrophenol	0.172	0.164	4.8	104	0.21
44	PM	4-Nitrophenol	0.166	0.160	3.5	94	0.19
45	T	Dibenzofuran	1.609	1.625	-1.0	96	0.21
46	M	2,4-Dinitrotoluene	1.167	1.125	3.6	97	0.23
47	M	Diethylphthalate	1.443	1.376	4.6	93	0.21
48	M	Fluorene	1.259	1.219	3.2	98	0.23
49	M	4-Chlorophenyl-phenylether	0.596	0.628	-5.4	105	0.23
50		Phenanthrene-d10	1.000	1.000	0.0	102	0.25
51	T	4-Nitroaniline	0.166	0.194	-16.9	93	0.21
52	MC	4,6-Dinitro-2-methylphenol	0.132	0.139	-5.1	109	0.21
53	T	n-Nitrosodiphenylamine	0.508	0.502	1.2	96	0.23
54	S	2,4,6-Tribromophenol	0.108	0.110	-2.0	106	0.23
55		1,2-Diphenylhydrazine (as a	1.211	1.189	1.8	92	0.23
56	M	4-Bromophenyl-phenylether	0.206	0.219	-6.2	101	0.23
57	M	Hexachlorobenzene	0.215	0.232	-8.2	104	0.23
58	CM	Pentachlorophenol	0.137	0.160	-16.2	122	0.23
59	M	Phenanthrene	1.094	1.129	-3.2	105	0.25
60	M	Anthracene	1.009	1.064	-5.5	105	0.25
61		Carbazole	0.944	1.015	-7.5	107	0.25
62	M	Di-n-butylphthalate	1.606	1.633	-1.6	102	0.23
63	MC	Fluoranthene	1.035	1.139	-10.1	103	0.27
64	I	Chrysene-d12	1.000	1.000	0.0	110	0.31
65		Benzidine	0.437	0.361	17.5	99	0.27
66	M	Pyrene	1.502	1.240	17.4	107	0.27
67	S	Terphenyl-d14	1.062	0.881	17.1	110	0.27
68	M	Butylbenzylphthalate	0.962	0.769	20.0	100	0.27
69	M	Benzo[a]anthracene	1.516	1.300	14.2	106	0.31
70	M	3,3'-Dichlorobenzidine	0.386	0.357	7.5	111	0.29
71	M	Chrysene	0.843	0.806	4.4	115	0.31
72	M	bis(2-Ethylhexyl)phthalate	1.364	1.148	15.8	101	0.27
73	I	Perylene-d12	1.000	1.000	0.0	206#	0.30
74	MC	Di-n-octylphthalate	5.094	4.570	10.3	200#	0.27
75	M	Benzo[b]fluoranthene	2.467	2.153	12.7	176#	0.30
76	m	Benzo[k]fluoranthene	1.190	1.273	-7.0	237#	0.31
77	mc	Benzo[a]pyrene	1.227	1.266	-3.2	193#	-0.51#
78	m	Indeno[1,2,3-cd]pyrene	0.452	0.458	-1.1	227#	0.26
79	m	Dibenz[a,h]anthracene	0.436	0.384	11.8	217#	0.26

(#) = Out of Range

Data File : C:\HPCHEM\1\DATA2\B7803.D Vial: 2
Acq On : 3 Jun 95 10:13 am Operator: SCOTTV SUP
Sample : 50 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 10:06:36 1995
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
80	M	Benzo[g,h,i]perylene	0.356	0.291	18.1	185#	0.26
81		1-Methyl naphthalene	0.000	0.000#	0.0	0#	-13.33#
82		7,12-Dimethylbenz(a)anthrac	0.000	0.000#	0.0	191#	0.30
83		Quinoline	0.000	0.000#	0.0	95	0.20
84		Thiophenol	0.000	0.000#	0.0	72	0.17
85		4-Methyl chrysene	0.000	0.000#	0.0	118	0.31
86		Dibenz(a,j)acridine	0.000	0.000#	0.0	131	0.27
87		Indene	0.000	0.000#	0.0	94	0.18

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Data File : c:\hpchem\1\data2\b7803.d Vial: 2
Acq On : 3 Jun 95 10:13 am Operator: SCOTTV
Sample : 50 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jun 7 9:32 1995

Method : C:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 10:06:36 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.21	152	29236	40.00	ug/mL	0.18
17) Naphthalene-d8	12.92	136	116999	40.00	ug/mL	0.18
32) Acenaphthene-d10	18.26	164	80656	40.00	ug/mL	0.21
50) Phenanthrene-d10	22.77	188	134208	40.00	ug/ml	0.25
64) Chrysene-d12	30.89	240	129676	40.00	ug/mL	0.31
73) Perylene-d12	34.90	264	93467	40.00	ug/mL	0.30
System Monitoring Compounds						**%Recovery**
2) 2-Fluorophenol	5.63	112	38146	46.13	ug/mL	46.13%
3) Phenol-d5	8.53	99	62550	45.70	ug/mL	45.70%
18) Nitrobenzene-d5	10.88	82	64784	48.60	ug/mL	48.60%
36) 2-Fluorobiphenyl	16.39	172	119643	49.45	ug/mL	49.45%
54) 2,4,6-Tribromophenol	20.69	330	18489	51.01	ug/mL	51.01%
67) Terphenyl-d14	27.91	244	142742	41.47	ug/mL	41.47%
Target Compounds						**Qvalue**
4) N-nitrosodimethylamine	1.85	74	21365	50.56	ug/mlm	100
6) Phenol	8.57	94	58717	48.17	ug/mL	100
7) bis(2-Chloroethyl)ether	12.60	93	74087	50.04	ug/mL	96
8) 2-Chlorophenol	8.61	128	47149	50.82	ug/mL	95
9) 1,3-Dichlorobenzene	9.01	146	52942	52.30	ug/mL	98
10) 1,4-Dichlorobenzene	9.26	146	54825	52.49	ug/mL	99
11) 1,2-Dichlorobenzene	9.65	146	52051	52.46	ug/mL	98
12) 2-Methylphenol	10.79	108	47472	53.93	ug/mL	65
13) bis(2-chloroisopropyl)ethe	10.28	45	64632	47.33	ug/mL#	1
14) 4-Methylphenol	10.79	108	47472	49.15	ug/mL	99
15) N-Nitroso-Di-n-propylamine	10.67	70	48058	48.86	ug/mL	91
16) Hexachloroethane	10.61	117	26915	49.93	ug/mL	99
19) Nitrobenzene	10.94	77	65242	52.61	ug/mL#	89
20) Isophorone	11.73	82	119099	45.58	ug/mL	96
21) 2-Nitrophenol	11.88	139	29485	47.92	ug/mL	98
22) 2,4-Dimethylphenol	10.79	107	57307	49.78	ug/mL#	32
23) bis(2-Chloroethoxy)methane	8.32	93	66255	49.66	ug/mL#	42
24) 2,4-Dichlorophenol	12.65	162	43957	50.41	ug/mL	97
25) 1,2,4-Trichlorobenzene	12.83	180	48531	52.36	ug/mL	98
26) Naphthalene	13.00	128	149571	52.24	ug/mL#	91
27) 4-Chloroaniline	13.35	127	67787	50.05	ug/mL	98
28) Hexachlorobutadiene	13.50	225	27957	51.65	ug/mL	96
29) 4-Chloro-3-methylphenol	15.04	107	55034	49.01	ug/mL	100
30) 2-Chloronaphthalene	16.58	162	104679	51.41	ug/ml	99
31) 2-Methylnaphthalene	15.14	142	108545	47.23	ug/mL	100
33) Hexachlorocyclopentadiene	15.66	237	25173	44.85	ug/mL	96
34) 2,4,6-Trichlorophenol	16.10	196	35610	42.51	ug/mL	99
35) 2,4,5-Trichlorophenol	16.20	196	38697	59.22	ug/mL	100

(#) = qualifier out of range (m) = manual integration

Data File : c:\hpchem\1\data2\b7803.d Vial: 2
Acq On : 3 Jun 95 10:13 am Operator: SCOTTV
Sample : 50 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jun 7 9:32 1995

Method : C:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 10:06:36 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
37)	2-Nitroaniline	17.05	65	49104	44.34	ug/mL#	100
38)	Dimethylphthalate	17.82	163	128716	49.12	ug/mL	99
39)	Acenaphthylene	17.80	152	166597	48.47	ug/mL	99
40)	2,6-Dinitrotoluene	17.91	165	30393	48.59	ug/mL	97
41)	3-Nitroaniline	18.34	138	34672	49.71	ug/mL	95
42)	Acenaphthene	18.36	153	104858	50.73	ug/mL	100
43)	2,4-Dinitrophenol	18.66	184	16518	47.58	ug/mL	99
44)	4-Nitrophenol	19.13	109	16116	48.25	ug/mL	89
45)	Dibenzofuran	18.92	168	163832	50.51	ug/mL	95
46)	2,4-Dinitrotoluene	19.96	165	113430	48.20	ug/mL#	32
47)	Diethylphthalate	20.07	149	138770	47.70	ug/mL	100
48)	Fluorene	19.96	166	122870	48.41	ug/mL	99
49)	4-Chlorophenyl-phenylether	20.15	204	63340	52.68	ug/mL	93
51)	4-Nitroaniline	20.21	138	32609	58.46	ug/mL	97
52)	4,6-Dinitro-2-methylphenol	20.30	198	23243	52.57	ug/mL	100
53)	n-Nitrosodiphenylamine	20.55	169	84236	49.39	ug/mL#	1
55)	1,2-Diphenylhydrazine (as	20.61	77	199476	49.08	ug/ml	100
56)	4-Bromophenyl-phenylether	21.59	248	36733	53.12	ug/mL#	89
57)	Hexachlorobenzene	21.58	284	38977	54.11	ug/mL	91
58)	Pentachlorophenol	22.29	266	26808	58.11	ug/mL	98
59)	Phenanthrene	22.85	178	189424	51.58	ug/mL	100
60)	Anthracene	23.00	178	178492	52.73	ug/mLm	99
61)	Carbazole	23.64	167	170215	53.76	ug/ml	100
62)	Di-n-butylphthalate	25.14	149	273873	50.81	ug/mL	99
63)	Fluoranthene	26.47	202	191126	55.04	ug/mLm	95
65)	Benzidine	27.14	184	58486	41.24	ug/mlm	100
66)	Pyrene	27.10	202	200950	41.28	ug/mLm	87
68)	Butylbenzylphthalate	29.69	149	124639	39.98	ug/mL	95
69)	Benzo[a]anthracene	30.87	228	210709	42.89	ug/mLm	99
70)	3,3'-Dichlorobenzidine	31.00	252	57942	46.26	ug/mL	99
71)	Chrysene	30.96	228	130675	47.82	ug/mLm	97
72)	bis(2-Ethylhexyl)phthalate	31.66	149	186121	42.09	ug/mL	99
74)	Di-n-octylphthalate	33.57	149	533971	44.86	ug/mLm	99
75)	Benzo[b]fluoranthene	33.93	252	251584	43.65	ug/mLm	99
76)	Benzo[k]fluoranthene	34.01	252	148737	53.49	ug/mLm	94
77)	Benzo[a]pyrene	33.93	252	147880	51.60	ug/mL	98
78)	Indeno[1,2,3-cd]pyrene	37.43	276	53465	50.57	ug/mLm	89
79)	Dibenz[a,h]anthracene	37.54	278	44917	44.12	ug/mL	98
80)	Benzo[g,h,i]perylene	38.01	276	34048	40.97	ug/mLm	98

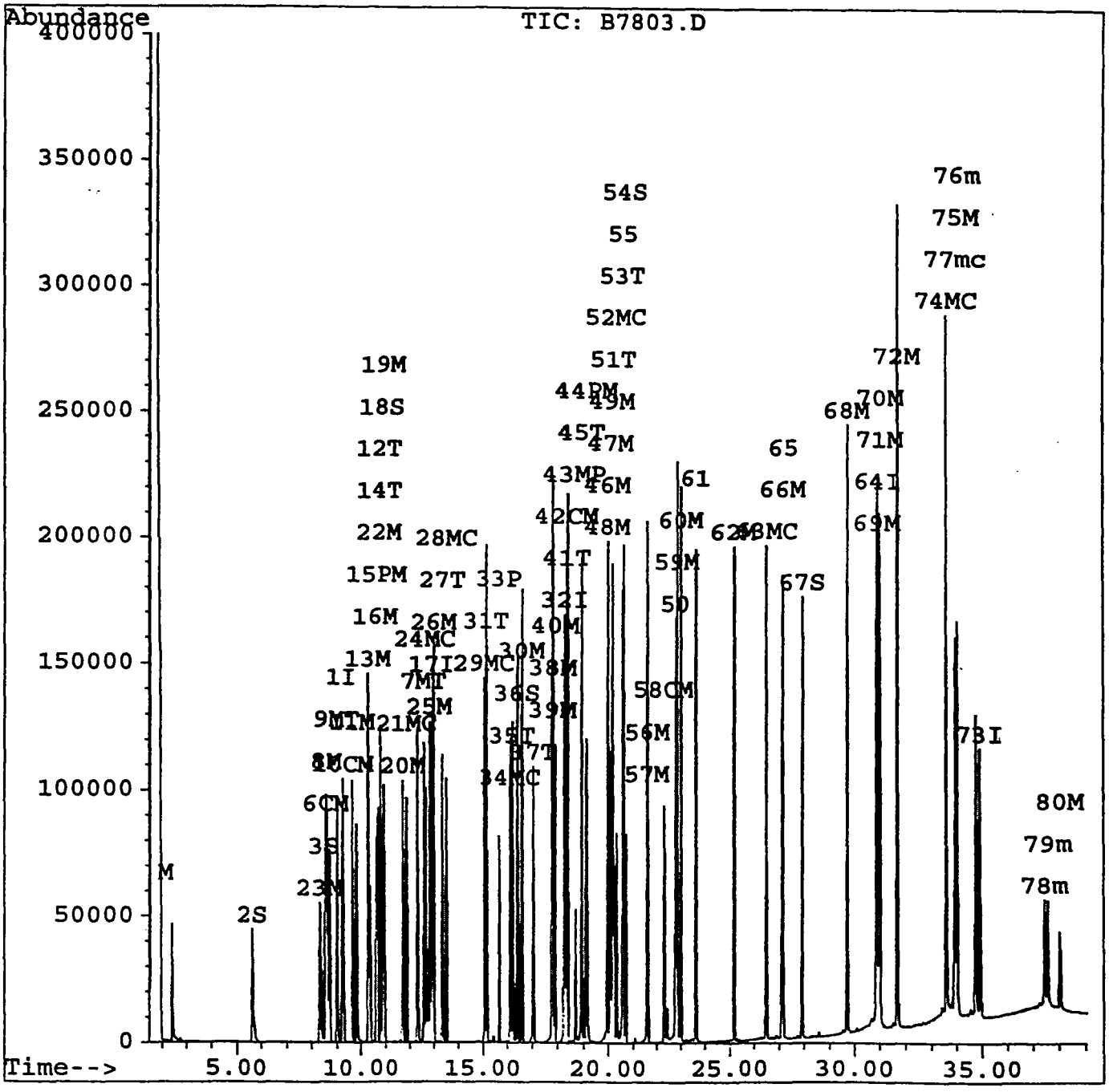
(#) = qualifier out of range (m) = manual integration

Data File : c:\hpchem\1\data2\b7803.d
Acq On : 3 Jun 95 10:13 am
Sample : 50 STD.....
Misc :
Quant Time: Jun 7 9:32 1995

Converted from RTE d

Vial: 2
Operator: SCOTTV
Inst : ABNA
BT Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 10:06:36 1995
Response via : Multiple Level Calibration



SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name : EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Lab File ID: B8021.D DFTPP Injection Date: 6/26/95

Instrument ID: ABNA DFTPP Injection Time: 0057

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
51	30.0 - 80.0% of mass 198	54.5
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	68.1
70	Less than 2.0% of mass 69	0.0 (0.0)1
127	25.0 - 75.0% of mass 198	50.7
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100 % relative abundance	100.0
199	5.0 - 9.0% of mass 198	8.6
275	10.0 - 30.0% of mass 198	23.0
365	Greater than 0.75% of mass 198	2.0
441	Present, but less than mass 443	8.3
442	40.0 - 110.0% of mass 198	47.8
443	15.0 - 24.0% of mass 442	10.1 (21.0)2

1-Value is % mass 69 2-Value is % mass 442

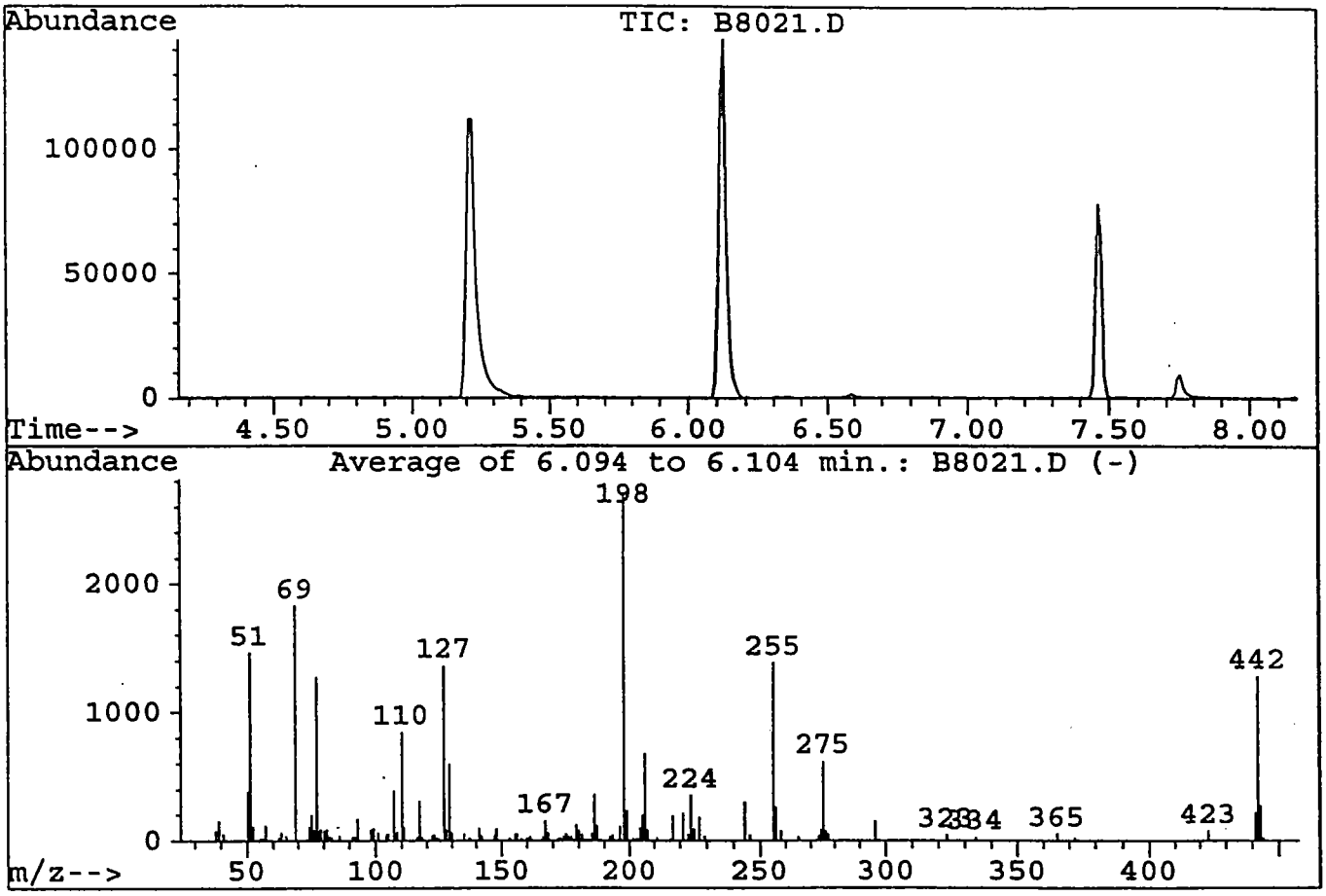
This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD050	50 STD	B8022.D	6/26/95	0132
02	SBLK01	BLANK1	B8023.D	6/26/95	0256
03	9526397B	9526397B	B8024.D	6/26/95	0349
04	9526427B	9526427B	B8025.D	6/26/95	0442
05	9526428B	9526428B	B8026.D	6/26/95	0535
06	9526429B	9526429B	B8027.D	6/26/95	0627
07	9526430B	9526430B	B8028.D	6/26/95	0719
08	9526431B	9526431B	B8029.D	6/26/95	0810
09	9526432B	9526432B	B8030.D	6/26/95	0901
10	9526433B	9526433B	B8031.D	6/26/95	0952
11	9526434B	9526434B	B8032.D	6/26/95	1043
12	9526404B	9526404B	B8033.D	6/26/95	1133
13	SBLK02	BLANK2	B8034.D	6/26/95	1223
14	9526460B	9526460B	B8035.D	6/26/95	1314
15	9526461B	9526461B	B8036.D	6/26/95	1404
16	9526462B	9526462B	B8037.D	6/26/95	1455
17	9526605B	9526605B	B8038.D	6/26/95	1545
18	9526606B	9526606B	B8039.D	6/26/95	1636
19	9526607B	9526607B	B8040.D	6/26/95	1726
20	9526608B	9526608B	B8041.D	6/26/95	1817
21	9526609B	9526609B	B8042.D	6/26/95	1907
22					

Data File : C:\HPCHEM\1\DATA2\B8021.D
Acq On : 26 Jun 95 12:57 am
Sample : DFTPP..... Converted from RTE d
Misc :

Vial: 1
Operator: SCOTTV
Inst : ABNA
BT Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration



Peak Apex is scan: 320

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	54.5	1464	PASS
68	69	0	2	0.0	0	PASS
69	198	0	100	68.1	1828	PASS
70	69	0	2	0.0	0	PASS
127	198	40	60	50.7	1362	PASS
197	198	0	1	0.0	0	PASS
198	198	100	100	100.0	2686	PASS
199	198	5	9	8.6	231	PASS
275	198	10	30	23.0	618	PASS
365	198	1	100	2.0	53	PASS
441	443	0	100	82.6	223	PASS
442	198	40	100	47.8	1283	PASS
443	442	17	23	21.0	270	PASS

B8021.D BNACLP.M Wed Jun 28 13:48:29 1995 BNA

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
38.00	73	65.05	35	82.05	32	107.05	391
39.10	154	68.95	1828	83.05	24	108.15	63
41.00	47	73.15	15	85.95	33	110.05	845
50.05	385	74.05	106	91.05	29	111.00	98
51.05	1464	75.05	199	92.05	30	116.05	28
52.05	108	76.05	82	93.05	167	117.05	312
55.15	20	77.05	1273	98.05	82	117.95	23
56.05	14	78.05	80	99.05	95	122.00	38
57.05	119	79.00	85	100.95	58	122.90	46
62.05	25	80.05	80	104.05	42	124.00	22
63.05	63	81.05	88	104.95	53	124.90	16

Average of 6.094 to 6.104 min.: B8021.D

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
127.00	1362	155.10	51	175.10	51	196.10	109
127.95	83	156.00	47	176.00	29	198.00	2686
129.00	596	157.80	13	177.00	28	199.00	231
130.00	61	160.00	22	179.00	124	201.55	20
135.00	52	161.10	32	180.00	72	202.95	19
137.10	25	166.10	28	181.10	46	204.05	100
141.00	93	167.00	154	185.10	55	205.05	197
142.10	35	168.00	59	186.10	361	206.05	678
147.10	38	172.00	15	187.10	114	207.05	84
148.00	89	173.00	21	192.10	30	211.15	26
153.00	22	174.10	35	193.10	37	216.05	16

Average of 6.094 to 6.104 min.: B8021.D

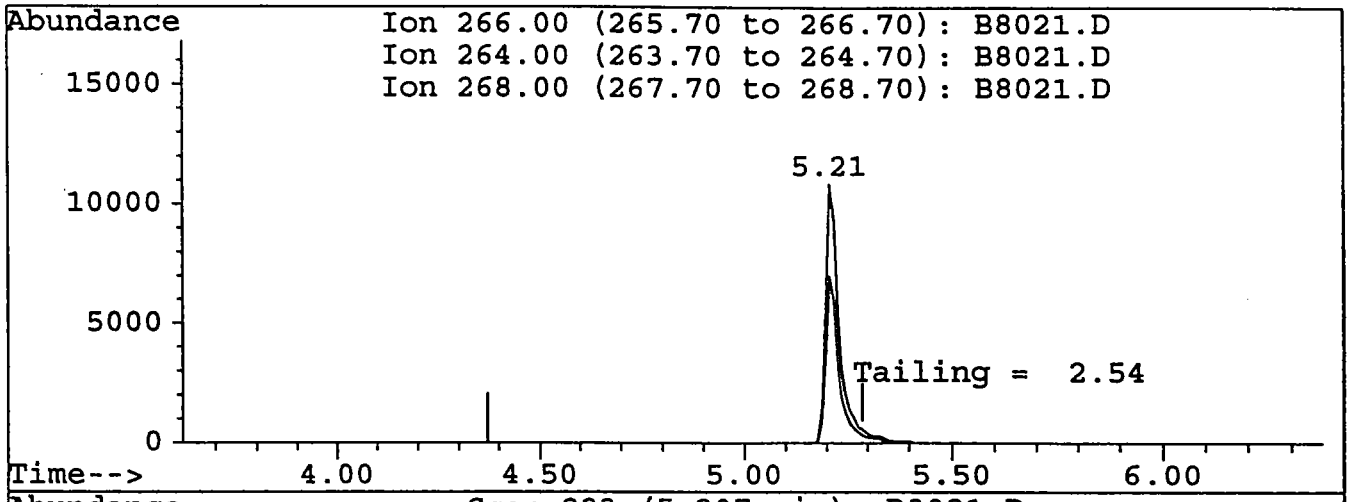
Modified:subtracted

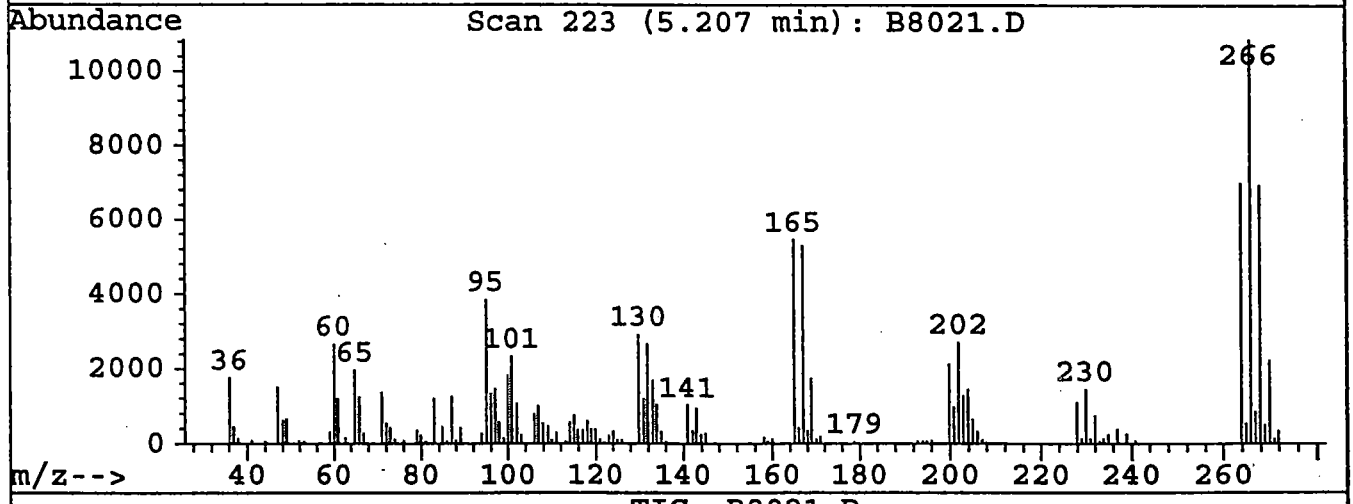
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
217.05	190	258.05	80	372.15	21		
221.05	214	265.05	28	423.10	74		
223.05	49	273.05	39	441.10	223		
224.00	353	274.05	86	442.10	1283		
225.05	91	275.05	618	443.10	270		
227.05	184	276.15	76	444.10	19		
229.05	33	277.15	48				
244.05	303	296.00	152				
246.05	46	323.10	44				
255.05	1384	334.20	26				
256.05	260	365.05	53				

Data File : C:\HPCHEM\1\DATA2\B8021.D
Acq On : 26 Jun 95 12:57 am
Sample : DFTPP..... Converted from RTE d
Misc :
Quant Time: Jun 26 12:22 1995

Vial: 1
Operator: SCOTTV
Inst : ABNA
BT Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Thu Jun 15 14:15:34 1995
Response via : Multiple Level Calibration





TIC: B8021.D

(1) Pentachlorophenol (CM)

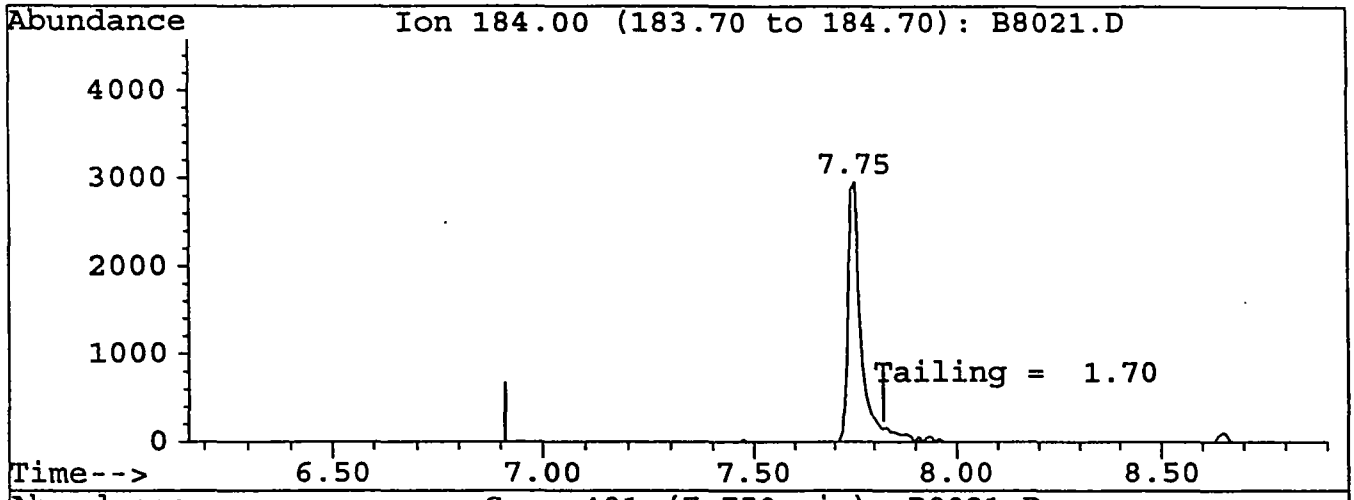
5.21min 78.31ug/mL

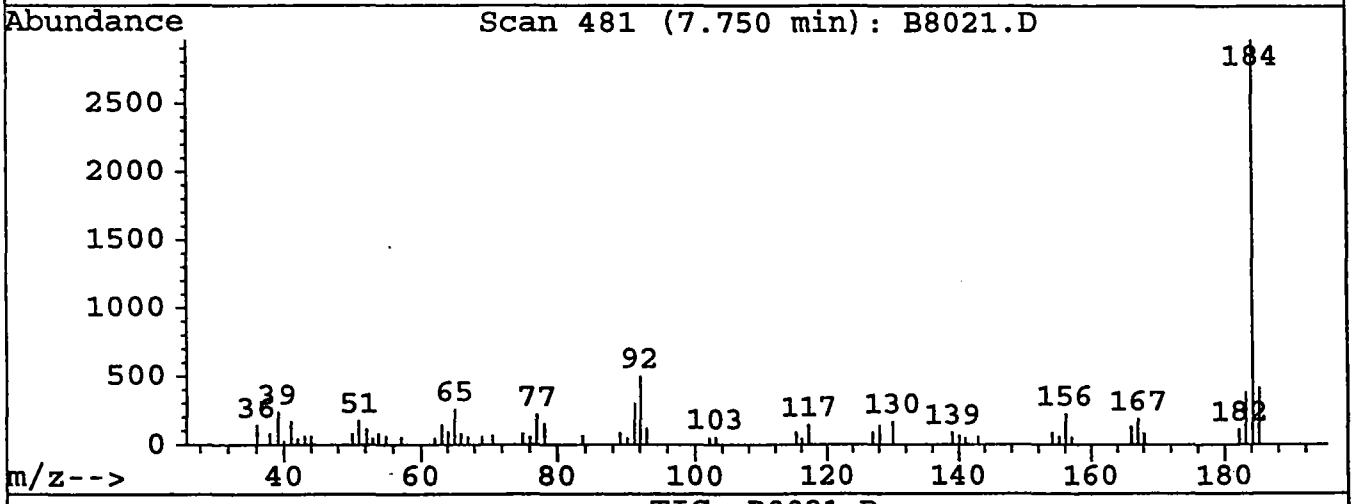
response 25865

Ion	Exp%	Act%
266.00	100	100
264.00	64.30	64.26
268.00	64.70	63.60
0.00	0.00	0.00

Data File : C:\HPCHEM\1\DATA2\B8021.D Vial: 1
Acq On : 26 Jun 95 12:57 am Operator: SCOTTV
Sample : DFTPP..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jun 26 12:22 1995

Method : C:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Thu Jun 15 14:15:34 1995
Response via : Multiple Level Calibration





TIC: B8021.D

(2) Benzidine
7.75min 22.22ug/ml
response 6825

Ion	Exp%	Act%
184.00	100	100
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: EMSL ANALYTICAL Contract: _____

Project No. _____ Site: _____ Location: _____ Group: _____

Instrument ID: ABNA Calibration Date: 6/26/95 Time: 0132

Lab File ID: B8022.D Init. Calib. Date(s): 6/26/95 1/0/00

Init. Calib. Times: 0132 0000

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
N-nitrosodimethylamine	0.578	0.594		-2.8	
bis(2-Chloroethyl)ether	2.026	2.057		-1.5	
1,3-Dichlorobenzene	1.385	1.415		-2.2	
1,4-Dichlorobenzene	1.429	1.448		-1.3	30.0
1,2-Dichlorobenzene	1.357	1.394		-2.7	
bis(2-chloroisopropyl)ether	1.868	1.973		-5.6	
N-Nitroso-Di-n-propylamine	1.346	1.356	0.050	-0.7	
Hexachloroethane	0.737	0.753		-2.2	
Nitrobenzene	0.424	0.403		5.0	
Isophorone	0.893	0.801		10.3	
bis(2-Chloroethoxy)methane	0.456	0.437		4.2	
1,2,4-Trichlorobenzene	0.317	0.308		2.8	
Naphthalene	0.979	1.005		-2.7	
Hexachlorobutadiene	0.185	0.171		7.6	30.0
Hexachlorocyclopentadiene	0.278	0.256	0.050	7.9	
2-Chloronaphthalene	0.696	0.677		2.7	
Dimethylphthalate	1.299	1.315		-1.2	
Acenaphthylene	1.704	1.765		-3.6	
2,6-Dinitrotoluene	0.310	0.308		0.6	
Acenaphthene	1.025	1.045		-2.0	30.0
2,4-Dinitrotoluene	1.167	1.178		-0.9	
Diethylphthalate	1.443	1.428		1.0	
Fluorene	1.259	1.274		-1.2	
4-Chlorophenyl-phenylether	0.596	0.606		-1.7	
n-Nitrosodiphenylamine	0.508	0.555		-9.3	
1,2-Diphenylhydrazine(as azo)	0.000	0.000			
4-Bromophenyl-phenylether	0.206	0.205		0.5	
Hexachlorobenzene	0.215	0.185		14.0	
Phenanthrene	1.094	1.121		-2.5	
Anthracene	1.009	1.054		-4.5	
Di-n-butylphthalate	1.606	1.858		-15.7	
Fluoranthene	1.035	1.239		-19.7	30.0
Benzidine	0.437	0.411		5.9	
Pyrene	1.502	1.348		10.3	
Butylbenzylphthalate	0.962	0.919		4.5	
Benzo[a]anthracene	1.516	1.273		16.0	
3,3'-Dichlorobenzidine	0.386	0.365		5.4	

All other compounds must meet a minimum RRF of 0.010.

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: EMSL ANALYTICAL Contract: _____

Project No. _____ Site: _____ Location: _____ Group: _____

Instrument ID: ABNA Calibration Date: 6/26/95 Time: 0132

Lab File ID: B8022.D Init. Calib. Date(s): 6/26/95 1/0/00

Init. Calib. Times: 0132 0000

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
Chrysene	0.843	0.998		-18.4	
bis(2-Ethylhexyl)phthalate	1.364	1.344		1.5	
Di-n-octylphthalate	5.094	4.618		9.3	30.0
Benzo[b]fluoranthene	2.467	2.164		12.3	
Benzo[k]fluoranthene	1.190	1.213		-1.9	
Benzo[a]pyrene	1.227	1.263		-2.9	30.0
Indeno[1,2,3-cd]pyrene	0.452	0.378		16.4	
Dibenz[a,h]anthracene	0.436	0.371		14.9	
Benzo[g,h,i]perylene	0.356	0.325		8.7	
Nitrobenzene-d5	0.456	0.433		5.0	
2-Fluorobiphenyl	1.200	1.208		-0.7	
Terphenyl-d14	1.062	0.883		16.9	

All other compounds must meet a minimum RRF of 0.010.

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA2\B8022.D Vial: 2
Acq On : 26 Jun 95 1:32 am Operator: SCOTTV SUP
Sample : 50 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Thu Jun 15 14:15:34 1995
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	72	0.00
2	S	2-Fluorophenol	1.131	1.081	4.4	73	0.04
3	S	Phenol-d5	1.873	1.726	7.8	72	0.04
4	M	N-nitrosodimethylamine	0.578	0.594	-2.7	59	0.36
5		Pyridine	1.374	0.000#	100.0#	0#	-1.62#
6	CM	Phenol	1.668	1.648	1.2	70	0.02
7	MT	bis(2-Chloroethyl)ether	2.026	2.057	-1.5	73	0.02
8	M	2-Chlorophenol	1.269	1.246	1.8	72	0.02
9	MT	1,3-Dichlorobenzene	1.385	1.415	-2.2	72	0.00
10	CM	1,4-Dichlorobenzene	1.429	1.448	-1.4	71	0.00
11	M	1,2-Dichlorobenzene	1.357	1.394	-2.7	73	0.00
12	T	2-Methylphenol	1.204	1.327	-10.2	82	0.54#
13	M	bis(2-chloroisopropyl)ether	1.868	1.973	-5.6	82	0.04
14	T	4-Methylphenol	1.322	1.327	-0.4	73	0.04
15	PM	N-Nitroso-Di-n-propylamine	1.346	1.356	-0.8	77	0.00
16	M	Hexachloroethane	0.737	0.753	-2.2	73	0.02
17	I	Naphthalene-d8	1.000	1.000	0.0	72	0.02
18	S	Nitrobenzene-d5	0.456	0.433	4.9	71	0.00
19	M	Nitrobenzene	0.424	0.403	5.0	66	0.00
20	M	Isophorone	0.893	0.801	10.4	70	0.00
21	MC	2-Nitrophenol	0.210	0.193	8.1	69	0.02
22	M	2,4-Dimethylphenol	0.394	0.394	-0.0	74	0.04
23	M	bis(2-Chloroethoxy)methane	0.456	0.437	4.1	69	0.00
24	MC	2,4-Dichlorophenol	0.298	0.276	7.3	68	0.06
25	M	1,2,4-Trichlorobenzene	0.317	0.308	2.8	69	0.00
26	M	Naphthalene	0.979	1.005	-2.7	75	0.02
27	T	4-Chloroaniline	0.463	0.417	9.9	64	0.02
28	MC	Hexachlorobutadiene	0.185	0.171	7.4	66	0.02
29	MC	4-Chloro-3-methylphenol	0.384	0.354	7.9	66	0.06
30	M	2-Chloronaphthalene	0.696	0.677	2.7	70	0.04
31	T	2-Methylnaphthalene	0.786	0.928	-18.1	95	0.02
32	I	Acenaphthene-d10	1.000	1.000	0.0	70	0.04
33	P	Hexachlorocyclopentadiene	0.278	0.256	7.9	70	0.02
34	MC	2,4,6-Trichlorophenol	0.415	0.340	18.2	63	0.04
35	T	2,4,5-Trichlorophenol	0.324	0.372	-14.8	70	0.06
36	S	2-Fluorobiphenyl	1.200	1.208	-0.7	72	0.04
37	T	2-Nitroaniline	0.549	0.507	7.6	62	0.04
38	M	Dimethylphthalate	1.299	1.315	-1.2	71	0.04
39	M	Acenaphthylene	1.704	1.765	-3.6	72	0.04
40	M	2,6-Dinitrotoluene	0.310	0.308	0.7	66	0.04

(#) = Out of Range

Data File : C:\HPCHEM\1\DATA2\B8022.D Vial: 2
Acq On : 26 Jun 95 1:32 am Operator: SCOTTV SUP
Sample : 50 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Thu Jun 15 14:15:34 1995
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
41	T	3-Nitroaniline	0.346	0.332	3.9	64	0.06
2	CM	Acenaphthene	1.025	1.045	-1.9	71	0.04
3	MP	2,4-Dinitrophenol	0.172	0.155	10.3	70	0.06
44	PM	4-Nitrophenol	0.166	0.158	4.4	66	0.09
5	T	Dibenzofuran	1.609	1.532	4.7	64	0.04
6	M	2,4-Dinitrotoluene	1.167	1.178	-0.9	72	0.05
47	M	Diethylphthalate	1.443	1.428	1.1	69	0.02
48	M	Fluorene	1.259	1.274	-1.2	73	0.05
9	M	4-Chlorophenyl-phenylether	0.596	0.606	-1.6	72	0.05
50		Phenanthrene-d10	1.000	1.000	0.0	67	0.05
1	T	4-Nitroaniline	0.166	0.198	-19.1	62	0.05
2	MC	4,6-Dinitro-2-methylphenol	0.132	0.136	-3.3	71	0.05
53	T	n-Nitrosodiphenylamine	0.508	0.555	-9.2	70	0.05
4	S	2,4,6-Tribromophenol	0.108	0.091	15.7	58	0.05
5		1,2-Diphenylhydrazine (as a	1.211	1.303	-7.6	67	0.05
56	M	4-Bromophenyl-phenylether	0.206	0.205	0.5	63	0.05
57	M	Hexachlorobenzene	0.215	0.185	13.9	54	0.05
8	CM	Pentachlorophenol	0.137	0.134	2.3	68	0.07
59	M	Phenanthrene	1.094	1.121	-2.4	69	0.05
60	M	Anthracene	1.009	1.054	-4.5	69	0.05
1		Carbazole	0.944	0.932	1.2	65	0.07
2	M	Di-n-butylphthalate	1.606	1.858	-15.7	76	0.05
63	MC	Fluoranthene	1.035	1.239	-19.7	74	0.07
4	I	Chrysene-d12	1.000	1.000	0.0	71	0.10
65		Benzidine	0.437	0.411	5.9	73	0.09
66	M	Pyrene	1.502	1.348	10.2	75	0.07
7	S	Terphenyl-d14	1.062	0.883	16.9	71	0.09
68	M	Butylbenzylphthalate	0.962	0.919	4.4	77	0.09
69	M	Benzo[a]anthracene	1.516	1.273	16.0	67	0.10
0	M	3,3'-Dichlorobenzidine	0.386	0.365	5.5	73	0.10
1	M	Chrysene	0.843	0.998	-18.4	92	0.10
72	M	bis(2-Ethylhexyl)phthalate	1.364	1.344	1.5	76	0.08
3	I	Perylene-d12	1.000	1.000	0.0	102	0.09
74	MC	Di-n-octylphthalate	5.094	4.618	9.4	100	0.08
75	M	Benzo[b]fluoranthene	2.467	2.164	12.3	88	0.10
6	m	Benzo[k]fluoranthene	1.190	1.213	-1.9	112	0.10
77	mc	Benzo[a]pyrene	1.227	1.263	-2.9	95	0.10
78	m	Indeno[1,2,3-cd]pyrene	0.452	0.378	16.3	93	0.05
9	m	Dibenz[a,h]anthracene	0.436	0.371	14.9	104	0.03

(#) = Out of Range

Data File : C:\HPCHEM\1\DATA2\B8022.D Vial: 2
Acq On : 26 Jun 95 1:32 am Operator: SCOTTV SUP
Sample : 50 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Thu Jun 15 14:15:34 1995
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
80	M	Benzo[g,h,i]perylene	0.356	0.325	8.7	102	0.03
81		1-Methyl naphthalene	0.000	0.000#	0.0	27#	0.00
82		7,12-Dimethylbenz(a)anthrac	0.000	0.000#	0.0	97	0.09
83		Quinoline	0.000	0.000#	0.0	62	0.02
84		Thiophenol	0.000	0.000#	0.0	0#	-5.47#
85		4-Methyl chrysene	0.000	0.000#	0.0	78	0.10
86		Dibenz(a,j)acridine	0.000	0.000#	0.0	82	0.08
87		Indene	0.000	0.000#	0.0	0#	-9.03#
88		Benzyl alcohol	1.050	0.000#	100.0#	0#	-9.70#
89		Benzoic acid	0.964	0.000#	100.0#	0#	-12.98#

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report

Data File : c:\hpchem\1\data2\b8022.d Vial: 2
Acq On : 26 Jun 95 1:32 am Operator: SCOTTV
Sample : 50 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jun 28 13:51 1995

Method : C:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Thu Jun 15 14:15:34 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.03	152	21442	40.00	ug/mL	0.00
17) Naphthalene-d8	12.77	136	89144	40.00	ug/mL	0.02
32) Acenaphthene-d10	18.08	164	57304	40.00	ug/mL	0.04
50) Phenanthrene-d10	22.57	188	88470	40.00	ug/ml	0.05
64) Chrysene-d12	30.68	240	83496	40.00	ug/mL	0.10
73) Perylene-d12	34.69	264	46248	40.00	ug/mL	0.09
System Monitoring Compounds						**%Recovery**
2) 2-Fluorophenol	5.51	112	28986	47.79	ug/mL	47.79%
3) Phenol-d5	8.43	99	46263	46.09	ug/mL	46.09%
18) Nitrobenzene-d5	10.71	82	48301	47.56	ug/mL	47.56%
36) 2-Fluorobiphenyl	16.23	172	86505	50.33	ug/mL	50.33%
54) 2,4,6-Tribromophenol	20.51	330	10076	42.17	ug/mL	42.17%
67) Terphenyl-d14	27.73	244	92120	41.57	ug/mL	41.57%
Target Compounds						**Qvalue**
4) N-nitrosodimethylamine	2.31	74	15915	51.35	ug/mlm	0
6) Phenol	8.45	94	44171	49.41	ug/mL	100
7) bis(2-Chloroethyl)ether	12.44	93	55126	50.76	ug/mL	93
8) 2-Chlorophenol	8.47	128	33394	49.08	ug/mL#	88
9) 1,3-Dichlorobenzene	8.84	146	37929	51.09	ug/mL	97
10) 1,4-Dichlorobenzene	9.09	146	38821	50.68	ug/mL	99
11) 1,2-Dichlorobenzene	9.47	146	37367	51.35	ug/mL	98
12) 2-Methylphenol	10.67	108	35563	55.08	ug/mL	64
13) bis(2-chloroisopropyl)ethe	10.13	45	52877	52.79	ug/mL#	67
14) 4-Methylphenol	10.67	108	35563	50.20	ug/mL	97
15) N-Nitroso-Di-n-propylamine	10.49	70	36342	50.38	ug/mL	98
16) Hexachloroethane	10.44	117	20194	51.08	ug/mL	100
19) Nitrobenzene	10.76	77	44854	47.48	ug/mL#	74
20) Isophorone	11.57	82	89209	44.81	ug/mL	98
21) 2-Nitrophenol	11.71	139	21551	45.97	ug/mL	86
22) 2,4-Dimethylphenol	10.67	107	43864	50.01	ug/mL#	32
23) bis(2-Chloroethoxy)methane	8.16	93	48749	47.96	ug/mL#	42
24) 2,4-Dichlorophenol	12.54	162	30803	46.36	ug/mL#	94
25) 1,2,4-Trichlorobenzene	12.65	180	34317	48.59	ug/mL	99
26) Naphthalene	12.82	128	112022	51.35	ug/mL#	91
27) 4-Chloroaniline	13.17	127	46512	45.07	ug/mL	99
28) Hexachlorobutadiene	13.34	225	19100	46.32	ug/mL	97
29) 4-Chloro-3-methylphenol	14.92	107	39399	46.05	ug/mL#	86
30) 2-Chloronaphthalene	16.41	162	75446	48.64	ug/ml	99
31) 2-Methylnaphthalene	14.96	142	103416	59.06	ug/mL	99
33) Hexachlorocyclopentadiene	15.48	237	18372	46.07	ug/mL	99
34) 2,4,6-Trichlorophenol	15.94	196	24339	40.90	ug/mL	99
35) 2,4,5-Trichlorophenol	16.06	196	26643	57.39	ug/mL	97

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data2\b8022.d Vial: 2
Acq On : 26 Jun 95 1:32 am Operator: SCOTTV
Sample : 50 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jun 28 13:51 1995

Method : C:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Thu Jun 15 14:15:34 1995
Response via : Multiple Level Calibration

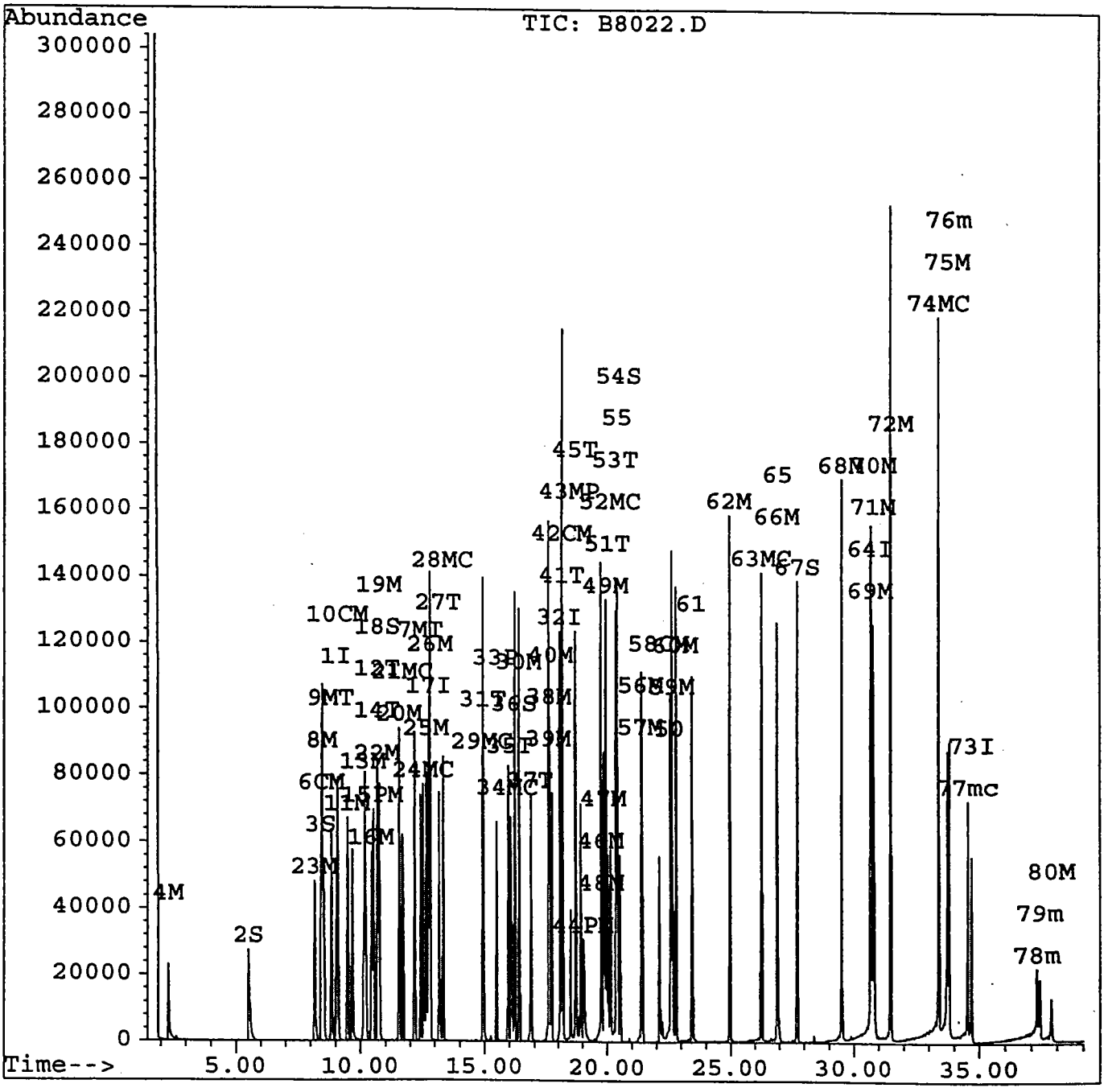
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
37)	2-Nitroaniline	16.89	65	36347	46.19	ug/mL#	100
38)	Dimethylphthalate	17.66	163	94216	50.61	ug/mL	100
39)	Acenaphthylene	17.62	152	126444	51.78	ug/mL	99
40)	2,6-Dinitrotoluene	17.74	165	22060	49.64	ug/mL	98
41)	3-Nitroaniline	18.18	138	23811	48.05	ug/mL	91
42)	Acenaphthene	18.18	153	74851	50.97	ug/mL	100
43)	2,4-Dinitrophenol	18.51	184	11069	44.87	ug/mL#	79
44)	4-Nitrophenol	19.03	109	11345	47.81	ug/mL	95
45)	Dibenzofuran	18.74	168	109763	47.63	ug/mL	97
46)	2,4-Dinitrotoluene	19.78	165	84381	50.47	ug/mL#	34
47)	Diethylphthalate	19.87	149	102259	49.47	ug/mL	98
48)	Fluorene	19.78	166	91237	50.59	ug/mL	98
49)	4-Chlorophenyl-phenylether	19.97	204	43401	50.81	ug/mL#	89
51)	4-Nitroaniline	20.05	138	21893	59.54	ug/mL	98
52)	4,6-Dinitro-2-methylphenol	20.14	198	15054	51.65	ug/mL	100
53)	n-Nitrosodiphenylamine	20.38	169	61379	54.59	ug/mL#	1
55)	1,2-Diphenylhydrazine (as	20.43	77	144138	53.80	ug/ml	100
56)	4-Bromophenyl-phenylether	21.42	248	22677	49.75	ug/mL	95
57)	Hexachlorobenzene	21.40	284	20432	43.03	ug/mL#	55
58)	Pentachlorophenol	22.13	266	14850	48.83	ug/mL	96
59)	Phenanthrene	22.65	178	123975	51.21	ug/mL	99
60)	Anthracene	22.80	178	116611	52.25	ug/mLm	100
61)	Carbazole	23.46	167	103091	49.39	ug/ml	99
62)	Di-n-butylphthalate	24.96	149	205497	57.84	ug/mL	99
63)	Fluoranthene	26.27	202	136995	59.85	ug/mLm	90
65)	Benzidine	26.96	184	42938	47.03	ug/mlm	100
66)	Pyrene	26.90	202	140703	44.89	ug/mL#	91
68)	Butylbenzylphthalate	29.50	149	95939	47.80	ug/mL	87
69)	Benzo[a]anthracene	30.66	228	132833	41.99	ug/mLm	100
70)	3,3'-Dichlorobenzidine	30.82	252	38125	47.27	ug/mL#	96
71)	Chrysene	30.76	228	104112	59.18	ug/mLm	97
72)	bis(2-Ethylhexyl)phthalate	31.47	149	140270	49.26	ug/mL	100
74)	Di-n-octylphthalate	33.38	149	266949	45.32	ug/mLm	99
75)	Benzo[b]fluoranthene	33.73	252	125118	43.87	ug/mLm	95
76)	Benzo[k]fluoranthene	33.80	252	70141	50.97	ug/mLm	97
77)	Benzo[a]pyrene	34.54	252	72996	51.47	ug/mLm	96
78)	Indeno[1,2,3-cd]pyrene	37.21	276	21880	41.83	ug/mL	100
79)	Dibenz[a,h]anthracene	37.31	278	21439	42.56	ug/mL	95
80)	Benzo[g,h,i]perylene	37.77	276	18782	45.67	ug/mLm	92

(#) = qualifier out of range (m) = manual integration

Data File : c:\hpchem\1\data2\b8022.d
Acq On : 26 Jun 95 1:32 am
Sample : 50 STD..... Converted from RTE d
Misc :
Quant Time: Jun 28 13:51 1995

Vial: 2
Operator: SCOTTV
Inst : ABNA
BT Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Thu Jun 15 14:15:34 1995
Response via : Multiple Level Calibration



SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Lab File ID (Standard): B7803.D Date Analyzed: 6/3/95

Instrument ID: ABNA Time Analyzed: 1013

		IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
	12 HOUR STD	29236	9.21	116999	12.92	80656	18.26
	UPPER LIMIT	58472	9.71	233998	13.42	161312	18.76
	LOWER LIMIT	14618	8.71	58500	12.42	40328	17.76
	SAMPLE NO.						
01	SBLK01	29342	9.21	113640	12.92	77393	18.25
02	9521072B	43362	9.20	172473	12.92	120771	18.25
03	9521073B	49674	9.20	207002	12.94	136613	18.27
04	SBLK02	45568	9.20	183778	12.92	124916	18.27
05	9522265B	38448	9.21	156239	12.92	104790	18.25
06	9522845B	34293	9.20	139874	12.92	94484	18.25
07	SBLK03	31802	9.20	131302	12.92	86836	18.27
08	9523339B	31877	9.20	132687	12.92	87914	18.25
09	9523341B	37996	9.20	159444	12.94	104434	18.27
10	9523342B	34168	9.20	146228	12.94	97312	18.27
11	9523343B	33809	9.20	139851	12.92	93023	18.27
12	9523530B	34840	9.20	145007	12.92	98737	18.25
13	9523531B	35055	9.20	145276	12.92	99265	18.27
14	9523533B	36725	9.20	152052	12.92	102907	18.27
15	9523534B	37321	9.29	127658	13.06	64338	18.50
16	9523535B	36905	9.21	144207	12.92	97310	18.26
17	9523536B	36125	9.20	148482	12.92	99681	18.27
18	SBLK04	38489	9.20	152333	12.92	104920	18.25
19	9523789B	39839	9.20	162610	12.92	110929	18.27
20	9523792B	36962	9.20	155161	12.92	105988	18.27
21	9523787B	38496	9.20	159554	12.92	108441	18.27
22	SBLK05	43303	9.20	177127	12.92	122916	18.27

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Lab File ID (Standard): B7803.D Date Analyzed: 6/3/95

Instrument ID: ABNA Time Analyzed: 1013

		IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
	12 HOUR STD	29236	9.21	116999	12.92	80656	18.26
	UPPER LIMIT	58472	9.71	233998	13.42	161312	18.76
	LOWER LIMIT	14618	8.71	58500	12.42	40328	17.76
	SAMPLE NO.						
01	22654MS	33780	9.20	129967	12.94	93254	18.26
02	22654MSD	35303	9.20	144937	12.94	99611	18.26
03	22659MS	28616	9.20	119812	12.94	81829	18.26
04	22659MSD	30456	9.21	121585	12.94	84364	18.26
05							
06							
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Lab File ID (Standard): B7803.D Date Analyzed: 6/3/95

Instrument ID: ABNA Time Analyzed: 1013

		IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
	12 HOUR STD	134208	22.77	129676	30.89	93467	34.90
	UPPER LIMIT	268416	23.27	259352	31.39	186934	35.40
	LOWER LIMIT	67104	22.27	64838	30.39	46734	34.40
	SAMPLE NO.						
01	SBLK01	127774	22.76	144639	30.86	143369	34.89
02	9521072B	201946	22.77	208937	30.89	160791	34.90
03	9521073B	222787	22.77	231737	30.89	165808	34.90
04	SBLK02	200423	22.77	227269	30.88	184816	34.91
05	9522265B	172502	22.78	184570	30.88	122938	34.91
06	9522845B	149864	22.78	156654	30.88	124082	34.91
07	SBLK03	142609	22.77	151919	30.88	122270	34.91
08	9523339B	145640	22.78	157437	30.89	128975	34.92
09	9523341B	172617	22.77	198222	30.90	166777	34.93
10	9523342B	156213	22.77	174808	30.88	147217	34.91
11	9523343B	149747	22.77	162481	30.88	137109	34.91
12	9523530B	159922	22.78	179407	30.88	152667	34.91
13	9523531B	164218	22.77	179435	30.88	151215	34.91
14	9523533B	167089	22.77	185071	30.88	155624	34.91
15	9523534B	126172	22.95	162548	30.91	85072	34.88
16	9523535B	153052	22.76	160811	30.89	134801	34.89
17	9523536B	149413	22.77	158425	30.88	129419	34.91
18	SBLK04	168411	22.78	175380	30.88	148566	34.91
19	9523789B	183194	22.77	209328	30.88	181543	34.91
20	9523792B	175832	22.77	198461	30.88	168915	34.91
21	9523787B	177208	22.77	191680	30.88	155077	34.91
22	SBLK05	199698	22.77	216974	30.88	174620	34.91

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Lab File ID (Standard): B7803.D Date Analyzed: 6/3/95

Instrument ID: ABNA Time Analyzed: 1013

		IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
	12 HOUR STD	134208	22.77	129676	30.89	93467	34.90
	UPPER LIMIT	268416	23.27	259352	31.39	186934	35.40
	LOWER LIMIT	67104	22.27	64838	30.39	46734	34.40
	SAMPLE NO.						
01	22654MS	155903	22.77	148922	30.91	65345	34.91
02	22654MSD	164759	22.77	152801	30.91	66464	34.91
03	22659MS	135678	22.77	133913	30.90	64806	34.89
04	22659MSD	145091	22.77	140877	30.90	65773	34.90
05							
06							
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Lab File ID (Standard): B8022.D Date Analyzed: 6/26/95

Instrument ID: ABNA Time Analyzed: 0132

		IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
	12 HOUR STD	21442	9.03	89144	12.77	57304	18.08
	UPPER LIMIT	42884	9.53	178288	13.27	114608	18.58
	LOWER LIMIT	10721	8.53	44572	12.27	28652	17.58
	SAMPLE NO.						
01	SBLK01	18647	9.05	76527	12.74	50131	18.07
02	9526397B	23451	9.05	97748	12.74	61605	18.08
03	9526427B	24416	9.05	99072	12.75	65585	18.08
04	9526428B	24553	9.03	101580	12.75	66203	18.08
05	9526429B	27637	9.03	109180	12.75	72940	18.08
06	9526430B	30774	9.04	131052	12.75	85269	18.07
07	9526431B	28375	9.04	119977	12.73	76248	18.07
08	9526432B	26867	9.03	111812	12.75	72507	18.06
09	9526433B	31882	9.03	132938	12.75	85781	18.06
10	9526434B	31359	9.03	130386	12.75	86662	18.06
11	9526404B	27624	9.15	99335	12.91	50190	18.32
12	SBLK02	34799	9.04	143633	12.75	96973	18.06
13	9526460B	31927	9.03	123816	12.75	83112	18.06
14	9526461B	32045	9.03	130665	12.75	88931	18.06
15	9526462B	31027	9.04	127134	12.75	84900	18.06
16	9526605B	32505	9.03	129997	12.74	90498	18.06
17	9526606B	33509	9.03	130010	12.74	89335	18.06
18	9526607B	31707	9.03	125566	12.74	86746	18.06
19	9526608B	29751	9.03	123689	12.75	85078	18.06
20	9526609B	32785	9.03	132417	12.73	89239	18.06
21							
22							

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Lab File ID (Standard): B8022.D Date Analyzed: 6/26/95

Instrument ID: ABNA Time Analyzed: 0132

		IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
	12 HOUR STD	88470	22.57	83496	30.68	46248	34.69
	UPPER LIMIT	176940	23.07	166992	31.18	92496	35.19
	LOWER LIMIT	44235	22.07	41748	30.18	23124	34.19
	SAMPLE NO.						
01	SBLK01	82468	22.58	90615	30.68	86128	34.70
02	9526397B	102617	22.58	113970	30.68	83805	34.71
03	9526427B	109899	22.58	116909	30.67	78497	34.69
04	9526428B	106319	22.57	105542	30.67	89295	34.69
05	9526429B	118151	22.57	120174	30.67	83249	34.70
06	9526430B	138762	22.57	149884	30.67	58029	34.70
07	9526431B	128318	22.57	147780	30.68	61251	34.70
08	9526432B	120490	22.57	139055	30.67	62024	34.69
09	9526433B	142537	22.57	146160	30.67	48583	34.68
10	9526434B	139691	22.57	162373	30.67	59773	34.69
11	9526404B	80940	22.81	108486	30.70	87968	34.66
12	SBLK02	164949	22.57	155418	30.67	60234	34.68
13	9526460B	128520	22.57	125979	30.66	86508	34.68
14	9526461B	150455	22.57	151786	30.67	57313	34.70
15	9526462B	143517	22.57	163582	30.67	70818	34.70
16	9526605B	149315	22.56	159677	30.66	32874	34.69
17	9526606B	146020	22.56	165364	30.67	64198	34.69
18	9526607B	133121	22.56	156278	30.66	82524	34.69
19	9526608B	147468	22.58	155888	30.67	60262	34.69
20	9526609B	142783	22.56	163992	30.67	46820	34.68
21							
22							

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

FORT MONMOUTH, NJ

SAMPLE NO. 193

9526427B

Bldg 206 FB

Lab Name: EMSL ANALYTICAL US ARMY

FMETL# Site: BLDG# NJDEP#

Matrix: (soil/water) WATER Lab Sample ID: 9526427B

Sample wt/vol: 1000.0 (g/mL ML Lab File ID: B8025.D

Level: (low/med) Date Received: 6/13/95

% Moisture: decanted: (Y/N): N Date Extracted: 6/19/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 6/26/95

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
62-75-9	N-nitrosodimethylamine	2	U
111-44-4	bis(2-Chloroethyl)ether	1	U
541-73-1	1,3-Dichlorobenzene	2	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	2	U
108-60-1	bis(2-chloroisopropyl)ether	5	U
621-64-7	N-Nitroso-Di-n-propylamine	2	U
67-72-1	Hexachloroethane	1	U
98-95-3	Nitrobenzene	2	U
78-59-1	Isophorone	1	U
111-91-1	bis(2-Chloroethoxy)methane	3	U
120-82-1	1,2,4-Trichlorobenzene	2	U
91-20-3	Naphthalene	2	U
87-68-3	Hexachlorobutadiene	2	U
77-47-4	Hexachlorocyclopentadiene	12	U
91-58-7	2-Chloronaphthalene	1	U
131-11-3	Dimethylphthalate	1	U
208-96-8	Acenaphthylene	5	U
606-20-2	2,6-Dinitrotoluene	2	U
83-32-9	Acenaphthene	3	U
121-14-2	2,4-Dinitrotoluene	3	U
84-66-2	Diethylphthalate	1	U
86-73-7	Fluorene	3	U
7005-72-3	4-Chlorophenyl-phenylether	3	U
86-30-6	n-Nitrosodiphenylamine	6	U
122-66-7	1,2-Diphenylhydrazine(as azo)	6	U
101-55-3	4-Bromophenyl-phenylether	2	U
118-74-1	Hexachlorobenzene	2	U
85-01-08	Phenanthrene	2	U
120-12-7	Anthracene	2	U
84-74-2	Di-n-butylphthalate	5	U
206-44-0	Fluoranthene	1	U
92-87-5	Benzidine	1	U

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

FORT MONMOUTH, NJ

9526427B 194

Bldg 206 FB

Lab Name: EMSL ANALYTICAL US ARMY

FMETL# Site: BLDG# NJDEP#

Matrix: (soil/water) WATER Lab Sample ID: 9526427B

Sample wt/vol: 1000.0 (g/mL ML Lab File ID: B8025.D

Level: (low/med) Date Received: 6/13/95

% Moisture: decanted: (Y/N): N Date Extracted: 6/19/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 6/26/95

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
129-00-0	Pyrene	2	U
85-68-7	Butylbenzylphthalate	9	U
56-55-3	Benzo[a]anthracene	2	U
91-94-1	3,3'-Dichlorobenzidine	15	U
218-01-9	Chrysene	2	U
117-81-7	bis(2-Ethylhexyl)phthalate	4	U
117-84-0	Di-n-octylphthalate	2	U
205-99-2	Benzo[b]fluoranthene	1	U
207-08-9	Benzo[k]fluoranthene	2	U
50-32-8	Benzo[a]pyrene	2	U
193-39-5	Indeno[1,2,3-cd]pyrene	2	U
53-70-3	Dibenz[a,h]anthracene	3	U
191-24-2	Benzo[g,h,i]perylene	2	U

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.
9526427B
Bldg 206 FB

195

Lab Name: EMSL ANALYTICAL US ARMY

FMETL# Site: BLDG# NJDEP#

Matrix: (soil/water) WATER Lab Sample ID: 9526427B

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: B8025.D

Level: (low/med) Date Received: 6/13/95

% Moisture: decanted: (Y/N) N Date Extracted: 6/19/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 6/26/95

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 0 Concentration Units: (ug/L or ug/Kg) ug/L

CAS Number	Compound Name	RT	Est. Conc	Q
1.	NONE FOUND			
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

Data File : c:\hpchem\1\data2\b8025.d Vial: 5 196
Acq On : 26 Jun 95 4:42 am Operator: SCOTTV
Sample : 26427..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jun 28 14:50 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Thu Jun 15 14:15:34 1995
Response via : Multiple Level Calibration

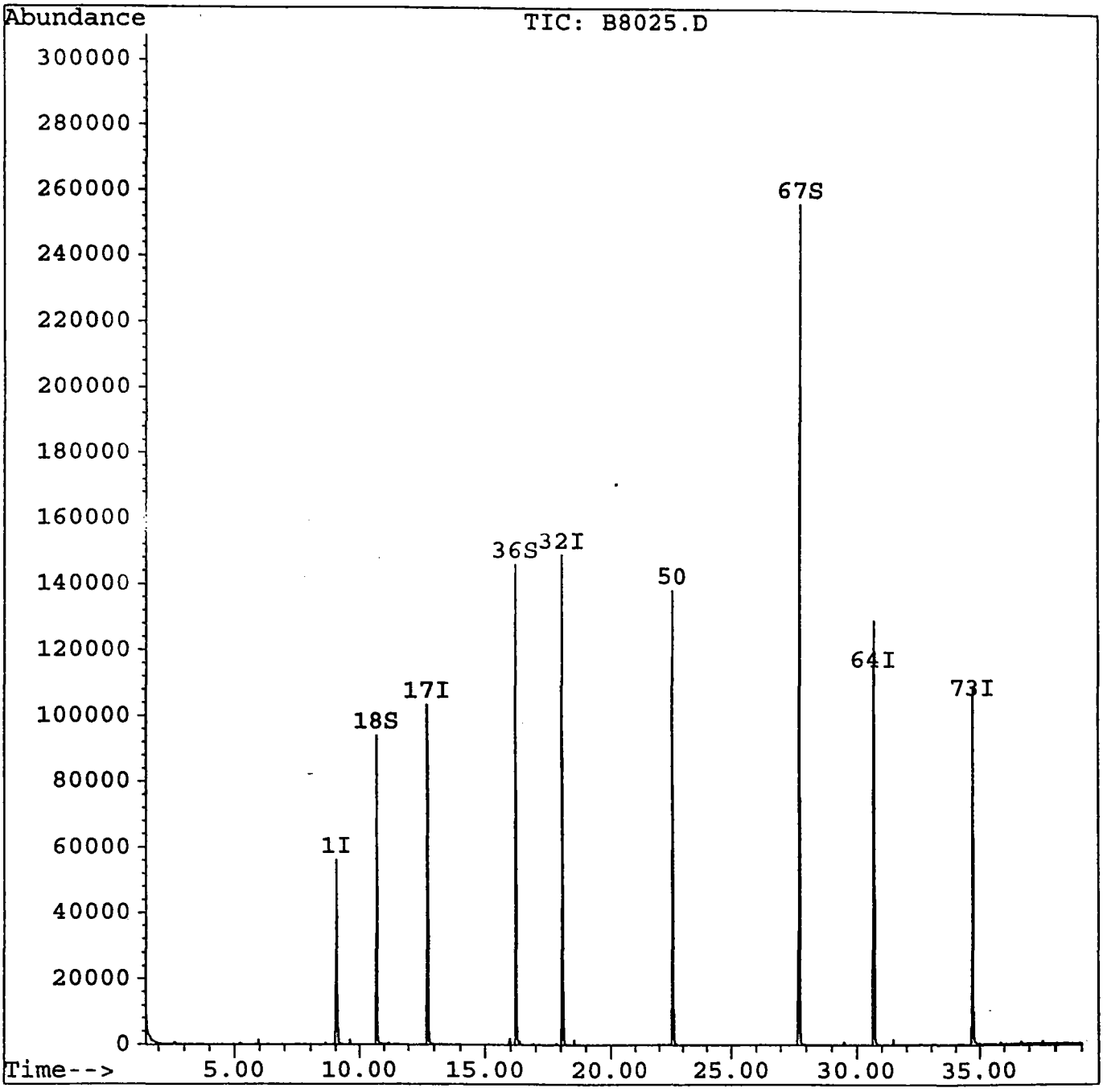
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.05	152	24416	40.00	ug/mL	0.02
17) Naphthalene-d8	12.75	136	99072	40.00	ug/mL	0.00
32) Acenaphthene-d10	18.08	164	65585	40.00	ug/mL	0.03
50) Phenanthrene-d10	22.58	188	109899	40.00	ug/ml	0.06
64) Chrysene-d12	30.67	240	116909	40.00	ug/mL	0.09
73) Perylene-d12	34.69	264	78497	40.00	ug/mL	0.10
System Monitoring Compounds						**%Recovery**
2) 2-Fluorophenol	0.00	112	0	0.00	ug/mL	0.00%
3) Phenol-d5	9.03	99	104	0.09	ug/mL	0.09%
18) Nitrobenzene-d5	10.71	82	61825	54.77	ug/mL	54.77%
36) 2-Fluorobiphenyl	16.23	172	106501	54.14	ug/mL	54.14%
54) 2,4,6-Tribromophenol	0.00	330	0	0.00	ug/mL	0.00%
67) Terphenyl-d14	27.74	244	208248	67.11	ug/mL	67.11%
Target Compounds						**Qvalue**

(#) = qualifier out of range (m) = manual integration

Data File : c:\hpchem\1\data2\b8025.d
Acq On : 26 Jun 95 4:42 am
Sample : 26427.....
Misc :
Quant Time: Jun 28 14:50 1995

Vial: 5197
Operator: SCOTTV
Converted from RTE d Inst : ABNA
BT Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Thu Jun 15 14:15:34 1995
Response via : Multiple Level Calibration



Data File : c:\hpchem\1\data2\b8025.d Vial: 5
Acq On : 26 Jun 95 4:42 am Operator: SCOTTV
Sample : 26427..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Library : NBS75K.L

No Library Search Compounds Detected

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
FORT MONMOUTH, NJ

SAMPLE NO.
MW1-293185
9526434B

199

Lab Name: EMSL ANALYTICAL US ARMY

FMETL# _____ Site: _____ BLDG# 1408 NJDEP# _____

Matrix: (soil/water) WATER Lab Sample ID: 9526434B

Sample wt/vol: 1000.0 (g/mL ML Lab File ID: B8032.D

Level: (low/med) _____ Date Received: 6/13/95

% Moisture: _____ decanted: (Y/N): N Date Extracted: 6/19/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 6/26/95

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
62-75-9	N-nitrosodimethylamine	2	U
111-44-4	bis(2-Chloroethyl)ether	1	U
541-73-1	1,3-Dichlorobenzene	2	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	2	U
108-60-1	bis(2-chloroisopropyl)ether	5	U
621-64-7	N-Nitroso-Di-n-propylamine	2	U
67-72-1	Hexachloroethane	1	U
98-95-3	Nitrobenzene	2	U
78-59-1	Isophorone	1	U
111-91-1	bis(2-Chloroethoxy)methane	3	U
120-82-1	1,2,4-Trichlorobenzene	2	U
91-20-3	Naphthalene	2	U
87-68-3	Hexachlorobutadiene	2	U
77-47-4	Hexachlorocyclopentadiene	12	U
91-58-7	2-Chloronaphthalene	1	U
131-11-3	Dimethylphthalate	1	U
208-96-8	Acenaphthylene	5	U
606-20-2	2,6-Dinitrotoluene	2	U
83-32-9	Acenaphthene	3	U
121-14-2	2,4-Dinitrotoluene	3	U
84-66-2	Diethylphthalate	1	U
86-73-7	Fluorene	3	U
7005-72-3	4-Chlorophenyl-phenylether	3	U
86-30-6	n-Nitrosodiphenylamine	6	U
122-66-7	1,2-Diphenylhydrazine(as azo)	6	U
101-55-3	4-Bromophenyl-phenylether	2	U
118-74-1	Hexachlorobenzene	2	U
85-01-08	Phenanthrene	2	U
120-12-7	Anthracene	2	U
84-74-2	Di-n-butylphthalate	5	U
206-44-0	Fluoranthene	1	U
92-87-5	Benzidine	1	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

FORT MONMOUTH, NJ

SAMPLE NO. 200

mat-293785
9526434B

Lab Name: EMSL ANALYTICAL US ARMY

FMETL# Site: BLDG# 1108 NJDEP#

Matrix: (soil/water) WATER Lab Sample ID: 9526434B

Sample wt/vol: 1000.0 (g/mL ML Lab File ID: B8032.D

Level: (low/med) Date Received: 6/13/95

% Moisture: decanted: (Y/N): N Date Extracted: 6/19/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 6/26/95

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
129-00-0	Pyrene	2	U
85-68-7	Butylbenzylphthalate	9	U
56-55-3	Benzo[a]anthracene	2	U
91-94-1	3,3'-Dichlorobenzidine	15	U
218-01-9	Chrysene	2	U
117-81-7	bis(2-Ethylhexyl)phthalate	4	U
117-84-0	Di-n-octylphthalate	2	U
205-99-2	Benzo[b]fluoranthene	1	U
207-08-9	Benzo[k]fluoranthene	2	U
50-32-8	Benzo[a]pyrene	2	U
193-39-5	Indeno[1,2,3-cd]pyrene	2	U
53-70-3	Dibenz[a,h]anthracene	3	U
191-24-2	Benzo[g,h,i]perylene	2	U

FORT MONMOUTH NJ 1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.
MW1-293178S 201
9526434B

Lab Name: EMSL ANALYTICAL US ARMY

FMETL# Site: BLDG# 1108 NJDEP#

Matrix: (soil/water) WATER Lab Sample ID: 9526434B

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: B8032.D

Level: (low/med) Date Received: 6/13/95

% Moisture: decanted: (Y/N) N Date Extracted: 6/19/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 6/26/95

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 0 Concentration Units: (ug/L or ug/Kg) ug/L

CAS Number	Compound Name	RT	Est. Conc	Q
1.	NONE FOUND			
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

Quantitation Report

Data File : c:\hpchem\1\data2\b8032.d Vial: 12
Acq On : 26 Jun 95 10:43 am Operator: SCOTTV
Sample : 26434..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jun 28 14:56 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Thu Jun 15 14:15:34 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.03	152	31359	40.00	ug/mL	0.00
17) Naphthalene-d8	12.75	136	130386	40.00	ug/mL	0.00
32) Acenaphthene-d10	18.06	164	86662	40.00	ug/mL	0.02
50) Phenanthrene-d10	22.57	188	139691	40.00	ug/ml	0.05
64) Chrysene-d12	30.67	240	162373	40.00	ug/mL	0.09
73) Perylene-d12	34.69	264	59773	40.00	ug/mL	0.10
System Monitoring Compounds						**%Recovery**
2) 2-Fluorophenol	0.00	112	0	0.00	ug/mL	0.00%
3) Phenol-d5	9.03	99	307	0.21	ug/mL	0.21%
18) Nitrobenzene-d5	10.71	82	99274	66.83	ug/mL	66.83%
36) 2-Fluorobiphenyl	16.21	172	186595	71.78	ug/mL	71.78%
54) 2,4,6-Tribromophenol	0.00	330	0	0.00	ug/mL	0.00%
67) Terphenyl-d14	27.74	244	289587	67.19	ug/mL	67.19%
Target Compounds						**Qvalue**

(#) = qualifier out of range (m) = manual integration

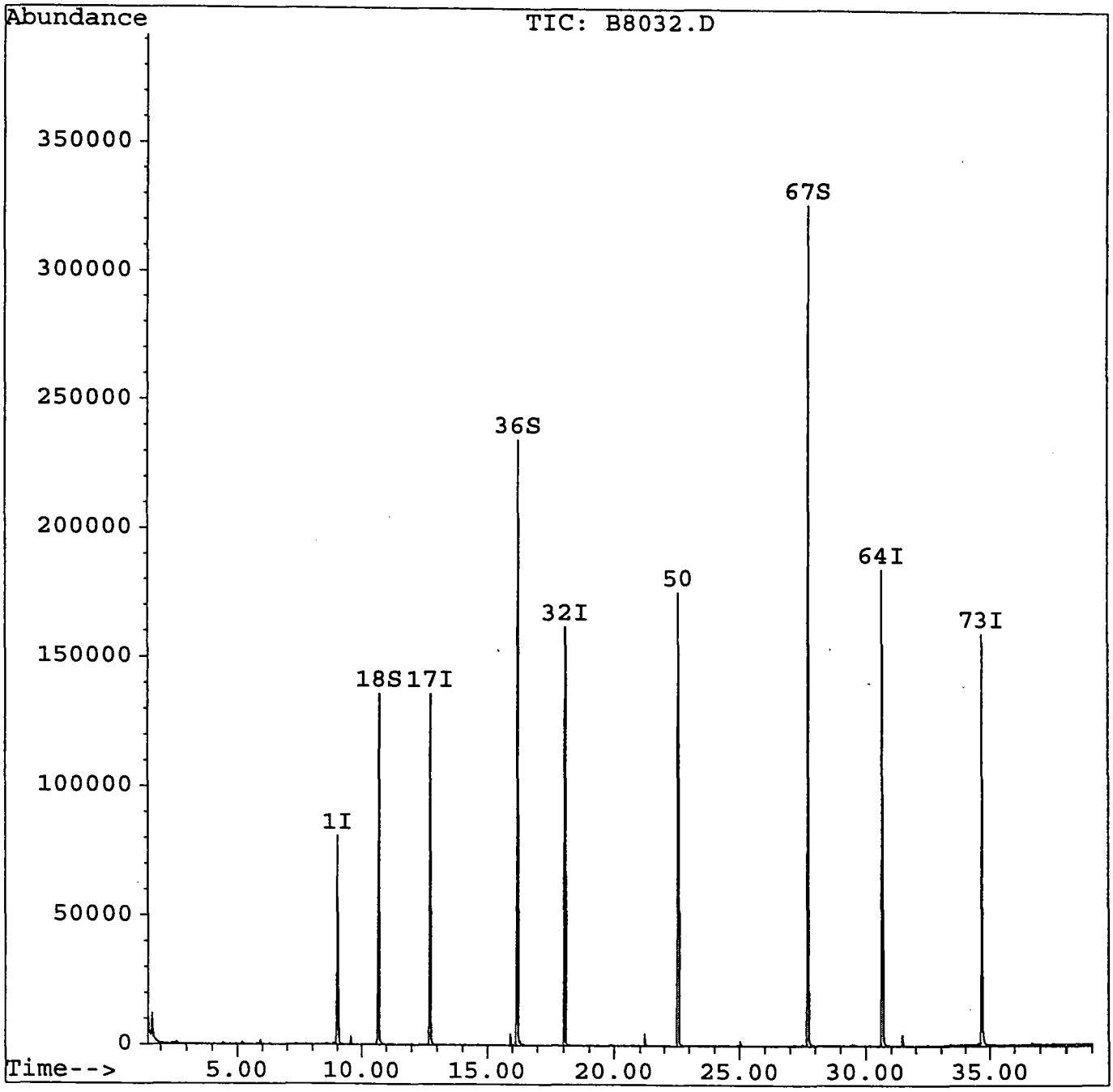
Quantitation Report

Data File : c:\hpchem\1\data2\b8032.d
Acq On : 26 Jun 95 10:43 am
Sample : 26434.....
Misc :
Quant Time: Jun 28 14:56 1995

Converted from RTE d

Vial: 12
Operator: SCOTTV
Inst : ABNA
BT Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Thu Jun 15 14:15:34 1995
Response via : Multiple Level Calibration



2C

WATER SEMIVOLATILE SURROGATE RECOVERY

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

	SAMPLE NO.	S1 (NBZ) #	S2 (FBP) #	S3 (TPH) #	#	#	#	#	#	TOT OUT
01	SBLK02	29	23	38						
02	9522265B	44	37	66						
03	9522845B	60	49	73						
04	SBLK03	68	67	89						
05	9523339B	73	69	60						
06	9523341B	61	60	63						
07	9523342B	74	70	68						
08	9523343B	64	62	72						
09	9523530B	64	61	65						
10	9523531B	73	67	69						
11	9523533B	40	39	64						
12	9523534B	81	67	76						
13	9523535B	70	69	68						
14	9523536B	62	65	68						
15	SBLK04	62	61	68						
16	9523789B	57	61	72						
17	9523792B	60	64	70						
18	9523787B	39	43	63						
19	SBLK05	57	55	63						
20	22654MS	91	63	82						
21	22654MSD	74	61	72						
22	22659MS	75	67	80						
23	22659MSD	78	65	78						
24										
25										
26										
27										
28										
29										
30										

	QC LIMITS
S1 (NBZ) = Nitrobenzene-d5	(22-101)
S2 (FBP) = 2-Fluorobiphenyl	(20-94)
S3 (TPH) = Terphenyl-d14	(35-127)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogate diluted out

4B

SEMIVOLATILE METHOD BLANK SUMMARY

SAMPLE NO. 806

SBLK05

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Lab File ID: B7825.D Lab Sample ID: BLANK5

Instrument ID: ABNA Date Extracted: 5/23/95

Matrix: (soil/water) WATER Date Analyzed: 6/4/95

Level: (low/med) _____ Time Analyzed: 0435

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	22654MS	22654MS	B7826.D	06/04/95
02	22654MSD	22654MSD	B7827.D	06/04/95
03	22659MS	22659MS	B7828.D	06/04/95
04	22659MSD	22659MSD	B7829.D	06/04/95
05				
06				
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

COMMENTS:

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO. 207

SBLK05

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Matrix: (soil/water) WATER Lab Sample ID: BLANK5

Sample wt/vol: 1000.0 (g/mL ML Lab File ID: B7825.D

Level: (low/med) _____ Date Received: _____

% Moisture: _____ decanted: (Y/N): N Date Extracted: 5/23/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 6/4/95

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
62-75-9	N-nitrosodimethylamine	2	U
108-95-2	Phenol	2	U
111-44-4	bis(2-Chloroethyl)ether	1	U
95-57-8	2-Chlorophenol	2	U
541-73-1	1,3-Dichlorobenzene	2	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	2	U
108-60-1	bis(2-chloroisopropyl)ether	5	U
621-64-7	N-Nitroso-Di-n-propylamine	2	U
67-72-1	Hexachloroethane	1	U
98-95-3	Nitrobenzene	2	U
78-59-1	Isophorone	1	U
88-75-5	2-Nitrophenol	3	U
105-67-9	2,4-Dimethylphenol	3	U
111-91-1	bis(2-Chloroethoxy)methane	3	U
120-83-2	2,4-Dichlorophenol	3	U
120-82-1	1,2,4-Trichlorobenzene	2	U
91-20-3	Naphthalene	2	U
87-68-3	Hexachlorobutadiene	2	U
59-50-7	4-Chloro-3-methylphenol	3	U
77-47-4	Hexachlorocyclopentadiene	12	U
88-06-2	2,4,6-Trichlorophenol	3	U
91-58-7	2-Chloronaphthalene	1	U
131-11-3	Dimethylphthalate	1	U
208-96-8	Acenaphthylene	5	U
606-20-2	2,6-Dinitrotoluene	2	U
83-32-9	Acenaphthene	3	U
51-28-5	2,4-Dinitrophenol	24	U
100-02-7	4-Nitrophenol	21	U
121-14-2	2,4-Dinitrotoluene	3	U
84-66-2	Diethylphthalate	1	U
86-73-7	Fluorene	3	U
7005-72-3	4-Chlorophenyl-phenylether	3	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO. 208

SBLK05

Lab Name: EMSL ANALYTICAL Contract:

Project No.: Site: Location: Group:

Matrix: (soil/water) WATER Lab Sample ID: BLANK5

Sample wt/vol: 1000.0 (g/mL ML Lab File ID: B7825.D

Level: (low/med) Date Received:

% Moisture: decanted: (Y/N): N Date Extracted: 5/23/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 6/4/95

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
534-52-1	4,6-Dinitro-2-methylphenol	3	U
86-30-6	n-Nitrosodiphenylamine	6	U
122-66-7	1,2-Diphenylhydrazine(as azo)	6	U
101-55-3	4-Bromophenyl-phenylether	2	U
118-74-1	Hexachlorobenzene	2	U
87-86-5	Pentachlorophenol	5	U
85-01-08	Phenanthrene	2	U
120-12-7	Anthracene	2	U
84-74-2	Di-n-butylphthalate	5	U
206-44-0	Fluoranthene	1	U
92-87-5	Benzidine	1	U
129-00-0	Pyrene	2	U
85-68-7	Butylbenzylphthalate	9	U
56-55-3	Benzo[a]anthracene	2	U
91-94-1	3,3'-Dichlorobenzidine	15	U
218-01-9	Chrysene	2	U
117-81-7	bis(2-Ethylhexyl)phthalate	4	U
117-84-0	Di-n-octylphthalate	2	U
205-99-2	Benzo[b]fluoranthene	1	U
207-08-9	Benzo[k]fluoranthene	2	U
50-32-8	Benzo[a]pyrene	2	U
193-39-5	Indeno[1,2,3-cd]pyrene	2	U
53-70-3	Dibenz[a,h]anthracene	3	U
191-24-2	Benzo[g,h,i]perylene	2	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO. SBLK05

Lab Name: EMSL ANALYTICAL Contract:

Project No.: Site: Location: Group:

Matrix: (soil/water) WATER Lab Sample ID: BLANK5

Sample wt/vol: 1000.0 (g/mL ML Lab File ID: B7825.D

Level: (low/med) Date Received: 5/24/95

% Moisture: decanted: (Y/N): N Date Extracted: 5/23/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 6/4/95

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
62-75-9	N-nitrosodimethylamine	2	U
111-44-4	bis(2-Chloroethyl)ether	1	U
541-73-1	1,3-Dichlorobenzene	2	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	2	U
108-60-1	bis(2-chloroisopropyl)ether	5	U
621-64-7	N-Nitroso-Di-n-propylamine	2	U
67-72-1	Hexachloroethane	1	U
98-95-3	Nitrobenzene	2	U
78-59-1	Isophorone	1	U
111-91-1	bis(2-Chloroethoxy)methane	3	U
120-82-1	1,2,4-Trichlorobenzene	2	U
91-20-3	Naphthalene	2	U
87-68-3	Hexachlorobutadiene	2	U
77-47-4	Hexachlorocyclopentadiene	12	U
91-58-7	2-Chloronaphthalene	1	U
131-11-3	Dimethylphthalate	1	U
208-96-8	Acenaphthylene	5	U
606-20-2	2,6-Dinitrotoluene	2	U
83-32-9	Acenaphthene	3	U
121-14-2	2,4-Dinitrotoluene	3	U
84-66-2	Diethylphthalate	1	U
86-73-7	Fluorene	3	U
7005-72-3	4-Chlorophenyl-phenylether	3	U
86-30-6	n-Nitrosodiphenylamine	6	U
122-66-7	1,2-Diphenylhydrazine(as azo)	6	U
101-55-3	4-Bromophenyl-phenylether	2	U
118-74-1	Hexachlorobenzene	2	U
85-01-08	Phenanthrene	2	U
120-12-7	Anthracene	2	U
84-74-2	Di-n-butylphthalate	5	U
206-44-0	Fluoranthene	1	U
92-87-5	Benzidine	1	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO. 210

SBLK05

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Matrix: (soil/water) WATER Lab Sample ID: BLANK5

Sample wt/vol: 1000.0 (g/mL ML Lab File ID: B7825.D

Level: (low/med) _____ Date Received: 5/24/95

% Moisture: _____ decanted: (Y/N): N Date Extracted: 5/23/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 6/4/95

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
129-00-0	Pyrene	2	U
85-68-7	Butylbenzylphthalate	9	U
56-55-3	Benzo[a]anthracene	2	U
91-94-1	3,3'-Dichlorobenzidine	15	U
218-01-9	Chrysene	2	U
117-81-7	bis(2-Ethylhexyl)phthalate	4	U
117-84-0	Di-n-octylphthalate	2	U
205-99-2	Benzo[b]fluoranthene	1	U
207-08-9	Benzo[k]fluoranthene	2	U
50-32-8	Benzo[a]pyrene	2	U
193-39-5	Indeno[1,2,3-cd]pyrene	2	U
53-70-3	Dibenz[a,h]anthracene	3	U
191-24-2	Benzo[g,h,i]perylene	2	U

Quantitation Report

Data File : c:\hpchem\1\data2\b7825.d Vial: 24
Acq On : 4 Jun 95 4:35 am Operator: SCOTTV
Sample : BLANK..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jun 5 16:06 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 10:06:36 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min
1) 1,4-Dichlorobenzene-d4	9.20	152	43303	40.00	ug/mL	0.17
17) Naphthalene-d8	12.92	136	177127	40.00	ug/mL	0.17
32) Acenaphthene-d10	18.27	164	122916	40.00	ug/mL	0.22
50) Phenanthrene-d10	22.77	188	199698	40.00	ug/ml	0.26
64) Chrysene-d12	30.88	240	216974	40.00	ug/mL	0.30
73) Perylene-d12	34.91	264	174620	40.00	ug/mL	0.31
System Monitoring Compounds						**%Recovery**
2) 2-Fluorophenol	5.64	112	78262	63.90	ug/mL	63.90
3) Phenol-d5	8.53	99	133633	65.92	ug/mL	65.92
18) Nitrobenzene-d5	10.88	82	114709	56.84	ug/mL	56.84
36) 2-Fluorobiphenyl	16.40	172	202657	54.96	ug/mL	54.96
54) 2,4,6-Tribromophenol	20.70	330	47874	88.77	ug/mL	88.77
67) Terphenyl-d14	27.93	244	363044	63.04	ug/mL	63.04
Target Compounds						**Qvalue**

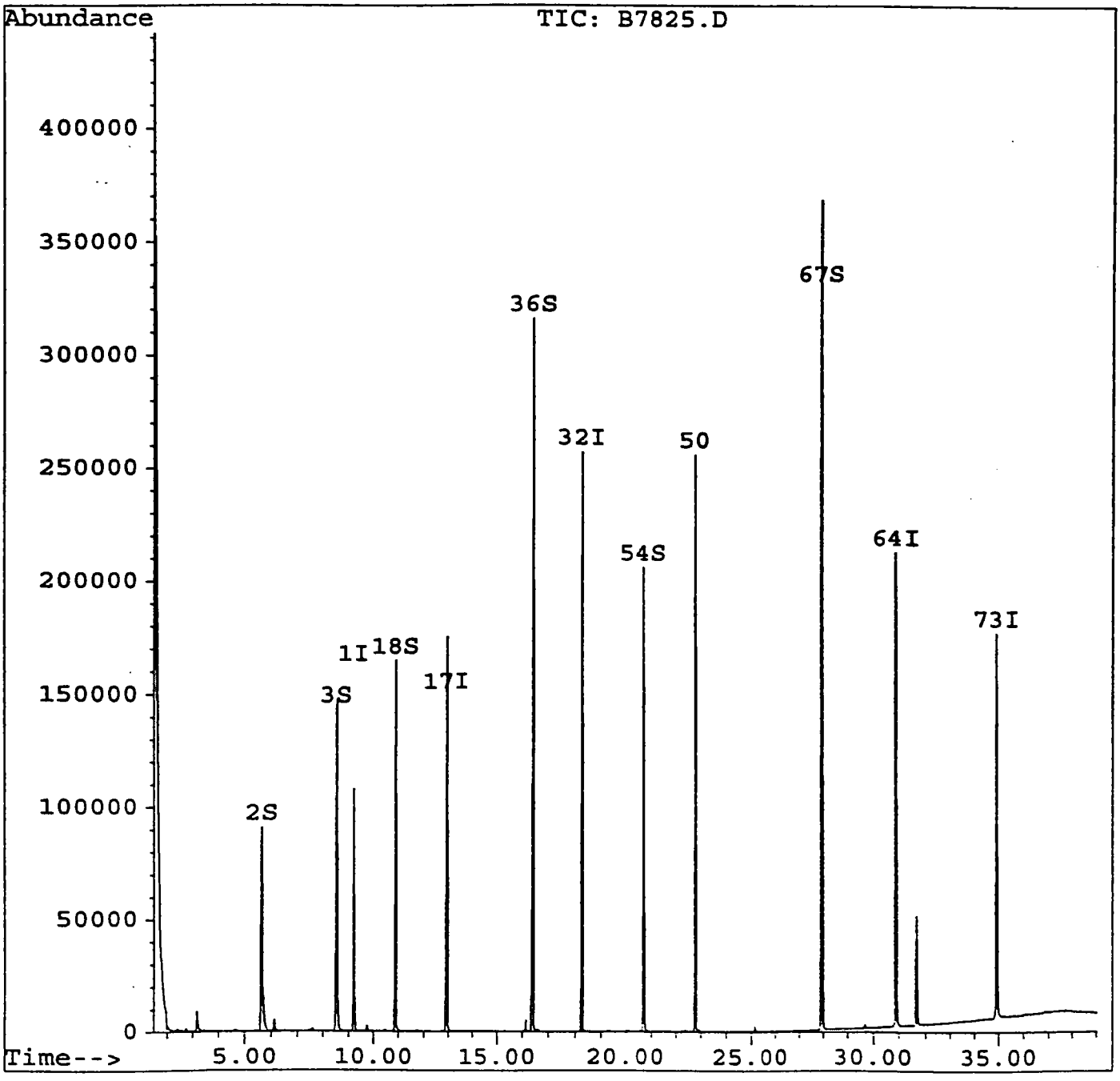
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data2\b7825.d
Acq On : 4 Jun 95 4:35 am
Sample : BLANK..... Converted from RTE d
Misc :
Quant Time: Jun 5 16:06 1995

Vial: 24
Operator: SCOTTV
Inst : ABNA
BT Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 10:06:36 1995
Response via : Multiple Level Calibration



SAMPLE NO.

SEMIVOLATILE METHOD BLANK SUMMARY

SBLK01

213

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Lab File ID: B8023.D Lab Sample ID: BLANK1

Instrument ID: ABNA Date Extracted: 6/19/95

Matrix: (soil/water) WATER Date Analyzed: 6/26/95

Level: (low/med) _____ Time Analyzed: 0256

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	9526397B	9526397B	B8024.D	06/26/95
02	9526427B	9526427B	B8025.D	06/26/95
03	9526428B	9526428B	B8026.D	06/26/95
04	9526429B	9526429B	B8027.D	06/26/95
05	9526430B	9526430B	B8028.D	06/26/95
06	9526431B	9526431B	B8029.D	06/26/95
07	9526432B	9526432B	B8030.D	06/26/95
08	9526433B	9526433B	B8031.D	06/26/95
09	9526434B	9526434B	B8032.D	06/26/95
10	9526404B	9526404B	B8033.D	06/26/95
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

COMMENTS:

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

SBLK01

214

Lab Name: EMSL ANALYTICAL

Site:

Matrix: (soil/water) WATER

Lab Sample ID: BLANK1

Sample wt/vol: 1000.0 (g/mL ML

Lab File ID: B8023.D

Level: (low/med)

Date Received: 6/14/95

% Moisture: decanted: (Y/N): N

Date Extracted: 6/19/95

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 6/26/95

Injection Volume: 1.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

pH:

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
62-75-9	N-nitrosodimethylamine	2	U
111-44-4	bis(2-Chloroethyl)ether	1	U
541-73-1	1,3-Dichlorobenzene	2	U
106-46-7	1,4-Dichlorobenzene	1	U
95-50-1	1,2-Dichlorobenzene	2	U
108-60-1	bis(2-chloroisopropyl)ether	5	U
621-64-7	N-Nitroso-Di-n-propylamine	2	U
67-72-1	Hexachloroethane	1	U
98-95-3	Nitrobenzene	2	U
78-59-1	Isophorone	1	U
111-91-1	bis(2-Chloroethoxy)methane	3	U
120-82-1	1,2,4-Trichlorobenzene	2	U
91-20-3	Naphthalene	2	U
87-68-3	Hexachlorobutadiene	2	U
77-47-4	Hexachlorocyclopentadiene	12	U
91-58-7	2-Chloronaphthalene	1	U
131-11-3	Dimethylphthalate	1	U
208-96-8	Acenaphthylene	5	U
606-20-2	2,6-Dinitrotoluene	2	U
83-32-9	Acenaphthene	3	U
121-14-2	2,4-Dinitrotoluene	3	U
84-66-2	Diethylphthalate	1	U
86-73-7	Fluorene	3	U
7005-72-3	4-Chlorophenyl-phenylether	3	U
86-30-6	n-Nitrosodiphenylamine	6	U
122-66-7	1,2-Diphenylhydrazine(as azo)	6	U
101-55-3	4-Bromophenyl-phenylether	2	U
118-74-1	Hexachlorobenzene	2	U
85-01-08	Phenanthrene	2	U
120-12-7	Anthracene	2	U
84-74-2	Di-n-butylphthalate	5	U
206-44-0	Fluoranthene	1	U
92-87-5	Benzidine	1	U

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

SBLK01

215

Lab Name: EMSL ANALYTICAL

Site:

Matrix: (soil/water) WATER

Lab Sample ID: BLANK1

Sample wt/vol: 1000.0 (g/mL ML

Lab File ID: B8023.D

Level: (low/med)

Date Received: 6/14/95

% Moisture: decanted: (Y/N): N

Date Extracted: 6/19/95

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 6/26/95

Injection Volume: 1.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

pH:

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
129-00-0	Pyrene	2	U
85-68-7	Butylbenzylphthalate	9	U
56-55-3	Benzo[a]anthracene	2	U
91-94-1	3,3'-Dichlorobenzidine	15	U
218-01-9	Chrysene	2	U
117-81-7	bis(2-Ethylhexyl)phthalate	4	U
117-84-0	Di-n-octylphthalate	2	U
205-99-2	Benzo[b]fluoranthene	1	U
207-08-9	Benzo[k]fluoranthene	2	U
50-32-8	Benzo[a]pyrene	2	U
193-39-5	Indeno[1,2,3-cd]pyrene	2	U
53-70-3	Dibenz[a,h]anthracene	3	U
191-24-2	Benzo[g,h,i]perylene	2	U

1F

SAMPLE NO.

SBLK01

21E

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: EMSL ANALYTICAL

Site:

Matrix: (soil/water) WATER

Lab Sample ID: BLANK1

Sample wt/vol: 1000.0 (g/mL) ML

Lab File ID: B8023.D

Level: (low/med)

Date Received: 6/14/95

% Moisture:

decanted: (Y/N) N

Date Extracted: 6/19/95

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 6/26/95

Injection Volume: 1.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

pH:

Number TICs found: 0

Concentration Units: (ug/L or ug/Kg) ug/L

CAS Number	Compound Name	RT	Est. Conc	Q
1.	NONE FOUND			
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

Quantitation Report -

Data File : c:\hpchem\1\data2\b8023.d Vial: 3
Acq On : 26 Jun 95 2:56 am Operator: SCOTTV
Sample : BLANK..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jun 28 14:48 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Thu Jun 15 14:15:34 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.05	152	18647	40.00	ug/mL	0.02
17) Naphthalene-d8	12.74	136	76527	40.00	ug/mL	0.00
32) Acenaphthene-d10	18.07	164	50131	40.00	ug/mL	0.03
50) Phenanthrene-d10	22.58	188	82468	40.00	ug/ml	0.06
64) Chrysene-d12	30.68	240	90615	40.00	ug/mL	0.10
73) Perylene-d12	34.70	264	86128	40.00	ug/mL	0.11
System Monitoring Compounds						**%Recovery**
2) 2-Fluorophenol	0.00	112	0	0.00	ug/mL	0.00%
3) Phenol-d5	9.05	99	81	0.09	ug/mL	0.09%
18) Nitrobenzene-d5	10.70	82	63446	72.77	ug/mL	72.77%
36) 2-Fluorobiphenyl	16.22	172	112181	74.60	ug/mL	74.60%
54) 2,4,6-Tribromophenol	0.00	330	0	0.00	ug/mL	0.00%
67) Terphenyl-d14	27.74	244	179869	74.79	ug/mL	74.79%
Target Compounds						**Qvalue**

(#) = qualifier out of range (m) = manual integration

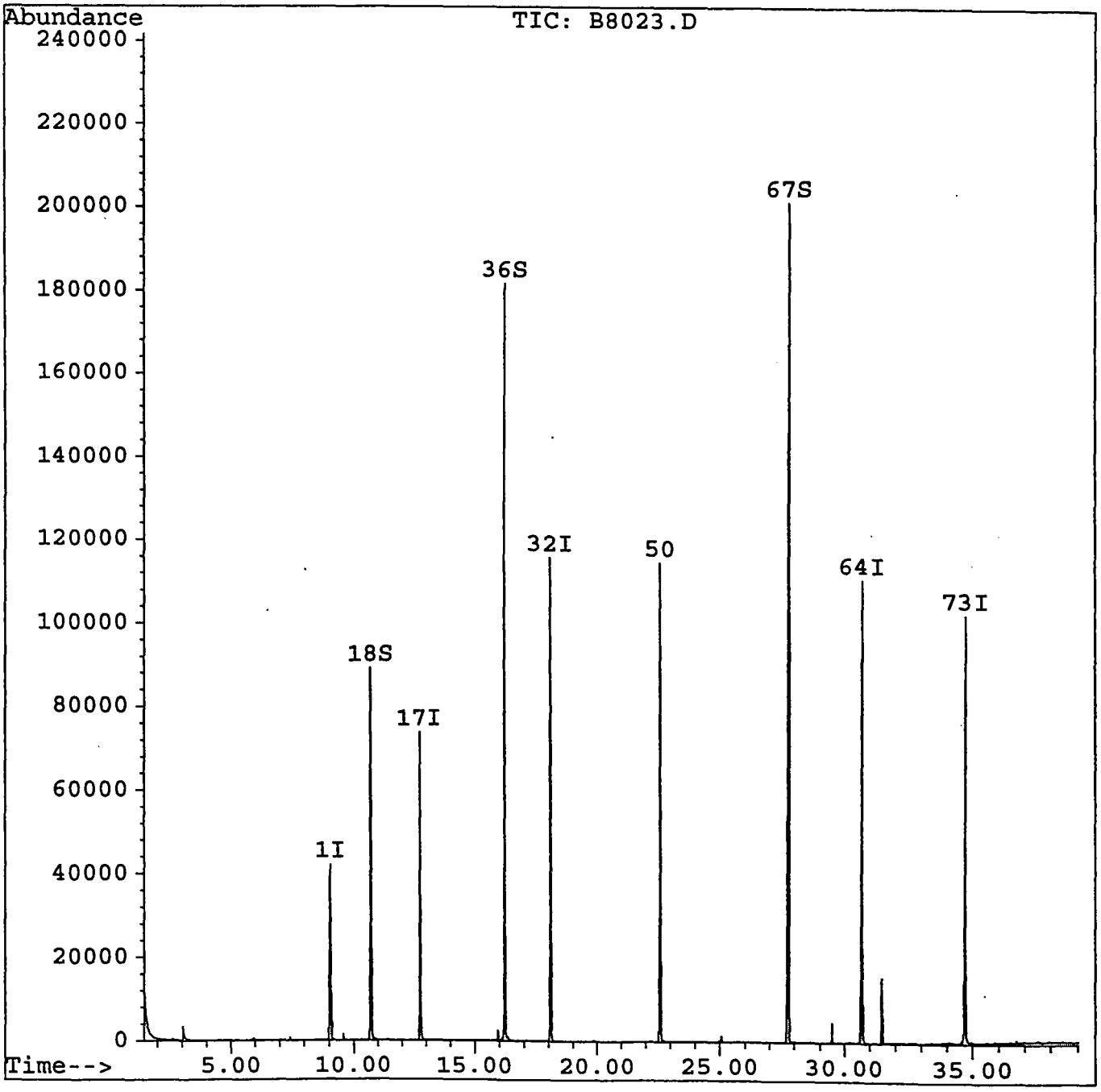
Quantitation Report

Data File : c:\hpchem\1\data2\b8023.d
Acq On : 26 Jun 95 2:56 am
Sample : BLANK.....
Misc :
Quant Time: Jun 28 14:48 1995

Converted from RTE d

Vial: 3
Operator: SCOTTV
Inst : ABNA
BT Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Thu Jun 15 14:15:34 1995
Response via : Multiple Level Calibration



Spike Recovery and RPD Summary Report - WATER

Method : C:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 10:06:36 1995
Response via : Initial Calibration

Non-Spiked Sample: B7742.D

	Spike Sample	Spike Duplicate Sample
File ID :	B7826.D	B7827.D
Sample :	22654MS.....	Converted from RTE data file >B7826::D5

Compound	Sample Conc	Spike Added	Spike Res	Dup Res	Spike %Rec	Dup %Rec	RPD	QC Limits RPD	QC Limits % Rec
N-nitrosodimethylami	0.0	100	108	91	108	91	17	100	1-300
Phenol	0.0	100	69	64	69	64	7	23	5-112
bis(2-Chloroethyl)et	0.0	100	77	68	77	68	13	55	12-158
2-Chlorophenol	0.0	100	76	67	76	67	13	29	23-134
1,3-Dichlorobenzene	0.0	100	57	50	57	50	14	42	1-172
1,4-Dichlorobenzene	0.0	100	58	51	58	51	13	32	20-124
1,2-Dichlorobenzene	0.0	100	62	53	62	53	15	31	32-129
bis(2-chloroisopropy	0.0	100	134	118	134	118	13	46	36-166
N-Nitroso-Di-n-propy	0.0	100	78	66	78	66	16	55	1-230
Hexachloroethane	0.0	100	50	42	50	42	18	25	40-113
Nitrobenzene	0.2	100	84	71	83	71	17	39	35-180
Isophorone	0.0	100	70	59	70	59	17	63	21-196
2-Nitrophenol	0.0	100	79	65	79	65	19	35	29-182
2,4-Dimethylphenol	0.0	100	43	40	43	40	7	26	32-119
bis(2-Chloroethoxy)m	0.0	100	58	49	58	49	18	35	33-184
2,4-Dichlorophenol	0.0	100	79	67	79	67	16	26	39-135
1,2,4-Trichlorobenze	0.0	100	67	59	67	59	13	28	44-142
Naphthalene	0.0	100	71	61	71	61	15	30	21-133
Hexachlorobutadiene	0.0	100	55	49	55	49	11	26	24-116
4-Chloro-3-methylphe	0.0	100	73	63	73	63	15	37	22-147
2-Chloronaphthalene	0.0	100	77	68	77	68	12	13	60-118
2,4,6-Trichloropheno	0.0	100	57	52	57	52	8	32	37-144
Dimethylphthalate	0.0	100	44	35	44	35	22	23	1-112
Acenaphthylene	0.0	100	56	50	56	50	12	40	33-145
2,6-Dinitrotoluene	0.0	100	73	71	73	71	3	30	50-158
Acenaphthene	0.0	100	77	71	77	71	8	28	47-145
2,4-Dinitrophenol	0.0	100	68	65	68	65	4	50	1-191
4-Nitrophenol	0.5	100	76	70	76	70	8	47	1-132
2,4-Dinitrotoluene	0.0	100	75	68	75	68	9	22	39-139
Diethylphthalate	0.1	100	47	41	47	41	15	27	1-114
Fluorene	0.9	100	75	69	74	68	9	21	59-121
4-Chlorophenyl-pheny	0.0	100	77	69	77	69	11	33	25-158
4,6-Dinitro-2-methyl	0.0	100	76	70	76	70	8	93	1-181
4-Bromophenyl-phenyl	0.0	100	78	72	78	72	8	23	53-127
Hexachlorobenzene	0.0	100	90	82	90	82	10	25	1-152
Pentachlorophenol	0.0	100	100	93	100	93	7	49	14-176
Phenanthrene	0.0	100	81	75	81	75	9	21	54-120
Anthracene	0.0	100	96	83	96	83	14	32	52-115
Di-n-butylphthalate	0.2	100	77	71	77	71	8	17	1-118
Fluoranthene	0.0	100	95	88	95	88	8	33	26-137
Pyrene	0.0	100	68	65	68	65	5	25	52-115
Butylbenzylphthalate	0.3	100	65	58	64	57	12	23	1-152
Benzo[a]anthracene	0.1	100	65	58	65	58	11	28	33-143

Chrysene	0.1	100	118	106	118	106	10	48	17-168
bis(2-Ethylhexyl)pht	0.4	100	71	63	71	62	13	41	8-158
Di-n-octylphthalate	0.0	100	67	59	67	59	13	31	4-146
Benzo[b]fluoranthene	0.0	100	53	48	53	48	11	39	24-159
Benzo[k]fluoranthene	0.1	100	108	99	108	99	8	32	11-162
Benzo[a]pyrene	0.1	100	101	90	101	90	12	39	17-163
Indeno[1,2,3-cd]pyre	0.0	100	42	38	42	38	10	45	1-171
Dibenz[a,h]anthracen	0.0	100	47	50	47	50	5	70	1-227
Benzo[g,h,i]perylene	0.0	100	54	48	54	48	11	59	1-219

Quantitation Report

Data File : c:\hpchem\1\data2\b7826.d
Acq On : 4 Jun 95 5:25 am
Sample : 22654MS..... Converted from RTE d
Misc :
Quant Time: Jun 13 13:06 1995

Vial: 25
Operator: SCOTTV
Inst : ABNA
BT Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 10:06:36 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min
1) 1,4-Dichlorobenzene-d4	9.20	152	33780	40.00	ug/mL	0.17
17) Naphthalene-d8	12.94	136	129967	40.00	ug/mL	0.19
32) Acenaphthene-d10	18.26	164	93254	40.00	ug/mL	0.21
50) Phenanthrene-d10	22.77	188	155903	40.00	ug/ml	0.25
64) Chrysene-d12	30.91	240	148922	40.00	ug/mL	0.33
73) Perylene-d12	34.91	264	65345	40.00	ug/mL	0.31
System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	5.66	112	86730	90.77	ug/mL	90.77
3) Phenol-d5	8.57	99	147096	93.02	ug/mL	93.02
18) Nitrobenzene-d5	10.90	82	134034	90.52	ug/mL	90.52
36) 2-Fluorobiphenyl	16.41	172	175522	62.75	ug/mL	62.75
54) 2,4,6-Tribromophenol	20.71	330	46665	110.83	ug/mL	110.83
67) Terphenyl-d14	27.94	244	322279	81.53	ug/mL	81.53
Target Compounds						Qvalue
4) N-nitrosodimethylamine	2.43	74	52801	108.13	ug/mlm	0
5) Pyridine	1.58	79	3052	8.44	ug/ml	100
6) Phenol	8.61	94	97169	68.99	ug/mL	100
7) bis(2-Chloroethyl)ether	12.61	93	132335	77.35	ug/mL	96
8) 2-Chlorophenol	8.63	128	81945	76.45	ug/mL	90
9) 1,3-Dichlorobenzene	9.01	146	66629	56.96	ug/mL	97
10) 1,4-Dichlorobenzene	9.26	146	69858	57.89	ug/mL	100
11) 1,2-Dichlorobenzene	9.65	146	70561	61.55	ug/mL	98
13) bis(2-chloroisopropyl)ethe	10.30	45	211229	133.86	ug/mL#	65
15) N-Nitroso-Di-n-propylamine	10.69	70	88152	77.56	ug/mL	95
16) Hexachloroethane	10.61	117	31123	49.97	ug/mL	89
19) Nitrobenzene	10.96	77	115194	83.63	ug/mL#	85
20) Isophorone	11.75	82	203312	70.04	ug/mL	98
21) 2-Nitrophenol	11.88	139	53977	78.97	ug/mL#	85
22) 2,4-Dimethylphenol	12.33	107	55100	43.09	ug/mLm	1
23) bis(2-Chloroethoxy)methane	8.72	93	86556	58.41	ug/mL	98
24) 2,4-Dichlorophenol	12.67	162	76577	79.05	ug/mL	98
25) 1,2,4-Trichlorobenzene	12.83	180	68935	66.95	ug/mL	98
26) Naphthalene	13.00	128	225507	70.91	ug/mL#	90
27) 4-Chloroaniline	13.00	127	28186	18.73	ug/mL#	1
28) Hexachlorobutadiene	13.52	225	33083	55.03	ug/mL	98
29) 4-Chloro-3-methylphenol	15.04	107	91543	73.39	ug/mL	95
30) 2-Chloronaphthalene	16.60	162	173185	76.58	ug/mlm	95
31) 2-Methylnaphthalene	15.04	142	68690	26.91	ug/mL#	18
34) 2,4,6-Trichlorophenol	16.12	196	54836	56.62	ug/mL	98
35) 2,4,5-Trichlorophenol	16.12	196	54836	72.58	ug/mL	98
37) 2-Nitroaniline	17.93	65	3806	2.97	ug/mL#	100
38) Dimethylphthalate	17.83	163	132688	43.80	ug/mL	100

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data2\b7826.d Vial: 25
Acq On : 4 Jun 95 5:25 am Operator: SCOTTV
Sample : 22654MS..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jun 13 13:06 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 10:06:36 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
39)	Acenaphthylene	17.80	152	221369	55.71 ug/mL	99
40)	2,6-Dinitrotoluene	17.93	165	52674	72.83 ug/mL	98
42)	Acenaphthene	18.37	153	184037	77.01 ug/mL	98
43)	2,4-Dinitrophenol	18.68	184	27438	68.35 ug/mL#	82
44)	4-Nitrophenol	19.15	109	29448	76.25 ug/mL	93
46)	2,4-Dinitrotoluene	19.97	165	203714	74.87 ug/mL#	33
47)	Diethylphthalate	20.07	149	159610	47.45 ug/mL	100
48)	Fluorene	19.97	166	219880	74.92 ug/mL	99
49)	4-Chlorophenyl-phenylether	20.15	204	106703	76.76 ug/mL	99
51)	4-Nitroaniline	19.97	138	2333	3.60 ug/mL#	26
52)	4,6-Dinitro-2-methylphenol	20.32	198	38799	75.54 ug/mL	100
53)	n-Nitrosodiphenylamine	20.57	169	120798	60.97 ug/mL#	1
55)	1,2-Diphenylhydrazine (as	20.63	77	341255	72.29 ug/ml	100
56)	4-Bromophenyl-phenylether	21.61	248	63010	78.44 ug/mL	93
57)	Hexachlorobenzene	21.59	284	75708	90.48 ug/mL#	81
58)	Pentachlorophenol	22.31	266	53483	99.80 ug/mL	98
59)	Phenanthrene	22.87	178	347261	81.41 ug/mL	99
60)	Anthracene	22.87	178	375780	95.56 ug/mL	98
62)	Di-n-butylphthalate	25.16	149	485216	77.50 ug/mL	100
63)	Fluoranthene	27.13	202	383198	95.00 ug/mL	95
65)	Benzidine	27.15	184	31355	19.25 ug/ml	100
66)	Pyrene	27.13	202	382718	68.46 ug/mL#	87
68)	Butylbenzylphthalate	29.69	149	231108	64.56 ug/mL	98
69)	Benzo[a]anthracene	30.89	228	364541	64.61 ug/mL	99
70)	3,3'-Dichlorobenzidine	31.03	252	116175	80.76 ug/mL	99
71)	Chrysene	30.89	228	369164	117.64 ug/mL	97
72)	bis(2-Ethylhexyl)phthalate	31.66	149	362642	71.41 ug/mL	98
74)	Di-n-octylphthalate	33.57	149	561704	67.50 ug/mL	99
75)	Benzo[b]fluoranthene	33.94	252	214943	53.34 ug/mL	99
76)	Benzo[k]fluoranthene	33.94	252	210450	108.25 ug/mL	91
77)	Benzo[a]pyrene	34.04	252	202935	101.27 ug/mL	97
78)	Indeno[1,2,3-cd]pyrene	37.41	276	31241	42.27 ug/mL#	76
79)	Dibenz[a,h]anthracene	37.53	278	33601	47.21 ug/mL#	91
80)	Benzo[g,h,i]perylene	37.41	276	31328	53.91 ug/mL#	91

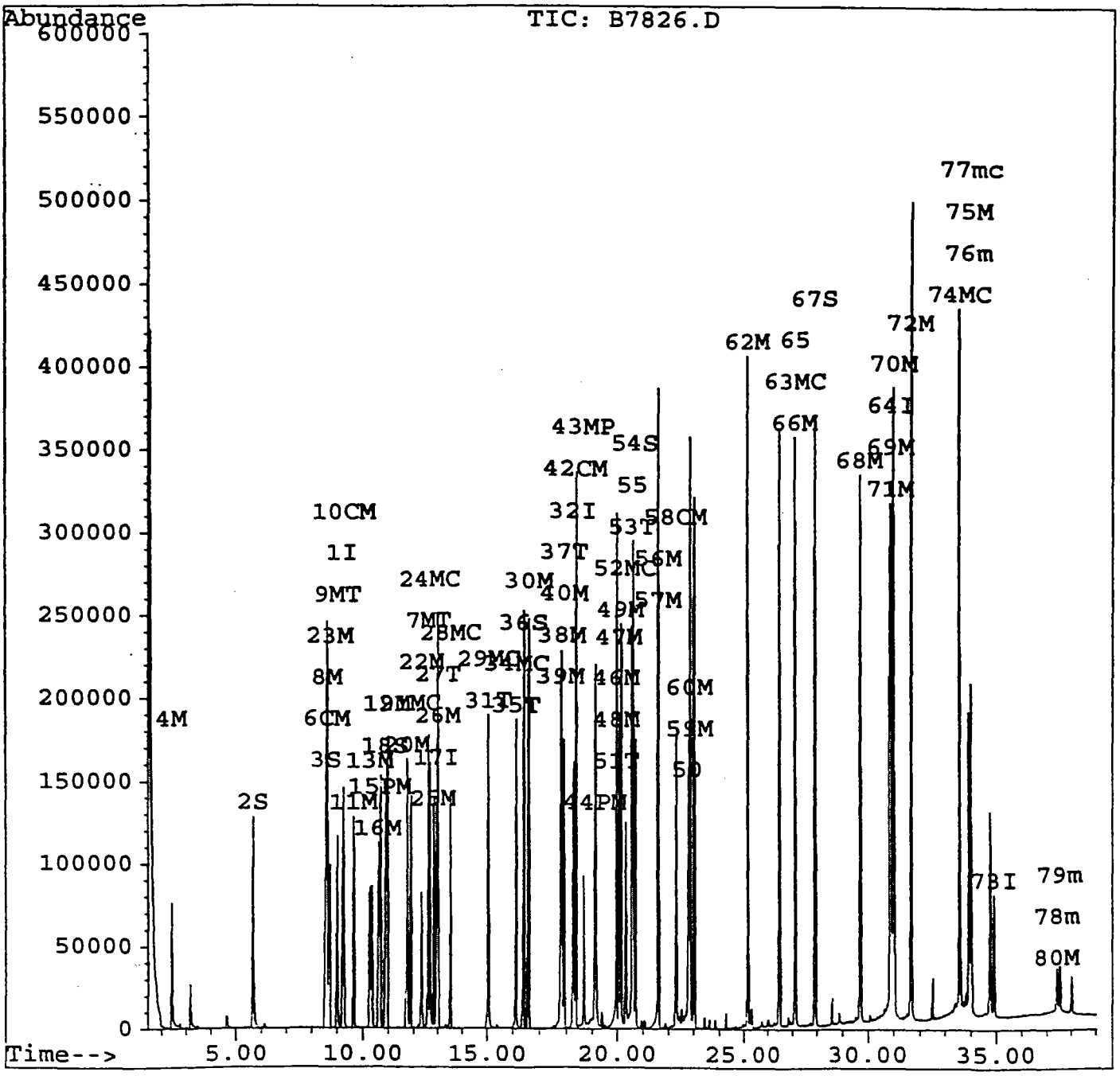
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data2\b7826.d
Acq On : 4 Jun 95 5:25 am
Sample : 22654MS..... Converted from RTE d
Misc :
Quant Time: Jun 13 13:06 1995

Vial: 25
Operator: SCOTTV
Inst : ABNA
BT Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 10:06:36 1995
Response via : Multiple Level Calibration



Quantitation Report

Data File : c:\hpchem\1\data2\b7827.d Vial: 26
Acq On : 4 Jun 95 6:15 am Operator: SCOTTV
Sample : 22654MSD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jun 13 13:07 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 10:06:36 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Mi
1) 1,4-Dichlorobenzene-d4	9.20	152	35303	40.00	ug/mL	0.1
17) Naphthalene-d8	12.94	136	144937	40.00	ug/mL	0.1
32) Acenaphthene-d10	18.26	164	99611	40.00	ug/mL	0.2
50) Phenanthrene-d10	22.77	188	164759	40.00	ug/ml	0.2
64) Chrysene-d12	30.91	240	152801	40.00	ug/mL	0.3
73) Perylene-d12	34.91	264	66464	40.00	ug/mL	0.3
System Monitoring Compounds						%Recover
2) 2-Fluorophenol	5.66	112	82094	82.21	ug/mL	82.2
3) Phenol-d5	8.57	99	140345	84.92	ug/mL	84.9
18) Nitrobenzene-d5	10.90	82	122579	74.23	ug/mL	74.2
36) 2-Fluorobiphenyl	16.41	172	181198	60.64	ug/mL	60.6
54) 2,4,6-Tribromophenol	20.71	330	47406	106.54	ug/mL	106.5
67) Terphenyl-d14	27.94	244	291235	71.81	ug/mL	71.8
Target Compounds						Qvalue
4) N-nitrosodimethylamine	2.43	74	46421	90.97	ug/mlm	10
5) Pyridine	1.58	79	3239	8.57	ug/ml	10
6) Phenol	8.61	94	94440	64.16	ug/mL	10
7) bis(2-Chloroethyl)ether	12.59	93	122019	68.25	ug/mL	9
8) 2-Chlorophenol	8.63	128	74868	66.83	ug/mL#	8
9) 1,3-Dichlorobenzene	9.01	146	60664	49.63	ug/mL	9
10) 1,4-Dichlorobenzene	9.26	146	63929	50.69	ug/mL	9
11) 1,2-Dichlorobenzene	9.65	146	63514	53.01	ug/mL	9
13) bis(2-chloroisopropyl)ethe	10.26	45	194225	117.78	ug/mL#	6
15) N-Nitroso-Di-n-propylamine	10.67	70	78184	65.82	ug/mL	9
16) Hexachloroethane	10.61	117	27204	41.80	ug/mL	9
19) Nitrobenzene	10.96	77	108893	70.89	ug/mL	9
20) Isophorone	11.75	82	190833	58.95	ug/mL	9
21) 2-Nitrophenol	11.88	139	49518	64.97	ug/mL#	8
22) 2,4-Dimethylphenol	12.33	107	57269	40.16	ug/mLm	
23) bis(2-Chloroethoxy)methane	8.72	93	80511	48.72	ug/mL	9
24) 2,4-Dichlorophenol	12.67	162	72662	67.26	ug/mL	9
25) 1,2,4-Trichlorobenzene	12.83	180	67428	58.72	ug/mL	9
26) Naphthalene	13.00	128	216145	60.94	ug/mL#	9
27) 4-Chloroaniline	13.00	127	27276	16.26	ug/mL#	
28) Hexachlorobutadiene	13.52	225	33024	49.25	ug/mL	9
29) 4-Chloro-3-methylphenol	15.04	107	87494	62.90	ug/mL	9
30) 2-Chloronaphthalene	16.58	162	170492	67.60	ug/ml	9
31) 2-Methylnaphthalene	15.04	142	66426	23.33	ug/mL#	1
34) 2,4,6-Trichlorophenol	16.12	196	53903	52.11	ug/mL	9
35) 2,4,5-Trichlorophenol	16.12	196	53903	66.79	ug/mL	9
37) 2-Nitroaniline	17.93	65	3941	2.88	ug/mL#	10
38) Dimethylphthalate	17.83	163	113606	35.11	ug/mL	9

(#) = qualifier out of range (m) = manual integration

Data File : c:\hpchem\1\data2\b7827.d Vial: 26
Acq On : 4 Jun 95 6:15 am Operator: SCOTTV
Sample : 22654MSD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jun 13 13:07 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 10:06:36 1995
Response via : Multiple Level Calibration

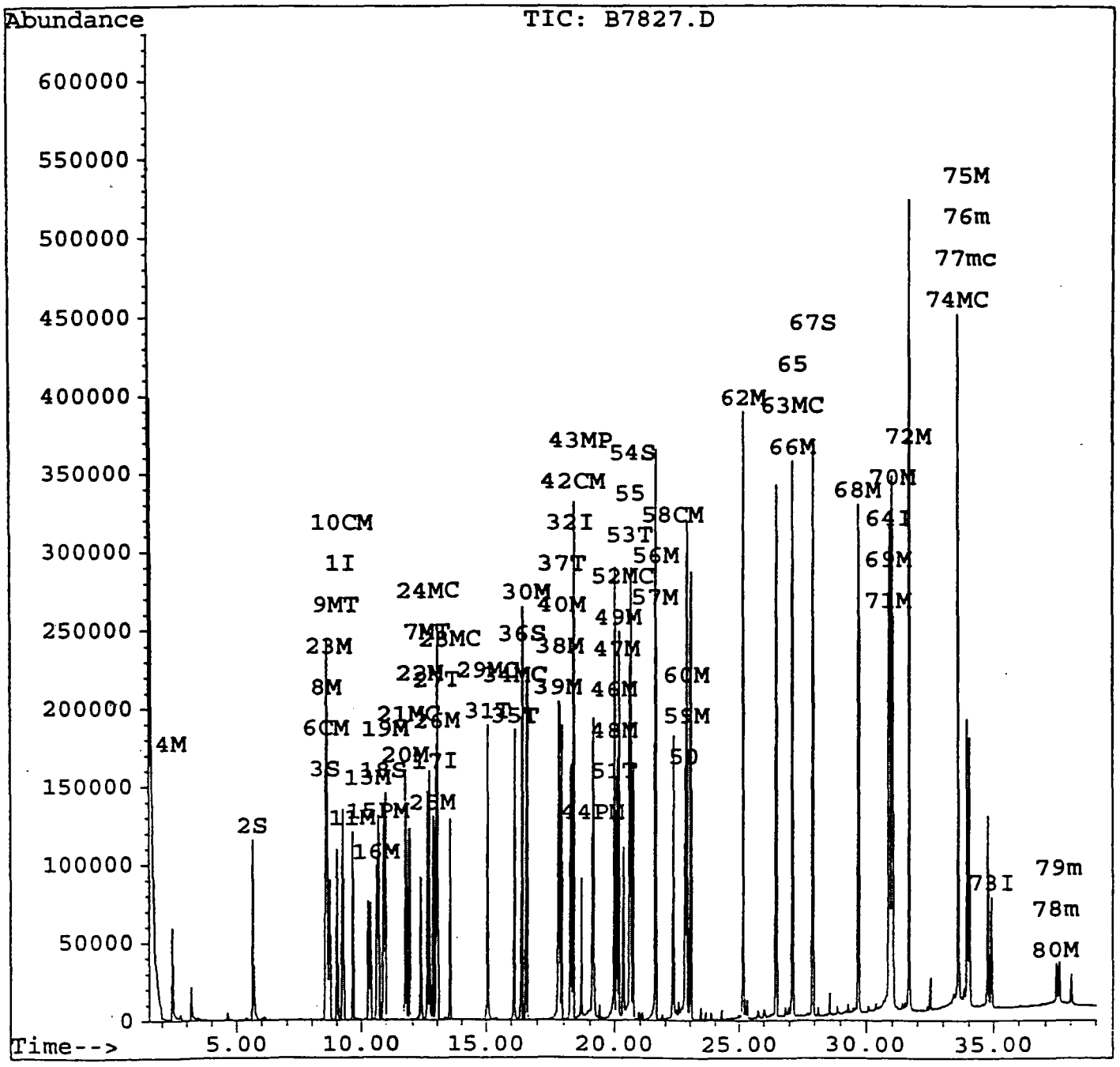
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalu
39)	Acenaphthylene	17.80	152	210414	49.57	ug/mL	9
40)	2,6-Dinitrotoluene	17.93	165	54747	70.87	ug/mL	9
42)	Acenaphthene	18.37	153	181623	71.15	ug/mL	9
43)	2,4-Dinitrophenol	18.68	184	28083	65.49	ug/mL#	7
44)	4-Nitrophenol	19.15	109	28931	70.14	ug/mL	9
46)	2,4-Dinitrotoluene	19.97	165	198956	68.45	ug/mL#	3
47)	Diethylphthalate	20.07	149	146204	40.69	ug/mL	9
48)	Fluorene	19.97	166	215505	68.74	ug/mL	9
49)	4-Chlorophenyl-phenylether	20.15	204	102158	68.80	ug/mL	9
51)	4-Nitroaniline	19.97	138	2275	3.32	ug/mL#	2
52)	4,6-Dinitro-2-methylphenol	20.32	198	38003	70.01	ug/mL	10
53)	n-Nitrosodiphenylamine	20.57	169	120181	57.40	ug/mL#	
55)	1,2-Diphenylhydrazine (as	20.63	77	326407	65.42	ug/ml	10
56)	4-Bromophenyl-phenylether	21.61	248	61314	72.23	ug/mL	9
57)	Hexachlorobenzene	21.59	284	72489	81.98	ug/mL#	8
58)	Pentachlorophenol	22.31	266	52714	93.08	ug/mL	9
59)	Phenanthrene	22.87	178	336724	74.69	ug/mL	9
60)	Anthracene	22.87	178	345412	83.11	ug/mL	9
62)	Di-n-butylphthalate	25.16	149	472693	71.44	ug/mL	10
63)	Fluoranthene	27.13	202	375315	88.04	ug/mL	9
65)	Benzidine	27.15	184	42901	25.67	ug/ml	10
66)	Pyrene	27.13	202	374572	65.30	ug/mL#	8
68)	Butylbenzylphthalate	29.69	149	211242	57.51	ug/mL	9
69)	Benzo[a]anthracene	30.87	228	336521	58.13	ug/mL	10
70)	3,3'-Dichlorobenzidine	31.03	252	109427	74.14	ug/mL#	9
71)	Chrysene	30.87	228	341333	106.01	ug/mL	9
72)	bis(2-Ethylhexyl)phthalate	31.66	149	327633	62.88	ug/mL	9
74)	Di-n-octylphthalate	33.57	149	500739	59.16	ug/mL	9
75)	Benzo[b]fluoranthene	33.94	252	196612	47.97	ug/mL	9
76)	Benzo[k]fluoranthene	33.94	252	196612	99.43	ug/mL	9
77)	Benzo[a]pyrene	33.94	252	182768	89.67	ug/mL	10
78)	Indeno[1,2,3-cd]pyrene	37.41	276	28662	38.13	ug/mL#	7
79)	Dibenz[a,h]anthracene	37.53	278	36034	49.77	ug/mL#	9
80)	Benzo[g,h,i]perylene	37.41	276	28604	48.40	ug/mL	9

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data2\b7827.d Vial: 26
Acq On : 4 Jun 95 6:15 am Operator: SCOTTV
Sample : 22654MSD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jun 13 13:07 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 10:06:36 1995
Response via : Multiple Level Calibration



Spike Recovery and RPD Summary Report - WATER

Method : C:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 10:06:36 1995
Response via : Initial Calibration

Non-Spiked Sample: B7741.D

	Spike Sample	Spike Duplicate Sample
File ID :	B7828.D	B7829.D
Sample :	22659MS.....	Converted from RTE data file >B7828::D5

Compound	Sample Conc	Spike Added	Spike Res	Dup Res	Spike %Rec	Dup %Rec	RPD	QC Limits RPD	QC Limits % Rec
N-nitrosodimethylami	0.0	100	83	85	83	85	1	100	1-300
Phenol	0.0	100	65	65	65	65	0	23	5-112
bis(2-Chloroethyl)et	0.0	100	66	64	66	64	2	55	12-158
2-Chlorophenol	0.0	100	65	65	65	65	1	29	23-134
1,3-Dichlorobenzene	0.0	100	48	48	48	48	1	42	1-172
1,4-Dichlorobenzene	0.0	100	49	50	49	50	2	32	20-124
1,2-Dichlorobenzene	0.0	100	52	53	52	53	1	31	32-129
bis(2-chloroisopropy	0.0	100	118	119	118	119	1	46	36-166
N-Nitroso-Di-n-propy	0.0	100	67	65	67	65	3	55	1-230
Hexachloroethane	0.0	100	51	42	51	42	19	25	40-113
Nitrobenzene	0.1	100	62	66	62	66	6	39	35-180
Isophorone	0.0	100	60	63	60	63	5	63	21-196
2-Nitrophenol	0.0	100	63	65	63	65	4	35	29-182
2,4-Dimethylphenol	0.0	100	34	32	34	32	7	26	32-119
bis(2-Chloroethoxy)m	0.0	100	47	50	47	50	6	35	33-184
2,4-Dichlorophenol	0.0	100	68	68	68	68	1	26	39-135
1,2,4-Trichlorobenze	0.0	100	57	60	57	60	6	28	44-142
Naphthalene	0.0	100	63	66	63	66	4	30	21-133
Hexachlorobutadiene	0.0	100	50	52	50	52	4	26	24-116
4-Chloro-3-methylphe	0.0	100	63	63	63	63	1	37	22-147
2-Chloronaphthalene	0.0	100	67	70	67	70	4	13	60-118
2,4,6-Trichloropheno	0.0	100	55	54	55	54	3	32	37-144
Dimethylphthalate	0.0	100	38	34	38	34	11	23	1-112
Acenaphthylene	0.0	100	52	52	52	52	0	40	33-145
2,6-Dinitrotoluene	0.0	100	76	74	76	74	3	30	50-158
Acenaphthene	0.0	100	75	76	75	76	1	28	47-145
2,4-Dinitrophenol	0.0	100	67	66	67	66	2	50	1-191
4-Nitrophenol	0.6	100	79	80	79	79	0	47	1-132
2,4-Dinitrotoluene	0.0	100	71	74	71	74	3	22	39-139
Diethylphthalate	0.0	100	49	48	49	48	2	27	1-114
Fluorene	0.7	100	71	74	70	73	3	21	59-121
4-Chlorophenyl-pheny	0.0	100	70	74	70	74	5	33	25-158
4,6-Dinitro-2-methyl	0.0	100	75	72	75	72	4	93	1-181
4-Bromophenyl-phenyl	0.0	100	73	76	73	76	3	23	53-127
Hexachlorobenzene	0.0	100	84	84	84	84	1	25	1-152
Pentachlorophenol	0.0	100	90	92	90	92	2	49	14-176
Phenanthrene	0.0	100	79	76	79	76	3	21	54-120
Anthracene	0.0	100	88	84	88	84	5	32	52-115
Di-n-butylphthalate	0.1	100	80	79	80	79	1	17	1-118
Fluoranthene	0.0	100	96	96	96	96	0	33	26-137
Pyrene	0.0	100	67	68	67	68	2	25	52-115
Butylbenzylphthalate	0.2	100	67	68	67	67	0	23	1-152
Benzo[a]anthracene	0.1	100	65	64	65	64	1	28	33-143
3,3'-Dichlorobenzidi	0.0	100	20	21	20	21	46	71	1-262

Chrysene	0.1	100	117	117	117	117	0	48	17-168
bis(2-Ethylhexyl)pht	0.4	100	76	74	75	73	3	41	8-158
Di-n-octylphthalate	0.0	100	65	68	65	68	6	31	4-146
Benzo[b]fluoranthene	0.0	100	52	51	52	51	2	39	24-159
Benzo[k]fluoranthene	0.1	100	108	106	108	106	2	32	11-162
Benzo[a]pyrene	0.1	100	104	103	104	102	2	39	17-163
Indeno[1,2,3-cd]pyre	0.0	100	42	39	42	39	8	45	1-171
Dibenz[a,h]anthracen	0.0	100	52	48	52	48	8	70	1-227
Benzo[g,h,i]perylene	0.0	100	53	49	53	49	9	59	1-219

BNACLP.M Tue Jun 13 13:39:34 1995 BNA

Quantitation Report

Data File : c:\hpchem\1\data2\b7828.d Vial: 27
Acq On : 4 Jun 95 7:04 am Operator: SCOTTV
Sample : 22659MS..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jun 13 13:36 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 10:06:36 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(M
1) 1,4-Dichlorobenzene-d4	9.20	152	28616	40.00	ug/mL	0.
17) Naphthalene-d8	12.94	136	119812	40.00	ug/mL	0.
32) Acenaphthene-d10	18.26	164	81829	40.00	ug/mL	0.
50) Phenanthrene-d10	22.77	188	135678	40.00	ug/ml	0.
64) Chrysene-d12	30.90	240	133913	40.00	ug/mL	0.
73) Perylene-d12	34.89	264	64806	40.00	ug/mL	0.
System Monitoring Compounds						%Recove
2) 2-Fluorophenol	5.64	112	38324	47.35	ug/mL	47.
3) Phenol-d5	8.55	99	92701	69.20	ug/mL	69.
18) Nitrobenzene-d5	10.88	82	102452	75.05	ug/mL	75.
36) 2-Fluorobiphenyl	16.41	172	163275	66.52	ug/mL	66.
54) 2,4,6-Tribromophenol	20.71	330	33951	92.66	ug/mL	92.
67) Terphenyl-d14	27.93	244	283818	79.85	ug/mL	79.
Target Compounds						Qvalu
4) N-nitrosodimethylamine	2.41	74	34539	83.50	ug/mlm	
5) Pyridine	1.54	79	2567	8.38	ug/ml	1
6) Phenol	8.59	94	77522	64.98	ug/mL	1
7) bis(2-Chloroethyl)ether	12.59	93	95053	65.59	ug/mL	
8) 2-Chlorophenol	8.61	128	59112	65.10	ug/mL	
9) 1,3-Dichlorobenzene	9.01	146	47356	47.79	ug/mL	
10) 1,4-Dichlorobenzene	9.26	146	50047	48.96	ug/mL	
11) 1,2-Dichlorobenzene	9.65	146	50447	51.95	ug/mL	
13) bis(2-chloroisopropyl)ethe	10.28	45	157284	117.66	ug/mL#	6
15) N-Nitroso-Di-n-propylamine	10.67	70	64689	67.19	ug/mL	
16) Hexachloroethane	10.61	117	26874	50.94	ug/mLm	
19) Nitrobenzene	10.94	77	78667	61.95	ug/mL#	7
20) Isophorone	11.75	82	159932	59.77	ug/mL	
21) 2-Nitrophenol	11.88	139	39464	62.63	ug/mL	8
22) 2,4-Dimethylphenol	12.33	107	40415	34.28	ug/mLm	
23) bis(2-Chloroethoxy)methane	8.70	93	64392	47.13	ug/mL	
24) 2,4-Dichlorophenol	12.67	162	60633	67.90	ug/mL	
25) 1,2,4-Trichlorobenzene	12.83	180	53810	56.69	ug/mL	
26) Naphthalene	13.00	128	185978	63.43	ug/mL#	
27) 4-Chloroaniline	13.00	127	23324	16.82	ug/mL#	
28) Hexachlorobutadiene	13.52	225	27583	49.77	ug/mL	
29) 4-Chloro-3-methylphenol	15.04	107	71878	62.51	ug/mL	
30) 2-Chloronaphthalene	16.58	162	140364	67.32	ug/ml	
31) 2-Methylnaphthalene	15.04	142	56186	23.87	ug/mL#	1
34) 2,4,6-Trichlorophenol	16.12	196	47014	55.32	ug/mL	
35) 2,4,5-Trichlorophenol	16.12	196	47014	70.91	ug/mL	
37) 2-Nitroaniline	17.93	65	3809	3.39	ug/mL#	10
38) Dimethylphthalate	17.83	163	100094	37.65	ug/mL	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data2\b7828.d Vial: 27
Acq On : 4 Jun 95 7:04 am Operator: SCOTTV
Sample : 22659MS..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jun 13 13:36 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 10:06:36 1995
Response via : Multiple Level Calibration

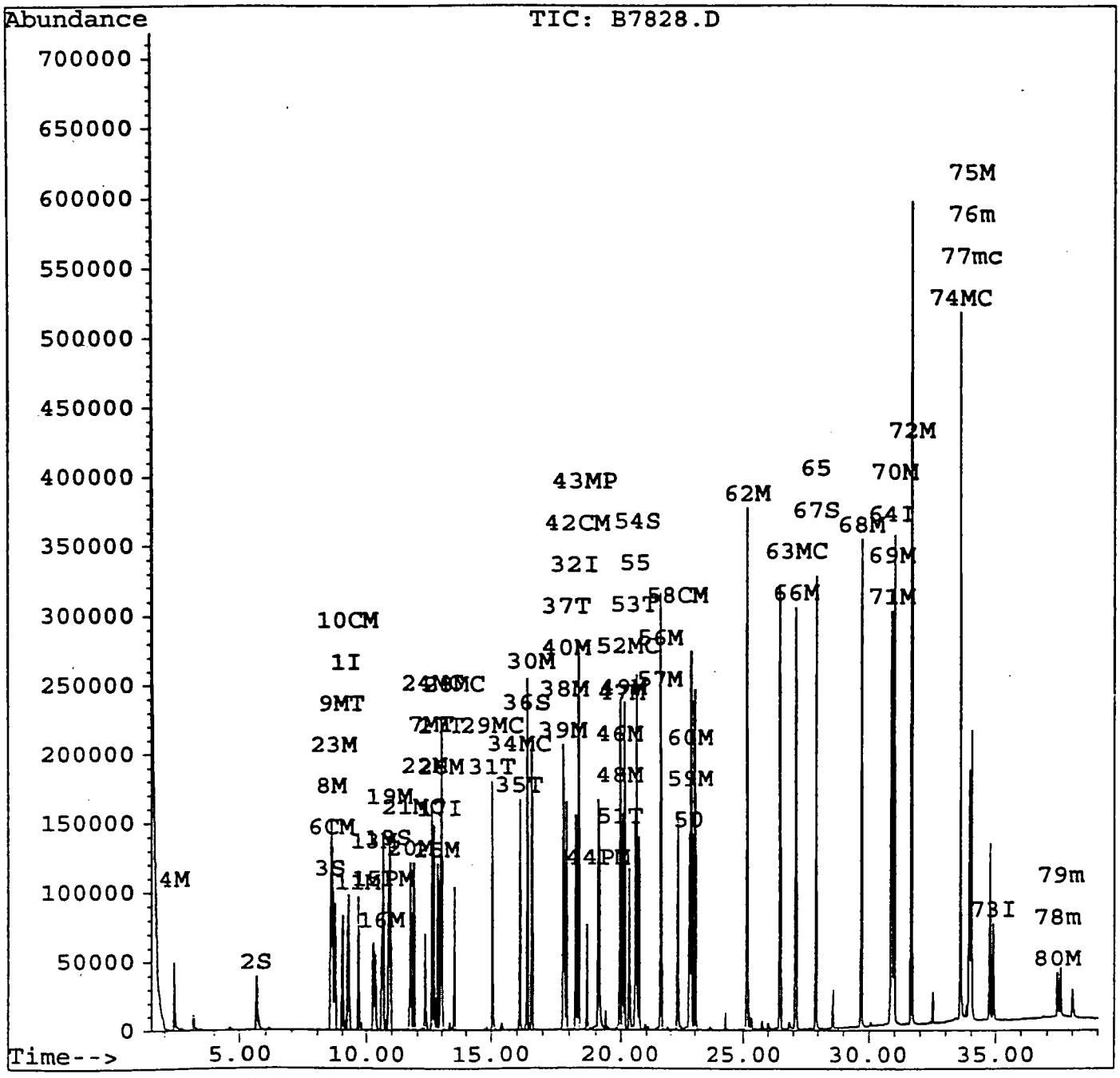
Compound	R.T.	QIon	Response	Conc	Unit	Qval
39) Acenaphthylene	17.80	152	181282	51.99	ug/mL	
40) 2,6-Dinitrotoluene	17.93	165	48485	76.40	ug/mL	
42) Acenaphthene	18.37	153	158243	75.46	ug/mL	
43) 2,4-Dinitrophenol	18.66	184	23597	66.99	ug/mL	
44) 4-Nitrophenol	19.14	109	26892	79.36	ug/mL	
46) 2,4-Dinitrotoluene	19.97	165	169896	71.16	ug/mL#	
47) Diethylphthalate	20.07	149	145441	49.27	ug/mL	
48) Fluorene	19.97	166	183372	71.21	ug/mL	
49) 4-Chlorophenyl-phenylether	20.15	204	85539	70.12	ug/mL	
51) 4-Nitroaniline	19.97	138	1902	3.37	ug/mL#	
52) 4,6-Dinitro-2-methylphenol	20.32	198	33506	74.96	ug/mL	1
53) n-Nitrosodiphenylamine	20.55	169	89532	51.93	ug/mL#	
55) 1,2-Diphenylhydrazine (as	20.63	77	282944	68.87	ug/ml	1
56) 4-Bromophenyl-phenylether	21.61	248	51088	73.08	ug/mL	
57) Hexachlorobenzene	21.59	284	60888	83.62	ug/mL#	
58) Pentachlorophenol	22.31	266	42101	90.27	ug/mL	
59) Phenanthrene	22.85	178	292342	78.75	ug/mL	
60) Anthracene	22.85	178	302620	88.42	ug/mL	
62) Di-n-butylphthalate	25.16	149	437772	80.34	ug/mL	
63) Fluoranthene	27.12	202	337156	96.04	ug/mL	
65) Benzidine	27.93	184	3699	2.53	ug/ml	1
66) Pyrene	27.12	202	336460	66.93	ug/mL#	
68) Butylbenzylphthalate	29.70	149	217209	67.48	ug/mL	
69) Benzo[a]anthracene	30.88	228	328642	64.77	ug/mL	
70) 3,3'-Dichlorobenzidine	31.00	252	25385	19.62	ug/mLm	
71) Chrysene	30.88	228	330668	117.19	ug/mL	
72) bis(2-Ethylhexyl)phthalate	31.67	149	345135	75.58	ug/mL	1
74) Di-n-octylphthalate	33.58	149	533567	64.65	ug/mL	1
75) Benzo[b]fluoranthene	34.03	252	207506	51.92	ug/mL	
76) Benzo[k]fluoranthene	34.03	252	207506	107.62	ug/mL	
77) Benzo[a]pyrene	34.03	252	207506	104.42	ug/mL	
78) Indeno[1,2,3-cd]pyrene	37.42	276	30768	41.98	ug/mL#	
79) Dibenz[a,h]anthracene	37.54	278	36991	52.40	ug/mL	
80) Benzo[g,h,i]perylene	37.42	276	30768	53.39	ug/mL	

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data2\b7828.d Vial: 27
Acq On : 4 Jun 95 7:04 am Operator: SCOTTV
Sample : 22659MS..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jun 13 13:36 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 10:06:36 1995
Response via : Multiple Level Calibration



Quantitation Report

Data File : c:\hpchem\1\data2\b7829.d Vial: 28
Acq On : 4 Jun 95 7:54 am Operator: SCOTTV
Sample : 22659MSD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jun 13 13:38 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 10:06:36 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(M:
1) 1,4-Dichlorobenzene-d4	9.21	152	30456	40.00	ug/mL	0.1
17) Naphthalene-d8	12.94	136	121585	40.00	ug/mL	0.1
32) Acenaphthene-d10	18.26	164	84364	40.00	ug/mL	0.2
50) Phenanthrene-d10	22.77	188	145091	40.00	ug/ml	0.2
64) Chrysene-d12	30.90	240	140877	40.00	ug/mL	0.3
73) Perylene-d12	34.90	264	65773	40.00	ug/mL	0.3
System Monitoring Compounds						%Recover
2) 2-Fluorophenol	5.62	112	46772	54.29	ug/mL	54.2
3) Phenol-d5	8.55	99	107330	75.28	ug/mL	75.2
18) Nitrobenzene-d5	10.88	82	108636	78.42	ug/mL	78.4
36) 2-Fluorobiphenyl	16.41	172	165709	65.48	ug/mL	65.4
54) 2,4,6-Tribromophenol	20.71	330	39093	99.77	ug/mL	99.7
67) Terphenyl-d14	27.93	244	291732	78.02	ug/mL	78.0
Target Compounds						Qvalu
4) N-nitrosodimethylamine	2.41	74	37285	84.69	ug/mlm	
5) Pyridine	1.56	79	2539	7.79	ug/ml	10
6) Phenol	8.59	94	82228	64.76	ug/mL	10
7) bis(2-Chloroethyl)ether	12.60	93	99103	64.25	ug/mL	9
8) 2-Chlorophenol	8.61	128	63241	65.44	ug/mL	9
9) 1,3-Dichlorobenzene	9.01	146	51022	48.38	ug/mL	9
10) 1,4-Dichlorobenzene	9.26	146	54214	49.83	ug/mL	9
11) 1,2-Dichlorobenzene	9.65	146	54332	52.57	ug/mL	9
13) bis(2-chloroisopropyl)ethe	10.28	45	169096	118.86	ug/mL#	6
15) N-Nitroso-Di-n-propylamine	10.67	70	66550	64.95	ug/mL	9
16) Hexachloroethane	10.61	117	23688	42.19	ug/mL	9
19) Nitrobenzene	10.94	77	84987	65.95	ug/mL#	7
20) Isophorone	11.75	82	169858	62.55	ug/mL	9
21) 2-Nitrophenol	11.88	139	41660	65.15	ug/mL	8
22) 2,4-Dimethylphenol	12.33	107	38383	32.08	ug/mLm	
23) bis(2-Chloroethoxy)methane	8.70	93	69472	50.11	ug/mL	10
24) 2,4-Dichlorophenol	12.67	162	61214	67.55	ug/mL	9
25) 1,2,4-Trichlorobenzene	12.83	180	58047	60.26	ug/mL	9
26) Naphthalene	13.00	128	195977	65.87	ug/mL#	9
27) 4-Chloroaniline	13.00	127	24740	17.58	ug/mL#	1
28) Hexachlorobutadiene	13.50	225	28998	51.56	ug/mL	9
29) 4-Chloro-3-methylphenol	15.04	107	73983	63.40	ug/mL	9
30) 2-Chloronaphthalene	16.58	162	148187	70.04	ug/ml	9
31) 2-Methylnaphthalene	15.04	142	56674	23.73	ug/mL#	1
34) 2,4,6-Trichlorophenol	16.12	196	47065	53.72	ug/mL	9
35) 2,4,5-Trichlorophenol	16.12	196	47065	68.86	ug/mL	9
37) 2-Nitroaniline	17.93	65	3818	3.30	ug/mL#	10
38) Dimethylphthalate	17.83	163	92844	33.88	ug/mL	9

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data2\b7829.d Vial: 28
Acq On : 4 Jun 95 7:54 am Operator: SCOTTV
Sample : 22659MSD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jun 13 13:38 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 10:06:36 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalu
39)	Acenaphthylene	17.80	152	187395	52.13	ug/mL	9
40)	2,6-Dinitrotoluene	17.93	165	48705	74.44	ug/mL	8
42)	Acenaphthene	18.37	153	164599	76.13	ug/mL	9
43)	2,4-Dinitrophenol	18.66	184	23948	65.95	ug/mL	9
44)	4-Nitrophenol	19.15	109	27839	79.68	ug/mL	9
46)	2,4-Dinitrotoluene	19.95	165	181124	73.58	ug/mL#	3
47)	Diethylphthalate	20.07	149	147246	48.39	ug/mL	9
48)	Fluorene	19.95	166	195315	73.56	ug/mL	10
49)	4-Chlorophenyl-phenylether	20.15	204	92973	73.93	ug/mL	9
51)	4-Nitroaniline	19.97	138	2140	3.55	ug/mL#	2
52)	4,6-Dinitro-2-methylphenol	20.32	198	34580	72.34	ug/mL	10
53)	n-Nitrosodiphenylamine	20.55	169	103444	56.10	ug/mL#	
55)	1,2-Diphenylhydrazine (as	20.63	77	304015	69.20	ug/ml	10
56)	4-Bromophenyl-phenylether	21.61	248	56539	75.63	ug/mL	9
57)	Hexachlorobenzene	21.59	284	65629	84.28	ug/mL#	7
58)	Pentachlorophenol	22.31	266	45874	91.98	ug/mL	9
59)	Phenanthrene	22.85	178	302063	76.09	ug/mL	10
60)	Anthracene	22.85	178	307177	83.93	ug/mL	9
62)	Di-n-butylphthalate	25.16	149	462525	79.38	ug/mL	10
63)	Fluoranthene	27.12	202	360324	95.98	ug/mL	9
65)	Benzidine	27.93	184	3521	2.29	ug/ml	10
66)	Pyrene	27.12	202	359722	68.02	ug/mL#	8
68)	Butylbenzylphthalate	29.69	149	229144	67.66	ug/mL	9
69)	Benzo[a]anthracene	30.88	228	343280	64.31	ug/mL	9
70)	3,3'-Dichlorobenzidine	31.00	252	42496	31.23	ug/mLm	9
71)	Chrysene	30.88	228	346867	116.85	ug/mL	9
72)	bis(2-Ethylhexyl)phthalate	31.68	149	354135	73.72	ug/mL	9
74)	Di-n-octylphthalate	33.58	149	572669	68.37	ug/mL	9
75)	Benzo[b]fluoranthene	34.03	252	206742	50.97	ug/mL	9
76)	Benzo[k]fluoranthene	34.03	252	206742	105.65	ug/mL	9
77)	Benzo[a]pyrene	34.03	252	206742	102.50	ug/mL	9
78)	Indeno[1,2,3-cd]pyrene	37.42	276	28894	38.84	ug/mL	8
79)	Dibenz[a,h]anthracene	37.52	278	34681	48.41	ug/mL#	8
80)	Benzo[g,h,i]perylene	37.42	276	28610	48.92	ug/mL	10

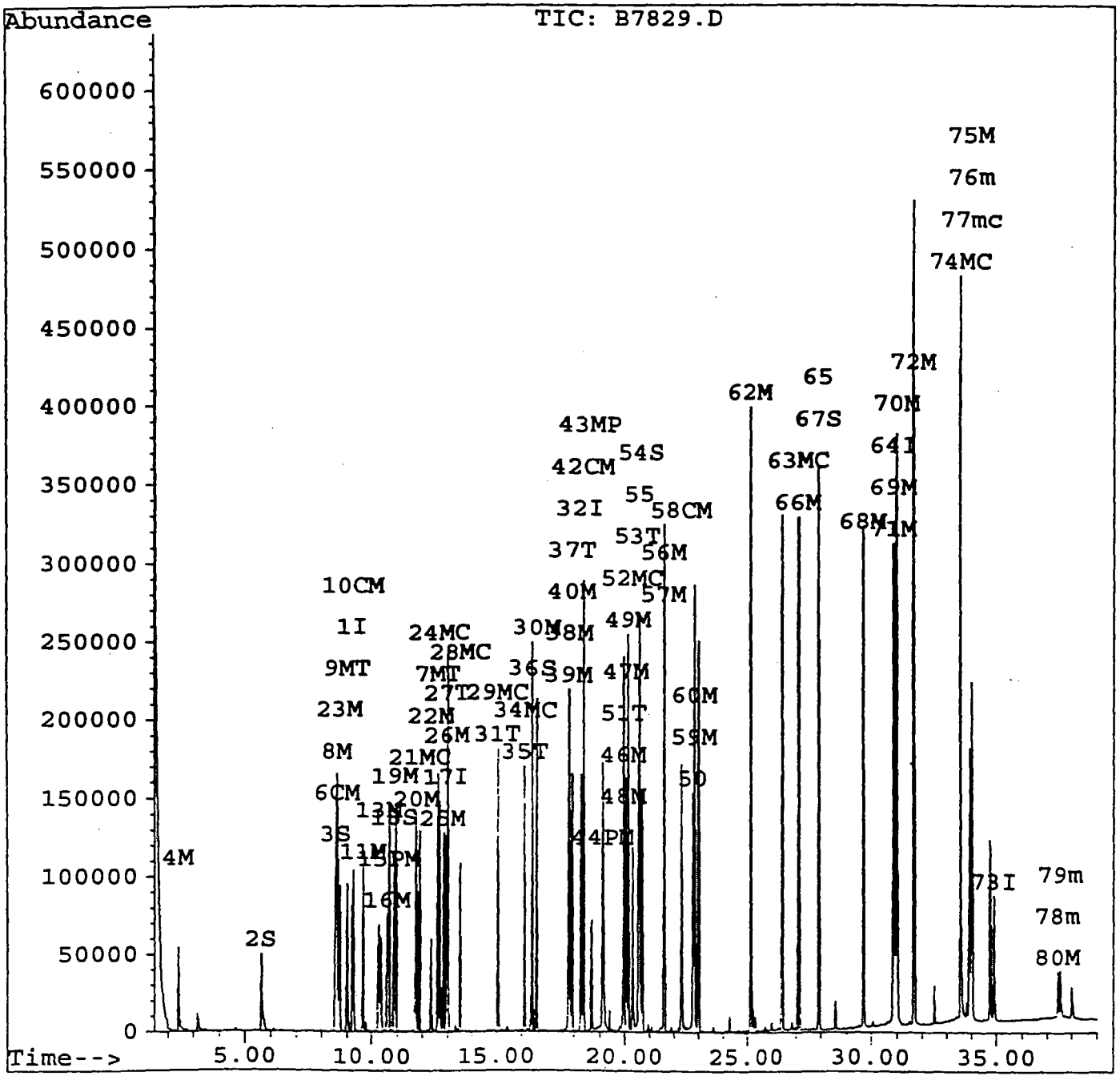
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data2\b7829.d
Acq On : 4 Jun 95 7:54 am
Sample : 22659MSD.....
Misc :
Quant Time: Jun 13 13:38 1995

Vial: 28
Operator: SCOTTV
Converted from RTE d Inst : ABNA
BT Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 10:06:36 1995
Response via : Multiple Level Calibration



b7829.d BNACLP.M

New Jersey Department of Environmental Protection
Division of Water Resources
Bureau of Underground Storage Tanks
CN-029, Trenton, New Jersey 08625

LABORATORY AUTHENTICATION STATEMENT

I certify under penalty of law, where applicable, this laboratory meets the Laboratory Performance Standards and Quality Control requirements specified in N.J.A.C. 7:18, 40 CFR Part 136 for Water and Wastewater Analyses and SW 846 for Solid Waste Analyses. I have personally examined and am familiar with the information contained in this report, and based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate, complete, and meets the standards specified in N.J.A.C. 7:18, 40 CFR Part 136, and/or SW 846. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment.

Paul Lomia

Laboratory Manager (as defined in N.J.A.C. 7:18)