United States Army
Fort Monmouth, New Jersey

Underground Storage Tank Site Investigation Report

Building 697

NJDEP UST Registration No. 0081533-194, -195, -196

Volume 1 of 3
Text, Tables, Figures, and Appendices A through C

February 1996

SMITH
ENVIRONMENTAL TECHNOLOGIES CORPORATION

UNDERGROUND STORAGE TANKS
SITE INVESTIGATION REPORT

BUILDING 697
NJDEP UST REGISTRATION NO. 0081533-194, -195, -196

FEBRUARY 1996

PROJECT NO.: 09-5004-01
CONTRACT NO.: DACA51-94-D-0014

PREPARED FOR:

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

PREPARED BY:

SMITH ENVIRONMENTAL TECHNOLOGIES CORPORATION
BROMLEY CORPORATE CENTER
THREE TERRI LANE
BURLINGTON, NEW JERSEY 08016

679R.DOC

SMITH
ENVIRONMENTAL TECHNOLOGIES CORPORATION

Engineering • Consulting • Remediation • Construction

DEPARTMENT OF THE ARMY
Headquarters, U.S. Army Garrison Fort Monmouth
Fort Monmouth, New Jersey 07703 - 5101

FEB 1996

REPLY TO
ATTENTION OF

Directorate of Public Works

N.J. Dept of Environmental Protection
Division of Responsible Party Site Remediation
Bureau of Federal Case Management- CN029
401 East State Street - 5th Floor
Trenton, N.J. 08625-0028
Attn: Ian Curtis - Case Manager

Dear Mr. Curtis:

Enclosed please find UST Closure and Site Investigation Reports for the following Fort Monmouth Sites:

Building 108 - 0090010-7	Building 411 - 0090010-28	Building 682 - 0081533-106
Building 114 - 0081533-1	Building 423 - 0090010-39	Building 161 - 0090010- 14
Building 443 - 0090010-49	Building 702 - 0081533-114	Building 167 - 0090010-18
Building 563 - 0081533-82	Building 789 - 0081533-126	Building 206 - 0081533-4
Building 608 - 0081533-86	Building 1106 - 0081533-166	Building 210 - 0081533-8
Building 620 - 0081533-93	Building 1122 - 0081533-199	Building 293 - 0081533-67
Building 625 - 0081533-96	Building 3027 - 0192486-28	Building 296 - 0081533-69
Building 659 - 0081533-101	Building 9002 - 0192468-1	Building 9017 - 0090029-6
Building 9049 - 0090029-20	Building 697 - 0081533-194	Building 2500 - 0081515-52
Building 9090 - 0090029-30	thru 196	thru 56

If the information provided in this enclosure is inadequate or you require further information with regard to these documents please contact Mr. Appleby at (908) 532-6224.

Sincerely,

James Ott
Director of Public Works

SMITH

TABLE OF CONTENTS

EXECUTIVE SUMMARY iv

1.0 UNDERGROUND STORAGE TANK DECOMMISSIONING ACTIVITIES 1

1.1 OVERVIEW 1
1.2 SITE DESCRIPTION 1

1.2.1 Geological/Hydrogeological Setting 1

2.0 SITE INVESTIGATION ACTIVITIES 4

2.1 OVERVIEW 4
2.2 FIELD SCREENING/MONITORING 4
2.3 SOIL SAMPLING 4
2.4 GROUNDWATER SAMPLING 5

2.4.1 Monitoring Well Instailation 5

3.0 CONCLUSIONS AND RECOMMENDATIONS 7

3.1 SOIL SAMPLING RESULTS 7
3.2 GROUNDWATER SAMPLING RESULTS 7
3.3 CONCLUSIONS AND RECOMMENDATIONS 8

Following Page No.

TABLES

Table 1 Summary of Sampling Activities 5
Table 2 Post-Excavation Soil Sampling Results 7
Table 3 Groundwater Sampling Results 7

FIGURES

Figure 1 Site Location Map 1
Figure 2 Site Map 1
Figure 3 Soil Sampling Results 7
Figure 4 Groundwater Sampling Results 7

SMITH

TABLE OF CONTENTS (CONTINUED)

APPENDICES

Appendix A Certifications
Appendix B NJDEP Well Permit and Well Construction Log
Appendix C Soil Analytical Data Package
Appendix D Groundwater Analytical Data Package

SMITH

EXECUTIVE SUMMARY

UST Closure

On June 1, 1990, three steel underground storage tanks (USTs) were closed by removal at U.S. Army Fort Monmouth, Fort Monmouth, New Jersey. The USTs, New Jersey Department of Environmental Protection (NJDEP) Registration Nos. 0081533-194, 195, and 196, were located immediately adjacent to Building 697 in the Main Post area of U.S. Army, Fort Monmouth. The fill ports were reported to have been immediately above the USTs. UST Nos. 0081533-194, 195, and 196 were 1,000-gallon waste oil USTs.

The USTs were closed prior to publication of the September *1990 Regulations Implementing the New Jersey Underground Storage of Hazardous Substances Act* (N.J.S.A. 58:10A). As such, they were closed without a NJDEP-approved closure plan or site assessment. No documentation is available regarding the exact former locations of the USTs or of their condition upon removal.

This document reports the site assessment activities and results; it does not describe the UST closure activities.

Site Assessment - Soil

In order to achieve technical consistency in its UST closure program, the U.S. Army conducted a site assessment at the UST closure site at Building 697. The site assessment was initiated on November 24, 1992.

During the site assessment, the U.S. Army returned to the assumed location of the backfilled UST closure site. Six soil borings were completed, and a soil sample was collected from each boring immediately beneath what appeared to be clean backfilled material. The soil samples were collected and analyzed in accordance with the NJDEP *Field Sampling Procedures Manual* dated May 1992. The samples, designated as A, B, C, D, E, and E-1, were analyzed for total petroleum hydrocarbons (TPHC).

On September 13, 1994, a soil sample was collected from the borehole drilled for the installation of monitoring well MW-1. The sample was collected from 3.0 to 4.0 feet below grade and analyzed for volatile organic compounds with xylene plus a library search for 10 tentatively identified compounds (VOCs+10).

Findings - Soil

The soil samples collected on November 24, 1992 (A, B, C, D, E, and E-1) contained TPHC concentrations ranging from non-detectable to 457.0 milligrams per kilogram (mg/kg). The sample collected on September 13, 1994 contained either non-detectable concentrations of VOCs

or concentrations below the corresponding NJDEP residential direct contact and impact to groundwater soil cleanup criteria (N.J.A.C. 7:26D and revisions dated February 3, 1994).

Site Restoration

The UST closure excavation was backfilled immediately following removal of the USTs in June 1990.

Site Assessment - Groundwater

Due to the relatively shallow depth to ground water and the amount of elapsed time between the UST closures and site assessment, one shallow overburden monitoring well (MW-1) was installed at the Building 697 area on September 13, 1994. It was installed approximately 12 feet west of Building 697 in the assumed downgradient direction from the former UST excavation. It was screened in the 2 1/2- to 17 1/2-foot depth interval, across the water table, which is approximately 12 feet below grade surface.

On May 25, 1995, MW-1 was sampled for VOCs+10, methyl tertiary-butyl ether (MTBE), tertiary butyl alcohol (TBA), semivolatile organic compounds plus 15 tentatively identified compounds (BNCs+15), the target compound list (TCL), which includes VOCs, BNCs, and pesticides/cyanide, and the target analyte list (TAL), which includes metals and cyanide. Sampling and analysis were performed in accordance with the NJDEP *Field Sampling Procedures Manual*, and the *Technical Requirements for Site Remediation*, N.J.A.C. 7:26E (*Technical Requirements*).

On June 16, 1995, MW-1 was sampled for VOCs+10, BNCs+15, TCL, and TAL.

Findings - Groundwater

The sample collected from MW-1 on May 25, 1995 contained a tetrachloroethene concentration of 1.0 ug/l. Tetrachloroethene was compared to the groundwater quality criteria for tetrachloroethylene of 1.0 ug/l. Tetrachloroethylene is a synonym for tetrachloroethene. The pesticide, chlordane, was detected in MW-1 at a concentration of 1.3 ug/l. This exceeded the groundwater quality criteria for chlordane of 0.5 ug/l. The sample also contained a methylene chloride concentration of 1.3 ug/l, which is less than the GWQC for methylene chloride of 2 ug/l. All other ground water results were below detection or the applicable GWQC.

The trip blank collected on May 25, 1995 contained a methylene chloride concentration of 1.5 ug/l, a toluene concentration of 1.0 ug/l, a 2-chlorotoluene concentration of 7.7 ug/l, a 4-chlorotoluene concentration of 2.5 ug/l, and a 1,4-dichlorobenzene of 0.6 ug/l. The field blank contained a methylene chloride concentration of 1.6 ug/l, a toluene concentration of 1.6 ug/l, a 2-chlorotoluene concentration of 7.7 ug/l, a 4-chlorotoluene concentration of 6.4 ug/l, and a 1,4-

dichlorobenzene of 0.6 ug/l. No other compounds were detected in MW-1, the trip blank, or the field blank.

The sample collected from MW-1 on June 16, 1995, contained a 1,2-dichloroethane concentration of 7.8 ug/l. This exceeded the groundwater quality criteria for 1,2-dichloroethane of 2.0 ug/l. The sample also contained a phenol concentration of 3.0 ug/l, and a chlordane concentration of 1.6 ug, which exceeded the GWQC for chlordane of 0.5 ug/l. All other ground water results were below detection or the applicable GWQC.

The trip blank collected on June 16, 1995, contained a chloromethane concentration of 1.0 ug/l, and a methylene chloride concentration of 0.8 ug/l. The sample also contained a 1,2-dichloroethane concentration of 8.4 ug/l. The field blank contained a chloromethane concentration of 0.9 ug/l, a methylene chloride concentration of 0.8 ug/l, and a 1,2-dichloroethane concentration of 7.3 ug/l. The field blank also contained a phenol concentration of 3.0 ug/l. No other compounds were detected in MW-1, the trip blank, or the field blank.

No product or sheen was observed in MW-1 on either of the sampling dates. The depth to the water table on May 25, 1995 was 13.16 feet below grade.

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*.

Conclusions and Recommendations

Based on the post-excavation soil sampling results, soils with TPHC concentrations exceeding the NJDEP total organic contaminants criteria of 10,000 mg/kg do not remain in the former location of the USTs. VOCs exceeding the applicable soil cleanup criteria were not detected at sampling location MW-1. However, the soil sampling program conducted at Building 697 will require additional sampling and analysis to meet current *Technical Requirements* (7:26E-2.1(d)) for waste oil USTs.

The *Technical Requirements* specify that, in addition to TPHC, a minimum of 25 percent of post-remediation soil samples collected at a waste oil UST location (and which contain detectable TPHC concentrations) also be analyzed for VO+10, BNC+15, PCBs, and Priority Pollutant metals or EPA Target Analyte List. The sample with the highest TPHC is to be analyzed for the additional parameters. At Building 697, this would be the soil sampling location designated as C (collected from 5.0 to 5.5 feet below grade on November 24, 1992).

Based on the analytical results of the groundwater samples collected on May 25, 1995, and June 16, 1995, groundwater quality at the Building 697 UST closure site exceeds the GWQC for chlordane and is at or slightly below the GWQC for tetrachloroethylene. The ground water

quality at Building 697 complies with the GWQC for all other VOCs, BNCs, TCL, and TAL parameters.

The trace concentrations of methylene chloride detected during both rounds is attributed to sampling and/or analytical interference, based on the detection of methylene chloride, a common source of laboratory interference, in the sampling blanks. Similarly, the 1,2-dichloroethane, chloromethane, and phenol detected during the June 16, 1995 sampling round are attributed to sampling and/or analytical interference due to the detection of these compounds in the sampling blanks.

Additional data collection is recommended for Building 697. A soil sample will be collected from post-excavation soil sampling location C at 5.0 to 5.5 feet below grade, and analyzed for TPHC, VO+10, BNC+15, PCBs, and Priority Pollutant metals or EPA Target Analyte List. Sampling and analytical protocols will conform to the NJDEP *Field Sampling Procedures Manual* dated May 1992 and the *Technical Requirements*. MW-1 will be resampled two additional times, approximately 30 days apart. During both additional sampling rounds, an unfiltered and a field-filtered sample will be collected and analyzed for chlordane. This is to determine if the chlordane previously detected is migrating in the groundwater or is due to interference from sampling-induced turbidity.

Should the recommended sampling indicate that the soil complies with the applicable soil cleanup criteria and the groundwater meets the GWQC for chlordane, no further action is proposed in regard to the closure and site assessment of UST Nos. 0081533-194, -195, and -196.

SMITH

1.0 UNDERGROUND STORAGE TANK DECOMMISSIONING ACTIVITIES

1.1 OVERVIEW

One underground storage tank (UST), New Jersey Department of Environmental Protection (NJDEP) Registration Nos. 0081533-194, -195, and -196, were closed at Building 697 at U.S. Army Fort Monmouth, New Jersey on June 1, 1990. The USTs were closed prior to publication of the September 1990 *Regulations Implementing the New Jersey Underground Storage of Hazardous Substances Act* (N.J.S.A. 58:10A). As such, they were closed without a NJDEP-approved closure plan or site assessment. No documentation is available regarding the exact former locations of the USTs or of their condition upon removal. The fill ports were reported to have been immediately above the USTs.

This report addresses only the site assessment; it does not describe the UST closure procedures. This UST Site Investigation Report has been prepared by Smith Environmental Technologies Corporation, to assist the United States Army Directorate of Public Works (DPW) in complying with NJDEP Bureau of Underground Storage Tanks (NJDEP-BUST) regulations.

The following UST Site Investigation Report was prepared using information required at the time of closure. Where possible, information required by the *Technical Requirements* was included. Conclusions and recommendations, including the results of the soil sampling investigation, are presented in the final section of this report. The Site Assessment Summary is in Appendix A.

1.2 SITE DESCRIPTION

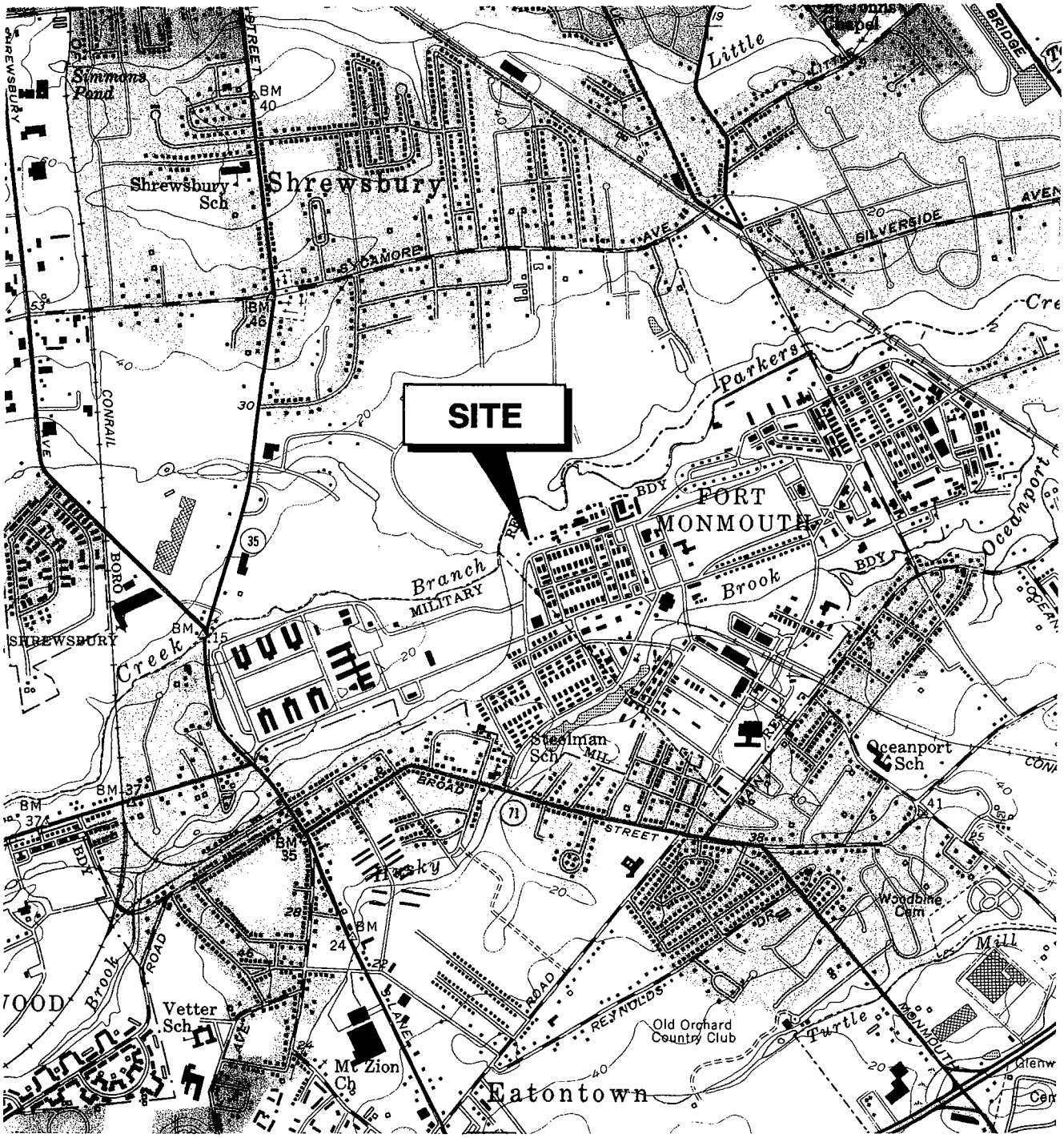
Building 697 is located near the landfill in the northwestern portion of the Main Post area of Fort Monmouth as shown on Figure 1. UST Nos. 0081533-194, -195, and -196 were located approximately 15 feet west of Building 697. A site map is provided on Figure 2. The fill port areas were located directly above the USTs.

1.2.1 Geological/Hydrogeological Setting

The following is a description of the geological/hydrogeological setting of the area surrounding Building 697. Included is 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.

SMITH

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



N

SCALE
0 2000 FT.



QUADRANGLE LOCATION

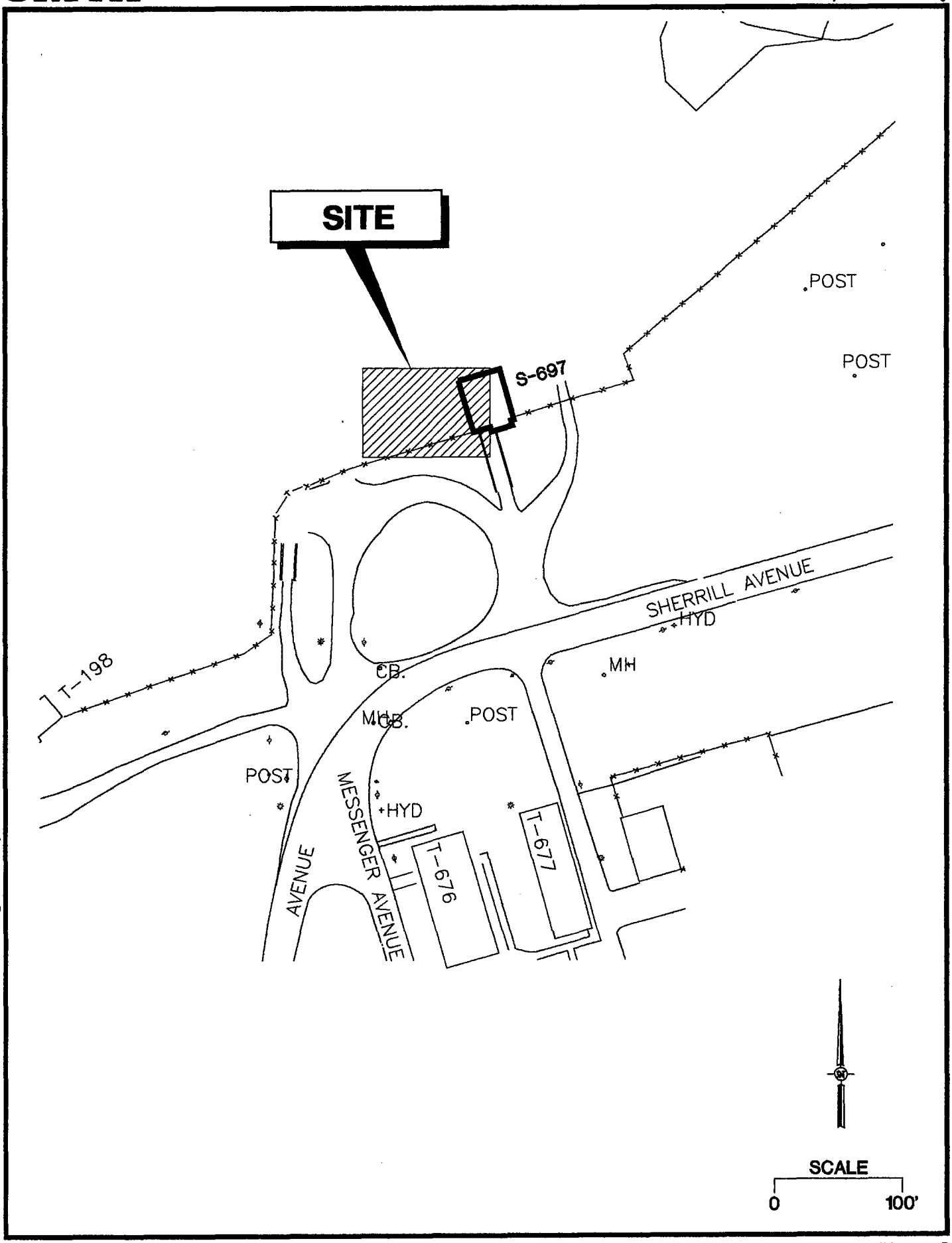
Source: U.S.G.S. Quadrangle Long Branch, N.J.

Project No. 00-5004-01

Figure 1
Site Location Map

SMITH

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



Source: Smith Environmental Technologies Corporation (007)

Project No. 09-5004-01

Figure 2
Building 697
Site Map

SMITH

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 ironoxide encrusted (Minard).

Hydrogeology

The water table aquifer at the Main Post area is identified as part of the "composite confining units", or minor aquifers. The minor aquifers include the Navesink formation, 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.

Six well records for monitor wells installed at locations within the Main Post area in February 1981 were used for reference. The wells were completed to total depths ranging from 20 to 25 feet below ground surface (BGS). Water was encountered at depths ranging from 5 to 12 feet BGS.

The lithologic descriptions for these borings described deposits that were primarily fine to coarse, glauconitic sands, with traces of gravel, silt, and clay. These sediments are part of the Hornerstown Marl, from the Tertiary Period (Paleocene Series, approximately 58 to 66 Ma). According to Jablonski, wells drilled in the Red Bank and Tinton Sands may produce from 2 to 25 gallons per minute (gpm). Some well owners have reported acidic water that requires treatment to remove iron.

Shallow groundwater is locally influenced within the Main Post area by the following factors:

- tidal influence (based on proximity to the Atlantic Ocean, rivers and tributaries)
- topography
- nature of the fill material within the Main Post area
- presence of clay and silt lenses in the natural overburden deposits
- local groundwater recharge areas (i.e., streams, lakes)

Due to the fluvial nature of the overburden deposits (i.e., sand and clay lenses), shallow groundwater flow direction is best determined on a case-by-case basis. This is consistent with lithologies observed in borings installed within the Main Post area, which primarily consisted of fine-to-medium grained sands, with occasional lenses or laminations of gravel silt and/or clay.

SMITH

2.0 SITE INVESTIGATION ACTIVITIES

2.1 OVERVIEW

The Site Investigation was managed and carried out by U.S. Army DPW personnel. The TPHC analysis was performed and reported by U.S. Army Fort Monmouth Laboratory. The VOC analyses were performed and reported by Princeton Testing Laboratory Inc., located in Princeton, New Jersey. Both 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). All records of the Site Investigation activities are maintained by the Fort Monmouth DPW Environmental Office.

The following Parties participated in Site Investigation Activities:

- Subsurface Evaluator: Charles 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 McKee
  Phone Number: (908)532-6147
  NJDEP Company Certification No.: 13461

2.2 FIELD SCREENING/MONITORING

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

2.3 SOIL SAMPLING

In order to achieve technical consistency in its UST closure program, the U.S. Army conducted a site assessment at the UST closure site at Building 697. The site assessment was initiated on November 24, 1992.

During the site assessment, the U.S. Army returned to the assumed location of the backfilled UST closure site. Six soil borings were completed, and a soil sample was collected in each immediately beneath what appeared to be clean backfilled material. The soil samples were collected and analyzed in accordance with the NJDEP *Field Sampling Procedures Manual* dated

May 1992. The samples, designated as A, B, C, D, E, and E-1, were analyzed for total petroleum hydrocarbons (TPHC).

On September 13, 1994, a soil sample was collected from the borehole drilled for the installation of monitoring well MW-1. The sample was collected from 3.0 to 4.0 feet below grade and analyzed for volatile organic compounds plus a library search for 10 tentatively identified compounds.

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

2.4 GROUNDWATER SAMPLING

2.4.1 Monitoring Well Installation

Due to the relatively shallow depth to ground water and the amount of elapsed time between the UST closures and site assessment, one shallow overburden monitoring well (MW-1) was installed at the Building 697 area on September 13, 1994. It was installed approximately 12 feet west of Building 697 in the assumed downgradient direction from the former UST excavation. It was screened in the 2 1/2- to 17 1/2-foot depth interval, across the water table, which is approximately 12 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 permit and a well construction log are presented in Appendix B.

The well was constructed with a 4-inch (ID) PVC riser and a 0.020 slotted PVC well screen. A silica sand pack was installed in the annulus between the borehole and the screen. The sand pack was extended approximately 1 foot above the top of the well 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 6 inched bgs. The well was secured with a water-tight, steel protective casing with a stickup that is approximately 2.5 feet above ground surface. The steel protective casing 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.

TABLE 1

SUMMARY OF SAMPLING ACTIVITIES
BUILDING 697, MAIN POST
FORT MONMOUTH, NEW JERSEY

Sample ID	Date of Collection	Matrix	Sample Type	Analytical Parameters (and USEPA Methods) *	Sampling Method
A	11/24/92	Soil	Post-Excavation	TPHC	Stainless Steel Scoop
B	11/24/92	Soil	Post-Excavation	TPHC	Stainless Steel Scoop
C	11/24/92	Soil	Post-Excavation	TPHC	Stainless Steel Scoop
D	11/24/92	Soil	Post-Excavation	TPHC	Stainless Steel Scoop
E	11/24/92	Soil	Post-Excavation	TPHC	Stainless Steel Scoop
E1	11/24/92	Soil	Post-Excavation	TPHC	Stainless Steel Scoop
MW-1	9/13/94	Soil	Well Installation	VOCs **	Split Spoon Sample
MW-1	9/13/94	Soil	Well Installation	VOCs **	Split Spoon Sample
MW-1	5/25/95	Aqueous	Groundwater	TCL, TAL, BNCs, VOCs, MTBE, TBA,	Teflon Bottom Bailer
MW-1	6/16/95	Aqueous	Groundwater	TCL, TAL, BNCs, VOCs, MTBE, TBA,	Teflon Bottom Bailer

*Notes:

TPHC	Total Petroleum Hydrocarbons (Method 418.1 / soil and aqueous)
BNCs	Semivolatile organic compounds plus 15 tentatively identified compounds (Method 625:aqueous)
VOCs **	Volatile organic compounds with xylene plus 15 tentatively identified compounds (Method 8240 / soil and aqueous) Volatile organic compounds with xylene plus 10 tentatively identified compounds (Method 524.2:aqueous)
MTBE	Methyl teriary-butyl ether (Method 524.2:aqueous)
TBA	Tertiary butyl alcohol (Method 524.2:aqueous)
TCL	The target compound list which includes VOCs, BNCs, and pesticides/PCBs (Pesticides/PCBs -Method 608:aqueous)
TAL	The target analyte list which includes metals and cyanide (Metals-Method SW-846:aqueous) (Cyanide-Method 335.2:aqueous)

The monitoring well was developed using a submersible 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 the 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 May 25, 1995, MW-1 was sampled for volatile organic compounds with xylene plus 10 tentatively identified compounds (VOCs+10), methyl tertiary-butyl ether (MTBE), tertiary butyl alcohol (TBA), semivolatile organic compounds plus 15 tentatively identified compounds (BNCs+15), the target compound list (TCL which includes VOCs, BNCs, and pesticides/PCBs), and the target analyte list (TAL which includes metals and cyanide). On June 16, 1995, MW-1 was sampled for VOCs+10, BNCs+15, TCL, and TAL.

All groundwater sampling and analysis was performed in accordance with the NJDEP *Field Sampling Procedures Manual*, and the *Technical Requirements.* 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 aqueous phase liquids). The well was then purged of three to five well volumes of standing water. Sample volume was then collected using a dedicated decontaminated Teflon bottom-fill bailer (see QAPP) attached to PTFE (Teflon)-coated stainless steel.

SMITH

3.0 CONCLUSIONS AND RECOMMENDATIONS

3.1 SOIL SAMPLING RESULTS

The soil samples collected on November 24, 1992 (A, B, C, D, E, and E-1) contained TPHC concentrations ranging from non-detectable to 457.0 milligrams per kilogram (mg/kg). The sample collected on September 13, 1994 contained either non-detectable concentrations of VOCs or concentrations below the corresponding NJDEP residential direct contact and impact to groundwater soil cleanup criteria (N.J.A.C. 7:26D and revisions dated February 3, 1994). A summary of the soil analytical results and comparison to the NJDEP soil cleanup criteria is provided in Table 2. The soil sampling results are shown on Figure 3. The soil analytical data package is provided in Appendix C. The full data package, including associated quality control, is on file at the U.S. Army Fort Monmouth, DPW.

3.2 GROUNDWATER SAMPLING RESULTS

The groundwater sampling results are listed in Table 3, and shown on Figure 4. The laboratory documentation is in Appendix D.

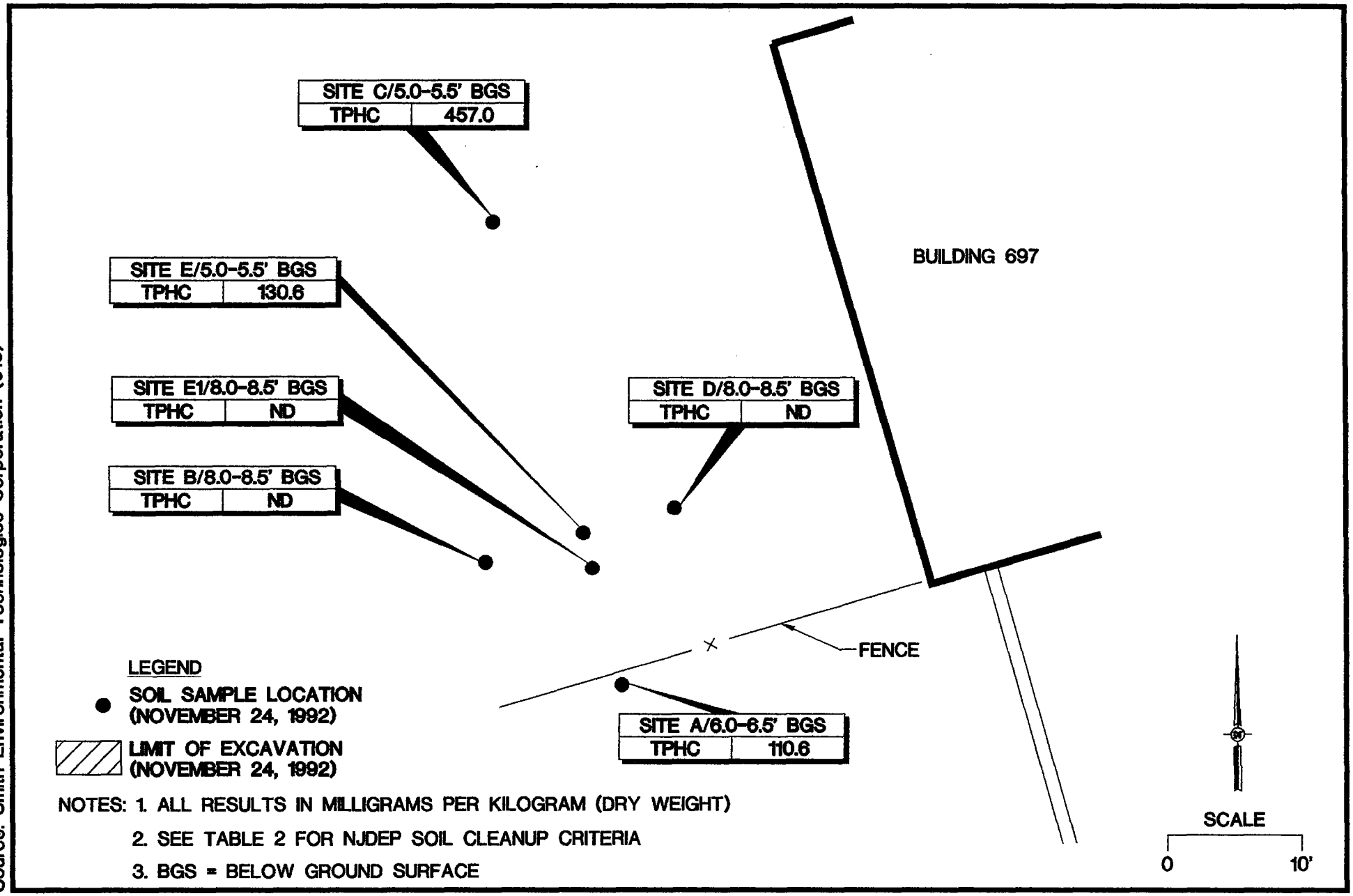
The sample collected from MW-1 on May 25, 1995 contained a tetrachloroethene concentration of 1.0 ug/l. Tetrachloroethene was compared to the groundwater quality criteria for tetrachloroethylene of 1.0 ug/l. Tetrachloroethylene is a synonym for tetrachloroethene. The pesticide, chlordane, was detected in MW-1 at a concentration of 1.3 ug/l. This exceeded the groundwater quality criteria for chlordane of 0.5 ug/l. The sample also contained a methylene chloride concentration of 1.3 ug/l, which is less than the GWQC for methylene chloride of 2 ug/l. All other ground water results were below detection or the applicable GWQC.

The trip blank collected on May 25, 1995 contained a methylene chloride concentration of 1.5 ug/l, a toluene concentration of 1.0 ug/l, a 2-chlorotoluene concentration of 7.7 ug/l, a 4-chlorotoluene concentration of 2.5 ug/l, and a 1,4-dichlorobenzene of 0.6 ug/l. The field blank contained a methylene chloride concentration of 1.6 ug/l, a toluene concentration of 1.6 ug/l, a 2-chlorotoluene concentration of 7.7 ug/l, a 4-chlorotoluene concentration of 6.4 ug/l, and a 1,4-dichlorobenzene of 0.6 ug/l. No other compounds were detected in MW-1, the trip blank, or the field blank.

The sample collected from MW-1 on June 16, 1995, contained a 1,2-dichloroethane concentration of 7.8 ug/l. This exceeded the groundwater quality criteria for 1,2-dichloroethane of 2.0 ug/l. The sample also contained a phenol concentration of 3.0 ug/l, and a chlordane concentration of 1.6 ug, which exceeded the GWQC for chlordane of 0.5 ug/l. All other ground water results were below detection or the applicable GWQC.

SMITH

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



Source: Smith Environmental Technologies Corporation (015)

Project No. 09-5004-01

Figure 3
Building 697
Soil Sampling Results

TABLE 2

POST-EXCAVATION SOIL SAMPLING RESULTS
BUILDING 697, MAIN POST
FT. MONMOUTH, NEW JERSEY

Sample ID/Depth	Sample Laboratory ID	Sample Date	Analysis Date	Analytical Method Used	Sample Quantitation Limit	Comound of Concern	Result (mg/kg) *	NJDEP Soil Cleanup Criteria**	Exceeds Cleanup Criteria
A/6.0-6.5'	C92-1068	11/24/92	11/25/92	Total Solid	--	--	84%	--	--
				TPHC	3.3	yes	110.6	10,000	--
B/8.0-8.5'	C92-1069	11/24/92	11/25/92	Total Solid	--	--	97%	--	--
				TPHC	3.3	yes	ND	10,000	--
C/5.0-5.5'	C92-1070	11/24/92	11/25/92	Total Solid	--	--	79%	--	--
				TPHC	3.3	yes	457.0	10,000	--
D/8.0-8.5'	C92-1071	11/24/92	11/25/92	Total Solid	--	--	96%	--	--
				TPHC	3.3	yes	ND	10,000	--
E/5.0-5.5'	C92-1072	11/24/92	11/25/92	Total Solid	--	--	88%	--	--
				TPHC	3.3	yes	130.6	10,000	--
E1/8.0-8.5'	C92-1073	11/24/92	11/25/92	Total Solid	--	--	97%	--	--
				TPHC	3.3	yes	ND	10,000	--

Note:

* Unless noted otherwise
** Cleanup criteria for total organics
-- Not applicable / does not exceed criteria
TPHC Total Petroleum Hydrocarbons

TABLE 2

SOIL SAMPLING RESULTS
BUILDING 697, MW-1
FORT MONMOUTH, NEW JERSEY
VOLATILE ORGANICS

Sample ID/Depth	Sample Date	Analysis Date	Compound Name	Sample Quantitation Limit (mg/kg)	Compound of Concern	Result (mg/kg)	NJDEP Soil Cleanup Criteria * (mg/kg)	Exceeds Cleanup Criteria
MW-1/3.0-4.0'	9/13/94	09/19/94	Chloromethane	0.023	--	< 0.023	520/10	--
			Bromomethane	0.023	--	< 0.023	79/1	--
			Vinyl Chloride	0.023	--	< 0.023	2/10	--
			Chloroethane	0.023	--	< 0.023	--	--
			Methylene Chloride	0.012	--	< 0.012	49/1	--
			Acetone	0.012	--	< 0.012	1,000/100	--
			Carbon Disulfide	0.012	--	< 0.012	--	--
			1,1-Dichloroethene	0.012	--	< 0.012	8/10	--
			1,1-Dichloroethane	0.012	--	< 0.012	570/10	--
			1,2-Dichloroethene (trans)	0.012	--	< 0.012	1,000/50	--
			Chloroform	0.012	--	< 0.012	19/1	--
			1,2-Dichloroethane	0.012	--	< 0.012	6/1	--
			2-Butanone	0.012	--	< 0.012	1,000/50	--
			1,1,1-Trichloroethane	0.012	yes	< 0.012	210/50	--
			Carbon Tetrachloride	0.012	--	< 0.012	2/1	--
			Bromodichloromethane	0.012	--	< 0.012	11/1	--
			1,1,2,2-Tetrachloroethane	0.012	--	< 0.012	34/1	--
			1,2-Dichloropropane	0.012	--	< 0.012	10	--
			trans-1,3-Dichloropropene	0.012	--	< 0.012	4/1	--
			Trichloroethene	0.012	yes	< 0.012	23/1	--
			Dibromochloromethane	0.012	--	< 0.012	110/1	--
			1,1,2-Trichloroethane	0.012	--	< 0.012	22/1	--
			Benzene	0.012	yes	< 0.012	3/1	--
			cis-1,3-Dichloropropene	0.012	--	< 0.012	4/1	--
			Bromoform	0.012	--	< 0.012	86/1	--
			2-Hexanone	0.012	--	< 0.012	--	--

TABLE 2

SOIL SAMPLING RESULTS
BUILDING 697, MW-1
FORT MONMOUTH, NEW JERSEY
VOLATILE ORGANICS

Sample ID/Depth	Sample Date	Analysis Date	Compound Name	Sample Quantitation Limit (mg/kg)	Compound of Concern	Result (mg/kg)	NJDEP Soil Cleanup Criteria * (mg/kg)	Exceeds Cleanup Criteria
MW-1/3.0-4.0'	9/13/94	09/19/94	4-Methyl-2-pentanone	0.012	--	< 0.012	1,000/50	--
			Tetrachloroethene	0.012	--	< 0.012	4/1 **	--
			Toluene	0.012	yes	< 0.012	1,000/500	--
			Chlorobenzene	0.012	--	< 0.012	37/1	--
			Ethylbenzene	0.012	yes	< 0.012	1,000/100	--
			Styrene	0.012	--	< 0.012	23/100	--
			Xylenes (Total)	0.012	yes	< 0.012	410/10	--

Note:

* Residential Direct Contact / Impact to Groundwater

** The tetrachloroethene results were compared to the soil cleanup criteria for tetrachloroethylene; tetrachloroethene is a synonym for tetrachloroethylene

-- Not applicable / does not exceed criteria

(J) Indicates detected below sample quantitation limit

(B) Indicates also present in blank

(ND) Indicates compound not detected

TABLE 2

SOIL SAMPLING RESULTS
BUILDING 697, MW-1
FORT MONMOUTH, NEW JERSEY
VOLATILE TICS

Sample ID/Depth	Sample Date	Analysis Date	Compound Name	Sample Quantitation Limit (mg/kg)	Compound of Concern	Result (mg/kg)	NJDEP Soil Cleanup Criteria * (mg/kg)	Exceeds Cleanup Criteria
MW-1/3.0-4.0'	9/13/94	09/22/94	NO TICS FOUND	--	--	--	--	--

Note:
* Residential Direct Contact / Impact to Groundwater
-- Not applicable / does not exceed criteria
(J) Indicates detected below sample quantitation limit
(B) Indicates also present in blank
(ND) Indicates compound not detected

TABLE 2

SOIL SAMPLING RESULTS
BUILDING 697, FIELD BLANK
FORT MONMOUTH, NEW JERSEY
VOLATILE ORGANICS

Sample ID	Sample Date	Analysis Date	Compound Name	Sample Quantitation Limit (ug/l)	Compound of Concern	Result (ug/l)
Field Blank	9/13/94	09/19/94	Chloromethane	10	--	< 10
			Bromomethane	10	--	< 10
			Vinyl Chloride	10	--	< 10
			Chloroethane	10	--	< 10
			Methylene Chloride	5.0	--	< 5.0
			Acetone	5.0	--	< 5.0
			Carbon Disulfide	5.0	--	< 5.0
			1,1-Dichloroethene	5.0	--	< 5.0
			1,1-Dichloroethane	5.0	--	< 5.0
			1,2-Dichloroethene (trans)	5.0	--	< 5.0
			Chloroform	5.0	--	< 5.0
			1,2-Dichloroethane	5.0	--	< 5.0
			2-Butanone	5.0	--	< 5.0
			1,1,1-Trichloroethane	5.0	yes	< 5.0
			Carbon Tetrachloride	5.0	--	< 5.0
			Bromodichloromethane	5.0	--	< 5.0
			1,1,2,2-Tetrachloroethane	5.0	--	< 5.0
			1,2-Dichloropropane	5.0	--	< 5.0
			trans-1,3-Dichloropropene	5.0	--	< 5.0
			Trichloroethene	5.0	yes	< 5.0
			Dibromochloromethane	5.0	--	< 5.0
			1,1,2-Trichloroethane	5.0	--	< 5.0
			Benzene	5.0	yes	< 5.0
			cis-1,3-Dichloropropene	5.0	--	< 5.0
			Bromoform	5.0	--	< 5.0
			2-Hexanone	5.0	--	< 5.0

TABLE 2

SOIL SAMPLING RESULTS
BUILDING 697, FIELD BLANK
FORT MONMOUTH, NEW JERSEY
VOLATILE ORGANICS

Sample ID	Sample Date	Analysis Date	Compound Name	Sample Quantitation Limit (ug/l)	Compound of Concern	Result (ug/l)
Field Blank	9/13/94	09/19/94	4-Methyl-2-pentanone	5.0	--	< 5.0
			Tetrachloroethene	5.0	--	< 5.0
			Toluene	5.0	yes	< 5.0
			Chlorobenzene	5.0	--	< 5.0
			Ethylbenzene	5.0	yes	< 5.0
			Styrene	5.0	--	< 5.0
			Xylenes (Total)	5.0	yes	< 5.0

Note:

* Residential Direct Contact / Impact to Groundwater

** The tetrachloroethene results were compared to the soil cleanup criteria for tetrachloroethylene; tetrachloroethene is a synonym for tetrachloroethylene

-- Not applicable / does not exceed criteria

(J) Indicates detected below sample quantitation limit

(B) Indicates also present in blank

(ND) Indicates compound not detected

TABLE 2

SOIL SAMPLING RESULTS
BUILDING 697, FIELD BLANK
FORT MONMOUTH, NEW JERSEY
VOLATILE TICS

Sample ID	Sample Date	Analysis Date	Compound Name	Sample Quantitation Limit (ug/l)	Compound of Concern	Result (ug/l)
Field Blank	9/13/94	09/23/94	Unknown	--	--	740
			Butane,2-Methyl	--	--	50
			Pentane (ACN) (DOT)	--	--	20
			Hydroxylamine,0-(3-Mebuty	--	--	32
			Acetic Acid, Ethyl Ester	--	--	110

Note:

*	Residential Direct Contact / Impact to Groundwater
--	Not applicable / does not exceed criteria
(J)	Indicates detected below sample quantitation limit
(B)	Indicates also present in blank
(ND)	Indicates compound not detected

TABLE 3

GROUNDWATER SAMPLING RESULTS
BUILDING 697, MAIN POST, MW-1
FT. MONMOUTH, NEW JERSEY
VOLATILE ORGANICS

Sample ID	Sample Date	Analysis Date	Compound Name	Sample Quantitation Limit (ug/l)	Compound of Concern	Result (ug/l)	GWQC (ug/l)	Exceeds Criteria
MW-1	5/25/95	6/07/95	Dichlorodifluoromethane	0.50	--	ND	--	--
			Chloromethane	0.50	--	ND	--	--
			Bromomethane	0.50	--	ND	--	--
			Vinyl Chloride	0.50	--	ND	5	--
			Chloroethane	0.50	--	ND	--	--
			Trichlorofluoromethane	0.50	--	ND	--	--
			Methylene Chloride	0.50	--	1.30 B	2	--
			1,2-Dichloroethene (trans)	0.50	--	ND	100*	--
			1,1-Dichloroethene	0.50	--	ND	2*	--
			1,1 Dichloroethane	0.50	--	ND	70	--
			2,2-Dichloropropane	0.50	--	ND	--	--
			Bromochloromethane	0.50	--	ND	--	--
			cis-1,2-Dichloroethene	0.50	--	ND	10*	--
			Chloroform	0.50	--	ND	6	--
			1,1-Dichloropropene	0.50	--	ND	--	--
			1,2-Dichloroethane	0.50	--	ND	2	--
			1,1,1-Trichloroethane	0.50	yes	ND	30	--
			Dibromomethane	0.50	--	ND	--	--
			Carbon Tetrachloride	0.50	--	ND	2	--
			Bromodichloromethane	0.50	--	ND	1	--
			1,2-Dichloropropane	0.50	--	ND	1	--
			cis-1,3-Dichloropropene	0.50	--	ND	NA	--
			1,3-Dichloropropane	0.50	--	ND	--	--
			Trichloroethene	0.50	yes	ND	1	--
			Dibromochloromethane	0.50	--	ND	10	--

TABLE 3

GROUNDWATER SAMPLING RESULTS
BUILDING 697, MAIN POST, MW-1
FORT MONMOUTH, NEW JERSEY
VOLATILE ORGANICS (Continued)

Sample ID	Sample Date	Analysis Date	Compound Name	Sample Quantitation Limit (ug/l)	Compound of Concern	Result (ug/l)	GWQC (ug/l)	Exceeds Criteria
MW-1	5/25/95	6/07/95	1,1,2-Trichloroethane	0.50	--	ND	3	--
			Benzene	0.50	yes	ND	1	--
			trans-1,3-Dichloropropene	0.50	--	ND	NA	--
			Bromoform	0.50	--	ND	4	--
			1,1,2,2-Tetrachloroethane	0.50	--	ND	10	--
			Tetrachloroethene	0.50	yes	1.0	1*	--
			1,1,2,2-Tetrachloroethane	0.50	--	ND	2	--
			Toluene	0.50	yes	ND	1,000	--
			1,2-Dibromoethane	0.50	--	ND	--	--
			Chlorobenzene	0.50	--	ND	4	--
			Ethylbenzene	0.50	yes	ND	700	--
			Xylenes (Total)	0.50	yes	ND	40	--
			Styrene	0.50	--	ND	100	--
			Isopropylbenzene	0.50	--	ND	--	--
			Bromobenzene	0.50	--	ND	--	--
			1,2,3-Trichloropropane	0.50	--	ND	--	--
			n-Propylbenzene	0.50	--	ND	--	--
			2-Chlorotoluene	0.50	--	ND	--	--
			4-Chlorotoluene	0.50	--	ND	--	--
			1,3,5-Trimethylbenzene	0.50	--	ND	--	--
			tert-Butylbenzene	0.50	--	ND	--	--
			1,2,4-Trimethylbenzene	0.50	--	ND	--	--
			sec-Butylbenzene	0.50	--	ND	--	--
			1,3-Dichlorobenzene	0.50	--	ND	600	--
			1,4-Dichlorobenzene	0.50	--	ND	75	--

TABLE 3

GROUNDWATER SAMPLING RESULTS
BUILDING 697, MAIN POST, MW-1
FORT MONMOUTH, NEW JERSEY
VOLATILE ORGANICS (Continued)

Sample ID	Sample Date	Analysis Date	Compound Name	Sample Quantitation Limit (ug/l)	Compound of Concern	Result (ug/l)	GWQC (ug/l)	Exceeds Criteria
MW-1	5/25/95	6/07/95	4-Isopropyltoluene	0.50	--	ND	--	--
			1,2-Dichlorobenzene	0.50	--	ND	600	--
			n-Butylbenzene	0.50	--	ND	--	--
			1,2-Dibromo-3-chloropropane	0.50	--	ND	NA	--
			1,2,4-Trichlorobenzene	0.50	--	ND	9	--
			Hexachlorobutadiene	0.50	--	ND	1	--
			Naphthalene	0.50	--	ND	--	--
			1,2,3-Trichlorobenzene	0.50	--	ND	--	--
			Methyl-tertiary butyl ether	0.50	--	ND	--	--
			tertiary-butyl alcohol	2.0	--	ND	--	--

Notes:

* The tetrachloroethene, 1,2-Dichloroethene(trans), 1,1-Dichloroethene, and cis-1,2-Dichloroethene results were compared to the GWQC for their respective synonym (tetrachlororethylene, 1,2-Dichloroethylene(trans), 1,1-Dichloroethylene, and cis-1,2-Dichloroethylene).

-- Not applicable / does not exceed criteria

(J) Indicates detected below sample quantitation limit

(B) Indicates also present in blank

(ND) Indicates compound not detected

(NA) Not available for this constituent

GWQC Ground Water Quality Criteria

TABLE 3

GROUNDWATER SAMPLING RESULTS
BUILDING 697, MAIN POST, MW-1
FORT MONMOUTH, NEW JERSEY
VOLATILE TICs

Sample ID	Sample Date	Analysis Date	Compound Name	Sample Quantitation Limit (ug/l)	Compound of Concern	Result (ug/l)	GWQC (ug/l)	Exceeds Criteria
MW-1	5/25/95	6/07/95	NO TICS FOUND	--	--	--	--	--

Notes:
-- Not applicable / does not exceed criteria
(J) Indicates detected below sample quantitation limit
(B) Indicates also present in blank
(ND) Indicates compound not detected
(NA) Not available for this constituent
GWQC Ground Water Quality Criteria

TABLE 3

GROUNDWATER SAMPLING RESULTS
BUILDING 697, MAIN POST, MW-1
FORT MONMOUTH, NEW JERSEY
SEMIVOLATILES

Sample ID	Sample Date	Analysis Date	Compound Name	Sample Quantitation Limit (ug/l)	Compound of Concern	Result (ug/l)	GWQC (ug/l)	Exceeds Criteria
MW-1	5/25/95	6/07/95	Phenol	10	--	ND	4,000	--
			bis(2-chloroisopropyl)Ether	10	--	ND	300	--
			2-Chlorophenol	10	--	ND	40	--
			1,3-Dichlorobenzene	10	--	ND	600	--
			1,4-Dichlorobenzene	10	--	ND	75	--
			1,2-Dichlorobenzene	10	--	ND	600	--
			2-Methylphenol	10	--	ND	--	--
			bis (2-chloroisopropyl)ether	10	--	ND	300	--
			4-Methylphenol	10	--	ND	--	--
			N-Nitroso-Di-n-propylamine	10	--	ND	20	--
			Hexachloroethane	10	--	ND	10	--
			Nitrobenzene	10	--	ND	10	--
			Isophorone	10	--	ND	100	--
			2-Nitrophenol	10	--	ND	--	--
			2,4-Dimethylphenol	10	--	ND	100	--
			bis(2-Chloroethoxy)Methane	10	--	ND	--	--
			2,4-Dichlorophenol	10	--	ND	20	--
			1,2,4-Trichlorobenzene	10	--	ND	9	--
			Naphthalene	10	--	ND	--	--
			4-Chloroaniline	10	--	ND	--	--
			Hexachlorobutadiene	10	--	ND	1	--
			4-Chloro-3-methylphenol	10	--	ND	--	--
			2-Methylnaphthalene	10	--	ND	--	--
			Hexachlorocyclopentadiene	10	--	ND	50	--
			2,4,6-Trichlorophenol	10	--	ND	20	--
			2,4,5-Trichlorophenol	25	--	ND	700	--
			2-Chloronaphthalene	10	--	ND	--	--
			2-Nitroaniline	25	--	ND	--	--
			Dimethyl Phthalate	10	--	ND	--	--
			Acenaphthylene	10	--	ND	NA	--

TABLE 3

GROUNDWATER SAMPLING RESULTS
BUILDING 697, MAIN POST, MW-1
FORT MONMOUTH, NEW JERSEY
SEMIVOLATILES (Continued)

Sample ID	Sample Date	Analysis Date	Compound Name	Sample Quantitation Limit (ug/l)	Compound of Concern	Result (ug/l)	GWQC (ug/l)	Exceeds Criteria
MW-1	5/25/95	6/07/95	2,6-Dinitrotoluene	10	--	ND	NA	--
			3-Nitroaniline	25	--	ND	--	--
			Acenaphthene	10	--	ND	400	--
			2,4-Dinitrophenol	25	--	ND	40	--
			4-Nitrophenol	25	--	ND	--	--
			Dibenzofuran	10	--	ND	--	--
			2,4-Dinitrotoluene	10	--	ND	10	--
			Diethylphthalate	10	--	ND	5,000	--
			Fluorene	10	--	ND	300	--
			4-Chlorophenyl-phenlyether	10	--	ND	--	--
			4-Nitroaniline	25	--	ND	--	--
			4,6-Dinitro-2-methylphenol	25	--	ND	--	--
			N-Nitrosodiphenylamine	10	--	ND	20	--
			4-Bromophenyl-phenylether	10	--	ND	--	--
			Hexachlorobenzene	10	--	ND	10	--
			Pentachlorophenol	25	--	ND	1	--
			Phenanthrene	10	--	ND	NA	--
			Anthracene	10	--	ND	2,000	--
			Carbazole	10	--	ND	--	--
			Di-n-butylphthalate	10	--	ND	900	--
			Fluoranthene	10	--	ND	300	--
			Pyrene	10	--	ND	200	--
			Butylbenzylphthalate	10	--	ND	100	--
			Benzo(a)Anthracene	10	--	ND	NA	--
			3,3-Dichlorobenzidine	20	--	ND	60	--
			Chrysene	10	--	ND	NA	--

TABLE 3

GROUNDWATER SAMPLING RESULTS
BUILDING 697, MAIN POST, MW-1
FORT MONMOUTH, NEW JERSEY
SEMIVOLATILES (Continued)

Sample ID	Sample Date	Analysis Date	Compound Nane	Sample Quantitation Limit (ug/l)	Compound of Concern	Result (ug/l)	GWQC (ug/l)	Exceeds Criteria
MW-1	5/25/95	6/07/95	bis(2-Ethylhexyl)Phthalate	10	--	ND	30	--
			Di-n-Octyl Phthalate	10	--	ND	100	--
			Benzo(b)Fluoranthene	10	--	ND	NA	--
			Benzo(k)Fluoranthene	10	--	ND	NA	--
			Benzo(a)Pyrene	10	--	ND	NA	--
			Indeno(1,2,3-cd)pyrene	10	--	ND	NA	--
			Dibenzo(a,h)anthracene	10	--	ND	NA	--
			Benzo(g,h,i)perylene	10	--	ND	NA	--

Notes:
-- Not applicable / does not exceed criteria
(J) Indicates detected below sample quantitation limit
(B) Indicates also present in blank
(ND) Indicates compound not detected
(NA) Not available for this constituent
GWQC Ground Water Quality Criteria

TABLE 3

GROUNDWATER SAMPLING RESULTS
BUILDING 697, MAIN POST, MW-1
FORT MONMOUTH, NEW JERSEY
SEMIVOLATILE TICs

Sample ID	Sample Date	Analysis Date	Compound Name	Sample Quantitation Limit (ug/l)	Compound of Concern	Result (ug/l)	GWQC (ug/l)	Exceeds Criteria
MW-1	5/25/95	6/07/95	Oleic Acid	--	--	17 J	--	--
			Hexadecanoic acid	--	--	4 J	--	--
			Ethanol, 2,2'-[oxybis(2,1-et	--	--	9 J	--	--
			Triethylene glycol	--	--	18 J	--	--
			Unknown	--	--	19 J	--	--

Notes:
-- Not applicable / does not exceed criteria
(J) Indicates detected below sample quantitation limit
(B) Indicates also present in blank
(ND) Indicates compound not detected
(NA) Not available for this constituent
GWQC Ground Water Quality Criteria

TABLE 3

GROUNDWATER SAMPLING RESULTS
BUILDING 697, MAIN POST, MW-1
FORT MONMOUTH, NEW JERSEY
PESTICIDE/PCBs

Sample ID	Sample Date	Analysis Date	Compound Nane	Sample Quantitation Limit (ug/l)	Compound of Concern	Result (ug/l)	GWQC (ug/l)	Exceeds Criteria
MW-1	5/25/95	6/08/95	alpha-BHC	0.02	--	ND	0.02	--
			beta-BHC	0.04	--	ND	0.2	--
			delta-BHC	0.02	--	ND	--	--
			gamma-BHC (Lindane)	0.03	--	ND	0.2	--
			Heptachlor	0.02	--	ND	0.4	--
			Aldrin	0.04	--	ND	0.04	--
			Heptachlor epoxide	0.04	--	ND	0.2	--
			Endosulfan I	0.02	--	ND	0.4	--
			Dieldrin	0.03	--	ND	0.03	--
			4,4'-DDE	0.04	--	ND	0.1	--
			Endrin	0.04	--	ND	2.0	--
			Endosulfan II	0.04	--	ND	0.4	--
			4,4'-DDD	0.27	--	P	0.1	--
			Endosulfan sulfate	0.04	--	ND	0.4	--
			4,4'-DDT	0.22	--	P	0.1	--
			Endrin aldehyde	0.10	--	ND	--	--
			Chlordane	0.1	--	1.3	0.5	yes
			Toxaphene	1.0	--	ND	3.0	--

TABLE 3

GROUNDWATER SAMPLING RESULTS
BUILDING 697, MAIN POST, MW-1
FORT MONMOUTH, NEW JERSEY
PESTICIDE/PCBs

Sample ID	Sample Date	Analysis Date	Compound Nane	Sample Quantitation Limit (ug/l)	Compound of Concern	Result (ug/l)	GWQC (ug/l)	Exceeds Criteria
MW-1	5/25/95	6/08/95	Aroclor-1016	1.0	yes	ND	--	--
			Aroclor-1221	1.0	yes	ND	--	--
			Aroclor-1232	1.0	yes	ND	--	--
			Aroclor-1242	1.0	yes	ND	--	--
			Aroclor-1248	1.0	yes	ND	--	--
			Aroclor-1254	1.0	yes	ND	--	--
			Aroclor-1260	1.0	yes	ND	--	--
			Total PCBs	--	yes	--	0.5	--

Notes:

-- Not applicable / does not exceed criteria
(J) Indicates detected below sample quantitation limit
(B) Indicates also present in blank
(ND) Indicates compound not detected
(NA) Not available for this constituent
GWQC Ground Water Quality Criteria

TABLE 3

GROUNDWATER SAMPLING RESULTS
BUILDING 697, MAIN POST, MW-1
FORT MONMOUTH, NEW JERSEY
METALS

Sample ID	Sample Date	Analysis Date	Compound Nane	Sample Quantitation Limit (mg/l)	Compound of Concern	Result (mg/l)	GWQC (ug/l)	Exceeds Criteria
MW-1	5/25/95	06/06/95	Total Cyanide	0.010	--	< 0.010	200	--
			Ag	0.050	--	< 0.050	--	--
			Aluminum	0.20	--	3.8	200	--
			Arsenic	0.0050	--	< 0.0050	8	--
			Barium	0.020	--	0.042	2,000	--
			Beryllium	0.0050	--	<0.0050	20	--
			Calcium	0.40	--	15	--	--
			Cadmium	0.010	--	< 0.010	4	--
			Cobalt	0.050	--	< 0.050	--	--
			Chromium	0.050	--	< 0.050	100	--
			Copper	0.050	--	< 0.050	1,000	--
			Iron	0.10	--	19	300	--
			Mercury	0.0010	--	< 0.0010	2	--
			Potassium	3.0	--	6.8	--	--
			Magnesium	0.10	--	6.8	--	--
			Manganese	0.020	--	0.031	50	--
			Sodium	0.40	--	22	50,000	--
			Nickel	0.050	--	< 0.050	100	--
			Lead	0.0025	--	< 0.0025	10	--

TABLE 3

GROUNDWATER SAMPLING RESULTS
BUILDING 697, MAIN POST, MW-1
FORT MONMOUTH, NEW JERSEY
METALS (continued)

Sample ID	Sample Date	Analysis Date	Compound Nane	Sample Quantitation Limit (mg/l)	Compound of Concern	Result (mg/l)	GWQC (ug/l)	Exceeds Criteria
MW-1	5/25/95	06/06/95	Antimony	0.0050	--	< 0.0050	20	--
			Selenium	0.0050	--	< 0.0050	50	--
			Thallium	0.0050	--	< 0.0050	10	--
			Vanadium	0.050	--	< 0.050	--	--
			Zinc	0.020	--	0.031	5,000	--

Notes:

--	Not applicable / does not exceed criteria
(J)	Indicates detected below sample quantitation limit
(B)	Indicates also present in blank
(ND)	Indicates compound not detected
(NA)	Not available for this constituent
GWQC	Ground Water Quality Criteria

TABLE 3

GROUNDWATER SAMPLING RESULTS
BUILDING 697, MAIN POST, TRIP BLANK
FT. MONMOUTH, NEW JERSEY
VOLATILE ORGANICS

Sample ID	Sample Date	Analysis Date	Compound Name	Sample Quantitation Limit (ug/l)	Compound of Concern	Result (ug/l)
Trip Blank	5/25/95	6/07/95	Dichlorodifluoromethane	0.50	--	ND
			Chloromethane	0.50	--	ND
			Bromomethane	0.50	--	ND
			Vinyl Chloride	0.50	--	ND
			Chloroethane	0.50	--	ND
			Trichlorofluoromethane	0.50	--	ND
			Methylene Chloride	0.50	--	1.5 B
			1,2-Dichloroethene (trans)	0.50	--	ND
			1,1-Dichloroethene	0.50	--	ND
			1,1 Dichloroethane	0.50	--	ND
			2,2-Dichloropropane	0.50	--	ND
			Bromochloromethane	0.50	--	ND
			cis-1,2-Dichloroethene	0.50	--	ND
			Chloroform	0.50	--	ND
			1,1-Dichloropropene	0.50	--	ND
			1,2-Dichloroethane	0.50	--	ND
			1,1,1-Trichloroethane	0.50	yes	ND
			Dibromomethane	0.50	--	ND
			Carbon Tetrachloride	0.50	--	ND
			Bromodichloromethane	0.50	--	ND
			1,2-Dichloropropane	0.50	--	ND
			cis-1,3-Dichloropropene	0.50	--	ND
			1,3-Dichloropropane	0.50	--	ND
			Trichloroethene	0.50	yes	ND
			Dibromochloromethane	0.50	--	ND

TABLE 3

GROUNDWATER SAMPLING RESULTS
BUILDING 697, MAIN POST, TRIP BLANK
FORT MONMOUTH, NEW JERSEY
VOLATILE ORGANICS (Continued)

Sample ID	Sample Date	Analysis Date	Compound Name	Sample Quantitation Limit (ug/l)	Compound of Concern	Result (ug/l)
Trip Blank	5/25/95	6/07/95	1,1,2-Trichloroethane	0.50	--	ND
			Benzene	0.50	yes	ND
			trans-1,3-Dichloropropene	0.50	--	ND
			Bromoform	0.50	--	ND
			1,1,2,2-Tetrachloroethane	0.50	--	ND
			Tetrachloroethene	0.50	yes	ND
			1,1,2,2-Tetrachloroethane	0.50	--	ND
			Toluene	0.50	yes	1.0
			1,2-Dibromoethane	0.50	--	ND
			Chlorobenzene	0.50	--	ND
			Ethylbenzene	0.50	yes	ND
			Xylenes (Total)	0.50	yes	ND
			Styrene	0.50	--	ND
			Isopropylbenzene	0.50	--	ND
			Bromobenzene	0.50	--	ND
			1,2,3-Trichloropropane	0.50	--	ND
			n-Propylbenzene	0.50	--	ND
			2-Chlorotoluene	0.50	--	7.7
			4-Chlorotoluene	0.50	--	2.5
			1,3,5-Trimethylbenzene	0.50	--	ND
			tert-Butylbenzene	0.50	--	ND
			1,2,4-Trimethylbenzene	0.50	--	ND
			sec-Butylbenzene	0.50	--	ND
			1,3-Dichlorobenzene	0.50	--	ND
			1,4-Dichlorobenzene	0.50	--	0.60

TABLE 3

GROUNDWATER SAMPLING RESULTS
BUILDING 697, MAIN POST, TRIP BLANK
FORT MONMOUTH, NEW JERSEY
VOLATILE ORGANICS (Continued)

Sample ID	Sample Date	Analysis Date	Compound Name	Sample Quantitation Limit (ug/l)	Compound of Concern	Result (ug/l)
Trip Blank	5/25/95	6/07/95	4-Isopropyltoluene	0.50	--	ND
			1,2-Dichlorobenzene	0.50	--	ND
			n-Butylbenzene	0.50	--	ND
			1,2-Dibromo-3-chloropropane	0.50	--	ND
			1,2,4-Trichlorobenzene	0.50	--	ND
			Hexachlorobutadiene	0.50	--	ND
			Naphthalene	0.50	--	ND
			1,2,3-Trichlorobenzene	0.50	--	ND
			Methyl-tertiary butyl ether	0.50	--	ND
			tertiary-butyl alcohol	2.0	--	ND

Notes:

-- Not applicable / does not exceed criteria
(J) Indicates detected below sample quantitation limit
(B) Indicates also present in blank
(ND) Indicates compound not detected

TABLE 3

GROUNDWATER SAMPLING RESULTS
BUILDING 697, MAIN POST, TRIP BLANK
FORT MONMOUTH, NEW JERSEY
VOLATILE TICs

Sample ID	Sample Date	Analysis Date	Compound Name	Sample Quantitation Limit (ug/l)	Compound of Concern	Result (ug/l)
Trip Blank	5/25/95	6/07/95	NO TICS FOUND	--	--	--

Notes:

--	Not applicable / does not exceed criteria
(J)	Indicates detected below sample quantitation limit
(B)	Indicates also present in blank
(ND)	Indicates compound not detected
(NA)	Not available for this constituent
GWQC	Ground Water Quality Criteria

TABLE 3

GROUNDWATER SAMPLING RESULTS
BUILDING 697, MAIN POST, FIELD BLANK
FT. MONMOUTH, NEW JERSEY
VOLATILE ORGANICS

Sample ID	Sample Date	Analysis Date	Compound Name	Sample Quantitation Limit (ug/l)	Compound of Concern	Result (ug/l)
Field Blank	5/25/95	6/07/95	Dichlorodifluoromethane	0.50	--	ND
			Chloromethane	0.50	--	ND
			Bromomethane	0.50	--	ND
			Vinyl Chloride	0.50	--	ND
			Chloroethane	0.50	--	ND
			Trichlorofluoromethane	0.50	--	ND
			Methylene Chloride	0.50	--	1.6 B
			1,2-Dichloroethene (trans)	0.50	--	ND
			1,1-Dichloroethene	0.50	--	ND
			1,1 Dichloroethane	0.50	--	ND
			2,2-Dichloropropane	0.50	--	ND
			Bromochloromethane	0.50	--	ND
			cis-1,2-Dichloroethene	0.50	--	ND
			Chloroform	0.50	--	ND
			1,1-Dichloropropene	0.50	--	ND
			1,2-Dichloroethane	0.50	--	ND
			1,1,1-Trichloroethane	0.50	yes	ND
			Dibromomethane	0.50	--	ND
			Carbon Tetrachloride	0.50	--	ND
			Bromodichloromethane	0.50	--	ND
			1,2-Dichloropropane	0.50	--	ND
			cis-1,3-Dichloropropene	0.50	--	ND
			1,3-Dichloropropane	0.50	--	ND
			Trichloroethene	0.50	yes	ND
			Dibromochloromethane	0.50	--	ND

TABLE 3

GROUNDWATER SAMPLING RESULTS
BUILDING 697, MAIN POST, FIELD BLANK
FORT MONMOUTH, NEW JERSEY
VOLATILE ORGANICS (Continued)

Sample ID	Sample Date	Analysis Date	Compound Name	Sample Quantitation Limit (ug/l)	Compound of Concern	Result (ug/l)
Field Blank	5/25/95	6/07/95	1,1,2-Trichloroethane	0.50	--	ND
			Benzene	0.50	yes	ND
			trans-1,3-Dichloropropene	0.50	--	ND
			Bromoform	0.50	--	ND
			1,1,2,2-Tetrachloroethane	0.50	--	ND
			Tetrachloroethene	0.50	yes	ND
			1,1,2,2-Tetrachloroethane	0.50	--	ND
			Toluene	0.50	yes	1.6
			1,2-Dibromoethane	0.50	--	ND
			Chlorobenzene	0.50	--	ND
			Ethylbenzene	0.50	yes	ND
			Xylenes (Total)	0.50	yes	ND
			Styrene	0.50	--	ND
			Isopropylbenzene	0.50	--	ND
			Bromobenzene	0.50	--	ND
			1,2,3-Trichloropropane	0.50	--	ND
			n-Propylbenzene	0.50	--	ND
			2-Chlorotoluene	0.50	--	7.7
			4-Chlorotoluene	0.50	--	6.4
			1,3,5-Trimethylbenzene	0.50	--	ND
			tert-Butylbenzene	0.50	--	ND
			1,2,4-Trimethylbenzene	0.50	--	ND
			sec-Butylbenzene	0.50	--	ND
			1,3-Dichlorobenzene	0.50	--	ND
			1,4-Dichlorobenzene	0.50	--	0.60

TABLE 3

GROUNDWATER SAMPLING RESULTS
BUILDING 697, MAIN POST, FIELD BLANK
FORT MONMOUTH, NEW JERSEY
VOLATILE ORGANICS (Continued)

Sample ID	Sample Date	Analysis Date	Compound Name	Sample Quantitation Limit (ug/l)	Compound of Concern	Result (ug/l)
Field Blank	5/25/95	6/07/95	4-Isopropyltoluene	0.50	--	ND
			1,2-Dichlorobenzene	0.50	--	ND
			n-Butylbenzene	0.50	--	ND
			1,2-Dibromo-3-chloropropane	0.50	--	ND
			1,2,4-Trichlorobenzene	0.50	--	ND
			Hexachlorobutadiene	0.50	--	ND
			Naphthalene	0.50	--	ND
			1,2,3-Trichlorobenzene	0.50	--	ND
			Methyl-tertiary butyl ether	0.50	--	ND
			tertiary-butyl alcohol	2.0	--	ND

Notes:

-- Not applicable / does not exceed criteria
(J) Indicates detected below sample quantitation limit
(B) Indicates also present in blank
(ND) Indicates compound not detected

TABLE 3

GROUNDWATER SAMPLING RESULTS
BUILDING 697, MAIN POST, FIELD BLANK
FORT MONMOUTH, NEW JERSEY
VOLATILE TICs

Sample ID	Sample Date	Analysis Date	Compound Name	Sample Quantitation Limit (ug/l)	Compound of Concern	Result (ug/l)
Field Blank	5/25/95	6/07/95	NO TICS FOUND	--	--	--

Notes:

--	Not applicable / does not exceed criteria
(J)	Indicates detected below sample quantitation limit
(B)	Indicates also present in blank
(ND)	Indicates compound not detected
(NA)	Not available for this constituent
GWQC	Ground Water Quality Criteria

TABLE 3

GROUNDWATER SAMPLING RESULTS
BUILDING 697, MAIN POST, FIELD BLANK
FORT MONMOUTH, NEW JERSEY
SEMIVOLATILES

Sample ID	Sample Date	Analysis Date	Compound Name	Sample Quantitation Limit (ug/l)	Compound of Concern	Result (ug/l)
Field Blank	5/25/95	6/02/95	Phenol	10	--	ND
			bis(2 chloroethyl)Ether	10	--	ND
			2-Chlorophenol	10	--	ND
			1,3-Dichlorobenzene	10	--	ND
			1,4-Dichlorobenzene	10	--	ND
			1,2-Dichlorobenzene	10	--	ND
			2-Methylphenol	10	--	ND
			bis(2-chloroisopropyl)Ether	10	--	ND
			4-Methylphenol	10	--	ND
			N-Nitroso-Di-n-propylamine	10	--	ND
			Hexachloroethane	10	--	ND
			Nitrobenzene	10	--	ND
			Isophorone	10	--	ND
			2-Nitrophenol	10	--	ND
			2,4-Dimethylphenol	10	--	ND
			bis(2-Chloroethoxy)Methane	10	--	ND
			2,4-Dichlorophenol	10	--	ND
			1,2,4-Trichlorobenzene	10	--	ND
			Naphthalene	10	--	ND
			4-Chloroaniline	10	--	ND
			Hexachlorobutadiene	10	--	ND
			4-Chloro-3-methylphenol	10	--	ND
			4-Methylnaphthalene	10	--	ND
			Hexachlorocyclopentadiene	10	--	ND
			2,4,6-Trichlorophenol	10	--	ND
			2,4,5-Trichlorophenol	25	--	ND
			2-Chloronaphthalene	10	--	ND
			2-Nitroaniline	25	--	ND
			Dimethyl Phthalate	10	--	ND
			Acenaphthylene	10	--	ND

TABLE 3

GROUNDWATER SAMPLING RESULTS
BUILDING 697, MAIN POST, FIELD BLANK
FORT MONMOUTH, NEW JERSEY
SEMIVOLATILES (Continued)

Sample ID	Sample Date	Analysis Date	Compound Nane	Sample Quantitation Limit (ug/l)	Compound of Concern	Result (ug/l)
Field Blank	5/25/95	6/02/95	2,6-Dinitrotoluene	10	--	ND
			3-Nitroaniline	25	--	ND
			Acenaphthene	10	--	ND
			2,4-Dinitrophenol	25	--	ND
			4-Nitrophenol	25	--	ND
			Dibenzofuran	10	--	ND
			2,4-Dinitrotoluene	10	--	ND
			Diethylphthalate	10	--	ND
			Fluorene	10	--	ND
			4-Chlorophenyl-phenlyether	10	--	ND
			4-Nitroaniline	25	--	ND
			4,6-Dinitro-2-methylphenol	25	--	ND
			n-Nitrosodiphenylamine	10	--	ND
			4-Bromophenyl-phenylether	10	--	ND
			Hexachlorobenzene	10	--	ND
			Pentachlorophenol	25	--	ND
			Phenanthrene	10	--	ND
			Anthracene	10	--	ND
			Carbazole	10	--	ND
			Di-n-butylphthalate	10	--	ND
			Fluoranthene	10	--	ND
			Pyrene	10	--	ND
			Butylbenzylphthalate	10	--	ND
			Benzo(a)Anthracene	10	--	ND
			3,3-Dichlorobenzidine	20	--	ND
			Chrysene	10	--	ND

TABLE 3

GROUNDWATER SAMPLING RESULTS
BUILDING 697, MAIN POST, FIELD BLANK
FORT MONMOUTH, NEW JERSEY
SEMIVOLATILES (Continued)

Sample ID	Sample Date	Analysis Date	Compound Nane	Sample Quantitation Limit (ug/l)	Compound of Concern	Result (ug/l)
Field Blank	5/25/95	6/02/95	bis(2-Ethylhexyl)Phthalate	10	--	ND
			Di-n-Octyl Phthalate	10	--	ND
			Benzo(b)Fluoranthene	10	--	ND
			Benzo(k)Fluoranthene	10	--	ND
			Benzo(a)Pyrene	10	--	ND
			Indeno(1,2,3-cd)pyrene	10	--	ND
			Dibenzo(a,h)anthracene	10	--	ND
			Benzo(g,h,i)perylene	10	--	ND

Notes:

-- Not applicable / does not exceed criteria
(J) Indicates detected below sample quantitation limit
(B) Indicates also present in blank
(ND) Indicates compound not detected

TABLE 3

GROUNDWATER SAMPLING RESULTS
BUILDING 697, MAIN POST, FIELD BLANK
FORT MONMOUTH, NEW JERSEY
SEMIVOLATILE TICs

Sample ID	Sample Date	Analysis Date	Compound Name	Sample Quantitation Limit (ug/l)	Compound of Concern	Result (ug/l)
Field Blank	5/25/95	6/02/95	Unknown	--	--	5 J
			Unknown	--	--	5 J

Notes:

--	Not applicable / does not exceed criteria
(J)	Indicates detected below sample quantitation limit
(B)	Indicates also present in blank
(ND)	Indicates compound not detected
(NA)	Not available for this constituent
GWQC	Ground Water Quality Criteria

TABLE 3

GROUNDWATER SAMPLING RESULTS
BUILDING 697, MAIN POST, FIELD BLANK
FORT MONMOUTH, NEW JERSEY
METALS

Sample ID	Sample Date	Analysis Date	Compound Nane	Sample Quantitation Limit (mg/l)	Compound of Concern	Result (mg/l)
Field Blank	5/25/95	06/07/95	Total Cyanide	0.010	--	< 0.010
			Ag	0.050	--	< 0.050
			Aluminum	0.20	--	< 0.20
			Arsenic	0.0050	--	< 0.0050
			Barium	0.020	--	< 0.020
			Beryllium	0.0050	--	< 0.0050
			Calcium	0.40	--	< 0.40
			Cadmium	0.010	--	< 0.010
			Cobalt	0.050	--	< 0.050
			Chromium	0.050	--	< 0.050
			Copper	0.050	--	< 0.050
			Iron	0.10	--	0.10
			Mercury	0.0010	--	< 0.0010
			Potassium	3.0	--	< 3.0
			Magnesium	0.10	--	< 0.10
			Manganese	0.020	--	< 0.020
			Sodium	0.40	--	< 0.40
			Nickel	0.050	--	< 0.050
			Lead	0.0025	--	< 0.0025

TABLE 3

GROUNDWATER SAMPLING RESULTS
BUILDING 697, MAIN POST, FIELD BLANK
FORT MONMOUTH, NEW JERSEY
METALS (continued)

Sample ID	Sample Date	Analysis Date	Compound Nane	Sample Quantitation Limit (mg/l)	Compound of Concern	Result (mg/l)
Field Blank	5/25/95	6/07/95	Antimony	0.0050	--	< 0.0050
			Selenium	0.0050	--	< 0.0050
			Thallium	0.0050	--	< 0.0050
			Vanadium	0.050	--	< 0.050
			Zinc	0.020	--	< 0.020

Notes:

--	Not applicable / does not exceed criteria
(J)	Indicates detected below sample quantitation limit
(B)	Indicates also present in blank
(ND)	Indicates compound not detected
(NA)	Not available for this constituent
GWQC	Ground Water Quality Criteria

TABLE 3

GROUNDWATER SAMPLING RESULTS
BUILDING 697, MAIN POST, MW-1
FT. MONMOUTH, NEW JERSEY
VOLATILE ORGANICS

Sample ID	Sample Date	Analysis Date	Compound Name	Sample Quantitation Limit (ug/l)	Compound of Concern	Result (ug/l)	GWQC (ug/l)	Exceeds Criteria
MW-1	6/16/95	6/27/95	Dichlorodifluoromethane	0.50	--	ND	--	--
			Chloromethane	0.50	--	0.90	--	--
			Vinyl Chloride	0.50	--	ND	5	--
			Bromomethane	0.50	--	ND	--	--
			Chloroethane	0.50	--	ND	--	--
			Trichlorofluoromethane	0.50	--	ND	--	--
			1,1-Dichloroethene	0.50	--	ND	2*	--
			Methylene Chloride	0.50	--	1.3 B	2	--
			1,2-Dichloroethene (trans)	0.50	--	ND	100*	--
			1,1 Dichloroethane	0.50	--	ND	70	--
			2,2-Dichloropropane	0.50	--	ND	--	--
			cis-1,2-Dichloroethene	0.50	--	ND	10*	--
			Bromochloromethane	0.50	--	ND	--	--
			Chloroform	0.50	--	ND	6	--
			1,1,1-Trichloroethane	0.50	yes	ND	30	--
			Carbon Tetrachloride	0.50	--	ND	2	--
			Benzene	0.50	yes	ND	1	--
			1,2-Dichloroethane	0.50	--	7.8	2	yes
			Trichloroethene	0.50	yes	ND	1	--
			1,1-Dichloropropene	0.50	--	ND	--	--
			1,2-Dichloropropane	0.50	--	ND	1	--
			Dibromomethane	0.50	--	ND	--	--
			Bromodichloromethane	0.50	--	ND	1	--
			cis-1,3-Dichloropropene	0.50	--	ND	NA	--
			Toluene	0.50	yes	ND	1,000	--
			trans-1,3-Dichloropropene	0.50	--	ND	--	--
			1,1,2-Trichloroethane	0.50	--	ND	3	--
			Tetrachloroethene	0.50	yes	0.80	1*	--
			1,3-Dichloropropane	0.50	--	ND	--	--
			Dibromochloromethane	0.50	--	ND	10	--

TABLE 3

GROUNDWATER SAMPLING RESULTS
BUILDING 697, MAIN POST, MW-1
FORT MONMOUTH, NEW JERSEY
VOLATILE ORGANICS (Continued)

Sample ID	Sample Date	Analysis Date	Compound Name	Sample Quantitation Limit (ug/l)	Compound of Concern	Result (ug/l)	GWQC (ug/l)	Exceeds Criteria
MW-1	6/16/95	6/27/95	1,2-Dibromomethane	0.50	--	ND	--	--
			Chlorobenzene	0.50	--	ND	4	--
			1,1,1,2-Tetrachloroethane	0.50	--	ND	10	--
			Ethylbenzene	0.50	yes	ND	700	--
			Xylenes (Total)	0.50	yes	ND	40	--
			Styrene	0.50	--	ND	100	--
			Bromoform	0.50	--	ND	4	--
			Isopropylbenzene	0.50	--	ND	--	--
			Bromobenzene	0.50	--	ND	--	--
			1,1,2,2-Tetrachloroethane	0.50	--	ND	10	--
			1,2,3-Trichloropropane	0.50	--	ND	--	--
			n-Propylbenzene	0.50	--	ND	--	--
			2-Chlorotoluene	0.50	--	ND	--	--
			4-Chlorotoluene	0.50	--	ND	--	--
			1,3,5-Trimethylbenzene	0.50	--	ND	--	--
			tert-Butylbenzene	0.50	--	ND	--	--
			1,2,4-Trimethylbenzene	0.50	--	ND	--	--
			sec-Butylbenzene	0.50	--	ND	--	--
			1,3-Dichlorobenzene	0.50	--	ND	600	--
			4-Isopropyltoluene	0.50	--	ND	--	--
			1,4-Dichlorobenzene	0.50	--	ND	75	--
			1,2-Dichlorobenzene	0.50	--	ND	600	--
			n-Butylbenzene	0.50	--	ND	--	--
			1,2-Dibromo-3-chloropropane	0.50	--	ND	NA	--

TABLE 3

GROUNDWATER SAMPLING RESULTS
BUILDING 697, MAIN POST, MW-1
FORT MONMOUTH, NEW JERSEY
VOLATILE ORGANICS (Continued)

Sample ID	Sample Date	Analysis Date	Compound Name	Sample Quantitation Limit (ug/l)	Compound of Concern	Result (ug/l)	GWQC (ug/l)	Exceeds Criteria
MW-1	6/16/95	6/27/95	1,2,4-Trichlorobenzene	0.50	--	ND	9	--
			Hexachlorobutadiene	0.50	--	ND	1	--
			Naphthalene	0.50	--	ND	--	--
			1,2,3-Trichlorobenzene	0.50	--	ND	--	--

Notes:

* The tetrachloroethene, 1,2-Dichloroethene(trans), 1,1-Dichloroethene, and cis-1,2-Dichloroethene results were compared to the GWQC for their respective synonym (tetrachlororethylene, 1,2-Dichloroethylene(trans), 1,1-Dichloroethylene, and cis-1,2-Dichloroethylene).

-- Not applicable / does not exceed criteria

(J) Indicates detected below sample quantitation limit

(B) Indicates also present in blank

(ND) Indicates compound not detected

(NA) Not available for this constituent

GWQC Ground Water Quality Criteria

TABLE 3

GROUNDWATER SAMPLING RESULTS
BUILDING 697, MAIN POST, MW-1
FORT MONMOUTH, NEW JERSEY
VOLATILE TICs

Sample ID	Sample Date	Analysis Date	Compound Name	Sample Quantitation Limit (ug/l)	Compound of Concern	Result (ug/l)	GWQC (ug/l)	Exceeds Criteria
MW-1	6/16/95	6/27/95	Unknown	--	--	1 J	--	--
			Ethane,1-bromo-2-chloro	--	--	3 J	--	--

Notes:
-- Not applicable / does not exceed criteria
(J) Indicates detected below sample quantitation limit
(B) Indicates also present in blank
(ND) Indicates compound not detected
(NA) Not available for this constituent
GWQC Ground Water Quality Criteria

TABLE 3

GROUNDWATER SAMPLING RESULTS
BUILDING 697, MAIN POST, MW-1
FORT MONMOUTH, NEW JERSEY
SEMIVOLATILES

Sample ID	Sample Date	Analysis Date	Compound Name	Sample Quantitation Limit (ug/l)	Compound of Concern	Result (ug/l)	GWQC (ug/l)	Exceeds Criteria
MW-1	6/16/95	7/01/95	Phenol	10	--	3 JB	4,000	--
			bis(2 chloroethyl)Ether	10	--	ND	10	--
			2-Chlorophenol	10	--	ND	40	--
			1,3-Dichlorobenzene	10	--	ND	600	--
			1,4-Dichlorobenzene	10	--	ND	75	--
			1,2-Dichlorobenzene	10	--	ND	600	--
			2-Methylphenol	10	--	ND	--	--
			bis(2-chloroisopropyl)Ether	10	--	ND	300	--
			4-Methylphenol	10	--	ND	--	--
			N-Nitroso-Di-n-propylamine	10	--	ND	20	--
			Hexachloroethane	10	--	ND	10	--
			Nitrobenzene	10	--	ND	10	--
			Isophorone	10	--	ND	100	--
			2-Nitrophenol	10	--	ND	--	--
			2,4-Dimethylphenol	10	--	ND	100	--
			bis(2-Chloroethoxy)Methane	10	--	ND	--	--
			2,4-Dichlorophenol	10	--	ND	20	--
			1,2,4-Trichlorobenzene	10	--	ND	9	--
			Naphthalene	10	--	ND	--	--
			4-Chloroaniline	10	--	ND	--	--
			Hexachlorobutadiene	10	--	ND	1	--
			4-Chloro-3-methylphenol	10	--	ND	--	--
			2-Methylnaphthalene	10	--	ND	--	--
			Hexachlorocyclopentadiene	10	--	ND	50	--
			2,4,6-Trichlorophenol	10	--	ND	20	--
			2,4,5-Trichlorophenol	25	--	ND	700	--
			2-Chloronaphthalene	10	--	ND	--	--
			2-Nitroaniline	25	--	ND	--	--
			Dimethyl Phthalate	10	--	ND	--	--
			Acenaphthylene	10	--	ND	NA	--

TABLE 3

GROUNDWATER SAMPLING RESULTS
BUILDING 697, MAIN POST, MW-1
FORT MONMOUTH, NEW JERSEY
SEMIVOLATILES (Continued)

Sample ID	Sample Date	Analysis Date	Compound Nane	Sample Quantitation Limit (ug/l)	Compound of Concern	Result (ug/l)	GWQC (ug/l)	Exceeds Criteria
MW-1	6/16/95	7/01/95	2,6-Dinitrotoluene	10	--	ND	NA	--
			3-Nitroaniline	25	--	ND	--	--
			Acenaphthene	10	--	ND	400	--
			2,4-Dinitrophenol	25	--	ND	40	--
			4-Nitrophenol	25	--	ND	--	--
			Dibenzofuran	10	--	ND	--	--
			2,4-Dinitrotoluene	10	--	ND	10	--
			Diethylphthalate	10	--	ND	5,000	--
			Fluorene	10	--	ND	300	--
			4-Chlorophenyl-phenlyether	10	--	ND	--	--
			4-Nitroaniline	25	--	ND	--	--
			4,6-Dinitro-2-methylphenol	25	--	ND	--	--
			n-Nitrosodiphenylamine	10	--	ND	20	--
			4-Bromophenyl-phenylether	10	--	ND	--	--
			Hexachlorobenzene	10	--	ND	10	--
			Pentachlorophenol	25	--	ND	1	--
			Phenanthrene	10	--	ND	NA	--
			Anthracene	10	--	ND	2,000	--
			Carbazole	10	--	ND	--	--
			Di-n-butylphthalate	10	--	ND	900	--
			Fluoranthene	10	--	ND	300	--
			Pyrene	10	--	ND	200	--
			Butylbenzylphthalate	10	--	ND	100	--
			Benzo(a)Anthracene	10	--	ND	NA	--
			3,3-Dichlorobenzidine	20	--	ND	60	--
			Chrysene	10	--	ND	NA	--
			bis(2-Ethylhexyl)Phthalate	10	--	ND	30	--

TABLE 3

GROUNDWATER SAMPLING RESULTS
BUILDING 697, MAIN POST, MW-1
FORT MONMOUTH, NEW JERSEY
SEMIVOLATILES (Continued)

Sample ID	Sample Date	Analysis Date	Compound Nane	Sample Quantitation Limit (ug/l)	Compound of Concern	Result (ug/l)	GWQC (ug/l)	Exceeds Criteria
MW-1	6/16/95	7/01/95	Di-n-Octyl Phthalate	10	--	ND	100	--
			Benzo(b)Fluoranthene	10	--	ND	NA	--
			Benzo(k)Fluoranthene	10	--	ND	NA	--
			Benzo(a)Pyrene	10	--	ND	NA	--
			Indeno(1,2,3-cd)pyrene	10	--	ND	NA	--
			Dibenzo(a,h)anthracene	10	--	ND	NA	--
			Benzo(g,h,i)perylene	10	--	ND	NA	--

Notes:
-- Not applicable / does not exceed criteria
(J) Indicates detected below sample quantitation limit
(B) Indicates also present in blank
(ND) Indicates compound not detected
(NA) Not available for this constituent
GWQC Ground Water Quality Criteria

TABLE 3

GROUNDWATER SAMPLING RESULTS
BUILDING 697, MAIN POST, MW-1
FORT MONMOUTH, NEW JERSEY
SEMIVOLATILE TICs

Sample ID	Sample Date	Analysis Date	Compound Name	Sample Quantitation Limit (ug/l)	Compound of Concern	Result (ug/l)	GWQC (ug/l)	Exceeds Criteria
MW-1	6/16/95	7/01/95	15-Tetracosenoic acid, methyl	--	--	36 J	--	--
			Oleic Acid	--	--	12 J	--	--
			Hexadecanoic acid	--	--	7 J	--	--

Notes:
-- Not applicable / does not exceed criteria
(J) Indicates detected below sample quantitation limit
(B) Indicates also present in blank
(ND) Indicates compound not detected
(NA) Not available for this constituent
GWQC Ground Water Quality Criteria

TABLE 3

GROUNDWATER SAMPLING RESULTS
BUILDING 697, MAIN POST, MW-1
FORT MONMOUTH, NEW JERSEY
PESTICIDE/PCBs

Sample ID	Sample Date	Analysis Date	Compound Name	Sample Quantitation Limit (ug/l)	Compound of Concern	Result (ug/l)	GWQC (ug/l)	Exceeds Criteria
MW-1	6/16/95	6/29/95	alpha-BHC	0.02	--	ND	0.02	--
			beta-BHC	0.04	--	ND	0.2	--
			delta-BHC	0.02	--	ND	--	--
			gamma-BHC (Lindane)	0.03	--	ND	0.2	--
			Heptachlor	0.02	--	ND	0.4	--
			Aldrin	0.04	--	ND	0.04	--
			Heptachlor epoxide	0.04	--	ND	0.2	--
			Endosulfan I	0.02	--	ND	0.4	--
			Dieldrin	0.03	--	ND	0.03	--
			4,4'-DDE	0.04	--	ND	0.1	--
			Endrin	0.04	--	ND	2.0	--
			Endosulfan II	0.04	--	ND	0.4	--
			4,4'-DDD	0.31	--	P	0.1	--
			Endosulfan sulfate	0.04	--	ND	0.4	--
			4,4'-DDT	0.12	--	P	0.1	--
			Endrin aldehyde	0.10	--	ND	--	--
			Chlordane	0.1	--	1.6	0.5	yes
			Toxaphene	1.0	--	ND	3.0	--

TABLE 3

GROUNDWATER SAMPLING RESULTS
BUILDING 697, MAIN POST, MW-1
FORT MONMOUTH, NEW JERSEY
PESTICIDE/PCBs

Sample ID	Sample Date	Analysis Date	Compound Nane	Sample Quantitation Limit (ug/l)	Compound of Concern	Result (ug/l)	GWQC (ug/l)	Exceeds Criteria
	6/16/95	6/29/95	Aroclor-1016	1.0	yes	ND	--	--
			Aroclor-1221	1.0	yes	ND	--	--
			Aroclor-1232	1.0	yes	ND	--	--
			Aroclor-1242	1.0	yes	ND	--	--
			Aroclor-1248	1.0	yes	ND	--	--
			Aroclor-1254	1.0	yes	ND	--	--
			Aroclor-1260	1.0	yes	ND	--	--
			Total PBCs	--	yes	--	0.5	--

Notes:

-- Not applicable / does not exceed criteria
(J) Indicates detected below sample quantitation limit
(B) Indicates also present in blank
(ND) Indicates compound not detected
(NA) Not available for this constituent
GWQC Ground Water Quality Criteria

TABLE 3

GROUNDWATER SAMPLING RESULTS
BUILDING 697, MAIN POST, MW-1
FORT MONMOUTH, NEW JERSEY
METALS

Sample ID	Sample Date	Analysis Date	Compound Nane	Sample Quantitation Limit (mg/l)	Compound of Concern	Result (mg/l)	GWQC (ug/l)	Exceeds Criteria
MW-1	6/16/95	06/30/95	Tctal Cyanide	0.010	--	< 0.010	200	--
			Ag	0.050	--	< 0.050	--	--
			Aluminum	0.20	--	0.20	200	--
			Arsenic	0.0050	--	< 0.0050	8	--
			Barium	0.020	--	0.029	2,000	--
			Beryllium	0.0050	--	< 0.0050	20	--
			Calcium	0.40	--	14	--	--
			Cadmium	0.010	--	< 0.010	4	--
			Cobalt	0.050	--	< 0.050	--	--
			Chromium	0.050	--	< 0.050	100	--
			Copper	0.050	--	< 0.050	1,000	--
			Iron	0.10	--	3.5	300	--
			Mercury	0.0010	--	< 0.0010	2	--
			Potassium	3.0	--	< 3.0	--	--
			Magnesium	0.10	--	5.4	--	--
			Manganese	0.020	--	0.023	50	--
			Sodium	0.40	--	23	50,000	--
			Nickel	0.050	--	< 0.050	100	--
			Lead	0.0025	--	< 0.0025	10	--

TABLE 3

GROUNDWATER SAMPLING RESULTS
BUILDING 697, MAIN POST, MW-1
FORT MONMOUTH, NEW JERSEY
METALS (continued)

Sample ID	Sample Date	Analysis Date	Compound Nane	Sample Quantitation Limit (mg/l)	Compound of Concern	Result (mg/l)	GWQC (ug/l)	Exceeds Criteria
MW-1	6/16/95	06/30/95	Antimony	0.0050	--	< 0.0050	20	--
			Selenium	0.0050	--	< 0.0050	50	--
			Thallium	0.0050	--	< 0.0050	10	--
			Vanadium	0.050	--	< 0.050	--	--
			Zinc	0.020	--	< 0.020	5,000	--

Notes:
-- Not applicable / does not exceed criteria
(J) Indicates detected below sample quantitation limit
(B) Indicates also present in blank
(ND) Indicates compound not detected
(NA) Not available for this constituent
GWQC Ground Water Quality Criteria

TABLE 3

GROUNDWATER SAMPLING RESULTS
BUILDING 697, MAIN POST, TRIP BLANK
FT. MONMOUTH, NEW JERSEY
VOLATILE ORGANICS

Sample ID	Sample Date	Analysis Date	Compound Name	Sample Quantitation Limit (ug/l)	Compound of Concern	Result (ug/l)
Trip Blank	6/16/95	6/27/95	Dichlorodifluoromethane	0.50	--	ND
			Chloromethane	0.50	--	1.0
			Vinyl Chloride	0.50	--	ND
			Bromomethane	0.50	--	ND
			Chloroethane	0.50	--	ND
			Trichlorofluoromethane	0.50	--	ND
			1,1-Dichloroethene	0.50	--	ND
			Methylene Chloride	0.50	--	0.80 B
			1,2-Dichloroethene (trans)	0.50	--	ND
			1,1 Dichloroethane	0.50	--	ND
			2,2-Dichloropropane	0.50	--	ND
			cis-1,2-Dichloroethene	0.50	--	ND
			Bromochloromethane	0.50	--	ND
			Chloroform	0.50	--	ND
			1,1,1-Trichloroethane	0.50	yes	ND
			Carbon Tetrachloride	0.50	--	ND
			1,1-Dichloropropene	0.50	--	ND
			Benzene	0.50	yes	ND
			1,2-Dichloroethane	0.50	--	8.4
			Trichloroethene	0.50	yes	ND
			1,2-Dichloropropane	0.50	--	ND
			Dibromomethane	0.50	--	ND
			Bromodichloromethane	0.50	--	ND
			cis-1,3-Dichloropropene	0.50	--	ND
			Toluene	0.50	yes	ND
			trans-1,3-Dichloropropene	0.50	--	ND
			1,1,2-Trichloroethane	0.50	--	ND
			Tetrachloroethene	0.80	yes	ND
			1,3-Dichloropropane	0.50	--	ND
			Dibromochloromethane	0.50	--	ND

TABLE 3

GROUNDWATER SAMPLING RESULTS
BUILDING 697, MAIN POST, TRIP BLANK
FORT MONMOUTH, NEW JERSEY
VOLATILE ORGANICS (Continued)

Sample ID	Sample Date	Analysis Date	Compound Name	Sample Quantitation Limit (ug/l)	Compound of Concern	Result (ug/l)
Trip Blank	6/16/95	6/27/95	1,2-Dibromomethane	0.50	--	ND
			Chlorobenzene	0.50	--	ND
			1,1,1,2-Tetrachloroethane	0.50	--	ND
			Ethylbenzene	0.50	yes	ND
			Xylenes (Total)	0.50	yes	ND
			Styrene	0.50	--	ND
			Bromoform	0.50	--	ND
			Isopropylbenzene	0.50	--	ND
			Bromobenzene	0.50	--	ND
			1,1,2,2-Tetrachloroethane	0.50	--	ND
			1,2,3-Trichloropropane	0.50	--	ND
			n-Propylbenzene	0.50	--	ND
			2-Chlorotoluene	0.50	--	ND
			4-Chlorotoluene	0.50	--	ND
			1,3,5-Trimethylbenzene	0.50	--	ND
			tert-Butylbenzene	0.50	--	ND
			1,2,4-Trimethylbenzene	0.50	--	ND
			sec-Butylbenzene	0.50	--	ND
			1,3-Dichlorobenzene	0.50	--	ND
			4-Isopropyltoluene	0.50	--	ND
			1,4-Dichlorobenzene	0.50	--	ND
			1,2-Dichlorobenzene	0.50	--	ND
			n-Butylbenzene	0.50	--	ND
			1,2-Dibromo-3-chloropropane	0.50	--	ND

TABLE 3

GROUNDWATER SAMPLING RESULTS
BUILDING 697, MAIN POST, TRIP BLANK
FORT MONMOUTH, NEW JERSEY
VOLATILE ORGANICS (Continued)

Sample ID	Sample Date	Analysis Date	Compound Name	Sample Quantitation Limit (ug/l)	Compound of Concern	Result (ug/l)
Trip Blank	6/16/95	6/27/95	1,2,4-Trichlorobenzene	0.50	--	ND
			Hexachlorobutadiene	0.50	--	ND
			Naphthalene	0.50	--	ND
			1,2,3-Trichlorobenzene	0.50	--	ND

Notes:

-- Not applicable / does not exceed criteria
(J) Indicates detected below sample quantitation limit
(B) Indicates also present in blank
(ND) Indicates compound not detected

TABLE 3

GROUNDWATER SAMPLING RESULTS
BUILDING 697, MAIN POST, TRIP BLANK
FORT MONMOUTH, NEW JERSEY
VOLATILE TICs

Sample ID	Sample Date	Analysis Date	Compound Name	Sample Quantitation Limit (ug/l)	Compound of Concern	Result (ug/l)
Trip Blank	6/16/95	6/27/95	Ethane,1-bromo-2-chloro	--	--	3 J

Notes:

--	Not applicable / does not exceed criteria
(J)	Indicates detected below sample quantitation limit
(B)	Indicates also present in blank
(ND)	Indicates compound not detected
(NA)	Not available for this constituent
GWQC	Ground Water Quality Criteria

TABLE 3

GROUNDWATER SAMPLING RESULTS
BUILDING 697, MAIN POST, FIELD BLANK
FT. MONMOUTH, NEW JERSEY
VOLATILE ORGANICS

Sample ID	Sample Date	Analysis Date	Compound Name	Sample Quantitation Limit (ug/l)	Compound of Concern	Result (ug/l)
Field Blank	6/16/95	6/27/95	Dichlorodifluoromethane	0.50	--	ND
			Chloromethane	0.50	--	0.90
			Vinyl Chloride	0.50	--	ND
			Bromomethane	0.50	--	ND
			Chloroethane	0.50	--	ND
			Trichlorofluoromethane	0.50	--	ND
			Methylene Chloride	0.50	--	0.80 B
			1,2-Dichloroethene (trans)	0.50	--	ND
			1,1 Dichloroethane	0.50	--	ND
			2,2-Dichloropropane	0.50	--	ND
			cis-1,2-Dichloroethene	0.50	--	ND
			Bromochloromethane	0.50	--	ND
			Chloroform	0.50	--	ND
			1,1,1-Trichloroethane	0.50	yes	ND
			Carbon Tetrachloride	0.50	--	ND
			1,1-Dichloropropene	0.50	--	ND
			Benzene	0.50	yes	ND
			1,2-Dichloroethane	0.50	--	7.3
			1,2-Dichloropropane	0.50	--	ND
			Trichloroethene	0.50	yes	ND
			Dibromomethane	0.50	--	ND
			Bromodichloromethane	0.50	--	ND
			cis-1,3-Dichloropropene	0.50	--	ND
			Toluene	0.50	yes	ND
			trans-1,3-Dichloropropene	0.50	--	ND
			1,1,2-Trichloroethane	0.50	--	ND
			Tetrachloroethene	0.50	yes	ND
			1,3-Dichloropropane	0.50	--	ND
			Dibromochloromethane	0.50	--	ND

TABLE 3

GROUNDWATER SAMPLING RESULTS
BUILDING 697, MAIN POST, FIELD BLANK
FORT MONMOUTH, NEW JERSEY
VOLATILE ORGANICS (Continued)

Sample ID	Sample Date	Analysis Date	Compound Name	Sample Quantitation Limit (ug/l)	Compound of Concern	Result (ug/l)
Field Blank	6/16/95	6/27/95	1,2-Dibromoethane	0.50	--	ND
			Chlorobenzene	0.50	--	ND
			1,1,1,2-Tetrachloroethane	0.50	--	ND
			Ethylbenzene	0.50	yes	ND
			Xylenes (Total)	0.50	yes	ND
			Styrene	0.50	--	ND
			Bromoform	0.50	--	ND
			Isopropylbenzene	0.50	--	ND
			Bromobenzene	0.50	--	ND
			1,1,2,2-Tetrachloroethane	0.50	--	ND
			n-Propylbenzene	0.50	--	ND
			2-Chlorotoluene	0.50	--	ND
			4-Chlorotoluene	0.50	--	ND
			1,3,5-Trimethylbenzene	0.50	--	ND
			tert-Butylbenzene	0.50	--	ND
			1,2,4-Trimethylbenzene	0.50	--	ND
			sec-Butylbenzene	0.50	--	ND
			1,3-Dichlorobenzene	0.50	--	ND
			4-Isopropyltoluene	0.50	--	ND
			1,4-Dichlorobenzene	0.50	--	ND

TABLE 3

GROUNDWATER SAMPLING RESULTS
BUILDING 697, MAIN POST, FIELD BLANK
FORT MONMOUTH, NEW JERSEY
VOLATILE ORGANICS (Continued)

Sample ID	Sample Date	Analysis Date	Compound Name	Sample Quantitation Limit (ug/l)	Compound of Concern	Result (ug/l)
Field Blank	6/16/95	6/27/95	1,2-Dichlorobenzene	0.50	--	ND
			n-Butylbenzene	0.50	--	ND
			1,2-Dibromo-3-chloropropane	0.50	--	ND
			1,2,4-Trichlorobenzene	0.50	--	ND
			Hexachlorobutadiene	0.50	--	ND
			Naphthalene	0.50	--	ND
			1,2,3-Trichlorobenzene	0.50	--	ND

Notes:

-- Not applicable / does not exceed criteria
(J) Indicates detected below sample quantitation limit
(B) Indicates also present in blank
(ND) Indicates compound not detected

TABLE 3

GROUNDWATER SAMPLING RESULTS
BUILDING 697, MAIN POST, FIELD BLANK
FORT MONMOUTH, NEW JERSEY
VOLATILE TICs

Sample ID	Sample Date	Analysis Date	Compound Name	Sample Quantitation Limit (ug/l)	Compound of Concern	Result (ug/l)
Field Blank	6/16/95	6/27/95	Ethane,1-bromo-2-chloro	--	--	3 J

Notes:

--	Not applicable / does not exceed criteria
(J)	Indicates detected below sample quantitation limit
(B)	Indicates also present in blank
(ND)	Indicates compound not detected
(NA)	Not available for this constituent
GWQC	Ground Water Quality Criteria

TABLE 3

GROUNDWATER SAMPLING RESULTS
BUILDING 697, MAIN POST, FIELD BLANK
FORT MONMOUTH, NEW JERSEY
SEMIVOLATILES

Sample ID	Sample Date	Analysis Date	Compound Name	Sample Quantitation Limit (ug/l)	Compound of Concern	Result (ug/l)
Field Blank	6/16/95	6/26/95	Phenol	10	--	3 JB
			bis(2 chloroethyl)Ether	10	--	ND
			2-Chlorophenol	10	--	ND
			1,3-Dichlorobenzene	10	--	ND
			1,4-Dichlorobenzene	10	--	ND
			2-Methylphenol	10	--	ND
			bis(2-chloroisopropyl)Ether	10	--	ND
			4-Methylphenol	10	--	ND
			N-Nitroso-Di-n-propylamine	10	--	ND
			Hexachloroethane	10	--	ND
			Nitrobenzene	10	--	ND
			Isophorone	10	--	ND
			2-Nitrophenol	10	--	ND
			2,4-Dimethylphenol	10	--	ND
			bis(2-Chloroethoxy)Methane	10	--	ND
			2,4-Dichlorophenol	10	--	ND
			1,2,4-Trichlorobenzene	10	--	ND
			Naphthalene	10	--	ND
			4-Chloroaniline	10	--	ND
			Hexachlorobutadiene	10	--	ND
			4-Chloro-3-methylphenol	10	--	ND
			2-Methylnaphthalene	10	--	ND
			Hexachlorocyclopentadiene	10	--	ND
			2,4,6-Trichlorophenol	10	--	ND
			2,4,5-Trichlorophenol	25	--	ND
			2-Chloronaphthalene	10	--	ND
			2-Nitroaniline	25	--	ND
			Dimethyl Phthalate	10	--	ND
			Acenaphthylene	10	--	ND
			2,6-Dinitrotoluene	10	--	ND

TABLE 3

GROUNDWATER SAMPLING RESULTS
BUILDING 697, MAIN POST, FIELD BLANK
FORT MONMOUTH, NEW JERSEY
SEMIVOLATILES (Continued)

Sample ID	Sample Date	Analysis Date	Compound Nane	Sample Quantitatio n Limit (ug/l)	Compound of Concern	Result (ug/l)
Field Blank	6/16/95	6/26/95	3-Nitroaniline	25	--	ND
			Acenaphthene	10	--	ND
			2,4-Dinitrophenol	25	--	ND
			4-Nitrophenol	25	--	ND
			Dibenzofuran	10	--	ND
			2,4-Dinitrotoluene	10	--	ND
			Diethylphthalate	10	--	ND
			Fluorene	10	--	ND
			4-Chlorophenyl-phenlyether	10	--	ND
			4-Nitroaniline	25	--	ND
			4,6-Dinitro-2-methylphenol	25	--	ND
			N-Nitrosodiphenylamine	10	--	ND
			4-Bromophenyl-phenylether	10	--	ND
			Hexachlorobenzene	10	--	ND
			Pentachlorophenol	25	--	ND
			Phenanthrene	10	--	ND
			Anthracene	10	--	ND
			Carbazole	10	--	ND
			Di-n-butylphthalate	10	--	ND
			Fluoranthene	10	--	ND
			Pyrene	10	--	ND
			Butylbenzylphthalate	10	--	ND
			Benzo(a)Anthracene	10	--	ND
			3,3-Dichlorobenzidine	20	--	ND
			Chrysene	10	--	ND

TABLE 3

GROUNDWATER SAMPLING RESULTS
BUILDING 697, MAIN POST, FIELD BLANK
FORT MONMOUTH, NEW JERSEY
SEMIVOLATILES (Continued)

Sample ID	Sample Date	Analysis Date	Compound Nane	Sample Quantitation Limit (ug/l)	Compound of Concern	Result (ug/l)
Field Blank	6/16/95	6/26/95	bis(2-Ethylhexyl)Phthalate	10	--	ND
			Di-n-Octyl Phthalate	10	--	ND
			Benzo(b)Fluoranthene	10	--	ND
			Benzo(k)Fluoranthene	10	--	ND
			Benzo(a)Pyrene	10	--	ND
			Indeno(1,2,3-cd)pyrene	10	--	ND
			Dibenzo(a,h)anthracene	10	--	ND
			Benzo(g,h,i)perylene	10	--	ND

Notes:

--	Not applicable / does not exceed criteria
(J)	Indicates detected below sample quantitation limit
(B)	Indicates also present in blank
(ND)	Indicates compound not detected

TABLE 3

GROUNDWATER SAMPLING RESULTS
BUILDING 697, MAIN POST, FIELD BLANK
FORT MONMOUTH, NEW JERSEY
SEMIVOLATILE TICs

Sample ID	Sample Date	Analysis Date	Compound Name	Sample Quantitation Limit (ug/l)	Compound of Concern	Result (ug/l)
Field Blank	6/16/95	6/26/95	NO TICS FOUND	--	--	--

Notes:

--	Not applicable / does not exceed criteria
(J)	Indicates detected below sample quantitation limit
(B)	Indicates also present in blank
(ND)	Indicates compound not detected
(NA)	Not available for this constituent
GWQC	Ground Water Quality Criteria

TABLE 3

GROUNDWATER SAMPLING RESULTS
BUILDING 697, MAIN POST, FIELD BLANK
FORT MONMOUTH, NEW JERSEY
PESTICIDE/PCBs

Sample ID	Sample Date	Analysis Date	Compound Nane	Sample Quantitation Limit (ug/l)	Compound of Concern	Result (ug/l)
Field Blank	6/16/95	6/29/95	alpha-BHC	0.02	--	ND
			beta-BHC	0.04	--	ND
			delta-BHC	0.02	--	ND
			gamma-BHC (Lindane)	0.03	--	ND
			Heptachlor	0.02	--	ND
			Aldrin	0.04	--	ND
			Heptachlor epoxide	0.04	--	ND
			Endosulfan I	0.02	--	ND
			Dieldrin	0.03	--	ND
			4,4'-DDE	0.04	--	ND
			Endrin	0.04	--	ND
			Endosulfan II	0.04	--	ND
			4,4'-DDD	0.04	--	ND
			Endosulfan sulfate	0.04	--	ND
			4,4'-DDT	0.04	--	ND
			Endrin aldehyde	0.10	--	ND
			Chlordane	0.10	--	ND
			Toxaphene	1.0	--	ND

TABLE 3

GROUNDWATER SAMPLING RESULTS
BUILDING 697, MAIN POST, FIELD BLANK
FORT MONMOUTH, NEW JERSEY
PESTICIDE/PCBs

Sample ID	Sample Date	Analysis Date	Compound Nane	Sample Quantitation Limit (ug/l)	Compound of Concern	Result (ug/l)
Field Blank	6/16/95	6/29/95	Aroclor-1016	1.0	yes	ND
			Aroclor-1221	1.0	yes	ND
			Aroclor-1232	1.0	yes	ND
			Aroclor-1242	1.0	yes	ND
			Aroclor-1248	1.0	yes	ND
			Aroclor-1254	1.0	yes	ND
			Aroclor-1260	1.0	yes	ND
			Total PCBs	--	yes	--

Notes:

--	Not applicable / does not exceed criteria
(J)	Indicates detected below sample quantitation limit
(B)	Indicates also present in blank
(ND)	Indicates compound not detected
(NA)	Not available for this constituent
GWQC	Ground Water Quality Criteria

TABLE 3

GROUNDWATER SAMPLING RESULTS
BUILDING 697, MAIN POST, FIELD BLANK
FORT MONMOUTH, NEW JERSEY
METALS

Sample ID	Sample Date	Analysis Date	Compound Nane	Sample Quantitation Limit (mg/l)	Compound of Concern	Result (mg/l)
Field Blank	6/16/95	06/30/95	Total Cyanide	0.010	--	< 0.010
			Ag	0.050	--	< 0.050
			Aluminum	0.20	--	< 0.20
			Arsenic	0.0050	--	< 0.0050
			Barium	0.020	--	< 0.020
			Beryllium	0.0050	--	< 0.0050
			Calcium	0.40	--	< 0.40
			Cadmium	0.010	--	< 0.010
			Cobalt	0.050	--	< 0.050
			Chromium	0.050	--	< 0.050
			Copper	0.050	--	< 0.050
			Iron	0.10	--	< 0.10
			Mercury	0.0010	--	< 0.0010
			Potassium	3.0	--	< 3.0
			Magnesium	0.10	--	< 0.10
			Manganese	0.020	--	< 0.020
			Sodium	0.40	--	< 0.40
			Nickel	0.050	--	< 0.050
			Lead	0.0025	--	< 0.0025

TABLE 3

GROUNDWATER SAMPLING RESULTS
BUILDING 697, MAIN POST, FIELD BLANK
FORT MONMOUTH, NEW JERSEY
METALS (continued)

Sample ID	Sample Date	Analysis Date	Compound Nane	Sample Quantitation Limit (mg/l)	Compound of Concern	Result (mg/l)
Field Blank	6/16/95	06/30/95	Antimony	0.0050	--	< 0.0050
			Selenium	0.0050	--	< 0.0050
			Thallium	0.0050	--	< 0.0050
			Vanadium	0.050	--	< 0.050
			Zinc	0.020	--	< 0.020

Notes:

--	Not applicable / does not exceed criteria
(J)	Indicates detected below sample quantitation limit
(B)	Indicates also present in blank
(ND)	Indicates compound not detected
(NA)	Not available for this constituent
GWQC	Ground Water Quality Criteria

The trip blank collected on June 16, 1995, contained a chloromethane concentration of 1.0 ug/l, and a methylene chloride concentration of 0.8 ug/l. The sample also contained a 1,2-dichloroethane concentration of 8.4 ug/l. The field blank contained a chloromethane concentration of 0.9 ug/l, a methylene chloride concentration of 0.8 ug/l, and a 1,2-dichloroethane concentration of 7.3 ug/l. The field blank also contained a phenol concentration of 3.0 ug/l. No other compounds were detected in MW-1, the trip blank, or the field blank.

No product or sheen was observed in MW-1 on either of the sampling dates. The depth to the water table on May 25, 1995 was 13.16 feet below grade.

3.3 CONCLUSIONS AND RECOMMENDATIONS

Based on the post-excavation soil sampling results, soils with TPHC concentrations exceeding the NJDEP total organic contaminants criteria of 10,000 mg/kg do not remain in the former location of the USTs. VOCs exceeding the applicable soil cleanup criteria were not detected at sampling location MW-1. However, the soil sampling program conducted at Building 697 will require additional sampling and analysis to meet current *Technical Requirements* (7:26E-2.1(d)) for waste oil USTs.

The *Technical Requirements* specify that, in addition to TPHC, a minimum of 25 percent of post-remediation soil samples collected at a waste oil UST location that contain detectable TPHC also be analyzed for VO+10, BNC+15, PCBs, and Priority Pollutant metals or EPA Target Analyte List. The sample with the highest TPHC is to be analyzed for the additional parameters. At Building 697, this would be the soil sampling location designated as C (collected from 5.0 to 5.5 feet below grade on November 24, 1992).

Based on the analytical results of the groundwater samples collected on May 25, 1995, and June 16, 1995, groundwater quality at the Building 697 UST closure site exceeds the GWQC for chlordane and is at or slightly below the GWQC for tetrachloroethylene. The ground water quality at Building 697 complies with the GWQC for all other VOCs, BNCs, TCL, and TAL parameters.

The trace concentrations of methylene chloride detected during both rounds is attributed to sampling and/or analytical interference, based on the detection of methylene chloride, a common source of laboratory interference, in the sampling blanks. Similarly, the 1,2-dichloroethane, chloromethane, and phenol detected during the June 16, 1995 sampling round are attributed to sampling and/or analytical interference due to the detection of these compounds in the sampling blanks.

Additional data collection is recommended for Building 697. A soil sample will be collected from post-excavation soil sampling location C at 5.0 to 5.5 feet below grade, and analyzed for TPHC, VO+10, BNC+15, PCBs, and Priority Pollutant metals or EPA Target Analyte List.

SMITH

Sampling and analytical protocols will conform to the NJDEP *Field Sampling Procedures Manual* dated May 1992 and the *Technical Requirements*. MW-1 will be resampled two additional times, approximately 30 days apart. During both additional sampling rounds, an unfiltered and a field-filtered sample will be collected and analyzed for chlordane. This is to determine if the chlordane previously detected is migrating in the groundwater or is due to interference from sampling-induced turbidity.

Should the recommended sampling indicate that the soil complies with the applicable soil cleanup criteria and the groundwater meets the GWQC for chlordane, no further action is proposed in regard to the closure and site assessment of UST Nos. 0081533-194, -195, and -196.

SMITH

APPENDIX A

CERTIFICATIONS

UST-014
2/91

FOR STATE USE ONLY

UST # _____

Date Rec'd _____

TMS # _____

Staff _____

State of New Jersey
Department of Environmental Protection and Energy
Division of Responsible Party Site Remediation
CN 029
Trenton, NJ 08625-0029
Tel. # 609-984-3156
Fax. # 609-292-5604

Scott A. Weiner
Commissioner

Karl J. Delaney
Director

UNDERGROUND STORAGE TANK SITE ASSESSMENT SUMMARY

Under the provisions of the Underground Storage of Hazardous Substances Act in accordance with N.J.A.C. 7:14B

This Summary form shall be used by all owners and operators of Underground Storage Tank Systems (USTS) who have either reported a release and are subject to the site assessment requirements of N.J.A.C. 7:14B-8.2 or who have closed USTS pursuant to N.J.A.C. 7:14B-9.1 et seq. and are subject to the site assessment requirements of N.J.A.C. 7:14B-9.2 and 9.3.

INSTRUCTIONS:

- *Please print legibly or type.*
- *Fill in all applicable blanks. This form will require various attachments in order to complete the Summary. The technical guidance document, Interim Closure Requirements for USTs, explains the regulatory (and technical) requirements for closure and the Scope of Work, Investigation and Corrective Action Requirements for Discharges from Underground Storage Tanks and Piping Systems explains the regulatory (and technical) requirements for corrective action.*
- *Return one original of the form and all required attachments to the above address.*
- *Attach a scaled site diagram of the subject facility which shows the information specified in Item IV B of this form.*
- *Explain any "No" or "N/A" response on a separate sheet.*

Date of Submission _____

Bldg. 697

0081533-194, 195, 196
FACILITY REGISTRATION #

I. FACILITY NAME AND ADDRESS

U.S. Army, Fort Monmouth, New Jersey
Directorate of Engineering and Housing, Building 167
Fort Monmouth, New Jersey 07743 County Monmouth
Telephone No. (908) 532-1475

OWNER'S NAME AND ADDRESS, if different from above

_____

_____

_____

Telephone No. _____

II. DISCHARGE REPORTING REQUIREMENTS

A. Was contamination found? ___ Yes X No If Yes, Case No._____
(Note: All discharges must be reported to the Environmental Action Hotline (609) 292-7172)

B. The substance(s) discharged was(were) N/A

C. Have any vapor hazards been mitigated? ___ Yes ___ No X N/A

III. DECOMMISSIONING OF TANK SYSTEMS

Closure Approval No._____

The site assessment requirements associated with tank decommissioning are explained in the Technical Guidance Document, Interim Closure Requirements for UST's, Section V. A-D. Attach complete documentation of the methods used and the results obtained for each of the steps of tank decommissioning used. Please include a site map which shows the locations of all samples and borings, the location of all tanks and piping runs at the facility at the beginning of the tank closure operation and annotated to differentiate the status of all tanks and piping (e.g., removed, abandoned, temporarily closed, etc.). The same site map can be used to document other parts of the site assessment requirements, if it is properly and legibly annotated.

IV. SITE ASSESSMENT REQUIREMENTS

A. Excavated Soil

Any evidence of contamination in excavated soil will require that the soil be classified as either Hazardous Waste or Non-Hazardous Waste. Please include all required documentation of compliance with the requirements for handling contaminated excavated soil (if any was present) as explained in the technical guidance documents for closure and corrective action. Describe amount of soil removed, its classification, and disposal location.

B. Scaled Site Diagrams

1. Scaled site diagrams must be attached which include the following information:
   a. North arrow and scale
   b. The locations of the ground water monitoring wells
   c. Location and depth of each soil sample and boring
   d. All major surface and sub-surface structures and utilities
   e. Approximate property boundaries
   f. All existing or closed underground storage tank systems, including appurtenant piping
   g. A cross-sectional view indicating depth of tank, stratigraphy and location of water table
   h. Locations of surface water bodies

C. Soil samples and borings (check appropriate answer)

1. Were soil samples taken from the excavation as prescribed? X Yes ___ No ___ N/A
2. Were soil borings taken at the tank system closure site as prescribed? ___ Yes ___ No X N A
3. Attach the analytical results in tabular form and include the following information about each sample:
   a. Customer sample number (keyed to the site map)
   b. The depth of the soil sample
   c. Soil boring logs
   d. Method detection limit of the method used
   e. QA/QC Information as required

D. Ground Water Monitoring

1. Number of ground water monitoring wells installed 1

2. Attach the analytical results of the ground water samples in tabular form. Include the following information for each sample from each well:

   a. Site diagram number for each well installed
   b. Depth of ground water surface
   c. Depth of screened interval
   d. Method detection limit of the method used
   e. Well logs
   f. Well permit numbers
   g. QA/QC information as required

V. SOIL CONTAMINATION

A. Was soil contamination found? ___ Yes X No
If "Yes", please answer Question B-E
If "No", please answer Question B

B. The highest soil contamination still remaining in the ground has been determined to be:
1. N/A ppb total BTEX, N/A ppb total non-targeted VOC
2. N/A ppb total B/N, N/A ppb total non-targeted B/N
3. 457.0 ppm TPHC
4. N/A ppb _____ (for non-petroleum substance)
(See Table 2 for other parameters)

C. Remediation of free product contaminated soils

1. All free product contaminated soil on the property boundaries and above the water table are believed to have been removed from the subsurface X Yes ___ No
2. Free product contaminated soils are suspected to exist below the water table ___ Yes X No
3. Free product contaminated soils are suspected to exist off the property boundaries. ___ Yes X No

D. Was the vertical and horizontal extent of contamination determined? ___ Yes ___ No X N/A

E. Does soil contamination intersect ground water? ___ Yes X No ___ N/A

VI. GROUND WATER CONTAMINATION

A. Was ground water contamination found? ___ Yes X No
If "Yes", please answer Questions B-G.
If "No", please answer only Question B.

B. The highest ground water contamination at any 1 sampling location and at any 1 sampling event to date has been determined to be: (See Table 3 for other parameters)

1. 0.0 ppb total BTEX, 4.0 ppb total non-targeted VOC
2. 3.0 ppb total B/N, 55.0 ppb total non-targeted B/N
3. N/A ppb total MTBE, N/A ppb total TBA
4. 1.6 ppb Chlordane (for non-petroleum substance)
5. greatest thickness of separate phase product found N/A
6. separate phase product has been delineated ___ Yes ___ No X N/A

C. Result(s) of well search

1. A well search (including a review of manual well records) indicates that private, municipal or commercial wells do exist within the distances specified in the Scope of Work. ___ Yes ___ No X N/A

2. The number of these wells identified is N/A .

D. Proximity of wells and contaminant plume

1. The shallowest depth of any well noted in the well search which may be in the horizontal or vertical potential path(s) of the contaminant plume(s) is N/A feet below grade (consideration has been given for the effects of pumping, subsurface structures, etc. on the direction(s) of contaminant migration). This well is N/A feet from the source and its screening begins at a depth of N/A feet.

2. The shallowest depth to the top of the well screen for any well in the potential path of the plume(s) (as described in D1 above) is N/A feet below grade. This well is located N/A feet from the source.

3. The closest horizontal distance of a private, commercial or municipal well in the potential path of the plume (as determined in D1) is N/A feet from the source. This well is N/A feet deep and screening begins at a depth of N/A feet.

E. A plan for separate phase product recovery has been included. ___Yes ___No X N/A

F. A ground water contour map has been submitted which includes the ground water elevations for each well.
___Yes ___No X N/A

G. Delineation of contamination N/A

1. The ground water contaminants have been delineated to MCLs or lower values at the property boundaries. ___Yes ___No

2. The plume is suspected to continue off the property at concentrations greater than MCLs.
___Yes ___No

3. Off property access (circle one): is being sought has been approved has been denied

VII. SITE ASSESSMENT CERTIFICATION [preparer of site assessment plan - N.J.A.C. 7:14B-8.3(b) &9.5(a)3]

The person signing this certification as the "Qualified Ground Water Consultant" (as defined in N.J.A.C.7:14B-1.6) responsible for the design and implementation of the site assessment plan as specified in N.J.A.C. 7:14B-8.3(a) & 9.2(b)2, must supply the name of the certifying organization and certification number.

"I certify under penalty of law that the information provided in this document is true, accurate, and complete and was obtained by procedures in compliance with N.J.A.C. 7:14B-8 and 9. I am aware that there are significant penalties for submitting false, inaccurate, or incomplete information, including fines and/or imprisonment."

NAME (Print or Type) Charles M. Appleby SIGNATURE [signature]

COMPANY NAME U.S. Army, Fort Monmouth DATE 2/14/96
(Preparer of Site Assessment Plan)

CERTIFYING ORGANIZATION NJDEP CERTIFICATION NUMBER 2056

VIII. TANK DECOMMISSIONING CERTIFICATION [person performing tank decommissioning portion of closure plan - N.J.A.C. 7:14B-9.5(a)4]

"I certify under penalty of law that tank decommissioning activities were performed in compliance with N.J.A.C. 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) _____ SIGNATURE _____

COMPANY NAME _____ DATE _____
(Performer of Tank Decommissioning)

IX. CERTIFICATIONS BY THE RESPONSIBLE PARTY(IES) OF THE FACILITY

A. The following certification shall be signed by the highest ranking individual with overall responsibility for that facility [N.J.A.C. 7:14B-2.3(c)1i].

"I certify under penalty of law that the information provided in this document is true, accurate, and complete . I am aware that there are significant penalties for submitting false, inaccurate, or incomplete information, including fines and/or imprisonment."

NAME (Print or Type) James Ott SIGNATURE James Ott

COMPANY NAME U.S. Army Fort Monmouth DATE 2/14/96

B. The following certification shall be signed as follows [according to the requirements of N.J.A.C. 7:14B-2.3(C)2i]:

1. For a corporation, by a principal executive officer of at least the level of vice president.
2. For a partnership or sole proprietorship, by a general partner or the proprietor, respectively; or
3. For a municipality, State, Federal or other public agency by either the principal executive officer or ranking elected official.
4. In cases where the highest ranking corporate partnership, governmental officer or official at the facility as required in A above is the same person as the official required to certify in B, only the certification in A need to be made. In all other cases, the certifications of A and B shall be made.

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false, inaccurate, or incomplete information, including fines and/or imprisonment."

NAME (Print or Type) _____ SIGNATURE _____

COMPANY NAME _____ DATE _____

MONITORING WELL CERTIFICATION FORM B-LOCATION CERTIFICATION

Name of Permittee: U.S. ARMY
Name of Facility: FORT MONMOUTH
Location: MONMOUTH COUNTY, NJ
NJPDES Number: NONE

LAND SURVEYOR'S CERTIFICATION

Well Permit Number: This number must be permanently affixed to the well casing.	29-31776-
Longitude (to nearest second):	West 74°02'58.14"
Latitude (to nearest second):	North 40°18'54.28"
Elevation of Top of Inner Casing (cap off) (one-hundredth of a foot):	17.94
Elevation of ground level (1/100th ft.)	15.04
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: FM-106 ☒ 1927 ☐ 1983 Elev.:
Owners Well Number (As shown on application or plans):	BLDG. S-697 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 #

SMITH

APPENDIX B

NJDEP WELL PERMIT AND WELL CONSTRUCTION LOG

SERIAL # 41113

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. 2931776

COORD # 09.136 51

Owner US Army - Fort Monmouth
Address SELFPWEV
Fort Monmouth NJ 07703
Name of Facility Bldg 697
Address Main Post
Fort Monmouth NJ

Driller Tyrrc Organization
Address 1350 US Hwy 130
Burlington NJ 08016

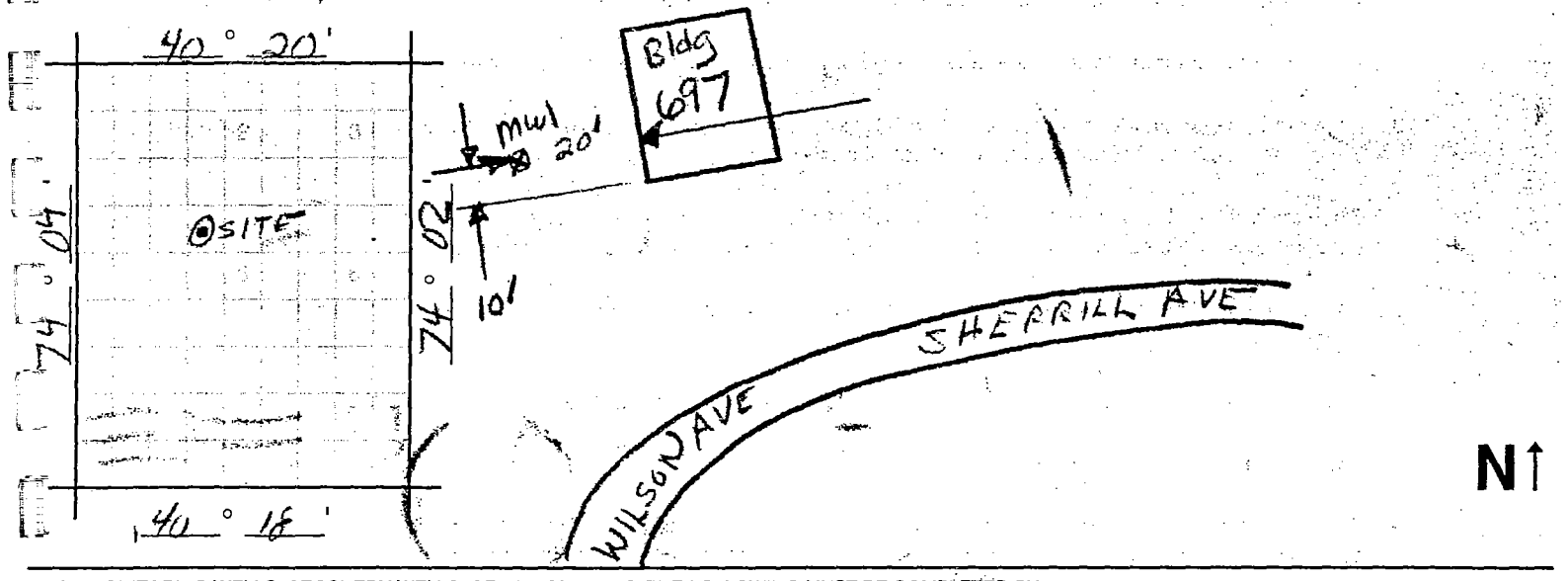
Diameter of Well(s)	4 Inches	Proposed Depth of Well(s)	15 Feet
# of Wells Applied for (max. 10)	1	Will pumping equipment be installed? YES ☐ NO ☒	
Type of Well (see reverse)	Monitoring	If Yes, give pump capacity	N/A GPM

LOCATION OF WELL(S)

Lot #	Block #	Municipality	County
		Fort Monmouth	Monmouth.

State Atlas Map No. 29

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
N/A
(Site Bldg. 697)

This Space for Approval Stamp

WELL PERMIT APPROVED
N.J.D.E.P.
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.

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

7-25-94

Signature of Driller _____ License # 142

Signature of Owner SELFM-PW-EV

COPIES: Water Allocation — White and Pink Health Dept. — Yellow Owner — Blue Driller — White

DWR-138 M
12/91

New Jersey Department of Environmental Protection and Energy
Bureau of Water Allocation

MONITORING WELL RECORD

Well Permit No. 29 - 31776
Atlas Sheet Coordinates ~~29~~ : ~~15~~ : 651

OWNER IDENTIFICATION - Owner US ARMY FORT MONMOUTH
Address SELFM-FW-EV
City FORT MONMOUTH State NJ Zip Code

WELL LOCATION - If not the same as owner please give address. Owner's Well No. Bldg. 697 MW-1
County MONMOUTH Municipality OCEANPORT BORO Lot No. Block No.
Address

TYPE OF WELL (as per Well Permit Categories) MONITORING Date well completed 9,13,94
Regulatory Program Requiring Well DEP Case I.D. #
CONSULTING FIRM/FIELD SUPERVISOR (if applicable) Tele. #

WELL CONSTRUCTION
Total depth drilled 17½ ft.
Well finished to 17½ ft.
Borehole diameter:
Top 8 in.
Bottom 8 in.
Well was finished: ☑ above grade ☐ flush mounted
If finished above grade, casing height (stick up) above land surface 2½ ft.
Was steel protective casing installed? ☑ Yes ☐ No

	Depth to Top (ft.) [From land surface]	Depth to Bottom (ft.)	Diameter (inches)	Type and Material
Inner Casing	0	2½'	4	PVC
Outer Casing (Not Protective Casing)				
Screen (Note slot size)	2½'	17½'	4	20 slot PVC
Tail Piece				
Gravel Pack	1½'	17½'		#2 Morie sand
Annular Seal/Grout	6"	1½'		Bentonite Pellets
Method of Grouting	Tremmie			

Static water level after drilling 12 ft.
Water level was measured using Tape
Well was developed for 1 hours at 10 gpm
Method of development pump
Was permanent pumping equipment installed? ☐ Yes ☑ No
Pump capacity gpm
Pump type:
Drilling Method Auger
Drilling Fluid Type of Rig B80
Name of Driller Michael E. Beck
Health and Safety Plan submitted? ☑ Yes ☐ No
Level of Protection used on site (circle one) None D C B A
N.J. License No. 142
Name of Drilling Company TYREE ENVIRONMENTAL TECHNICAL

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

0-6" Grassy area, topsoil
6"-3' Olive gray, fine-medium sand
3'-5' Medium brown fine sand
5'-8' Olive gray soft clay
8'-10' Dark gray medium sand
10'-17½' Brown, medium sand

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

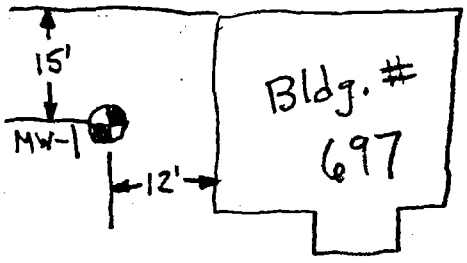
Driller's Signature Michael E. Beck Date 10-10-94

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

FIELD LOG OF BORING

SHEET 1 OF 2

LOCATION OF BORING:



Sherrill Ave.

PROJECT: US Army Ft, Monmouth	BORING NO: MW-1
	TOTAL DEPTH: 17½'
JOB NO:	LOGGED BY: E. Plyc
PROJ. MGR.: Capriffi	EDITED BY:
DRILLING CONTRACTOR: Tyree	
DRILL RIG TYPE: B 80	
DRILLERS NAME: M. Beck	
SAMPLING METHODS: SS	
HAMMER WT.: 120 lbs,	DROP:
STARTED, TIME: 11:45	DATE:
COMPLETED, TIME: 12:15	DATE:
BORING DEPTH (ft): 17½	
CASING DEPTH (ft): 2½	
WATER DEPTH (ft): 12'	
TIME: 6:30	
DATE: 9/14/94	
BACKFILLED, TIME: 12:20	DATE: 9/13/94 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	
										1		Grassy area, top soil
												Med. brown fine sand
										2	SP	
2-4'	SS	3	6	24			<1	N				
		5	6							3		
		5	6									Olive gray fine-med. sand;
		4	6				2	N		4	SP	moist @ ≈ 3'. Sample collected
												at 3-4'.
										5		
												Olive gray soft clay
										6		
											CL	
										7		
										8		
												Dark gray medium sand
										9	SP	
										10		
											SP	Brown, medium sand, wet

Grout, 2" PVC riser, bentonite, Sand pack, Screen, Moist sand

TYREE ENVIRONMENTAL TECHNOLOGIES

69

FIELD LOG OF BORING (CONTINUED)

SHEET 2 OF 2

DEPTH	TYPE	BLOWS	DRIVEN	REC'VD	COND.	D. RATE	PID	ODOR	GR.WELL	DEPTH	GRAPHIC LOG
									sand / screen	11	
										12	
										13	SP
										14	
										15	
										16	
										17	
										18	
										19	
										0	
										1	
										2	
										3	
										4	
										5	
										6	
										7	
										8	

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

TYREE ENVIRONMENTAL TECHNOLOGIES

SMITH

APPENDIX C

SOIL ANALYTICAL DATA PACKAGE

Serv-Air, Inc.
A Subsidiary of E-Systems, Inc.
Environmental and Energy Laboratory
P.O. Box 369
Fort Monmouth, NJ 07703
908-532-6147

NJDEPE Certified Laboratory # 13461

Report of Analysis

Analysis by: Sarah J. Hubbard and Brian K. McKee

Project: Bldg.# 697 Tank Assessment

Date Started: 11-24-92
Date Complete: 11-25-92

Reviewed: 12-02-92
Revised: 12-08-92
Released: 12-08-92

By: B. K. McK

Brian K. McKee
Environmental and Energy Chief

Serv-Air, Inc.

A Subsidiary of E-Systems, Inc.
Environmental and Energy Laboratory
P.O. Box 369
Fort Monmouth, NJ 07703
908-532-6147

NJDEPE Certified Laboratory # 13461

Project: Site Assement Location: Bldg. # 697 Date: 12-02-92
Sample Matrix: Soil
Parameter: Total Petroleum Hydrocarbon
Method: 418.1

Sample ID	Rec'd	Extract	Analysis	dry wt. Results (mg/Kg)	Detection Limit (mg/Kg)
C92-1068	11/24/92	11/25/92	11/25/92	110.6	3.3
C92-1069	11/24/92	11/25/92	11/25/92	ND	3.3
C92-1070	11/24/92	11/25/92	11/25/92	457.0	3.3
C92-1071	11/24/92	11/25/92	11/25/92	ND	3.3
C92-1072	11/24/92	11/25/92	11/25/92	130.6	3.3
C92-1073	11/24/92	11/25/92	11/25/92	ND	3.3
Blank	00/00/00	11/25/92	11/25/92	ND	3.3

Notes:

- All results reported on a dry weight basis
- ND = none detected

C92-1068 = A= 6'-6.5' = 84% Solid
C92-1069 = B= 8'-8.5 '= 97% Solid
C92-1070 = C= 5'-5.5' = 79% Solid: H2SiO3 added
C92-1071 = D= 8'-8.5' = 96% Solid
C92-1072 = E= 5'-5.5' = 88% Solid: H2SiO3 added
C92-1073 = E1= 8'-8.5' = 97% Solid

Brian K. McKee
Laboratory Director

SERV-AIR, INC.
An E-SYSTEMS Company

CHAIN OF CUSTODY RECORD

PROJ. NO.	PROJECT NAME
	Bldg 697 - UST Site Assessment

SAMPLERS: Charles Appleby DEH - UST Cert 0002056

SAMPLE	DATE	TIME	SOIL	AQ.	SAMPLE LOCATION	NO. OF CONTAINERS	TPHC	% Solid	REMARKS
C92-1068	11/24/92	1100	X		A; 6'-6.5'	1	X	X	OVA-128-9-5/1903 methanol extract 2 ppm
C92-1069		1445	X		B; 8'-8.5'	1	X	X	" < 1 ppm
C92-1070		1450	X		C; 5'-5.5'	1	X	X	Silica Gel added 2 ppm
C92-1071		1505	X		D; 8'-8.5'	1	X	X	
C92-1072		1515	X		E; 5'-5.5'	1	X	X	Silica Gel added (H_2SO_4)
C92-1073		1520	X		E1; 8'-8.5'	1	X	X	TS%

C92-1068 - 84%
1069 - 97%
1070 - 79%
1071 - 96%
1072 - 88%
1073 - 97%

Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time	Received for Laboratory by: (Signature)	Date/Time	Remarks	
[signature]	11/24/92 1600	[signature]	11/24 1602		

FT. MONMOUTH OFFICE

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 # MW-1
Building 697

JOB # 9404683-001

Laboratory Certification # 11118

Reviewed by: W. Alan Volk 11/4/94

princeton testing laboratory inc.

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

TABLE OF CONTENTS

	PAGE #
SDG File Inventory Sheets	0
Sample Analysis Request Forms	1
Chain of Custody Forms	2
Laboratory Chronicle	4
Methodology Summary	5
Conformance/Non-conformance Summary	6
Case Narrative	7
VOLATILE DATA	
QC Summary	9
Sample Data	29
Standards Data	49
Raw QC Data	86
Analysis Run-Log Sheets	117

940 4683

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. A. Wall

Laboratory Manager or Environmental Consultant's Signature

10/26/94

Date

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET

LABORATORY NAME: PRINCETON TESTING LABORATORY
CITY/STATE: PRINCETON, NJ

CASE NO. 4683 SDG NO. 1689.1 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	PAGE NOs TO	CHECK LAB	CHECK 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)			✓	
	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. 4683 SDG NO. 1639.1 SDG NOS. TO FOLLOW —
_____ _____ SAS NO. _____

	PAGE NOs FROM	TO	CHECK LAB	EPA
7. 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)				
_____				
_____				
8. EPA Shipping/Receiving Documents				
Airbills (No. of shipments ___)			✓	
Chain-of-Custody Records				
Sample Tags				
Sample Log-In Sheet (Lab & DCI)				
Miscellaneous Shipping/Receiving Records (describe or list)				
_____				
_____				
9. Internal Lab Sample Transfer Records and Tracking Sheets (describe or list)				
_____				
_____				
10. Other Records (describe or list)				
Telephone Communication Log				
_____				
_____				

11. Comments: _____

Completed by: (CLP Lab) W. A. Volk (Signature) W. A. Volk QA/QC Coordinator (Printed Name/Title) 11/4/94 (Date)

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

FORM DC-2-4

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

Temp. Cust#: L9094
CONTRACT #:QUOTE 94-0428
Standard Tests

Project No.: 9404683-001MW

Date Received: 09/19/94
Analysis Due : 09/21/94

Number Of Samples : 2
Number Of Containers: 3

Approved By: Steven Burns

Reports: Custom Report Format

Sample I.D.'s	Code	Requested Analytical Services	Sampled
001 1639.1 Bldg 697 MW 1 09/13/94	CTS%U	Solids, Percent, SW, EPA 160.3	09/13/94
	VMS0B	Volatile Organics Library Search	
	VMS0A	Volatile Organics, SW, SW-846 8240	
002 1639.2 Field Blank 09/13/94	VMW0B	Volatile Organics Library Search	09/13/94
	VMW0A	Volatile Organics, WW, SW-846 8240	

Project Notes:

*** Results must be sent with ASCII disk. ***

Customer Notes:

Three Copies of Packages. See Data Mgmt for Details

Initials/Date

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

Printed By: Rose Kovacs
Date: 10/19/94
Time: 16:17:30

Member: American Council of Independent Laboratories, Inc.

U.S. ARMY FORT MONMOUTH

(No dicar # at this time)

P.O. #: BPA Princeton Lab 94-0051

Chain of Custody

Project #: Bldg 697	Sampler: E. Plye / Tyree	Date / Time 9/14/94 | 1:30	Analysis Parameters
Customer: C. Appleby Self-PW-EV	Site Name: Bldg 697 MW # 1	Revised C-O-C	Start: / Finish:
Phone: X26224			

Lab Sample ID Number	Date/Time		Customer Sample Location/ID Number	Sample Matrix	# of Bottles	VOA +5	VOA	Preservation Method	Remarks	
1639.1	9/13/94	12:10	Bldg 697 MW-1	Soil	1	✓		2 HCl	Sample depth 3-4'	<4°C
1639.2	9/13/94	12:30	Field Blank	Soil (location just)	2	✓				
									SN: 7127784 HNu calibrated w/ 100 ppm gas at 8:00 AM	

Relinquished By (signature) Edward Plye	Date / Time 9/14/94 | 1:30	Received By (signature) Sarah J. Hubbard	Shipped By:
Relinquished By (signature) Sarah J. Hubbard	Date / Time 9/19/94 | 1108	Received for Lab by (signature):	Date / Time 9-19-94 | 11:08

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

SAI-ENV COC form 01 Page 1 of 3 Pages Rev. A Date: 02 Apr 93

Enviornmental Laboratory - 9-19-94 4:20

CHAIN OF CUSTODY

U.S. Army, Fort Monmouth N.J.
ATTN: SELFM-PW
Building 167
Fort Monmouth, New Jersey 07703-5103
Phone:(908) 532-6224 FAX:(908) 532-2367

Attention: Charles Appleby

Project Number: 9404683-001MW
Date Received : 09/19/94
Time Received : 15:20
Number of Containers: 3
Number of Samples : 2

Project Name

Sample I.D.'s

001 1639.1 Bldg 167 [illegible] Field
MW [illegible]
09/[illegible] [illegible]/en

Relinquished By	Received By	Date	Time
J. Allo	S. Burns	[illegible]/94	
		09/20/94	11:30

Member American Council of Independent Laboratories, Inc.

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 Job #: 9404683-w1

Date Received & Refrigerated: 9/19/94

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
	VHC 09/22/94
	VHC 09/23/94
	Other:

Dept. Manager Review and Approval: 10/18/94

QC Supervisor Review and Approval: 10/26/94

Member: American Council of Independent Laboratories, Inc.

METHODOLOGY SUMMARY

VOLATILE ORGANICS:

A.) Water - US EPA SW-846 METHOD 8240.

Soil - US EPA SW-846 METHOD 8240

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 9/22 - Blank had Meclx Below MDL		
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 H. Griffin Date 10/18/94

princeton testing laboratory inc.

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

October 17,1994.

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

Job Number: 9404683

CASE NARRATIVE

The following package contains analytical data pertaining to samples received by Princeton Testing Laboratory on 09/19/94. The samples were analyzed for volatile organics using SW-846 8240 Methodologies.

VOLATILE ORGANICS

BLANKS: No contamination found in the blanks except 09/22 blank had methylene chloride below Mdls.

SAMPLES: No target compounds were found in any sample.

SURROGATES: All surrogate recoveries are within QC limits.

MS/MSD: Sample Thickener Effluent 09/94 from the PTL job# 4842 was used for matrix spike and duplicate. Recoveries for two compounds exceeded the QC limits due to matrix interference. All other recoveries were within the QC limits.

If you have any further questions please do not hesitate to call me.

Khaja Eazazuddin.
GC/MS Supervisor.



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:

scription

Compound	MDL	CAS#	KEY#	CLIENT KEY#
Chloromethane	10	00074873	C010	1454
Bromomethane	10	00074839	C015	1462
Vinyl chloride	10	00075014		1531
Chloroethane	10	00075003		1452
Methylene chloride	5	00075092		1172
Acetone	5	00067641		1498
Carbon disulfide	5	00075150		1646
1,1-Dichloroethene	5	00075354		1442
1,1-Dichloroethane	5	00075343		1580
1,2-Dichloroethene (Total)	5	00540590		1583
Chloroform	5	00067663		1078
1,2-Dichloroethane	5	00107062		1383
2-Butanone	5	00078933		1278
1,1,1-Trichloroethane	5	00071556		1068
Carbon tetrachloride	5	00056235		1384
Bromodichloromethane	5	00075274		1480
1,1,2,2-Tetrachloroethane	5	00079345		1200
1,2-Dichloropropane	5	00078875		1368
trans-1,3-Dichloropropene	5	10061026		1364
Trichloroethene	5	00079016		1074
Dibromochloromethane	5	00124481		1390
1,1,2-Trichloroethane	5	00079005		1070
Benzene	5	00071432		1466
cis-1,3-Dichloropropene	5	10061015		1362
Bromoform	5	00075252		1124
2-Hexanone	5	00591786		1324
4-Methyl-2-Pentanone	5	00108101		1158
Tetrachloroethene	5	00127184		1096
Toluene	5	00108333		1426
Chlorobenzene	5	00108907		1564
Ethylbenzene	5	00100414		1394
Styrene	5	00100425		1120
Total Xylenes	5	01330207		1677

RECOVERY DATA	QC LIMITS		
1,2-Dichloroethane-D4	70-121%		1577
Toluene-d8	84-138%	02037265	1579
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.:_4683_ SAS No.:_____ SDG No.:____

Instrument ID: _INCOS-500___

SAMPLE NO.	(1,2-DCE)	(TOL-D8)	(4-BFB)
M.BLANK 9/22/94	113	96	75
1639.1 Bldg.697	92	98	71

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

COMMENTS:

2B
VOLATILE SURROGATE SUMMARY

Lab Name:_Princeton Testing Lab. Contract:_US Army, Fort Monmouth.

Lab Code:_PTL_ Case No.:_4683_ SAS No.:_____ SDG No.:_____

Instrument ID: _INCOS-500___

SAMPLE NO.	(1,2-DCE)	(TOL-D8)	(4-BFB)
M.BLANK 9/23/94	111	104	101
1639.2 Field Blank	109	94	92

(1,2-DCE)= 1,2-DICHLOROETHANE-d4 (76-114)
(TOL-d8)= TOLUENE-d8 (84-110)
(4-BFB) = 4-BROMOFLUOROBENZENE (86-115)

COMMENTS:

2B
VOLATILE SURROGATE SUMMARY

Lab Name:_Princeton Testing Lab. Contract:_US Army, Fort Monmouth.

Lab Code:_PTL_ Case No.:_4683_ SAS No.:_____ SDG No.:____

Instrument ID: _INCOS-500___

SAMPLE NO.	(1,2-DCE)	(TOL-D8)	(4-BFB)
THICKENER EFFLUENT MS	92	91	78
THICKENER EFFLUENT MSD	130**	91	73
BLANK 10/04/94	88	108	104

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

** = Exceded Qc limits

COMMENTS:

page 1 of 1 FORM II VOA-2

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: .

Project No.: 9404842-001

Lab Sample I.D.: 003

Client Sample I.D.: Thickener Effluent 09/94

Analyst: Uma Chaudhary
Instrument: 5100 Volatile MS System
Units: ug/kg

QC Batch Number: 9401004SV

COMPOUND	SPIKE ADDED	SAMPLE CONCENTRATION	MATRIX SPIKE CONCENTRATION	MS % REC	QC LIMITS REC
1,1-Dichloroethene	50	0	70.9	141.80	59-172
Trichloroethene	50	0	56.4	112.80	62-137
Benzene	50	0	54.4	108.80	66-142
Toluene	50	196	225	58.00	59-139
Chlorobenzene	50	0	56.6	113.20	60-133

COMPOUND	SPIKE ADDED	MSD CONCENTRATION	RPD	MSD % REC	QC LIMITS RPD
1,1-Dichloroethene	50	55.8	23.84	111.60	0-22
Trichloroethene	50	53.2	5.84	106.40	0-24
Benzene	50	51.5	5.48	103.00	0-21
Toluene	50	206	97.44	20.00	0-21
Chlorobenzene	50	51.6	9.24	103.20	0-21

4A

VOLATILE METHOD BLANK SUMMARY

Lab Name: PTL,INC. Contract: US Army,Fort Monmouth.

Lab Code: PTL Case No.:4683-001SAS No.: xxxx SDG.No xxxx

Lab File ID: CBLK922... Lab Sample ID: LAB BLANK

Date Analyzed: 09/22/94 Time Analyzed: 11:03

Matrix (soil/water) SOIL.... Level: (low/med) LOW

Instrument ID: FINN

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	1639.1 Bldg.	4683-001-01	C8647...	09/22/94
02				
03				
04				
05				

COMMENTS:

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. 697

Report Date: 10/31/94
Job Number: 9404683-001
Date Received: 09/19/94
Client Job No.: 1639
Page: 1

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

Parameters	*Sample I.D.: Blank 09/22/94*
Chloromethane	<10
Bromomethane	<10
Vinyl chloride	<10
Chloroethane	<10
Methylene chloride	2.1 J
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%	113
Toluene-d8 (Surrogate)	84-138%	96
4-Bromofluorobenzene (Surrogate)	59-113%	75

J = Estimated Value Detected Below MDL

For inquiries call us at (609) 452-9050 and ask for our Customer Service Department

Member: American Council of Independent Laboratories, Inc.

EPA SAMPLE NO.
LAB BLK 9/22

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: Princeton Testing Lab US_ARMY,FORT_MONMOUTH

Lab Code: PTL Case No.: 4683 SAS No.: XXX SDG No.: XXX

Matrix: (Soil/Water) Soil Lab Sample ID: LAB_BLK

Sample wt/vol: 5 (g/mL) g Lab File ID: CBLK922

Level: (low/med) LOW Date Received:

%Moisture: not dec. Date Analyzed: 09/22/94

GC Column: VOCOL ID: 0.53 mm Dilution Factor: 1

Soil Extract Vol: ul Soil Aliquot Vol: ul

Number TICs found: 1 CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

#S	CAS NUMB	COMPOUND NAME	RT	EST. CONC.	SCAN

4A

VOLATILE METHOD BLANK SUMMARY

Lab Name: PTL.INC. Contract: US Army.Fort Monmouth.

Lab Code: PTL Case No.:4683-001SAS No.: xxxx SDG.No xxxx

Lab File ID: CBLK923... Lab Sample ID: LAB BLANK

Date Analyzed: 09/23/94 Time Analyzed: 12:08

Matrix (soil/water) WATER... Level: (low/med) LOW

Instrument ID: FINN

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	1639.2.....	4683-001-02.	.C8665...	09/23/94...
02	.....	.....	.....	.....
04	.....	.....	.....	.....
05	.....	.....	.....	.....

COMMENTS:

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

Report Date: 10/17/94
Job Number: 9404683-001
Date Received: 09/19/94

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

Parameters	*Sample I.D.: Blank 09/23/94*
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)	76-114%	111
Toluene-d8 (Surrogate)	88-110%	104
4-Bromofluorobenzene (Surrogate)	86-115%	101

For inquiries call us at (609) 452-9050 and ask for our Customer Service Department
Member: American Council of Independent Laboratories, Inc.

EPA SAMPLE NO.
LAB BLK 9/23

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: Princeton Testing Lab US_ARMY,FORT_MONMOUTH.

Lab Code: PTL Case No.:4683 SAS No.:XXX SDG No.:XXX

Matrix: (Soil/Water) Water Lab Sample ID: LAB_BLK

Sample wt/vol: 5 (g/mL) ml Lab File ID: CBLK923

Level: (low/med) LOW Date Received:

%Moisture: not dec. Date Analyzed: 09/23/94

GC Column: VOCOL ID: 0.53 mm Dilution Factor: 1

Soil Extract Vol: ul Soil Aliquot Vol: ul

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

#S	CAS NUMB	COMPOUND NAME	RT	EST. CONC.	SCAN

4A

VOLATILE METHOD BLANK SUMMARY

Lab Name: PTL,INC. Contract: US Army,Fort Monmouth.

Lab Code: PTL Case No.:4683-001SAS No.: xxxx SDG.No xxxx

Lab File ID: CBLK1004.. Lab Sample ID: LAB BLANK

Date Analyzed: 10/04/94 Time Analyzed: 13:33 .

Matrix (soil/water) SOIL.... Level: (low/med) LOW

Instrument ID: FINN

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	THICKENER MS.	4842-001-03.	.C8717...	10/04/94...
02	THICKENER MSD	.4842-001-03.	.C8718...	10/04/94...
04	.....	.....	.....	.....
05	.....	.....	.....	.....

COMMENTS:

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. 697

Report Date: 10/31/94
Job Number: 9404683-001
Date Received: 09/19/94
Client Job No.: 1639
Page: 1

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

Parameters	*Sample I.D.: Blank 10/04/94*
Chloromethane	<10
Bromomethane	<10
Vinyl chloride	<10
Chloroethane	<10
Methylene chloride	2.6 J
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%	88
Toluene-d8 (Surrogate)	84-138%	108
4-Bromofluorobenzene (Surrogate)	59-113%	104

J = Estimated Value Detected Below MDL

For inquiries call us at (609) 452-9050 and ask for our Customer Service Department
Member: American Council of Independent Laboratories, Inc.

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.:___4683_____ SAS No.:_____ SDG No.:_____

Lab File ID:___BFB914_____ BFB Injection Date:_9/14/94_____

Instrument ID:___FINN500V__ BFB Injection Time:__1200_____

Matrix:(soil/water)_WATER__ Level:(low/med)_Low__ Column:(pack/cap)_Cap

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	18.3
75	30.0 - 60.0% of mass 95	48.5
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	8.3
173	Less than 2.0% of mass 174	0.0
174	Greater than 50.0% of mass 95	86.4
175	5.0 - 9.0% of mass 174	7.4
176	Greater than 95.0%, but less than 101.0% of mass 174	99.3
177	5.0 - 9.0% of mass 176	6.9

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__	_CV91450A_____	_9/14/94__	__1943____
10 PPB STD	__10 PPB STD__	_CV91410A_____	_9/14/94__	__2123____
20 PPB STD	__20 PPB STD__	_CV91420A_____	_9/14/94__	__2034____
_100 PPB STD	__100 PPB STD_	_CV914100B____	_9/14/94__	__1853____
_200 PPB STD	__200 PPB STD_	_CV914200_____	_9/14/94__	__1803____

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.: 4683 SAS No.: _____ SDG No.: _____

Lab File ID: BFB922 BFB Injection Date: 9/22/94

Instrument ID: FINN500V BFB Injection Time: 1001

Matrix: (soil/water) SOIL Level: (low/med) Low Column: (pack/cap) Cap

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	19.8
75	30.0 - 60.0% of mass 95	53.7
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.1
173	Less than 2.0% of mass 174	0.0
174	Greater than 50.0% of mass 95	69.8
175	5.0 - 9.0% of mass 174	7.2
176	Greater than 95.0%, but less than 101.0% of mass 174	97.4
177	5.0 - 9.0% of mass 176	7.4

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	CV0922	9/22/94	1011
LAB BLANK	M.BLK	CBLK922	9/22/94	1103
1639.1 Bldg	4683-001-01	C8647	9/22/94	1205
697 MW1				

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.: 4683 SAS No.: _____ SDG No.: _____

Lab File ID: BFB923 BFB Injection Date: 9/23/94

Instrument ID: FINN500V BFB Injection Time: 1055

Matrix: (soil/water) WATER Level: (low/med) Low Column: (pack/cap) Cap

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	20.7
75	30.0 - 60.0% of mass 95	53.9
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.3
173	Less than 2.0% of mass 174	0.0
174	Greater than 50.0% of mass 95	52.7
175	5.0 - 9.0% of mass 174	7.2
176	Greater than 95.0%, but less than 101.0% of mass 174	99.3
177	5.0 - 9.0% of mass 176	7.0

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	CV0923	9/23/94	1107
LAB_BLANK	M.BLK	CBLK923	9/23/94	1208
1639.2_Bldg	4683-001-02	C8665	9/23/94	1454

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.: 4683 SAS No.: XXX SDG No.: XXX

Lab File ID: BFB1004B BFB Injection Date: 10/04/94

Instrument ID: FINN500V BFB Injection Time: 11:42

Matrix: (soil/water) SOIL Level: (low/med) Low Column: (pack/cap) Cap

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	21.3
75	30.0 - 60.0% of mass 95	52.7
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.3
173	Less than 2.0% of mass 174	0.0
174	Greater than 50.0% of mass 95	57.7
175	5.0 - 9.0% of mass 174	7.6
176	Greater than 95.0%, but less than 101.0% of mass 174	95.3
177	5.0 - 9.0% of mass 176	7.4

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	CV0104	10/04/94	1234
LAB BLANK	M.BLK	CBLK1004	10/04/94	1333
THICKENER MS	4842-001-03	C8717	10/04/94	1921
THICKENER MSD	4842-001-03	C8718	10/04/94	2011

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Princeton Testing Lab. Contract: US_Army,Fort_monmouth.___.
Case No.: 4683_ Lab File ID (standard):CV0922_____ Instrument ID:FINN
Date Analyzed: 09/22/94____ Time Analyzed: 10:11_____

		IS1(BCM)	RT	IS2(DFB)	RT	IS3(CB)	RT
	12hr. STD __	9411_____	07:38	69368_____	09:54	54344_____	22:04_
	Upper Limit_	18822_____	07:88	138736_____	10:04	108688_____	22:54_
	Lower Limit	4706_____	06:88	34684_____	09:04	27172_____	21:54_
	EPA Sample.						
1	M.BLANK__9/22	6468_____	07:36	63621_____	09:52	47665_____	22:02_
2	1639.1BLDG697	6790_____	07:41	56755_____	09:57	38778_____	22:19_

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 PAGE 1 of 1.

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Princeton Testing Lab. Contract: US_Army,Fort_monmouth.___.
Case No.: 4683_ Lab File ID (standard):CV0923_____ Instrument ID:FINN
Date Analyzed: 09/23/94____ Time Analyzed: 11:07_____

	IS1(BCM)	RT	IS2(DFB)	RT	IS3(CB)	RT
12hr. STD __	12697_____	07:35	158172_____	09:52	106406_____	22:18_
Upper Limit_	25394_____	07:85	316344_____	10:02	21281_____	22:68_
Lower Limit	6348_____	06:85	79086_____	09:02	53203_____	21:68_
EPA Sample.						
1 M:BLANK__9/23	12703_____	07:29	121792_____	09:48	88184_____	22:01_
2 1639.2_Field_	9931_____	09:51	111832_____	09:51	80080_____	22:05_

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 PAGE 1 of 1.

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Princeton Testing Lab. Contract: US_Army,Fort_monmouth.___.
Case No.: 4683_ Lab File ID (standard):CV01004____ Instrument ID:FINN
Date Analyzed: 10/04/94____ Time Analyzed: 12:34_____

	IS1(BCM)	RT	IS2(DFB)	RT	IS3(CB)	RT
12hr. STD	15702	07:22	113786	09:38	82666	21:48
Upper Limit	31404	07:72	22752	09:88	165332	21:98
Lower Limit	7851	06:72	5688	08:88	41333	20:98
EPA Sample.						
1 M.BLANK_10/04	10934	07:24	102320	09:38	53294	21:53
2 THICKENER_MS	10169	07:22	111045	09:37	85824	21:48
3 THICKENER_MSD	7321	07:21	70167	09:37	56377	21:48

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 PAGE 1 of 1.

SAMPLE DATA

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

Report Date: 10/17/94
Job Number: 9404683-001
Date Received: 09/19/94

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

Parameters	*Sample I.D.: 1639.1 Bldg 697 MW 1 09/13/94*
Chloromethane	<23
Bromomethane	<23
Vinyl chloride	<23
Chloroethane	<23
Methylene chloride	<12
Acetone	<12
Carbon disulfide	<12
1,1-Dichloroethene	<12
1,1-Dichloroethane	<12
1,2-Dichloroethene (Total)	<12
Chloroform	<12
1,2-Dichloroethane	<12
2-Butanone	<12
1,1,1-Trichloroethane	<12
Carbon tetrachloride	<12
Bromodichloromethane	<12
1,1,2,2-Tetrachloroethane	<12
1,2-Dichloropropane	<12
trans-1,3-Dichloropropene	<12
Trichloroethene	<12
Dibromochloromethane	<12
1,1,2-Trichloroethane	<12
Benzene	<12
cis-1,3-Dichloropropene	<12
Bromoform	<12
2-Hexanone	<12
4-Methyl-2-Pentanone	<12
Tetrachloroethene	<12
Toluene	<12
Chlorobenzene	<12
Ethylbenzene	<12
Styrene	<12
Total Xylenes	<12

RECOVERY DATA	QC LIMITS	
1,2-Dichloroethane-d4 (Surrogate)	70-121%	92
Toluene-d8 (Surrogate)	84-138%	98
4-Bromofluorobenzene (Surrogate)	59-113%	71

For inquiries call us at (609) 452-9050 and ask for our Customer Service Department
Member: American Council of Independent Laboratories, Inc.

EPA SAMPLE NO.
1639.1 Bldg 697

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: Princeton Testing Lab US_ARMY,FORT_MONMOUTH.

Lab Code: PTL Case No.: 4683 SAS No.: XXX SDG No.: XXX

Matrix: (Soil/Water) Soil Lab Sample ID: _01

Sample wt/vol: _2._5 (g/mL) _g_ Lab File ID: C8647

Level: (low/med) LOW Date Received: 09/19/94

%Moisture: not dec. Date Analyzed: 09/22/94

GC Column: _VOCOL ID: _0.53_mm Dilution Factor: 2

Soil Extract Vol: _____ul Soil Aliquot Vol: _____ul

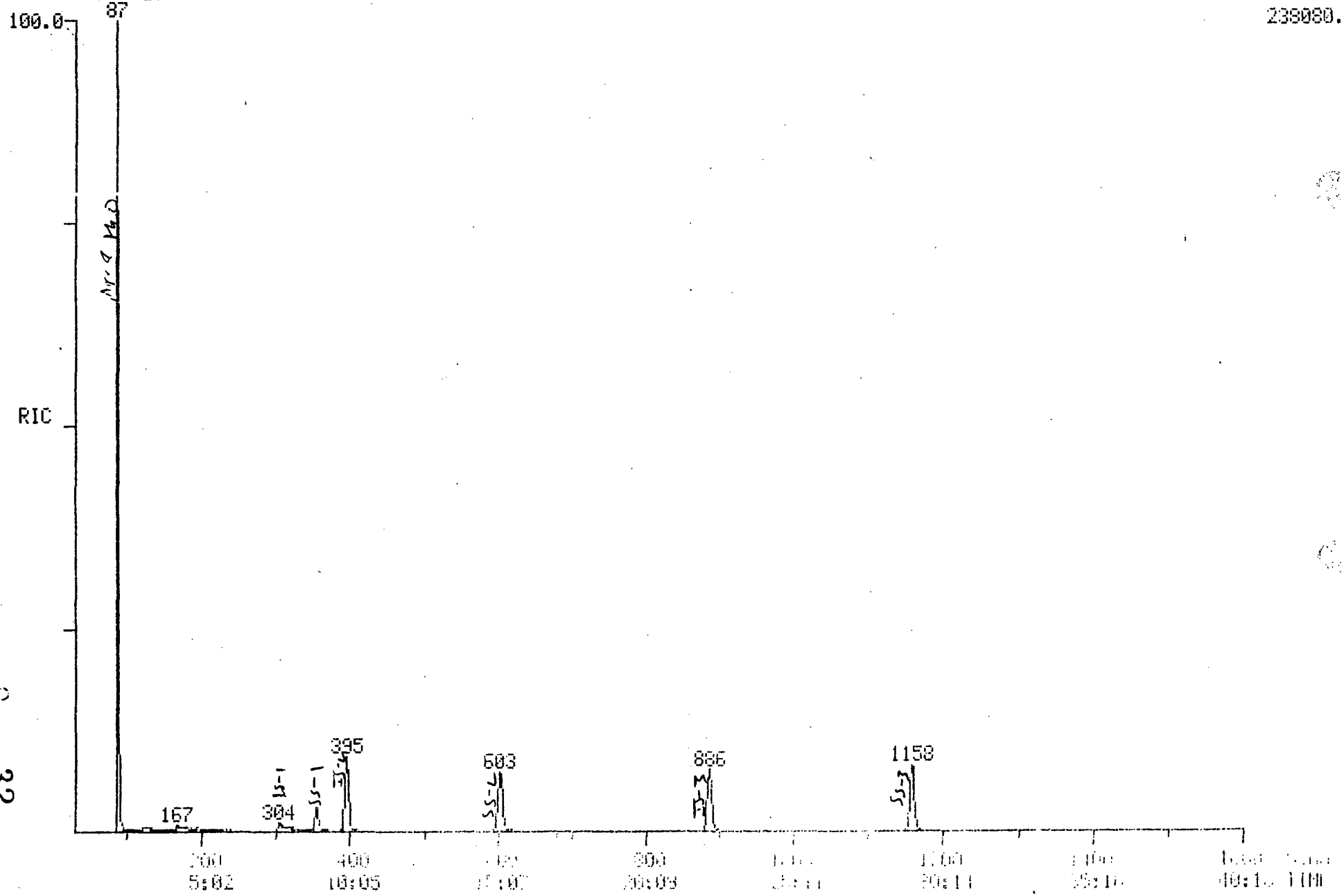
Number TICs found: 0 CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg

#S	CAS NUMB	COMPOUND NAME	RT	EST. CONC.	SCAN

RIC
09/22/94 12:05:00
SAMPLE: 4683-001-01 1639.1 BLDG 697 MW1
CONDS.: EPA METHOD 8240
RANGE: G 1,1600 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: C8647 #49
CALI: C8647 #3

SCANS 30 TO 1600



...ve Citation Report File: C8647

...ata: C8647.TI
...12/94 12:05:00
...Sample: 4683-001-01 1639.1 BLDG 697 MW1
...Misc.: EPA METHOD 8240
...Vials: 2.5G/5ML Instrument: FINN Weight: 0.000
...Submitted by: USA Analyst: UC Acct. No.: 4683-001

...LNT=AREA * REF AMNT/(REF AREA * RESP FACT)
...esp. 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

No	Name
48	C250 O-XYLENE
49	BENZENE-D6 **S. STD. **

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot	
1	49	305	7:41	1	1.000	M XX	6790.	50.000 NG	17.84	
2	114	395	9:57	2	1.000	A BB	56755.	50.000 NG	17.84	
3	117	886	22:19	3	1.000	A BB	38778.	50.000 NG	17.84	
4	63	354	8:55	1	1.161	A BB	10468.	45.813 NG	16.34	92
5	98	603	15:11	3	0.681	A BB	50151.	49.114 NG	17.52	98
6	95	1158	29:10	3	1.307	A BB	28440.	35.638 NG	12.71	71
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	NOT FOUND									
41	NOT FOUND									
42	NOT FOUND									
43	NOT FOUND									
44	NOT FOUND									
45	NOT FOUND									
46	NOT FOUND									
47	NOT FOUND									
48	NOT FOUND									
49	NOT FOUND									

PROCEDURE: FILTER/TIC DIAGNOSTIC REPORT 9/22/94 13:06:04

DATA FILE: C8647

FILTER SCAN PARAMETERS

MAX NUMBER TICS:	15
LIBRARY ENTRIES:	539
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
3	3	6

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	5	0	5	1

TIC PROCESSING:

NO.	SCAN#	PURITY	FIT	MW	COMPOUND NAME [BEFORE TIC THRESHOLD]
1	87	429	446	85	ACETIC ACID, CYANO-

Quantitation Report File: C8647

Data: C8647.TI
8/22/94 12:05:00
Sample: 4683-001-01 1639.1 BLDG 697 MW1
Comms.: EPA METHOD 8240
Formula: 2.5G/5ML Instrument: FINN Weight: 0.000
Submitted by: USA Analyst: UC Acct. No.: 4683-001

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

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

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	TOT	304	7:39	0	ISINV	A BB	22354.	******	UG/L	00.00
2	TOT	395	9:57	0	ISINV	A BB	116066.	******	UG/L	00.00
3	TOT	586	22:19	0	ISINV	A BB	100197.	******	UG/L	00.00
4	TOT	87	2:11	1	0.286	A BB	540404.	1208.750		*100.

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:13	0.83	1.000						
2	19:21	0.51	1.000						
3	23:54	0.93	1.000						
4					1208.75	1.001208.750	1.0001208.75		

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

Report Date: 10/17/94
Job Number: 9404683-001
Date Received: 09/19/94

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

Parameters	*Sample I.D.: 1639.2 Field Blank 09/13/94*
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)	76-114%	109
Toluene-d8 (Surrogate)	88-110%	94
4-Bromofluorobenzene (Surrogate)	86-115%	92

For inquiries call us at (609) 452-9050 and ask for our Customer Service Department

Member American Council of Independent Laboratories, Inc.

EPA SAMPLE NO.
1639.2 Field bl

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: Princeton Testing Lab US_ARMY,FORT_MONMOUTH.

Lab Code: PTL Case No.:4683 SAS No.:XXX SDG No.:XXX

Matrix: (Soil/Water) Water Lab Sample ID: 02

Sample wt/vol: 5 (g/mL) mL Lab File ID: C8665

Level: (low/med) LOW Date Received: 09/19/94

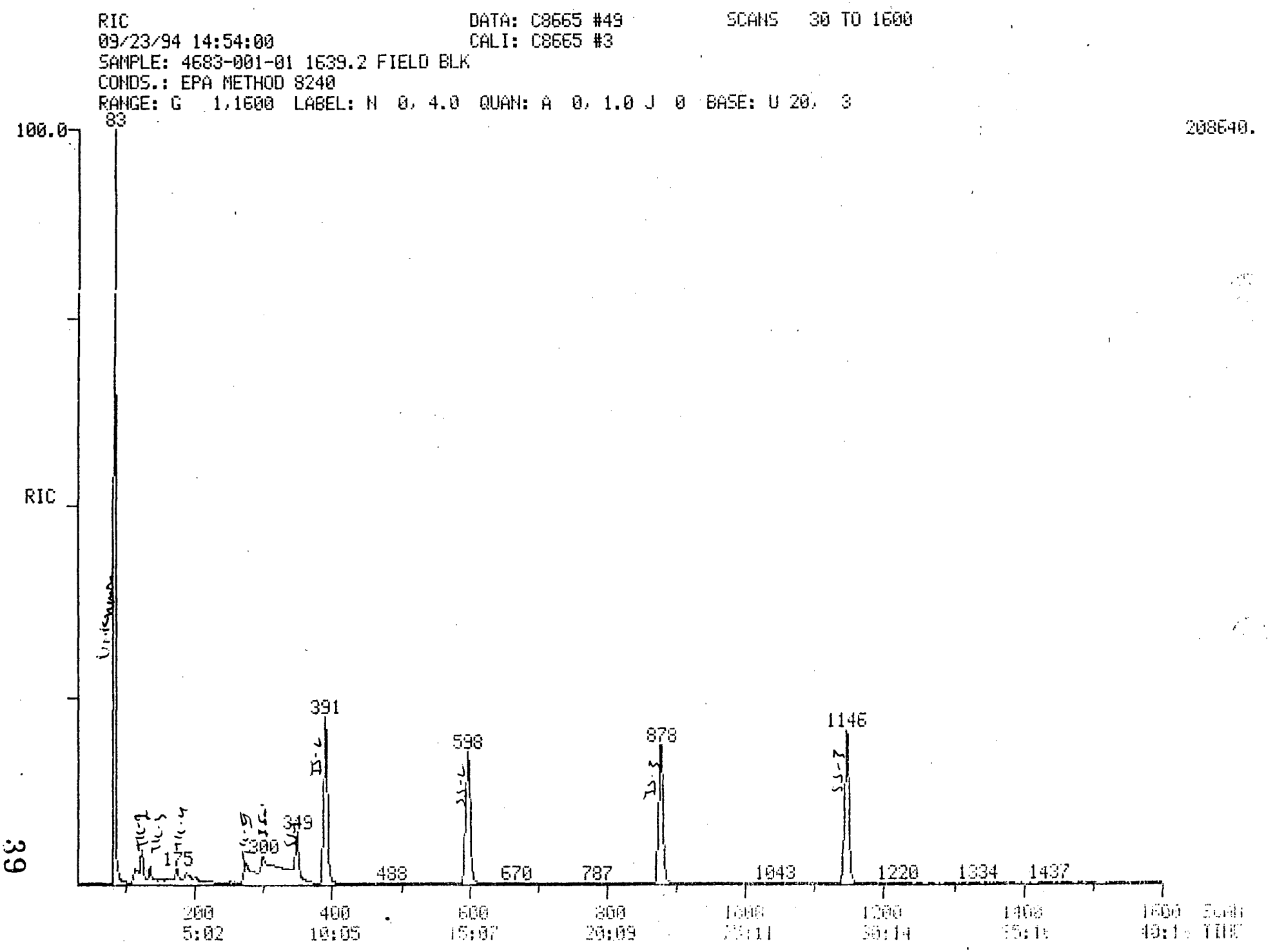
%Moisture: not dec. Date Analyzed: 09/23/94

GC Column: VOCOL ID: 0.53 mm Dilution Factor: 1

Soil Extract Vol: ul Soil Aliquot Vol: ul

Number TICs found: 5 CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L

#S	CAS NUMB	COMPOUND NAME	RT	EST. CONC.	SCAN
1	0-00-0	UNKNOWN	2:05	740	83
2	78-78-4	BUTANE,2-METHYL-	3:06	50	123
3	109-66-0	PENTANE (ACN)(DOT)	3:24	20	135
4	19411-655	HYDROXYLAMINE,O-(3-MEBUTY	4:24	32	175
5	141-78-6	ACETIC ACID,ETHYL ESTER	6:54	110	274


RIC
09/23/94 14:54:00
SAMPLE: 4683-001-01 1639.2 FIELD BLK
CONDS.: EPA METHOD 8240
DATA: C8665 #49
CALI: C8665 #3
SCANS 30 TO 1600
RANGE: G 1,1600 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3
100.0
RIC
208640.
83
175
300
349
391
488
538
670
787
878
1043
1146
1220
1334
1437
200
5:02
400
10:05
600
15:07
800
20:09
1000
25:11
1200
30:14
1400
35:16
1600
40:18
Scan
TIME

Quantitation Report File: C8665

Data: C8665.TI
9/23/94 14:54:00
Sample: 4683-001-01 1639.2 FIELD BLK
Mods.: EPA METHOD 8240
Formula: 5ML Instrument: FINN Weight: 0.000
Submitted by: USARMY Analyst: UC Acct. No.: 4683-001

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

8665

	Name									
	C250 O-XYLENE									
	BENZENE-D6 **S. STD. **									
	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot	
	49	300	7:33	1	1.000	A BB	9931.	50.000 NG	17.01	
	114	391	9:51	2	1.000	A BB	111832.	50.000 NG	17.01	
	117	877	22:05	3	1.000	A BB	80080.	50.000 NG	17.01	
	65	349	8:47	1	1.163	A BB	27370.	54.512 NG	18.54	109
	98	597	15:02	3	0.681	A BB	100760.	47.003 NG	15.99	94
	95	1146	28:52	3	1.307	A BB	68277.	41.221 NG	14.02	92
7	NOT FOUND									
8	NOT FOUND									
9	NOT FOUND									
10	NOT FOUND									
11	49	189	4:46	1	0.630	A BB	688.	0.956 NG	0.33	
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	43	231	5:49	2	0.591	A VB	63.	0.041 NG	0.01	
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	611	15:23	3	0.697	A BB	951.	0.405 NG	0.14	
41	NOT FOUND									
42	NOT FOUND									
43	NOT FOUND									
44	NOT FOUND									
45	NOT FOUND									
46	NOT FOUND									
47	NOT FOUND									
48	NOT FOUND									
49	NOT FOUND									

PROCEDURE: FILTER/TIC DIAGNOSTIC REPORT 9/23/94 15:58:27

DATA FILE: C8665

FILTER SCAN PARAMETERS

MAX. NUMBER TICS:	15
I.S.-TABLE ENTRIES:	539
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
6	3	9

FILTER PROCESSING:

TOTAL PEAKS	< 1ST SCAN	> LAST SCAN	< MIN RIC HT	< SCAN TOL	> MAX # PEAKS	TOTAL REJECTS	TOTAL TICS
	<----------REJECT PEAKS---------->						
12	0	0	0	7	0	7	5

TIC PROCESSING:

NO.	SCAN#	PURITY	FIT	MW	COMPOUND NAME [BEFORE TIC THRESHOLD]
1	83	382	398	70	3-BUTYN-1-OL
2	123	923	963	72	BUTANE, 2-METHYL-
3	135	944	966	72	PENTANE (ACN)(DOT)
4	175	848	855	103	HYDROXYLAMINE, O-(3-METHYLBUTY
5	274	957	957	88	ACETIC ACID, ETHYL ESTER

Quantitation Report File: C8665

Data: C8665.TI
9/23/94 14:54:00
Sample: 4683-001-01 1639.2 FIELD BLK
Misc.: EPA METHOD 8240

Formula: SML Instrument: FINN Weight: 0.000
Submitted by: USARMY Analyst: UC Acct. No.: 4683-001

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

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	78-78-4	BUTANE, 2-METHYL-
6	109-66-0	PENTANE (ACN)(DOT)
7	19411-65-5	HYDROXYLAMINE, O-(3-METHYLBUTYL)-
8	141-78-6	ACETIC ACID, ETHYL ESTER

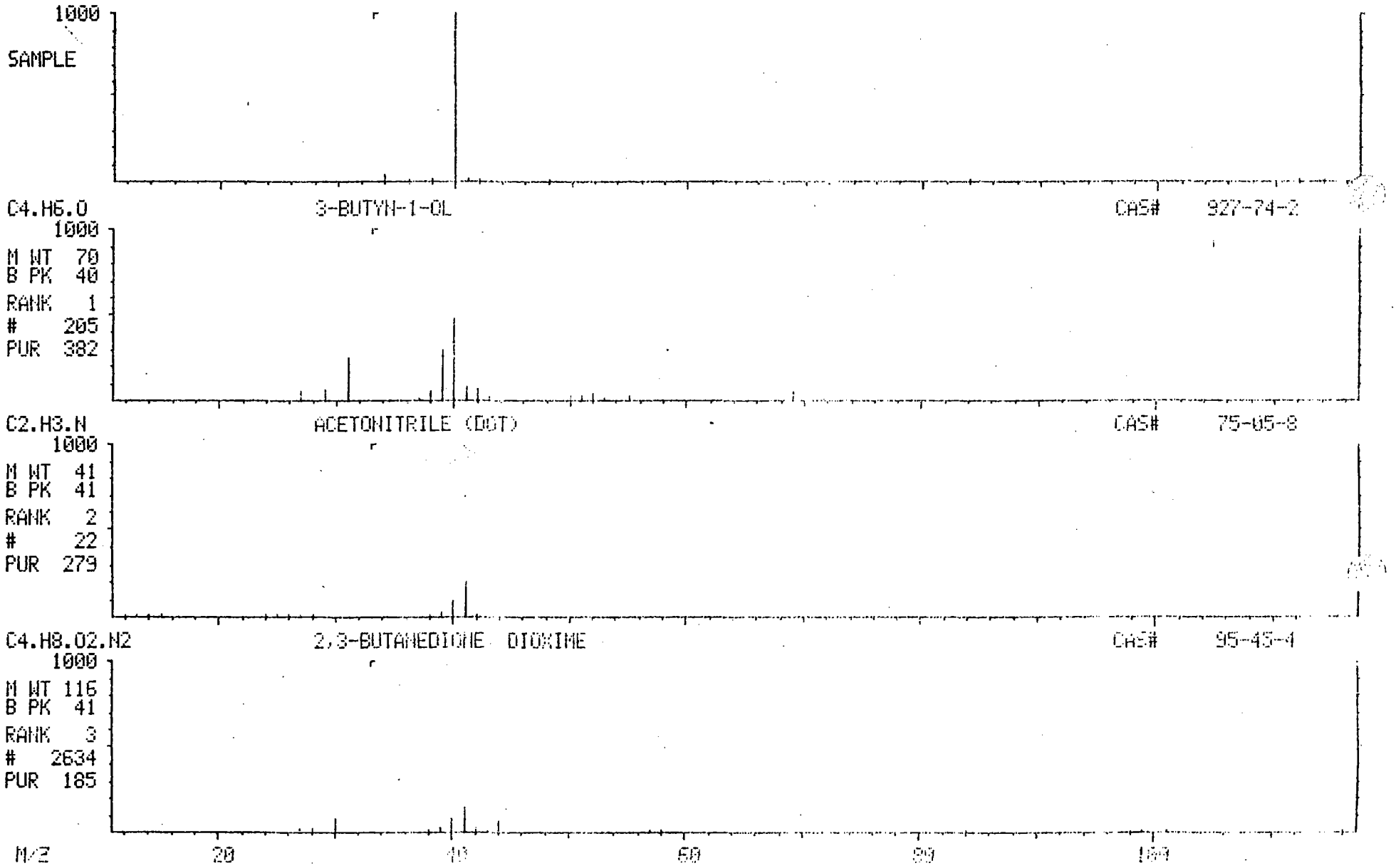
No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	TOT	299	7:32	0	ISINV	A BB	30405.	******	UG/L	00.00
2	TOT	391	9:51	0	ISINV	A BB	244784.	******	UG/L	00.00
3	TOT	877	22:05	0	ISINV	A BB	211711.	******	UG/L	00.00
4	TOT	83	2:05	1	0.278	A BB	452546.	744.195		78.11
5	TOT	123	3:06	1	0.411	A VB	30180.	49.630		5.21
6	TOT	135	3:24	1	0.452	A BV	12365.	20.334		2.13
7	TOT	175	4:24	1	0.585	A VV	19282.	31.708		3.33
8	TOT	274	6:54	1	0.916	A BB	64970.	106.841		11.21

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:13	0.82	1.000						
2	19:21	0.51	1.000						
3	23:54	0.92	1.000						
4					744.20	1.00	744.197	1.000	744.20
5					49.63	1.00	49.630	1.000	49.63
6					20.33	1.00	20.335	1.000	20.33
7					31.71	1.00	31.708	1.000	31.71
8					106.84	1.00	106.841	1.000	106.84

MID LIBRARY SEARCH (LIBRARYNB)
09/23/94 14:54:00 + 2:05
SAMPLE: 4683-001-01 1639.2 FIELD BLK
CONDS.: EPA METHOD 8240
ENHANCED (S 15B 2N 0T)

DATA: C8665 # 83
CALI: C8665 # 3

BASE M/Z: 40
RIC: 164864.

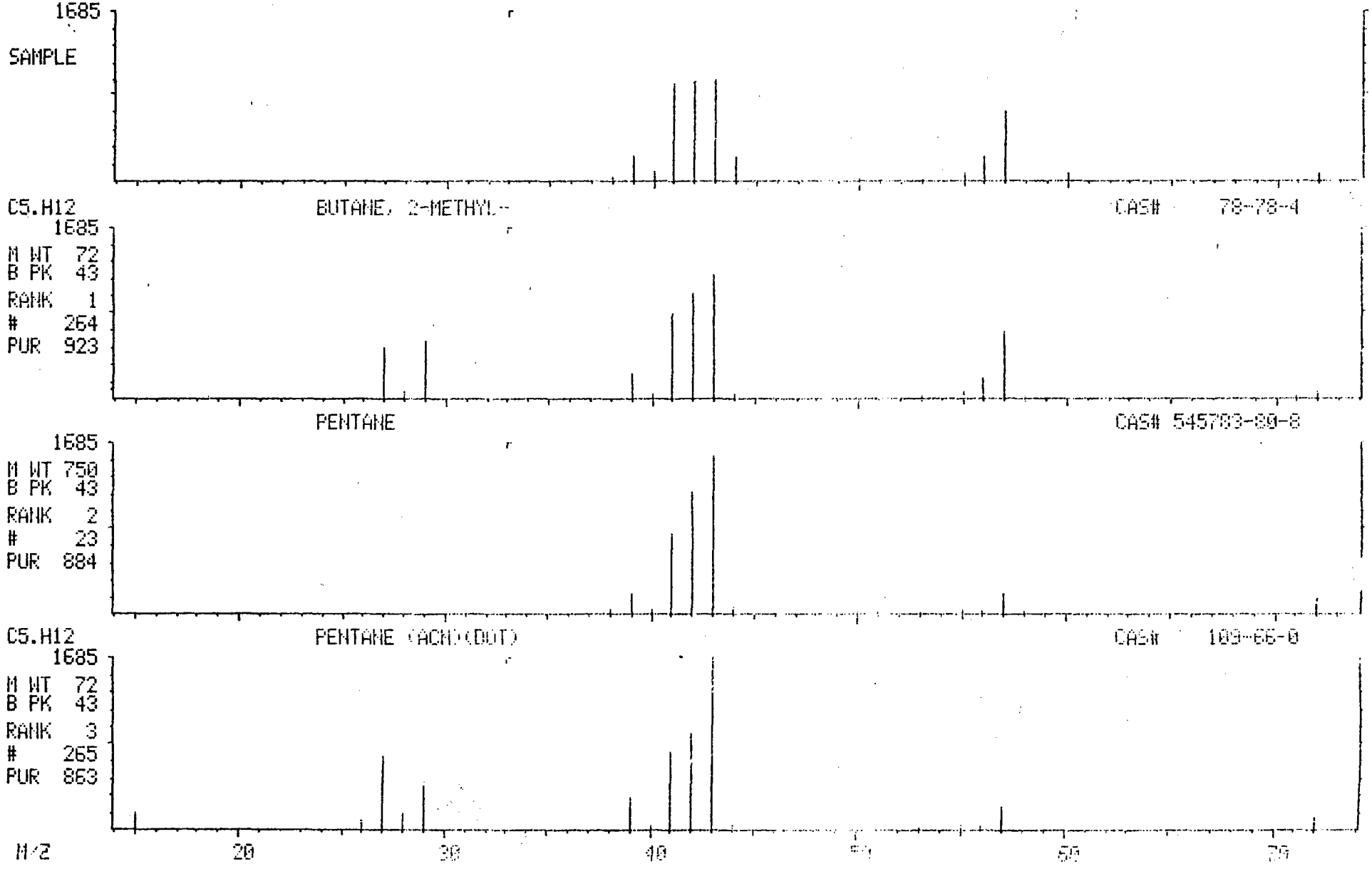


44

MID LIBRARY SEARCH (LIBRARY:NB)
09/23/94 14:54:00 + 3:06
SAMPLE: 4683-001-01 1639.2 FIELD BLK
CONDS.: EPA METHOD 8240
ENHANCED (S 15B 2N 0T)

DATA: C8665 # 123
CALI: C8665 # 3

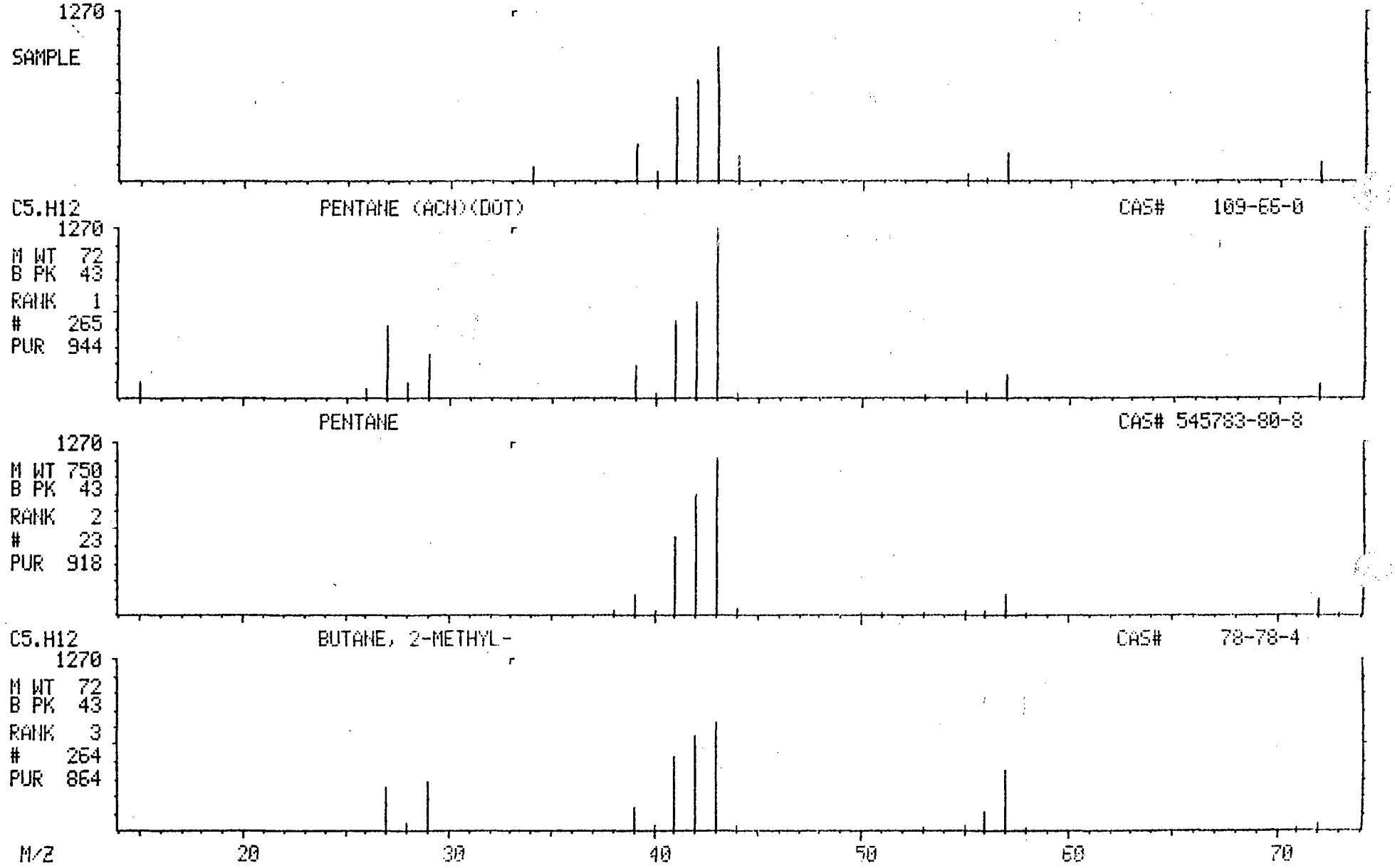
BASE M/Z: 43
RIC: 6782.



MID LIBRARY SEARCH (LIBRARY:MB)
09/23/94 14:54:00 + 3:24
SAMPLE: 4683-001-01 1639.2 FIELD BLK
CONDS.: EPA METHOD 8240
ENHANCED (S 15B 2N 0T)

DATA: C8665 # 135
CALI: C8665 # 3

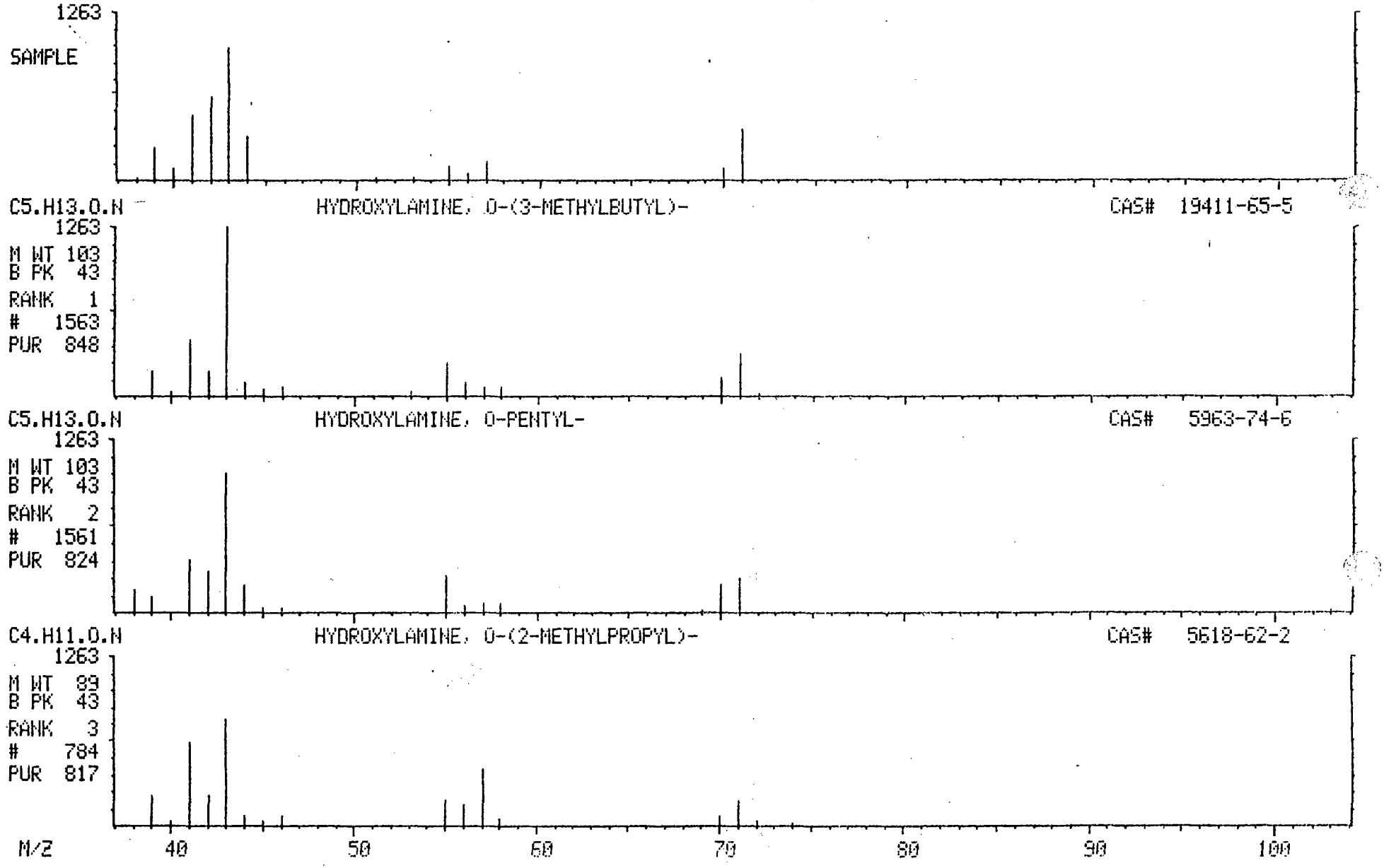
BASE M/Z: 43
RIC: 3316.



MID LIBRARY SEARCH (LIBRARYNB)
09/23/94 14:54:00 + 4:24
SAMPLE: 4683-001-01 1639.2 FIELD BLK
CONDS.: EPA METHOD 8240
ENHANCED (S 15B 2N 0T)

DATA: C8665 # 175
CALI: C8665 # 3

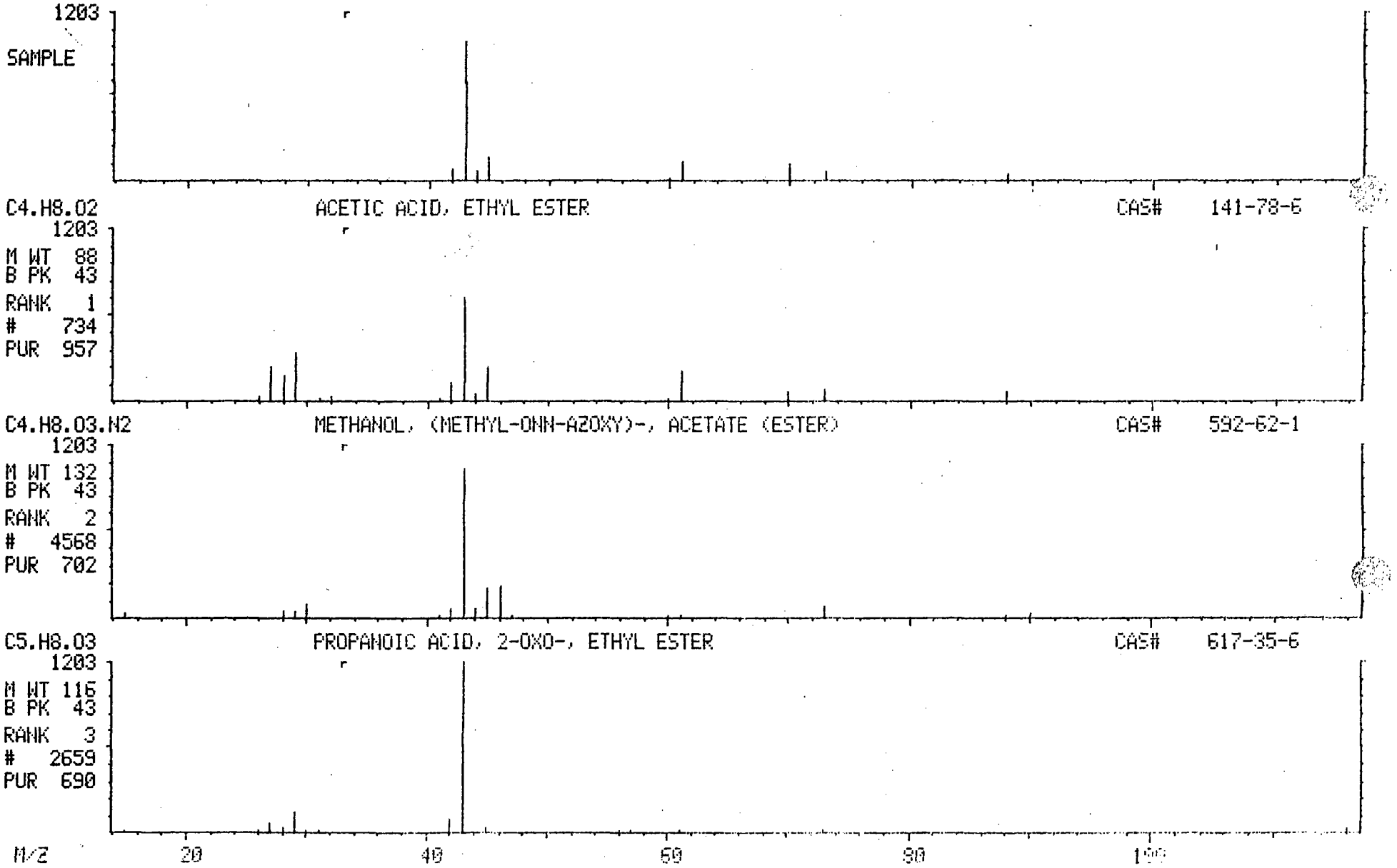
BASE M/Z: 43
RIC: 2916.



MID LIBRARY SEARCH (LIBRARYNB)
09/23/94 14:54:00 + 6:54
SAMPLE: 4683-001-01 1639.2 FIELD BLK
CONDS.: EPA METHOD 8240
ENHANCED (S 15B 2N 0T)

DATA: C8665 # 274
CALI: C8665 # 3

BASE M/Z: 43
RIC: 4096.



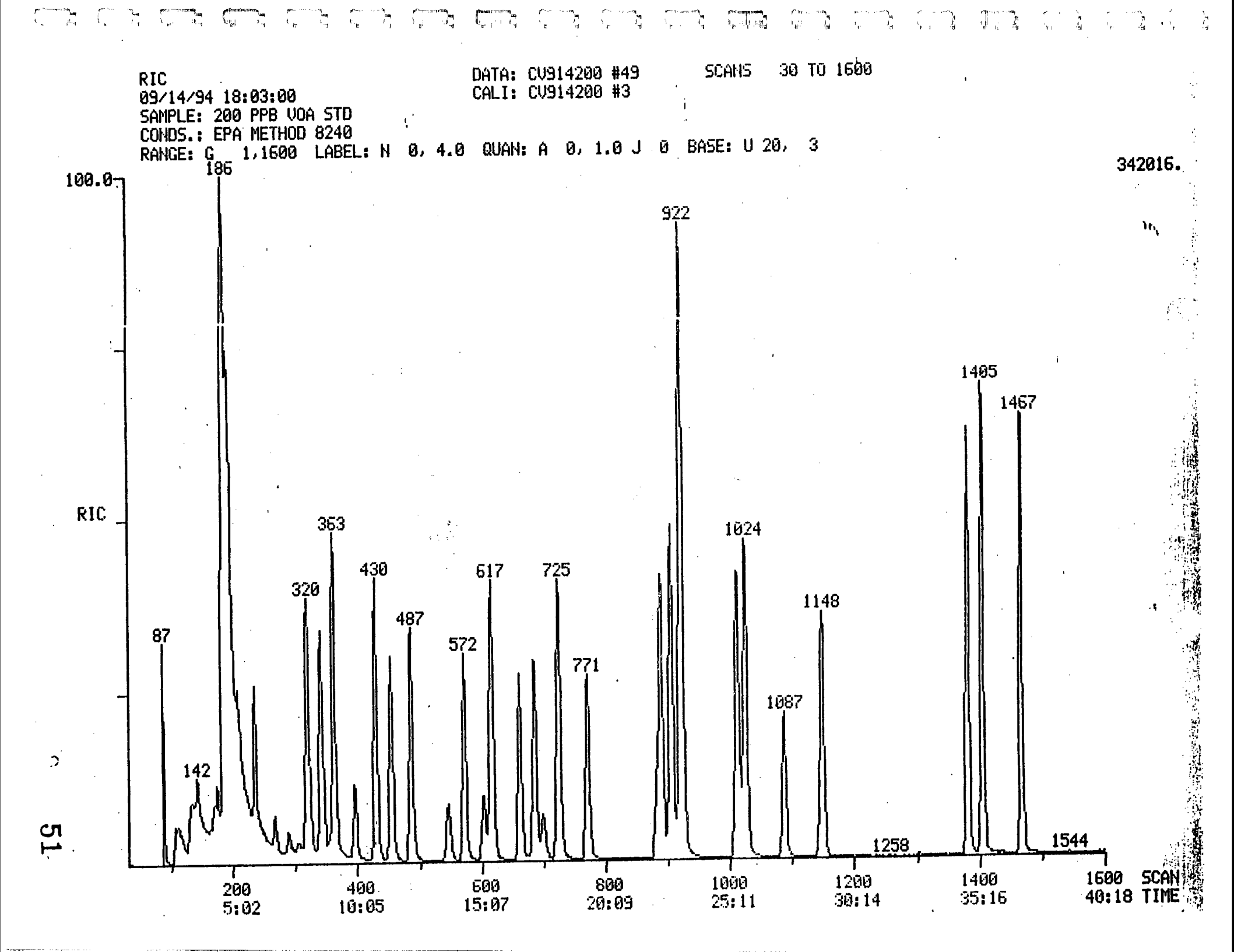


Initial Calibration Data

Instrument Identifier: FINN
Calibration Date: 09/14/94
%RSD - 8240.
MIN RF FOR SPCC (**) = 0.30

CV 9/14/10A | CV 9/14 20A | CV 9/14 50A | CV 9/14 100A | CV 9/14 200

	Compound	RF 10	RF 20	RF 50	RF 100	RF 200	Mean RF	%RSD
0010	CHLOROMETHANE **	1.686	2.462	2.506	2.683	2.223	2.312	16.727
0015	BROMOMETHANE	2.211	2.079	2.357	3.058	2.719	2.485	16.092
0020	VINYL CHLORIDE *	2.611	2.681	2.617	2.465	1.693	2.413	17.003
0025	CHLOROETHANE	0.714	0.669	0.817	1.245	1.155	0.920	28.576
0030	METHYLENE CHLORIDE	4.443	3.771	3.290	3.207	3.887	3.720	13.455
0251	ACROLIN	0.346	0.139	0.081	0.119	0.267	0.190	58.625
0035	ACETONE	1.737	1.058	1.339	1.617	1.333	1.417	18.830
0252	ACRYLONITRILE	0.342	0.518	0.525	0.612	0.568	0.513	20.021
0040	CARBON DISULFIDE	7.147	7.850	7.536	8.086	9.395	8.003	10.673
0045	1,1-DICHLOROETHENE *	0.706	0.553	0.594	0.720	0.815	0.678	15.527
0050	1,1-DICHLOROETHANE **	1.042	0.684	0.721	0.736	0.851	0.807	18.036
0055	TRANS-1,2-DICHLOROETHEN	2.335	2.026	2.153	2.326	2.518	2.272	8.296
0000	TRICHLOROFLUOROMETHA	0.722	0.511	0.524	0.524	0.724	0.601	18.590
0060	CHLOROFORM *	1.605	0.970	0.945	0.935	1.164	1.124	25.345
0065	1,2-DICHLOROETHANE	3.583	2.634	2.330	2.424	2.650	2.724	18.322
0110	2-BUTANONE	0.185	0.109	0.108	0.119	0.144	0.133	24.410
0115	1,1,1-TRICHLOROETHANE	0.674	0.680	0.712	0.728	0.759	0.711	4.965
0120	CARBON TETRACHLORIDE	0.541	0.544	0.545	0.571	0.604	0.561	4.811
0125	VINYL ACETATE	0.343	0.279	0.504	0.618	0.586	0.466	32.005
0130	BROMO DICHLOROMETHANE	0.583	0.634	0.697	0.697	0.727	0.668	8.680
0140	1,2-DICHLOROPROPANE	0.322	0.350	0.357	0.363	0.368	0.352	5.194
0145	TRANS-1,3 DICHLOROPROPE	0.407	0.483	0.539	0.552	0.568	0.510	12.924
0150	TRICHLOROETHENE	0.418	0.433	0.460	0.439	0.451	0.440	3.707
0155	DIBROMOCHLOROMETHANE	0.437	0.447	0.497	0.509	0.522	0.482	7.922
0160	1,1,2-TRICHLOROETHANE	0.315	0.319	0.336	0.331	0.342	0.329	3.427
0165	BENZENE	0.924	0.984	1.010	1.041	1.014	0.994	4.447
0143	CIS-1,3-DICHLOROPROPENE	0.377	0.429	0.486	0.501	0.497	0.458	11.752
0175	2-CHLOROETHYL VINYL ETH	0.000	0.000	0.180	0.194	0.204	0.144	34.005
		**** Insufficient Data ****						
0180	BROMOFORM **	0.271	0.293	0.303	0.308	0.356	0.306	10.221
0220	TETRACHLOROETHENE	0.507	0.489	0.517	0.490	0.500	0.501	2.380
0210	2-HEXANONE	0.419	0.508	0.497	0.528	0.291	0.449	21.730
0205	4-METHYL 2-PENTANONE	0.320	0.226	0.223	0.247	0.229	0.249	16.299
0225	1,1,2,2-TETRACHLOROETHA	0.617	0.632	0.606	0.504	0.621	0.596	8.764
0230	TOLUENE *	1.375	1.326	1.446	1.405	1.408	1.392	3.215
0235	CHLOROBENZENE **	0.957	0.940	0.985	0.984	0.976	0.968	2.019
0240	ETHYL BENZENE *	0.388	0.409	0.426	0.446	0.452	0.424	6.268
0245	STYRENE	0.812	0.845	0.942	0.990	1.035	0.925	10.206
0250	M+P-XYLENES	0.988	1.058	1.138	1.199	1.127	1.102	7.337
0253	1,3-DICHLOROBENZENE	0.867	0.916	0.947	0.860	0.905	0.899	4.027
0254	1,4-DICHLOROBENZENE	0.888	0.927	0.961	0.857	0.915	0.909	4.330
0255	1,2-DICHLOROBENZENE	0.832	0.921	0.880	0.770	0.849	0.850	6.617
0250	O-XYLENE	0.512	0.572	0.557	0.595	0.558	0.559	5.462


RIC
09/14/94 18:03:00
SAMPLE: 200 PPB VOA STD
CONDS.: EPA METHOD 8240
RANGE: G 1,1600 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3
DATA: CV914200 #49
CALI: CV914200 #3
SCANS 30 TO 1600
342016.
100.0
RIC
186
922
1405
1467
363
430
617
725
1024
320
487
1148
87
572
771
1087
142
1258
1544
200
5:02
400
10:05
600
15:07
800
20:09
1000
25:11
1200
30:14
1400
35:16
1600
40:18
SCAN
TIME

Quantitation Report File: CV914200

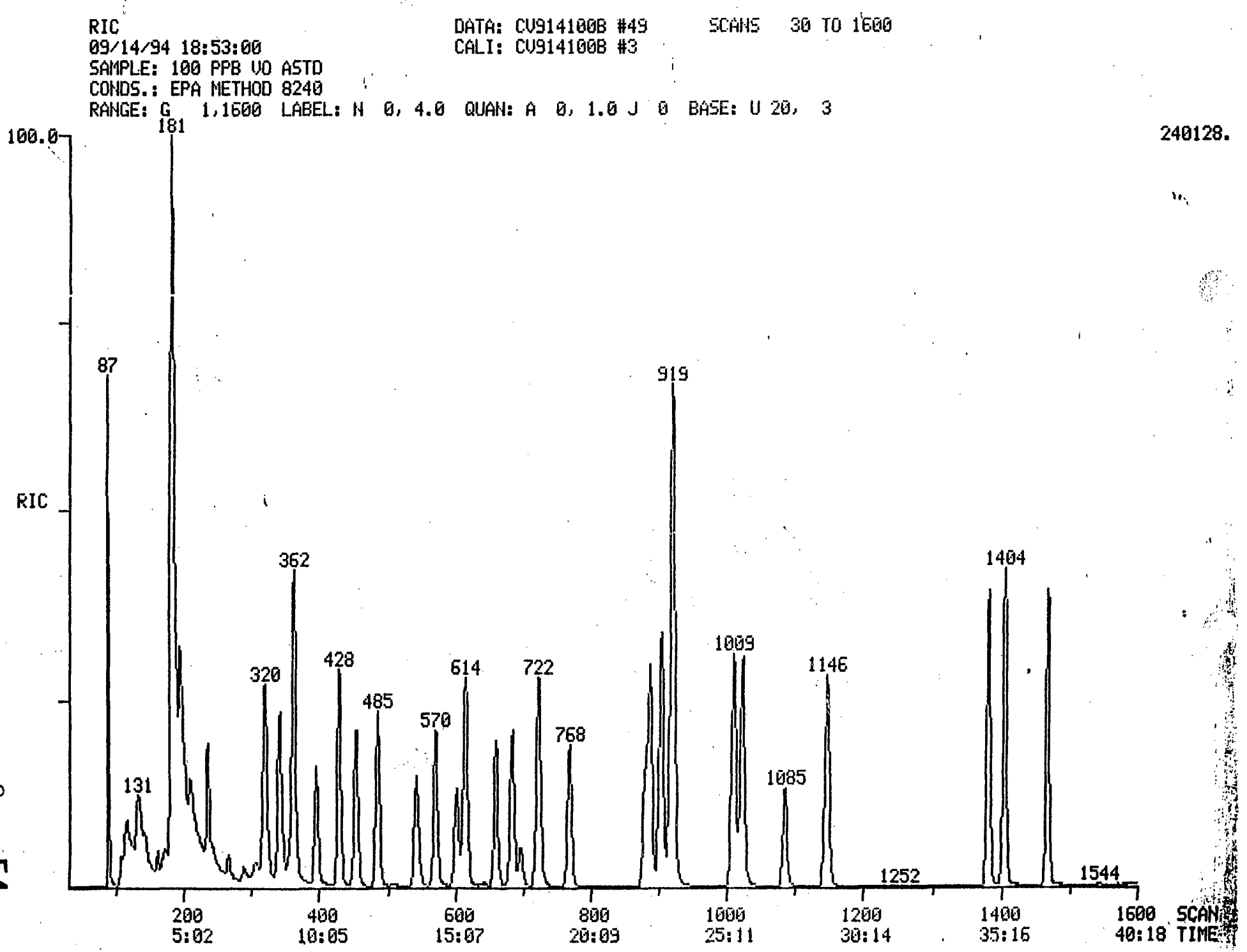
Data: CV914200.TI
09/14/94 18:03:00
Sample: 200 PPB VOA STD
Conds.: EPA METHOD 8240
Formula: 5ML Instrument: FINN Weight: 0.000
Submitted by: PTL Analyst: UC Acct. No.: 5-PT

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

No	Name	
48	C250	O-XYLENE
49		BENZENE-D6 **S. STD. **

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	49	306	7:42	1	1.000	A BV	7806.	50.000 NG	0.52
2	114	396	9:59	2	1.000	A BB	88807.	50.000 NG	0.52
3	117	882	22:13	3	1.000	A BB	75395.	50.000 NG	0.52
4	65	355	8:57	1	1.160	A BV	13515.	47.539 NG	0.50
5	98	603	15:11	3	0.684	A BB	92800.	49.991 NG	0.52
6	95	1148	28:55	3	1.302	A BB	102798.	70.521 NG	0.74
7	50	107	2:42	1	0.350	A BB	69405.	177.418 NG	1.86
8	94	131	3:18	1	0.428	A BB	84863.	230.699 NG	2.42
9	62	112	2:49	1	0.366	A BB	52850.	129.369 NG	1.36
10	64	135	3:24	1	0.441	M XX	36061.	282.812 NG	2.97
11	49	195	4:55	1	0.637	A BB	121356.	236.319 NG	2.48
12	56	164	4:08	1	0.536	A BV	8317.	665.676 NG	6.98
13	43	175	4:24	1	0.572	M XX	41602.	199.167 NG	2.09
14	53	205	5:10	1	0.670	A BB	17717.	216.540 NG	2.27
15	76	194	4:53	1	0.634	A BB	293321.	249.329 NG	2.62
16	96	174	4:23	1	0.569	A BB	25442.	274.760 NG	2.88
17	63	235	5:55	1	0.768	A BB	26555.	235.996 NG	2.48
18	61	209	5:16	1	0.683	A BB	78604.	233.963 NG	2.45
19	101	142	3:35	1	0.464	A BB	22594.	276.477 NG	2.90
20	83	289	7:17	1	0.944	A BB	36333.	246.447 NG	2.59
21	62	364	9:10	1	1.190	A BB	82722.	227.512 NG	2.39
22	43	267	6:44	2	0.674	A BB	51123.	268.984 NG	2.82
23	97	320	8:04	2	0.808	A BB	269582.	213.173 NG	2.24
24	117	342	8:37	2	0.864	A BB	214553.	221.732 NG	2.33
25	43	235	5:55	2	0.593	A BB	207998.	232.594 NG	2.44
26	83	487	12:16	2	1.230	A BB	257963.	208.554 NG	2.19
27	63	455	11:28	2	1.149	A BB	130599.	206.255 NG	2.16
28	75	572	14:25	2	1.444	A BB	201586.	210.673 NG	2.21
29	95	430	10:50	2	1.086	A BB	160149.	196.048 NG	2.06
30	129	771	19:25	2	1.947	A BB	185177.	209.989 NG	2.20
31	97	685	17:15	2	1.730	A BB	121282.	203.771 NG	2.14
32	78	362	9:07	2	0.914	A BB	359869.	200.641 NG	2.11
33	75	662	16:41	2	1.672	A BB	176297.	204.561 NG	2.15
34	NOT FOUND								
35	173	1087	27:23	2	2.745	A BB	126297.	235.078 NG	2.47
36	166	725	18:16	3	0.822	A BB	150600.	193.304 NG	2.03
37	43	546	13:45	3	0.619	A BB	87537.	116.807 NG	1.23
38	43	699	17:36	3	0.793	A BB	68826.	205.148 NG	2.15
39	83	1147	28:54	3	1.300	A BB	187103.	205.045 NG	2.15
40	91	616	15:31	3	0.698	A BB	424538.	194.784 NG	2.04
41	112	889	22:24	3	1.008	A BB	294155.	198.131 NG	2.08
42	106	905	22:48	3	1.026	A BB	136028.	211.911 NG	2.22
43	104	1024	25:48	3	1.161	A VB	311960.	219.809 NG	2.31
44	106	922	23:14	3	1.045	A BB	339687.	198.111 NG	2.08
45	146	1382	34:49	3	1.567	A BB	272771.	191.099 NG	2.01
46	146	1405	35:24	3	1.593	A BB	275728.	190.392 NG	2.00
47	146	1467	36:57	3	1.663	A BB	255873.	192.945 NG	2.02
48	106	1011	25:28	3	1.146	A BB	168185.	200.384 NG	2.10
49	NOT FOUND								


RIC
09/14/94 18:53:00
SAMPLE: 100 PPB VO ASTD
CONDS.: EPA METHOD 8240
RANGE: G 1,1600 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3
DATA: CV914100B #49 SCANS 30 TO 1600
CALI: CV914100B #3
100.0
240128.
RIC
87
131
181
320
362
428
485
570
614
722
768
919
1009
1085
1146
1252
1404
1544
200
5:02
400
10:05
600
15:07
800
20:09
1000
25:11
1200
30:14
1400
35:16
1600
40:18
SCAN
TIME

Quantitation Report File: CV914100B

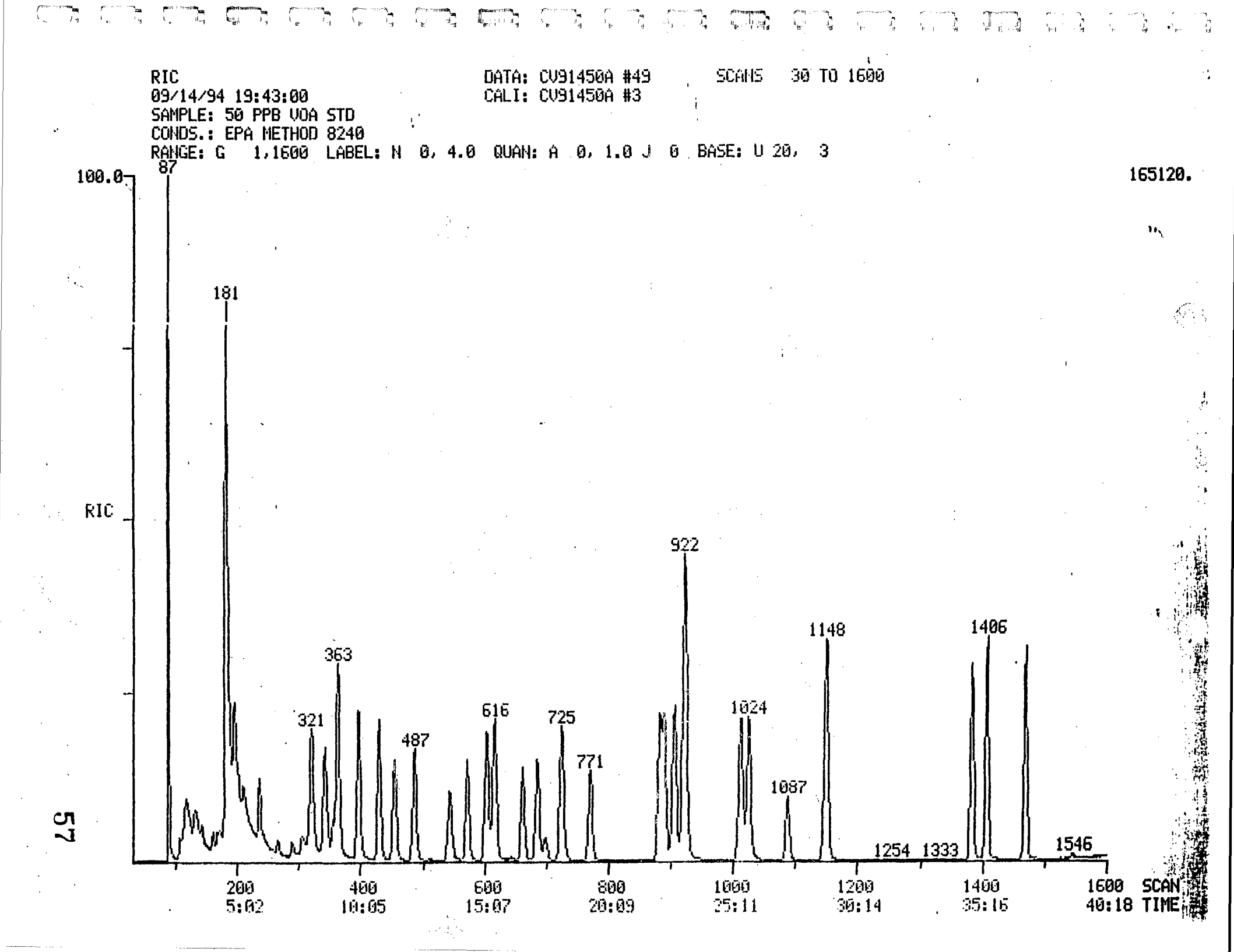
Data: CV914100B.TI
09/14/94 18:53:00
Sample: 100 PPB VO ASTD
Conds.: EPA METHOD 8240
Formula: 5ML Instrument: FINN Weight: 0.000
Submitted by: PTL Analyst: UC Acct. No.: 5-PT

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

No	Name	
48	C250	O-XYLENE
49		BENZENE-D6 **S. STD.**

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	49	305	7:41	1	1.000	A BV	8332.	50.000 NG	1.05
2	114	395	9:57	2	1.000	A BB	90012.	50.000 NG	1.05
3	117	879	22:09	3	1.000	A BB	73739.	50.000 NG	1.05
4	65	354	8:55	1	1.161	A BV	13901.	45.807 NG	0.97
5	98	601	15:08	3	0.684	A BB	91027.	50.136 NG	1.06
6	95	1146	28:52	3	1.304	A BB	74302.	52.116 NG	1.10
7	50	107	2:42	1	0.351	A BB	44707.	107.064 NG	2.26
8	94	130	3:16	1	0.426	A BB	50957.	129.774 NG	2.74
9	62	113	2:51	1	0.370	A BB	41066.	94.172 NG	1.99
10	64	133	3:21	1	0.436	A BB	20736.	152.352 NG	3.21
11	49	195	4:55	1	0.639	A BB	53428.	97.468 NG	2.06
12	56	163	4:06	1	0.534	M XX	1978.	148.278 NG	3.13
13	43	166	4:11	1	0.544	M XX	26942.	120.835 NG	2.55
14	53	203	5:07	1	0.666	A BB	10186.	116.630 NG	2.46
15	76	194	4:53	1	0.636	A BB	134740.	107.296 NG	2.26
16	96	171	4:18	1	0.561	A BB	11993.	121.333 NG	2.56
17	63	234	5:54	1	0.767	A BB	12259.	102.063 NG	2.15
18	61	210	5:17	1	0.689	A BB	38757.	108.073 NG	2.28
19	101	142	3:35	1	0.466	A BB	8717.	99.929 NG	2.11
20	83	289	7:17	1	0.948	A BB	15570.	98.942 NG	2.09
21	62	363	9:09	1	1.190	A BB	40391.	104.070 NG	2.19
22	43	266	6:42	2	0.673	A BB	21363.	110.897 NG	2.34
23	97	320	8:04	2	0.810	A BB	130938.	102.154 NG	2.15
24	117	342	8:37	2	0.866	A BB	102726.	104.742 NG	2.21
25	43	235	5:55	2	0.595	A BB	111183.	122.666 NG	2.59
26	83	485	12:13	2	1.228	A BB	125361.	99.993 NG	2.11
27	63	454	11:26	2	1.149	A BB	65276.	101.710 NG	2.15
28	75	570	14:21	2	1.443	A BB	99226.	102.311 NG	2.16
29	95	428	10:47	2	1.084	A BB	78860.	95.245 NG	2.01
30	129	768	19:21	2	1.944	A BB	91532.	102.407 NG	2.16
31	97	683	17:12	2	1.729	A BB	59509.	98.645 NG	2.08
32	78	362	9:07	2	0.916	A BB	187257.	103.006 NG	2.17
33	75	660	16:38	2	1.671	A BB	90090.	103.133 NG	2.18
34	63	541	13:38	2	1.370	M XX	36547.	104.940 NG	2.21
35	173	1085	27:20	2	2.747	A BB	55334.	101.615 NG	2.14
36	166	722	18:11	3	0.821	A BB	72157.	94.697 NG	2.00
37	43	542	13:39	3	0.617	A BB	77799.	106.143 NG	2.24
38	43	696	17:32	3	0.792	A BB	36416.	110.980 NG	2.34
39	83	1145	28:51	3	1.303	A BB	74267.	83.216 NG	1.76
40	91	614	15:28	3	0.699	A BB	207169.	97.186 NG	2.05
41	112	886	22:19	3	1.008	A BB	145047.	99.891 NG	2.11
42	106	903	22:45	3	1.027	A BB	65735.	104.704 NG	2.21
43	104	1022	25:45	3	1.163	A VB	145925.	105.128 NG	2.22
44	106	919	23:09	3	1.046	A BB	176711.	105.374 NG	2.22
45	146	1381	34:47	3	1.571	A BB	126695.	90.753 NG	1.91
46	146	1404	35:22	3	1.597	A BB	126306.	89.172 NG	1.88
47	146	1467	36:57	3	1.669	A BB	113466.	87.482 NG	1.85
48	106	1009	25:25	3	1.148	A BB	87673.	106.802 NG	2.25
49	NOT FOUND								


RIC
09/14/94 19:43:00
SAMPLE: 50 PPB VOA STD
CONDS.: EPA METHOD 8240
RANGE: G 1,1600 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3
DATA: CV91450A #49
CALI: CV91450A #3
SCANS 30 TO 1600
100.0
165120.
RIC
87
181
321
363
487
616
725
771
922
1024
1087
1148
1254
1333
1406
1546
200
5:02
400
10:05
600
15:07
800
20:09
1000
25:11
1200
30:14
1400
35:16
1600
40:18
SCAN
TIME
57

Quantitation Report File: CV91450A

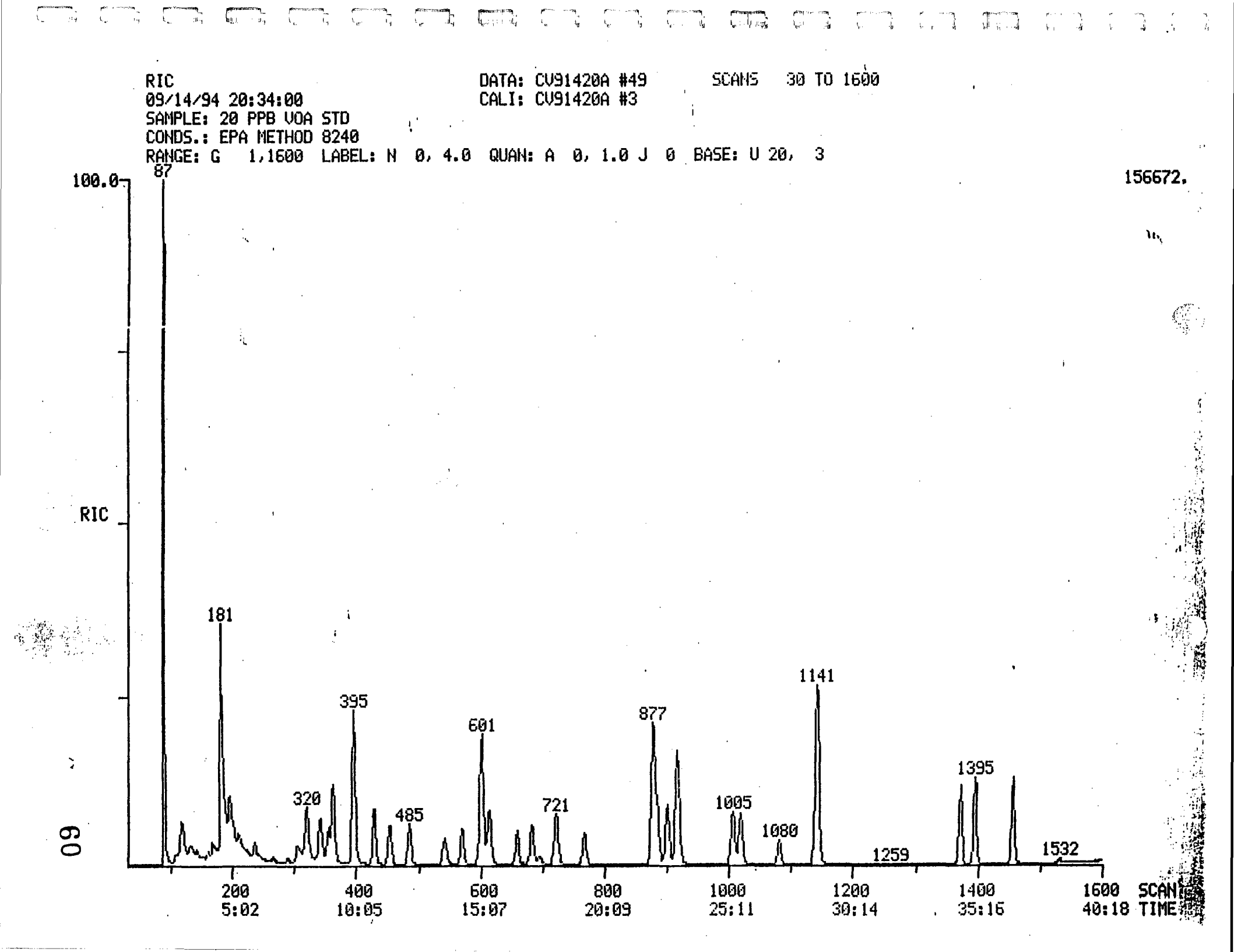
Data: CV91450A.TI
09/14/94 19:43:00
Sample: 50 PPB VOA STD
Conds.: EPA METHOD 8240
Formula: 5ML Instrument: FINN Weight: 0.000
Submitted by: PTL Analyst: UC Acct. No.: 5-PT

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

No	Name	
48	C250	O-XYLENE
49		BENZENE-D6 **S. STD. **

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	49	305	7:41	1	1.000	A BB	9202.	50.000 NG	2.08
2	114	396	9:59	2	1.000	A BB	88266.	50.000 NG	2.08
3	117	882	22:13	3	1.000	A BB	71581.	50.000 NG	2.08
4	65	355	8:57	1	1.164	A BB	16758.	50.000 NG	2.08
5	98	603	15:11	3	0.684	A BB	88121.	50.000 NG	2.08
6	95	1149	28:57	3	1.303	A BB	69198.	50.000 NG	2.08
7	50	107	2:42	1	0.351	A BB	23060.	50.000 NG	2.08
8	94	130	3:16	1	0.426	A BB	21684.	50.000 NG	2.08
9	62	114	2:52	1	0.374	A BB	24081.	50.000 NG	2.08
10	64	134	3:23	1	0.439	A BB	7516.	50.000 NG	2.08
11	49	195	4:55	1	0.639	A BB	30271.	50.000 NG	2.08
12	56	164	4:08	1	0.538	M XX	737.	50.000 NG	2.08
13	43	166	4:11	1	0.544	A BB	12313.	50.000 NG	2.08
14	53	203	5:07	1	0.666	A BB	4823.	50.000 NG	2.08
15	76	195	4:55	1	0.639	A BB	69349.	50.000 NG	2.08
16	96	171	4:18	1	0.561	A BB	5458.	50.000 NG	2.08
17	63	235	5:55	1	0.770	A BB	6633.	50.000 NG	2.08
18	61	210	5:17	1	0.689	A BB	19804.	50.000 NG	2.08
19	101	142	3:35	1	0.466	A BB	4817.	50.000 NG	2.08
20	83	289	7:17	1	0.948	A BB	8690.	50.000 NG	2.08
21	62	365	9:12	1	1.197	A BB	21433.	50.000 NG	2.08
22	43	266	6:42	2	0.672	A BB	9445.	50.000 NG	2.08
23	97	321	8:05	2	0.811	A BB	62845.	50.000 NG	2.08
24	117	343	8:38	2	0.866	A BB	48086.	50.000 NG	2.08
25	43	235	5:55	2	0.593	A BB	44440.	50.000 NG	2.08
26	83	487	12:16	2	1.230	A BB	61468.	50.000 NG	2.08
27	63	455	11:28	2	1.149	A BB	31466.	50.000 NG	2.08
28	75	572	14:25	2	1.444	A BB	47551.	50.000 NG	2.08
29	95	429	10:48	2	1.083	A BB	40595.	50.000 NG	2.08
30	129	771	19:25	2	1.947	A BB	43823.	50.000 NG	2.08
31	97	685	17:15	2	1.730	A BB	29578.	50.000 NG	2.08
32	78	363	9:09	2	0.917	A BB	89133.	50.000 NG	2.08
33	75	662	16:41	2	1.672	A BB	42829.	50.000 NG	2.08
34	63	543	13:41	2	1.371	M XX	17076.	50.000 NG	2.08
35	173	1087	27:23	2	2.745	A BB	26699.	50.000 NG	2.08
36	166	725	18:16	3	0.822	A BB	36983.	50.000 NG	2.08
37	43	544	13:42	3	0.617	A BB	35575.	50.000 NG	2.08
38	43	698	17:35	3	0.791	A BB	15926.	50.000 NG	2.08
39	83	1148	28:55	3	1.302	A BB	43317.	50.000 NG	2.08
40	91	616	15:31	3	0.698	A BB	103464.	50.000 NG	2.08
41	112	889	22:24	3	1.008	A BB	70477.	50.000 NG	2.08
42	106	905	22:48	3	1.026	A BB	30472.	50.000 NG	2.08
43	104	1024	25:48	3	1.161	A BB	67372.	50.000 NG	2.08
44	106	922	23:14	3	1.045	A BB	81395.	50.000 NG	2.08
45	146	1382	34:49	3	1.567	A BB	67759.	50.000 NG	2.08
46	146	1406	35:25	3	1.594	A BB	68748.	50.000 NG	2.08
47	146	1468	36:59	3	1.664	A BB	62953.	50.000 NG	2.08
48	106	1011	25:28	3	1.146	A BB	39843.	50.000 NG	2.08
49	NOT FOUND								


RIC
09/14/94 20:34:00
SAMPLE: 20 PPB VOA STD
CONDS.: EPA METHOD 8240
RANGE: G 1,1600 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3
DATA: CV91420A #49
CALI: CV91420A #3
SCANS 30 TO 1600
100.0
156672.
RIC
87
181
320
395
485
601
721
877
1005
1080
1141
1259
1395
1532
200
5:02
400
10:05
600
15:07
800
20:09
1000
25:11
1200
30:14
1400
35:16
1600
40:18
SCAN
TIME

Quantitation Report File: CV91420A

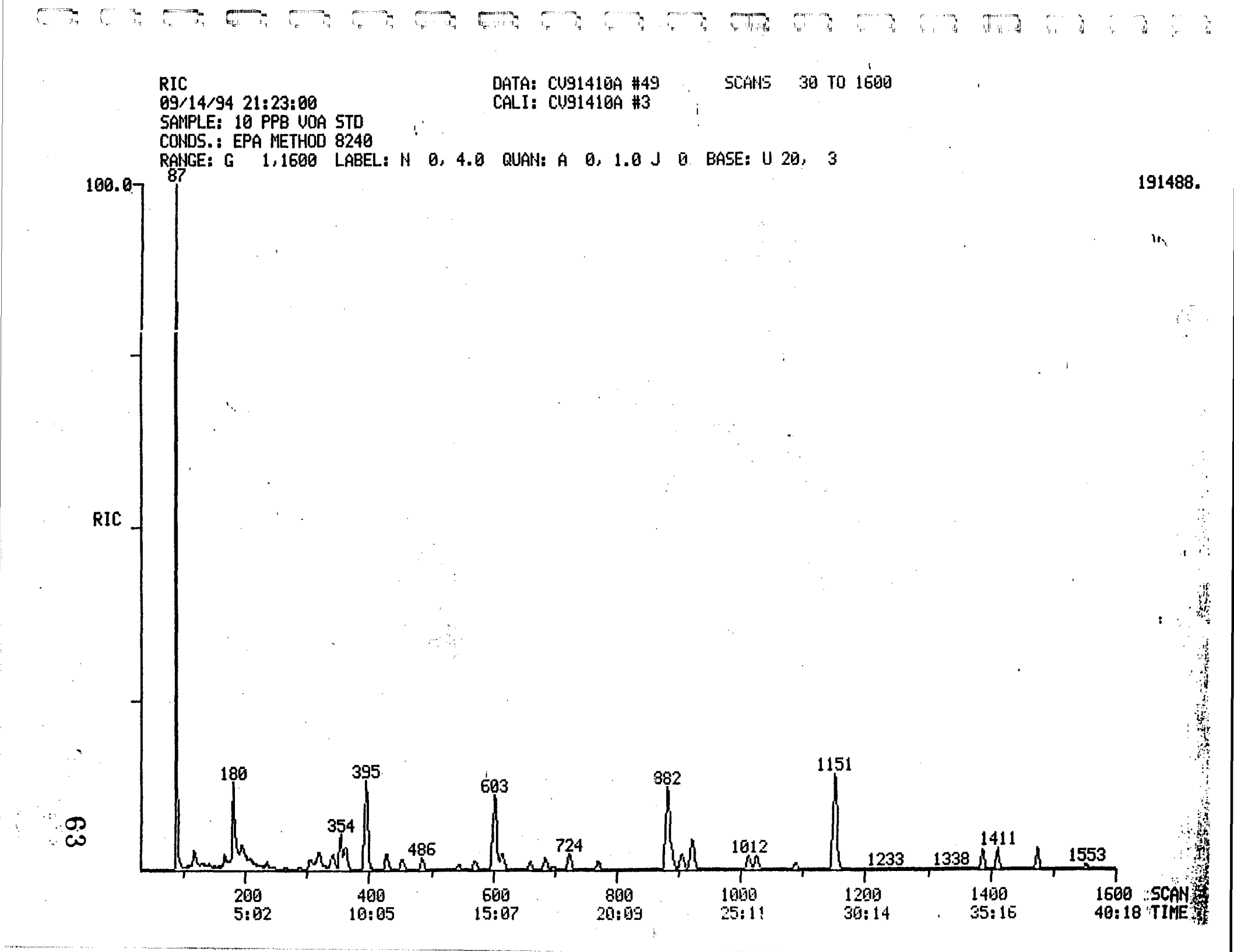
Date: CV91420A.TI
09/14/94 20:34:00
Sample: 20 PPB VOA STD
Conds.: EPA METHOD 8240
Formula: 5ML Instrument: FINN Weight: 0.000
Submitted by: PTL Analyst: UC Acct. No.: 5-PT

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

No	Name
48	C250 O-XYLENE
49	BENZENE-D6 **S. STD. **

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	49	305	7:41	1	1.000	A BB	8332.	50.000 NG	4.47
2	114	395	9:57	2	1.000	A BB	86467.	50.000 NG	4.47
3	117	877	22:05	3	1.000	A BB	68587.	50.000 NG	4.47
4	65	354	8:55	1	1.161	A BB	16583.	54.642 NG	4.88
5	98	601	15:08	3	0.685	A BB	84786.	50.208 NG	4.49
6	95	1141	28:45	3	1.301	A BB	60905.	45.929 NG	4.11
7	50	108	2:43	1	0.354	A BB	8204.	19.646 NG	1.76
8	94	131	3:18	1	0.430	A BB	6928.	17.643 NG	1.58
9	62	114	2:52	1	0.374	A BB	8934.	20.487 NG	1.83
10	64	134	3:23	1	0.439	A BB	2229.	16.376 NG	1.46
11	49	195	4:55	1	0.639	A BB	12567.	22.924 NG	2.05
12	56	164	4:08	1	0.538	A BV	461.	34.562 NG	3.09
13	43	167	4:12	1	0.548	A BB	3524.	15.804 NG	1.41
14	53	203	5:07	1	0.666	A BB	1726.	19.762 NG	1.77
15	76	195	4:55	1	0.639	A BB	26162.	20.832 NG	1.86
16	96	170	4:17	1	0.557	A BB	1840.	18.617 NG	1.66
17	63	234	5:54	1	0.767	A BB	2276.	18.952 NG	1.69
18	61	210	5:17	1	0.689	A BB	6752.	18.826 NG	1.68
19	101	142	3:35	1	0.466	A BB	1700.	19.487 NG	1.74
20	83	289	7:17	1	0.948	A BB	3232.	20.536 NG	1.84
21	62	363	9:09	1	1.190	A BB	8777.	22.613 NG	2.02
22	43	266	6:42	2	0.673	A BB	3756.	20.297 NG	1.81
23	97	320	8:04	2	0.810	A BB	23504.	19.089 NG	1.71
24	117	342	8:37	2	0.866	A BB	18813.	19.969 NG	1.79
25	43	235	5:55	2	0.595	A BB	9631.	11.061 NG	0.99
26	83	485	12:13	2	1.228	A BB	21901.	18.185 NG	1.63
27	63	454	11:26	2	1.149	A BB	12100.	19.626 NG	1.75
28	75	570	14:21	2	1.443	A BB	16673.	17.896 NG	1.60
29	95	428	10:47	2	1.084	A BB	14968.	18.819 NG	1.68
30	129	767	19:19	2	1.942	A BB	15438.	17.980 NG	1.61
31	97	682	17:11	2	1.727	A BB	11018.	19.013 NG	1.70
32	78	362	9:07	2	0.916	A BB	34012.	19.476 NG	1.74
33	75	659	16:36	2	1.668	A BB	14830.	17.673 NG	1.58
34	63	541	13:38	2	1.370	A BB	6204.	18.544 NG	1.66
35	173	1080	27:12	2	2.734	A BB	10122.	19.350 NG	1.73
36	166	721	18:10	3	0.822	A BB	13408.	18.919 NG	1.69
37	43	542	13:39	3	0.618	A BB	13931.	20.435 NG	1.83
38	43	695	17:30	3	0.792	A BB	6197.	20.305 NG	1.82
39	83	1140	28:43	3	1.300	A BB	17335.	20.883 NG	1.87
40	91	614	15:28	3	0.700	A BB	36363.	18.340 NG	1.64
41	112	884	22:16	3	1.008	A BB	25768.	19.079 NG	1.71
42	106	900	22:40	3	1.026	A BB	11196.	19.172 NG	1.71
43	104	1018	25:39	3	1.161	A BB	23182.	17.956 NG	1.61
44	106	916	23:04	3	1.044	A BB	29024.	18.608 NG	1.66
45	146	1372	34:34	3	1.564	A BB	25115.	19.342 NG	1.73
46	146	1395	35:08	3	1.591	A BB	25414.	19.290 NG	1.72
47	146	1456	36:41	3	1.660	A BV	25253.	20.933 NG	1.87
48	106	1005	25:19	3	1.146	A BB	15691.	20.551 NG	1.84
49	NOT FOUND								


RIC
09/14/94 21:23:00
SAMPLE: 10 PPB VOA STD
CONDS.: EPA METHOD 8240
RANGE: G 1,1600 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3
DATA: CV91410A #49
CALI: CV91410A #3
SCANS 30 TO 1600
100.0
191488.
RIC
87
180
354
395
486
603
724
882
1012
1151
1233
1338
1411
1553
200
5:02
400
10:05
600
15:07
800
20:09
1000
25:11
1200
30:14
1400
35:16
1600
40:18
SCAN
TIME
63

Quantitation Report File: CV91410A

Data: CV91410A.TI
09/14/94 21:23:00
Sample: 10 PPB VOA STD
Conds.: EPA METHOD 8240
Formula: 5ML Instrument: FINN Weight: 0.000
Submitted by: PTL Analyst: UC Acct. No.: 5-PT

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

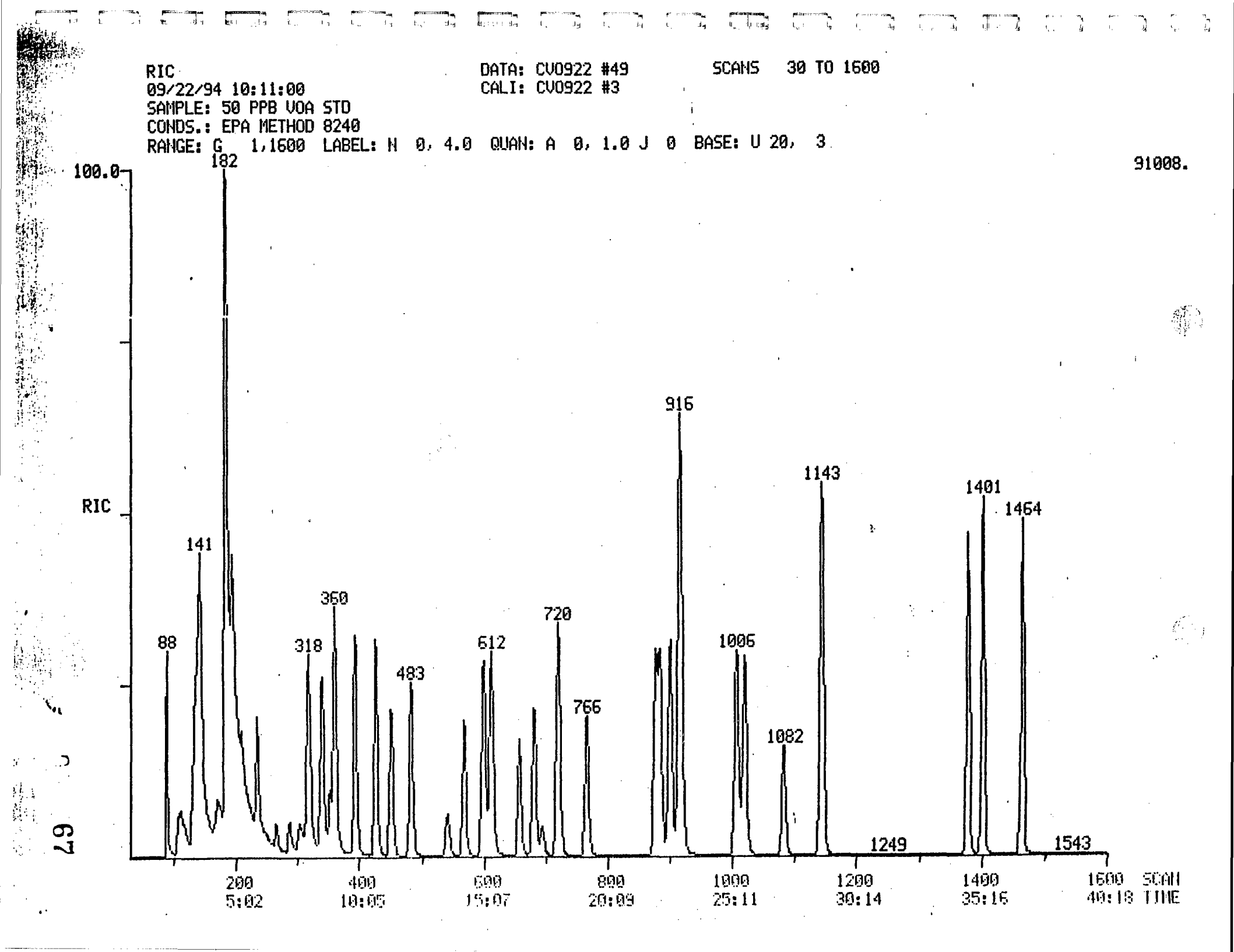
No	Name
48	C250 O-XYLENE
49	BENZENE-D6 **S. STD. **

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	49	305	7:41	1	1.000	A BB	6750.	50.000 NG	6.46
2	114	395	9:57	2	1.000	A BB	64012.	50.000 NG	6.46
3	117	882	22:13	3	1.000	A BB	49854.	50.000 NG	6.46
4	65	354	8:55	1	1.161	A BB	19365.	78.771 NG	10.17
5	98	603	15:11	3	0.684	A BB	61090.	49.768 NG	6.43
6	95	1151	29:00	3	1.305	A BB	43458.	45.086 NG	5.82
7	50	107	2:42	1	0.351	A BV	2275.	6.725 NG	0.87
8	94	130	3:16	1	0.426	M XX	2984.	9.381 NG	1.21
9	62	114	2:52	1	0.374	A BB	3524.	9.975 NG	1.29
10	64	136	3:26	1	0.446	M XX	964.	8.742 NG	1.13
11	49	194	4:53	1	0.636	A BB	5997.	13.505 NG	1.74
12	56	164	4:08	1	0.538	M XX	466.	43.114 NG	5.57
13	43	166	4:11	1	0.544	A BB	2344.	12.977 NG	1.68
14	53	203	5:07	1	0.666	A BB	461.	6.516 NG	0.84
15	76	194	4:53	1	0.636	A BB	9648.	9.484 NG	1.22
16	96	169	4:15	1	0.554	M XX	953.	11.897 NG	1.54
17	63	233	5:52	1	0.764	M XX	1406.	14.447 NG	1.87
18	61	208	5:14	1	0.682	M XX	3151.	10.847 NG	1.40
19	101	142	3:35	1	0.466	A BB	974.	13.783 NG	1.78
20	83	288	7:15	1	0.944	M XX	2166.	16.991 NG	2.19
21	62	364	9:10	1	1.193	A BB	4836.	15.381 NG	1.99
22	43	266	6:42	2	0.673	A BB	2358.	17.212 NG	2.22
23	97	320	8:04	2	0.810	A BB	8617.	9.454 NG	1.22
24	117	341	8:35	2	0.863	A BB	6919.	9.920 NG	1.28
25	43	235	5:55	2	0.595	A BV	4389.	6.810 NG	0.88
26	83	486	12:15	2	1.230	A BB	7464.	8.372 NG	1.08
27	63	455	11:28	2	1.152	A BB	4110.	9.006 NG	1.16
28	75	572	14:25	2	1.448	A BB	5202.	7.542 NG	0.97
29	95	429	10:48	2	1.086	A BB	5348.	9.083 NG	1.17
30	129	770	19:24	2	1.949	M XX	5582.	8.782 NG	1.13
31	97	685	17:15	2	1.734	A BB	4027.	9.387 NG	1.21
32	78	362	9:07	2	0.916	A BB	11823.	9.146 NG	1.18
33	75	662	16:41	2	1.676	A BB	4814.	7.749 NG	1.00
34	NOT FOUND								
35	173	1089	27:26	2	2.757	A BB	3461.	8.937 NG	1.15
36	166	724	18:14	3	0.821	A BB	5054.	9.811 NG	1.27
37	43	545	13:44	3	0.618	M XX	4175.	8.426 NG	1.09
38	43	697	17:33	3	0.790	A BB	3182.	14.343 NG	1.85
39	83	1149	28:57	3	1.303	A BB	6143.	10.181 NG	1.32
40	91	615	15:30	3	0.697	A BB	13701.	9.507 NG	1.23
41	112	889	22:24	3	1.008	A BB	9538.	9.716 NG	1.25
42	106	906	22:49	3	1.027	A BB	3859.	9.092 NG	1.17
43	104	1026	25:51	3	1.163	A BB	8093.	8.624 NG	1.11
44	106	922	23:14	3	1.045	A BB	9845.	8.684 NG	1.12
45	146	1387	34:56	3	1.573	A BB	8636.	9.150 NG	1.18
46	146	1411	35:33	3	1.600	A BB	8848.	9.240 NG	1.19
47	146	1474	37:08	3	1.671	A BB	8295.	9.459 NG	1.22
48	106	1012	25:30	3	1.147	A BB	5096.	9.182 NG	1.19
49	NOT FOUND								

DATAFILE: CV0922 Calibration Check

Instrument Identifier: FINN
Calibration Date: 09/14/94
Standard File: CV0922
Date: 09/22/94 Time: 10:11:00
25% D
MIN RF FOR SPCC (**) = 0.300

	Compound	Mean RF(I)	RF(0)	% D
CS15	1,2-DICHLOROETHANE-D4 *	2.017	1.683	0.000
CS05	TOLUENE-D8 **S. STD. **	1.232	1.317	0.000
CS10	4-BROMOFLUOROBENZENE **	1.020	1.029	0.000
C010	CHLOROMETHANE **	2.312	1.814	21.544
C015	BROMOMETHANE	2.485	3.793	52.652
C020	VINYL CHLORIDE *	2.413	1.527	36.741
C025	CHLOROETHANE	0.920	1.205	30.957
C030	METHYLENE CHLORIDE	3.720	2.879	22.596
C251	ACROLIN	0.190	0.272	43.004
C035	ACETONE	1.417	1.171	17.323
C252	ACRYLONITRILE	0.513	0.452	11.864
C040	CARBON DISULFIDE	8.003	7.368	7.936
C045	1,1-DICHLOROETHENE *	0.678	0.593	12.463
C050	1,1-DICHLOROETHANE **	0.807	0.783	2.986
C055	TRANS-1,2-DICHLOROETHEN	2.272	1.652	27.297
C000	TRICHLOROFLUOROMETHA	0.601	1.560	159.641
C060	CHLOROFORM *	1.124	1.063	5.375
C065	1,2-DICHLOROETHANE	2.724	2.160	20.698
C110	2-BUTANONE	0.133	0.133	0.299
C115	1,1,1-TRICHLOROETHANE	0.711	0.728	2.379
C120	CARBON TETRACHLORIDE	0.561	0.584	3.972
C125	VINYL ACETATE	0.466	0.584	25.367
C130	BROMO DICHLOROMETHANE	0.668	0.698	4.632
C140	1,2-DICHLOROPROPANE	0.352	0.346	1.740
C145	TRANS-1,3 DICHLOROPROPE	0.510	0.489	3.977
C150	TRICHLOROETHENE	0.440	0.442	0.435
C155	DIBROMOCHLOROMETHANE	0.482	0.514	6.496
C160	1,1,2-TRICHLOROETHANE	0.329	0.339	3.195
C165	BENZENE	0.994	0.974	2.067
C143	CIS-1,3-DICHLOROPROPENE	0.458	0.412	9.958
C175	2-CHLOROETHYL VINYL ETH	0.144	0.018	87.339
C180	BROMOFORM **	0.306	0.371	21.220
C220	TETRACHLOROETHENE	0.501	0.652	30.206
C210	2-HEXANONE	0.449	0.319	28.943
C205	4-METHYL 2-PENTANONE	0.249	0.232	6.844
C225	1,1,2,2-TETRACHLOROETHA	0.596	0.699	17.286
C230	TOLUENE *	1.392	1.490	7.064
C235	CHLOROBENZENE **	0.968	0.967	0.107
C240	ETHYL BENZENE *	0.424	0.405	4.473
C245	STYRENE	0.925	0.917	0.810
C250	M+P-XYLENES	1.102	1.171	6.283
C253	1,3-DICHLOROBENZENE	0.899	1.112	23.667
C254	1,4-DICHLOROBENZENE	0.909	1.149	26.281
C255	1,2-DICHLOROBENZENE	0.850	1.024	20.435
C250	O-XYLENE	0.559	0.578	3.387


RIC
09/22/94 10:11:00
SAMPLE: 50 PPB VOA STD
CONDS.: EPA METHOD 8240
RANGE: G 1,1600 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3
DATA: CV0922 #49
CALI: CV0922 #3
SCANS 30 TO 1600
100.0
91008.
RIC
182
141
88
318
360
483
612
720
766
916
1006
1082
1143
1249
1401
1464
1543
200
5:02
400
10:05
600
15:07
800
20:09
1000
25:11
1200
30:14
1400
35:16
1600 SCAN
40:18 TIME

Quantitation Report File: CV0922

Data: CV0922.TI
09/22/94 10:11:00
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	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

0922

No	Name
48	C250 O-XYLENE
49	BENZENE-D6 **S. STD. **

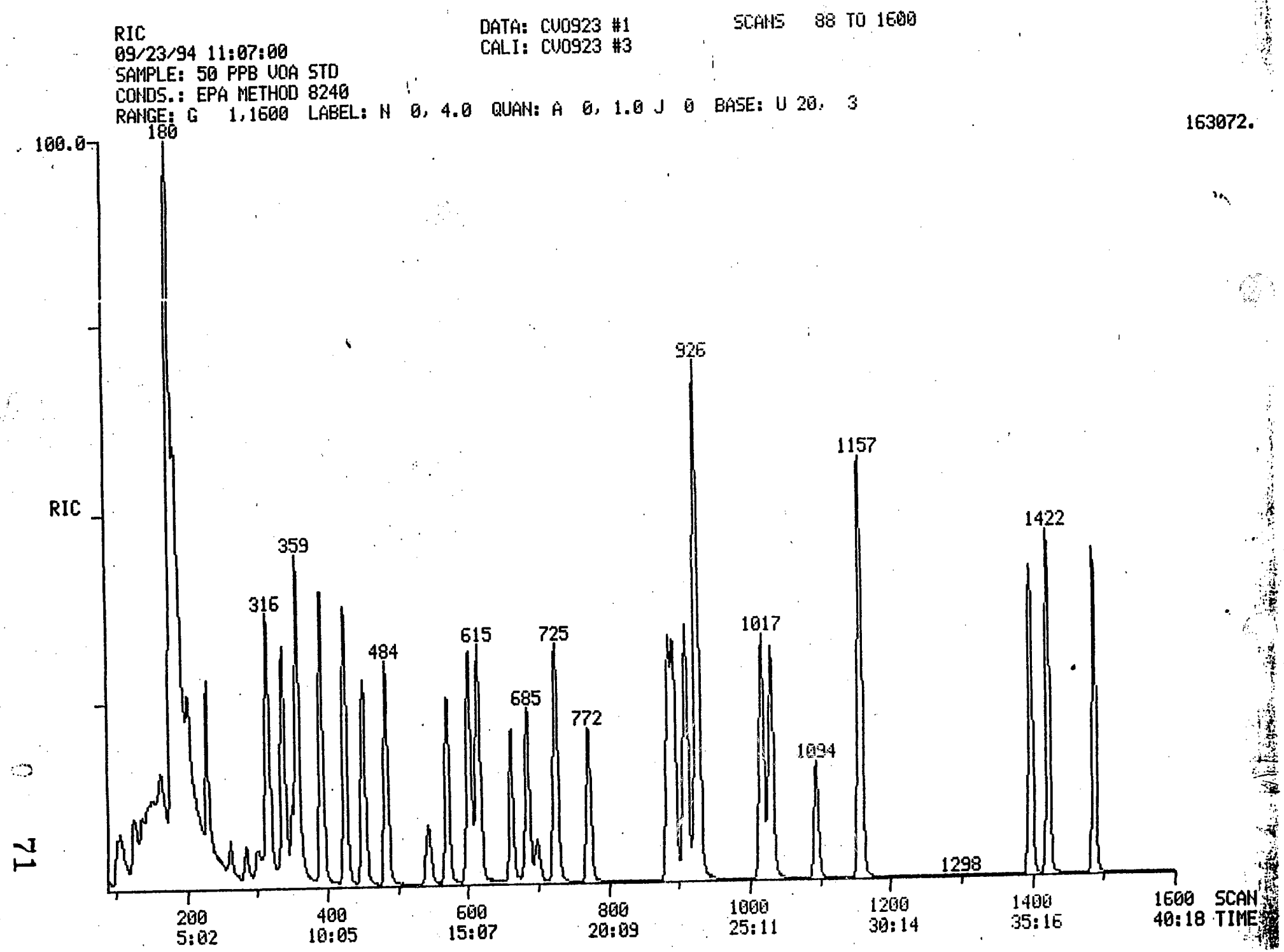
No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	49	303	7:38	1	1.000	M XX	9411.	50.000 NG	2.06
2	114	393	9:54	2	1.000	A BB	69368.	50.000 NG	2.06
3	117	876	22:04	3	1.000	A BB	54344.	50.000 NG	2.06
4	65	352	8:52	1	1.162	A BB	15835.	50.000 NG	2.06
5	98	599	15:05	3	0.684	A BB	71550.	50.000 NG	2.06
6	95	1143	28:48	3	1.305	A BB	55918.	50.000 NG	2.06
7	50	107	2:42	1	0.353	A BB	17067.	50.000 NG	2.06
8	94	132	3:20	1	0.436	A BB	35692.	50.000 NG	2.06
9	62	111	2:48	1	0.366	A BB	14363.	50.000 NG	2.06
10	64	135	3:24	1	0.446	A BB	11337.	50.000 NG	2.06
11	49	194	4:53	1	0.640	A BB	27090.	50.000 NG	2.06
12	56	163	4:06	1	0.538	A BB	2555.	50.000 NG	2.06
13	43	166	4:11	1	0.548	M XX	11018.	50.000 NG	2.06
14	53	203	5:07	1	0.670	A BB	4250.	50.000 NG	2.06
15	76	194	4:53	1	0.640	A BB	69334.	50.000 NG	2.06
16	96	169	4:15	1	0.558	A BB	5577.	50.000 NG	2.06
17	63	232	5:51	1	0.766	A BB	7361.	50.000 NG	2.06
18	61	208	5:14	1	0.686	A BB	15538.	50.000 NG	2.06
19	101	141	3:33	1	0.465	A BB	14677.	50.000 NG	2.06
20	83	287	7:14	1	0.947	A BB	10003.	50.000 NG	2.06
21	62	361	9:06	1	1.191	A BB	20325.	50.000 NG	2.06
22	43	264	6:39	2	0.672	A BB	9217.	50.000 NG	2.06
23	97	318	8:01	2	0.809	A BB	50437.	50.000 NG	2.06
24	117	339	8:32	2	0.863	A BB	40444.	50.000 NG	2.06
25	43	234	5:54	2	0.595	A BB	40498.	50.000 NG	2.06
26	83	483	12:10	2	1.229	A BB	48415.	50.000 NG	2.06
27	63	451	11:22	2	1.148	A BB	23960.	50.000 NG	2.06
28	75	568	14:18	2	1.445	A BB	33913.	50.000 NG	2.06
29	95	426	10:44	2	1.084	A BB	30645.	50.000 NG	2.06
30	129	765	19:16	2	1.947	A BB	35588.	50.000 NG	2.06
31	97	680	17:08	2	1.730	A BB	23483.	50.000 NG	2.06
32	78	360	9:04	2	0.916	A BB	67525.	50.000 NG	2.06
33	75	657	16:33	2	1.672	A BB	28563.	50.000 NG	2.06
34	63	540	13:36	2	1.374	M XX	1233.	50.000 NG	2.06
35	173	1081	27:14	2	2.751	A BB	25711.	50.000 NG	2.06
36	166	720	18:08	3	0.822	A BB	35401.	50.000 NG	2.06
37	43	541	13:38	3	0.618	A BB	17302.	50.000 NG	2.06
38	43	694	17:29	3	0.792	A BB	12580.	50.000 NG	2.06
39	83	1142	28:46	3	1.304	A BB	37955.	50.000 NG	2.06
40	91	612	15:25	3	0.699	A BB	80963.	50.000 NG	2.06
41	112	883	22:15	3	1.008	A BB	52541.	50.000 NG	2.06
42	106	900	22:40	3	1.027	A BB	21985.	50.000 NG	2.06
43	104	1018	25:39	3	1.162	A BB	49825.	50.000 NG	2.06
44	106	916	23:04	3	1.046	A BB	63617.	50.000 NG	2.06
45	146	1377	34:41	3	1.572	A BB	60380.	50.000 NG	2.06
46	146	1401	35:17	3	1.599	A BB	62387.	50.000 NG	2.06
47	146	1464	36:53	3	1.671	A BB	55633.	50.000 NG	2.06
48	106	1006	25:20	3	1.148	A BB	31372.	50.000 NG	2.06
49	84	340	8:34	2	0.865	M XX	8667.	30.000 NG	1.23

DATAFILE: CV0923

Calibration Check

Instrument Identifier: FINN
Calibration Date: 09/14/94
Standard File: CV0923
Date: 09/23/94 Time: 11:07:00
25% D
MIN RF FOR SPCC (**) = 0.300

	Compound	Mean RF(I)	RF(0)	% D
CS15	1,2-DICHLOROETHANE-D4 *	2.017	2.528	0.000
CS05	TOLUENE-D8 **S. STD. **	1.232	1.339	0.000
CS10	4-BROMOFLUOROBENZENE **	1.020	1.035	0.000
C010	CHLOROMETHANE **	2.312	2.971	28.489
C015	BROMOMETHANE	2.485	2.560	3.036
C020	VINYL CHLORIDE *	2.413	2.186	9.414
C025	CHLOROETHANE	0.920	0.714	22.364
C030	METHYLENE CHLORIDE	3.720	3.623	2.599
C251	ACROLIN	0.190	0.547	187.463
C035	ACETONE	1.417	1.737	22.628
C252	ACRYLONITRILE	0.513	0.643	25.311
C040	CARBON DISULFIDE	8.003	9.790	22.337
C045	1,1-DICHLOROETHENE *	0.678	0.733	8.243
C050	1,1-DICHLOROETHANE **	0.807	1.192	47.796
C055	TRANS-1,2-DICHLOROETHEN	2.272	2.987	31.471
C000	TRICHLOROFLUOROMETHA	0.601	0.586	2.414
C060	CHLOROFORM *	1.124	1.329	18.213
C065	1,2-DICHLOROETHANE	2.724	3.305	21.309
C110	2-BUTANONE	0.133	0.148	11.402
C115	1,1,1-TRICHLOROETHANE	0.711	0.748	5.236
C120	CARBON TETRACHLORIDE	0.561	0.601	7.108
C125	VINYL ACETATE	0.466	0.691	48.160
C130	BROMO DICHLOROMETHANE	0.668	0.689	3.235
C140	1,2-DICHLOROPROPANE	0.352	0.356	1.218
C145	TRANS-1,3 DICHLOROPROPE	0.510	0.489	4.124
C150	TRICHLOROETHENE	0.440	0.435	1.303
C155	DIBROMOCHLOROMETHANE	0.482	0.429	11.015
C160	1,1,2-TRICHLOROETHANE	0.329	0.288	12.256
C165	BENZENE	0.994	0.959	3.583
C143	CIS-1,3-DICHLOROPROPENE	0.458	0.392	14.322
C175	2-CHLOROETHYL VINYL ETH	0.144	0.015	89.347
C180	BROMOFORM **	0.306	0.285	6.792
C220	TETRACHLOROETHENE	0.501	0.523	4.394
C210	2-HEXANONE	0.449	0.390	13.127
C205	4-METHYL 2-PENTANONE	0.249	0.278	11.505
C225	1,1,2,2-TETRACHLOROETHA	0.596	0.685	14.898
C230	TOLUENE *	1.392	1.466	5.331
C235	CHLOROBENZENE **	0.968	0.937	3.226
C240	ETHYL BENZENE *	0.424	0.408	3.785
C245	STYRENE	0.925	0.944	2.036
C250	M+P-XYLENES	1.102	1.167	5.884
C253	1,3-DICHLOROBENZENE	0.899	0.904	0.586
C254	1,4-DICHLOROBENZENE	0.909	0.906	0.369
C255	1,2-DICHLOROBENZENE	0.850	0.816	4.068
C250	O-XYLENE	0.559	0.587	4.990


RIC
09/23/94 11:07:00
SAMPLE: 50 PPB VOA STD
CONDS.: EPA METHOD 8240
RANGE: G 1,1600 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3
DATA: CV0923 #1
CALI: CV0923 #3
SCANS 88 TO 1600
163072.
100.0
RIC
180
316
359
484
615
685
725
772
926
1017
1094
1157
1298
1422
200
5:02
400
10:05
600
15:07
800
20:09
1000
25:11
1200
30:14
1400
35:16
1600 SCAN
40:18 TIME

Quantitation Report File: CV0923

Data: CV0923.TI
09/23/94 11:07:00
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	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

BROMOFLUOROBENZENE

Tuning Report
09/14/94 12:00:00 + 3:47
Instrument: FINN
#150 to #152 summed - #145
Case Number:

Data: BFB914 # 151
Cali: CALTAB # 3
Analyst: UC
Laboratory:

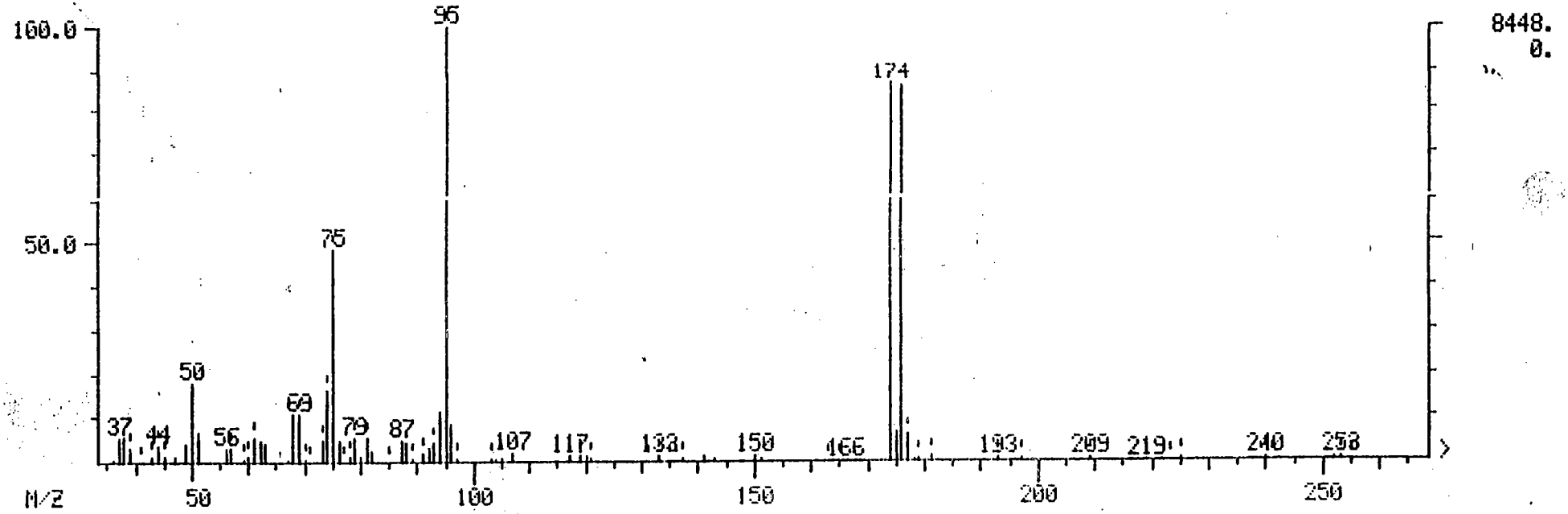
Base m/z: 95
RIC: 44736.
Acct. No.: GC
Contract:

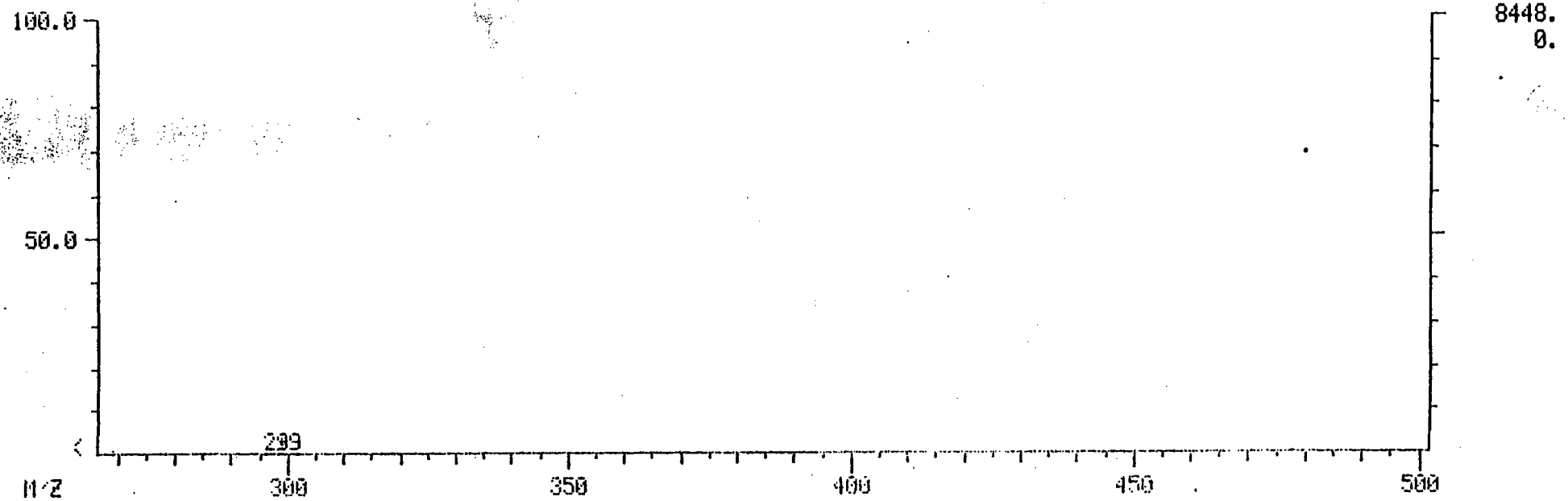
m/z	Intensity	% RA	Ion Abundance Criteria Min %	Max %	Mass	Actual	Status
50	1542.	18.3	15.0	40.0	95	18.3	PASS
75	4096.	48.5	30.0	60.0	95	48.5	PASS
95	8448.	100.0	100.0	---	---	100.0	PASS
96	697.	8.3	5.0	9.0	95	8.3	PASS
173	0.	0.0	---	2.0	174	0.0	PASS
174	7296.	86.4	50.0	---	95	86.4	PASS
175	542.	6.4	5.0	9.0	174	7.4	PASS
176	7248.	85.8	95.0	101.0	174	99.3	PASS
177	503.	6.0	5.0	9.0	176	6.9	PASS

MASS SPECTRUM
09/14/94 12:00:00 + 3:47
SAMPLE: 50NG BFB MASS SPECTROMETER TUNE CHECK
CONDS.: EPA METHOD 8240
TEMP: 160 DEG. C
#150 TO #152 SUMMED - #145

DATA: BFB914 #151
CALI: CALTAB #3

BASE M/Z: 95
RIC: 44736.

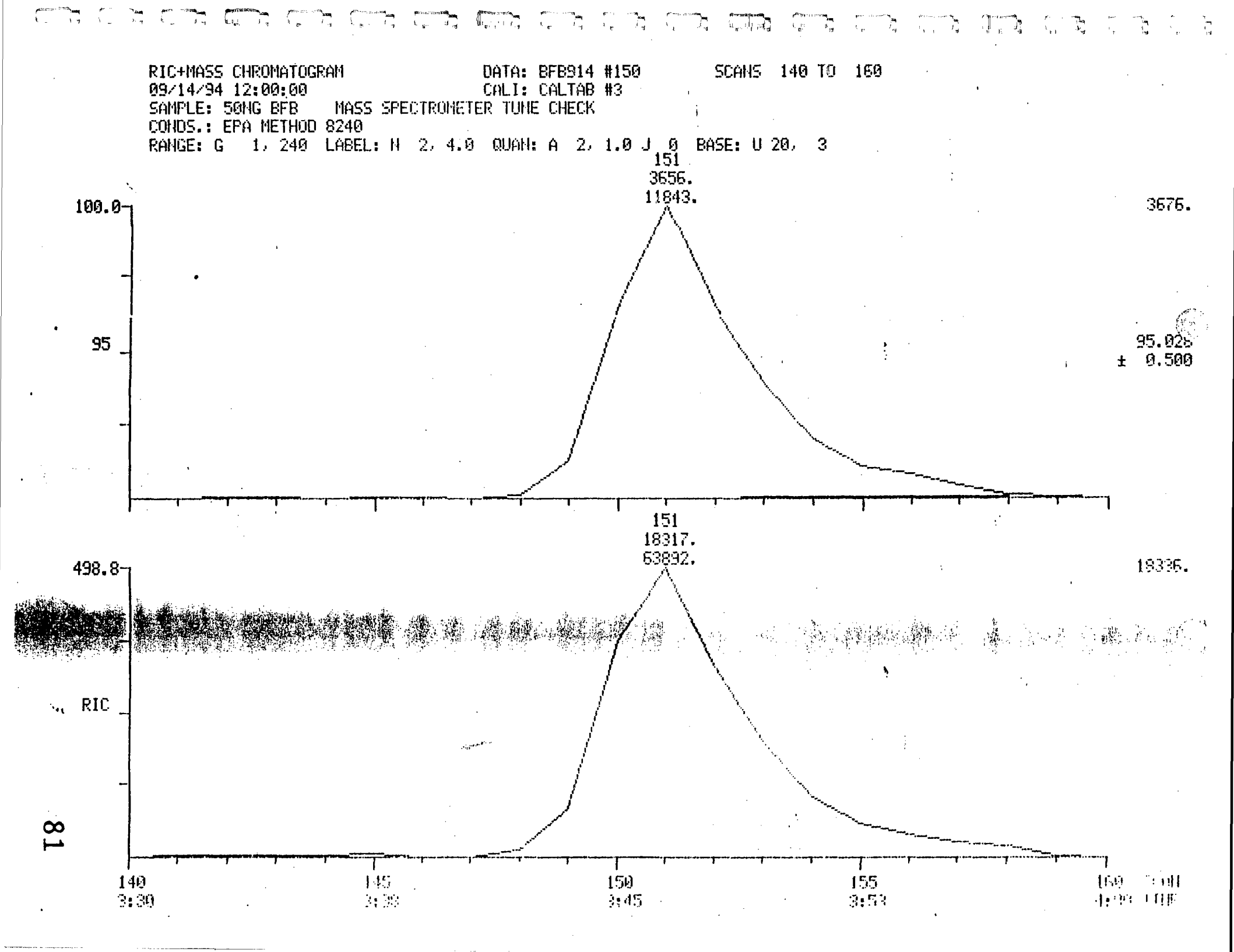




Mass List Data: BFB914 # 151 Base m/z: 95
09/14/94 12:00:00 + 3:47 Cali: CALTAB # 3 RIC: 44736.
Sample: 50NG BFB MASS SPECTROMETER TUNE CHECK
Conds.: EPA METHOD 8240
#150 to #152 summed - #145

36		0.00	0.	Minima	Min	Inten:	0.
299				Maxima	#	0	
Mass		% RA	Inten.	Mass		% RA	Inten.
36?		0.37	31.	111		0.19	16.
37?		5.68	480.	117		1.11	94.
38?		5.35	452.	119	S	0.91	77.
39?	S	2.70	228.	120		0.91	77.
41?	S	0.25	21.	121	S	0.31	26.
43?	S	0.96	81.	122		0.22	19.
44?	S	3.53	298.	123		0.22	19.
45?	S	1.02	86.	131	S	0.25	21.
47?		1.02	86.	133	S	1.43	121.
48?		0.19	16.	135	S	0.27	23.
49?		4.21	356.	136	S	0.26	22.
50?		18.25	1542.	137	S	0.46	39.
51?		6.37	538.	141		1.20	101.
56?		3.29	278.	143		0.85	72.
57?	S	3.10	262.	150		0.91	77.
59?	S	0.76	64.	151		0.52	44.
60?	S	1.01	85.	163	S	0.09	8.
61?	S	5.66	478.	165	S	0.02	2.
62?		4.59	388.	166		0.18	15.
63?		4.06	343.	174		86.36	7296.
67?		0.60	51.	175		6.42	542.
68?		10.52	889.	176		85.80	7248.
69	S	10.89	920.	177	S	5.95	503.
70	S	0.62	52.	178		0.54	46.
71	S	0.21	18.	179	S	0.53	45.
73	S	4.92	416.	181	S	1.12	95.
74	S	16.29	1376.	193	S	0.51	43.
75	S	48.48	4096.	197	S	0.46	39.
76		4.64	392.	209	S	0.44	37.
77	S	0.30	25.	219	S	0.26	22.
78	S	0.91	77.	223	S	0.24	20.
79	S	5.23	442.	225	S	0.45	38.
80		1.16	98.	239	S	0.01	1.
81	S	5.15	435.	240	S	0.34	29.
82		2.21	187.	241	S	0.27	23.
85	S	0.09	8.	252		0.40	34.
87		4.69	396.	253	S	0.60	51.
88		3.89	329.	255	S	0.01	1.
89	S	0.33	28.	269		0.50	42.
91	S	1.57	133.	299	S	0.22	19.
92		3.03	256.				
93	S	4.38	370.				
94		11.35	959.				
95	S	100.00	8448.				
96		8.25	697.				
97	S	0.50	42.				
103	S	0.71	60.				
104		0.31	26.				
105	S	0.85	72.				
107		1.73	146.				

RIC+MASS CHROMATOGRAM DATA: BFB914 #150 SCANS 140 TO 160
09/14/94 12:00:00 CALI: CALTAB #3
SAMPLE: 50NG BFB MASS SPECTROMETER TUNE CHECK
CONDS.: EPA METHOD 8240
RANGE: G 1, 240 LABEL: N 2, 4.0 QUAN: A 2, 1.0 J 0 BASE: U 20, 3



BROMOFLUOROBENZENE

ing Report
4/94 11:42:00 + 3:43
rument: FINN
46 to #148 summed
Number:

Data: BFB1004B # 147
Cali: CALTAB # 3
Analyst: KE
Laboratory:

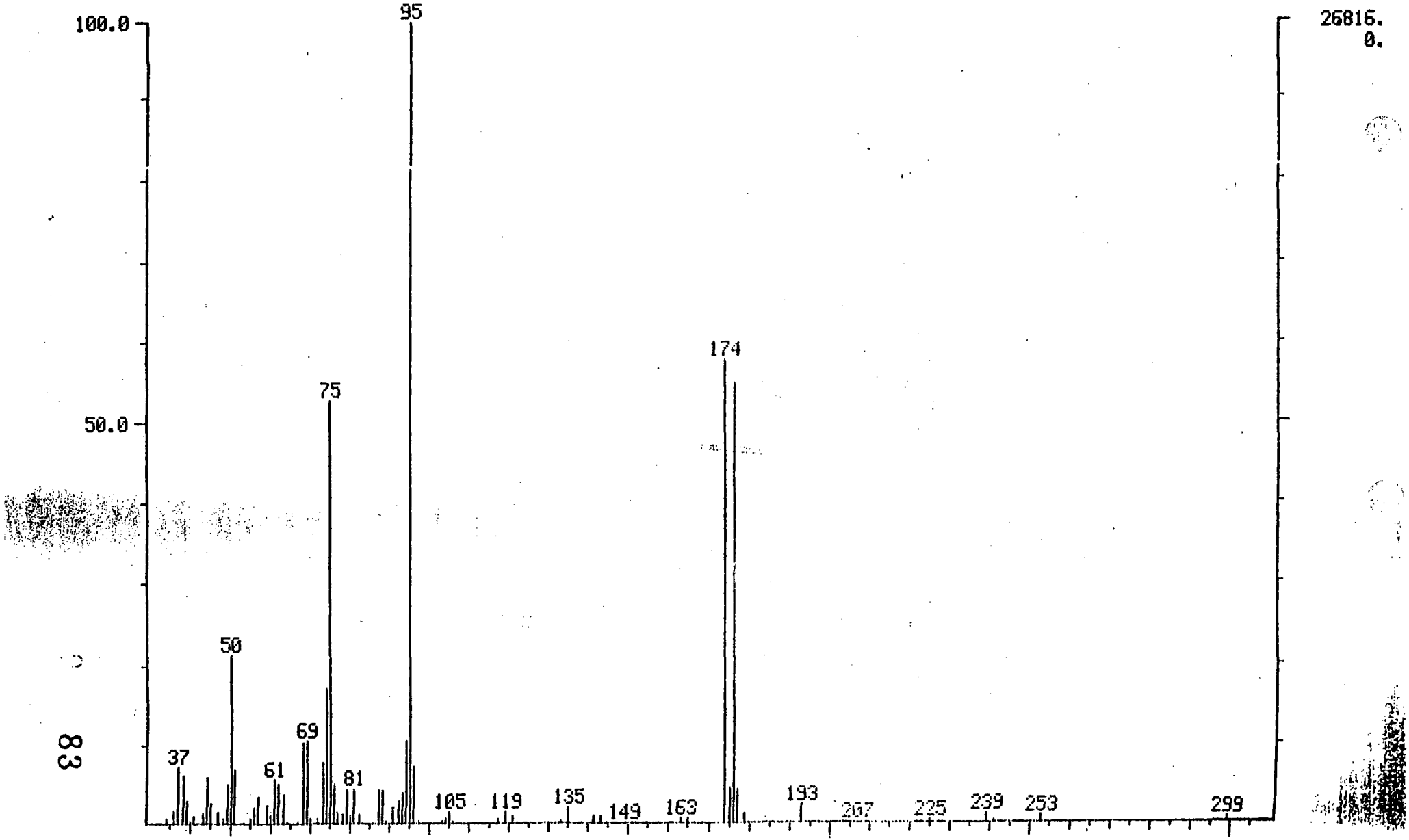
Base m/z: 95
RIC: 128512.
Acct. No.: -
Contract:

			Ion Abundance Criteria				
m/z	Intensity	% RA	Min %	Max %	Mass	Actual	Status
30	5704.	21.3	15.0	40.0	95	21.3	PASS
75	14128.	52.7	30.0	60.0	95	52.7	PASS
95	26816.	100.0	100.0	---	---	100.0	PASS
96	1948.	7.3	5.0	9.0	95	7.3	PASS
173	0.	0.0	---	2.0	174	0.0	PASS
174	15472.	57.7	50.0	---	95	57.7	PASS
175	1174.	4.4	5.0	9.0	174	7.6	PASS
176	14752.	55.0	95.0	101.0	174	95.3	PASS
177	1088.	4.1	5.0	9.0	176	7.4	PASS

MASS SPECTRUM
10/04/94 11:42:00 + 3:43
SAMPLE: 50NG BFB MASS SPECTROMETER TUNE CHECK
CONDS.: EPA METHOD 8240
TEMP: 160 DEG. C
#146 TO #148 SUMMED

DATA: BFB1004B #147
CALI: CALTAB #3

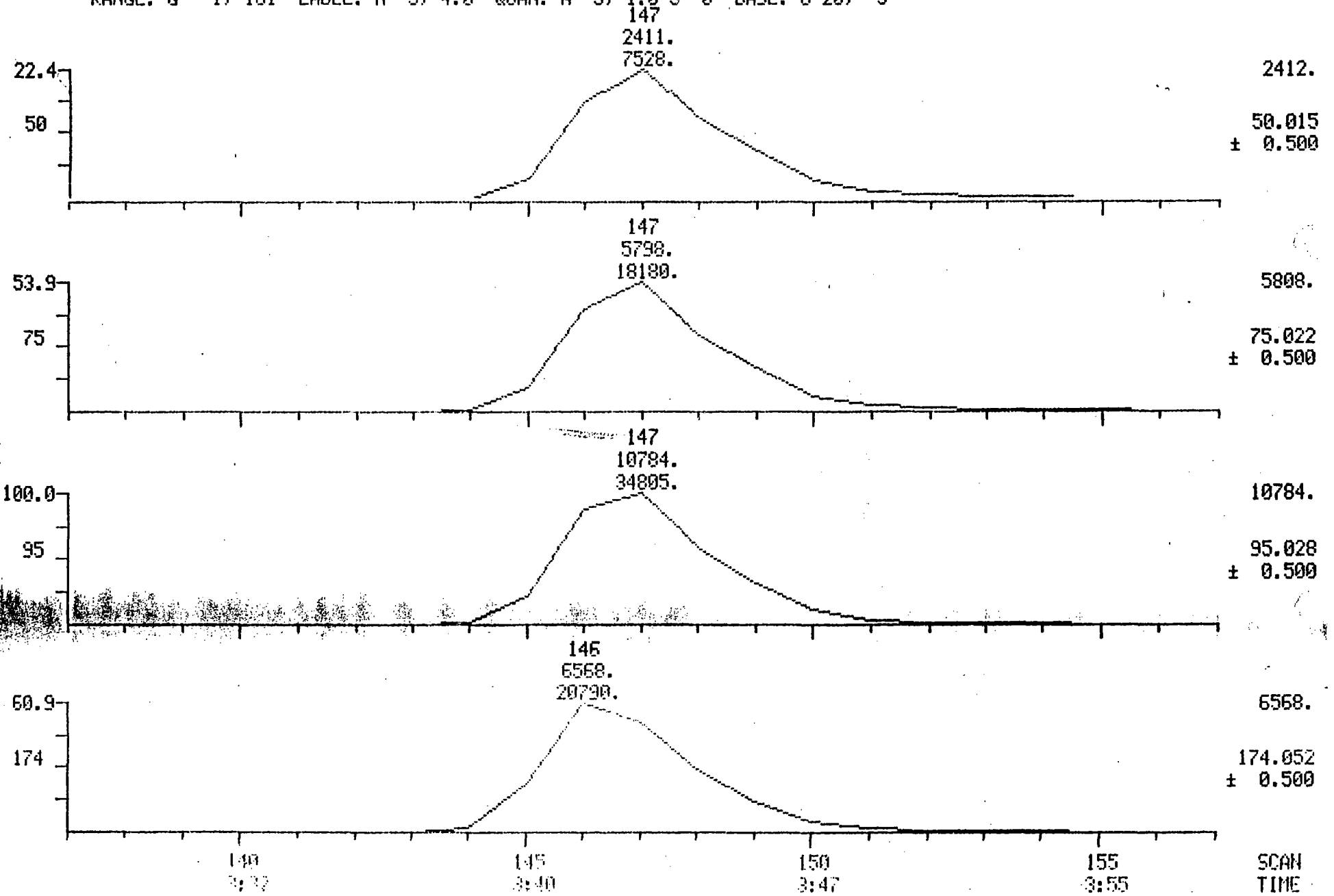
BASE M/Z: 95
RIC: 128512.



s List Data: BFB1004B # 147 Base m/z: 95
04/94 11:42:00 + 3:43 Cali: CALTAB # 3 RIC: 128512.
mple: 50NG BFB MASS SPECTROMETER TUNE CHECK
ds.: EPA METHOD 8240
46 to #148 summed

34	0.00	0.	Minima	Min Inten:	0.
00			Maxima #	0	
ass	% RA	Inten.	Mass	% RA	Inten.
34?	0.59	157.	96	7.26	1948.
36?	1.67	449.	97	0.16	43.
37?	7.09	1902.	103	0.29	77.
38?	6.08	1630.	104	0.43	116.
39?	2.80	752.	105	1.42	381.
40?	0.25	68.	106	0.14	38.
41?	0.81	216.	107	0.10	27.
42?	0.08	22.	115	0.06	16.
43?	1.42	381.	117	0.59	157.
44?	5.91	1584.	118	0.06	15.
45?	2.56	687.	119	1.33	356.
47?	1.48	398.	120	0.08	22.
48?	0.61	163.	121	0.74	198.
49?	5.09	1366.	128	0.08	22.
50?	21.27	5704.	133	0.34	90.
51?	6.88	1846.	135	2.03	544.
52?	0.13	36.	137	0.09	24.
55?	0.65	175.	141	0.72	193.
56?	1.93	518.	143	0.80	214.
57?	3.29	882.	149	0.07	19.
59?	2.13	570.	163	0.54	144.
60?	1.25	334.	165	0.47	125.
61?	5.57	1494.	174	57.70	15472.
62?	5.09	1366.	175	4.38	1174.
63?	3.72	997.	176	55.01	14752.
64?	0.25	66.	177	4.06	1088.
67?	0.21	57.	178	0.07	20.
68?	10.34	2772.	179	1.07	286.
69	10.37	2780.	181	0.12	31.
70	0.75	200.	193	2.14	573.
71	0.07	18.	194	0.13	34.
72	0.44	117.	195	0.14	37.
73	7.74	2076.	197	0.06	15.
74	17.24	4624.	207	0.09	23.
75	52.68	14128.	223	0.08	22.
76	4.95	1328.	225	0.21	55.
77	1.38	369.	237	0.06	15.
78	1.19	320.	239	1.06	285.
79	4.18	1122.	241	0.22	59.
80	1.23	330.	253	0.74	199.
81	4.29	1150.	255	0.10	26.
82	1.22	326.	299	0.61	164.
87	4.12	1104.	300	0.06	17.
88	4.16	1116.			
89	0.38	101.			
91	1.86	500.			
92	2.73	732.			
93	3.90	1046.			
94	10.41	2792.			
95	100.00	26816.			

MASS CHROMATOGRAMS DATA: BFB1004B #146 SCANS 137 TO 157
10/04/94 11:42:00 CALI: CALTAB #3
SAMPLE: 50NG BFB MASS SPECTROMETER TUNE CHECK
CONDS.: EPA METHOD 8240
RANGE: G 1, 181 LABEL: H 3, 4.0 QUAN: A 3, 1.0 J 0 BASE: U 20, 3



RAW DATA

BROMOFLUOROBENZENE

Tuning Report
9/22/94 10:01:00 + 3:44
Instrument: FINN
#148 to #150 summed
Case Number:

Data: BFB922 # 149
Cali: CALTAB # 3
Analyst: UC
Laboratory:

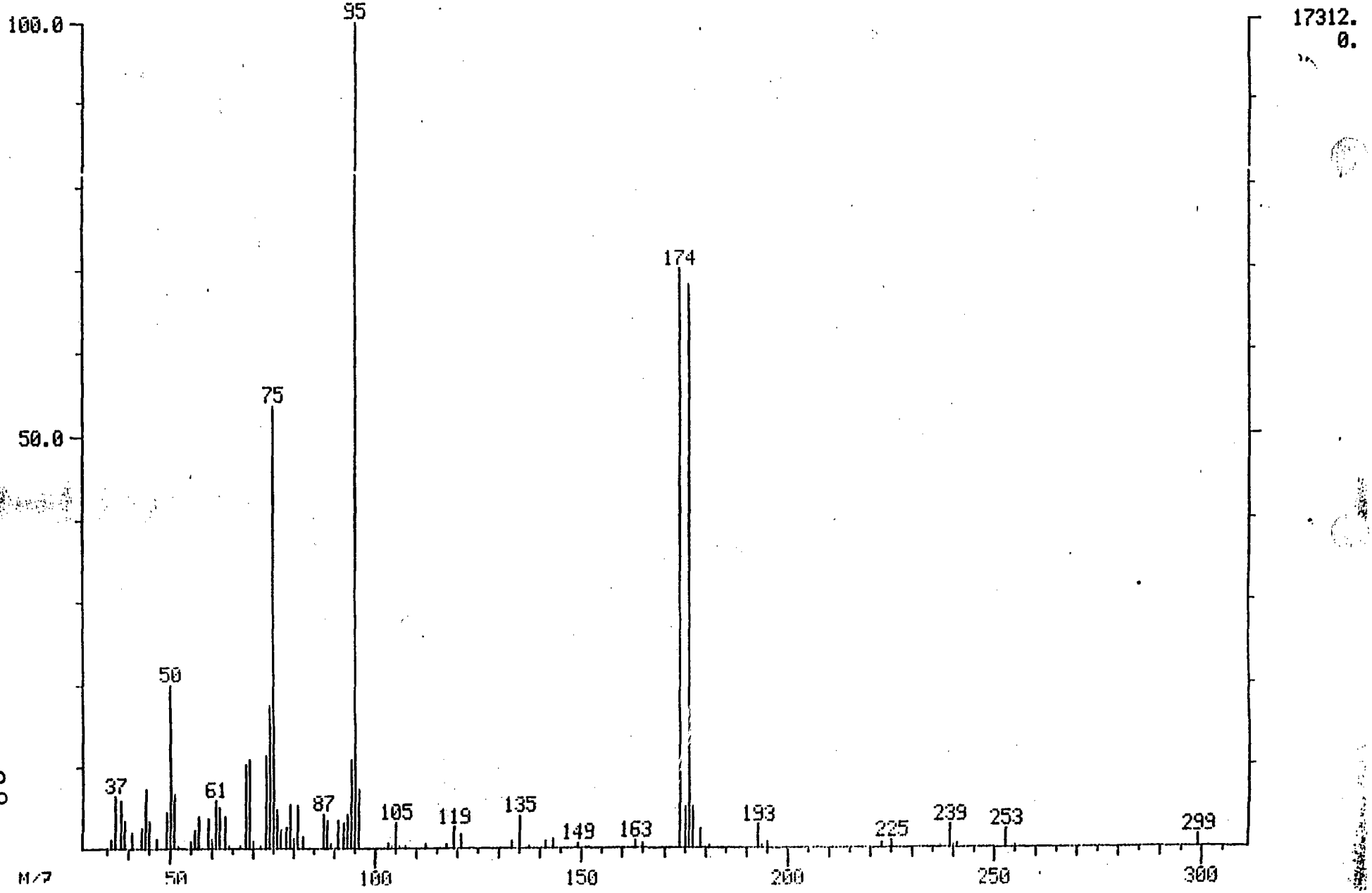
Base m/z: 95
RIC: 92800.
Acct. No.: 4540-003
Contract:

			Ion Abundance Criteria				
m/z	Intensity	% RA	Min %	Max %	Mass	Actual	Status
50	3428.	19.8	15.0	40.0	95	19.8	PASS
75	9296.	53.7	30.0	60.0	95	53.7	PASS
95	17312.	100.0	100.0	---	---	100.0	PASS
96	1224.	7.1	5.0	9.0	95	7.1	PASS
173	0.	0.0	---	2.0	174	0.0	PASS
174	12080.	69.8	50.0	---	95	69.8	PASS
175	866.	5.0	5.0	9.0	174	7.2	PASS
176	11760.	67.9	95.0	101.0	174	97.4	PASS
177	866.	5.0	5.0	9.0	176	7.4	PASS

MASS SPECTRUM
09/22/94 10:01:00 + 3:44
SAMPLE: 50NG BFB MASS SPECTROMETER TUNE CHECK
CONDS.: EPA METHOD 624
TEMP: 160 DEG. C
#148 TO #150 SUMMED

DATA: BFB922 #149
CALI: CALTAB #3

BASE M/Z: 95
RIC: 92800.

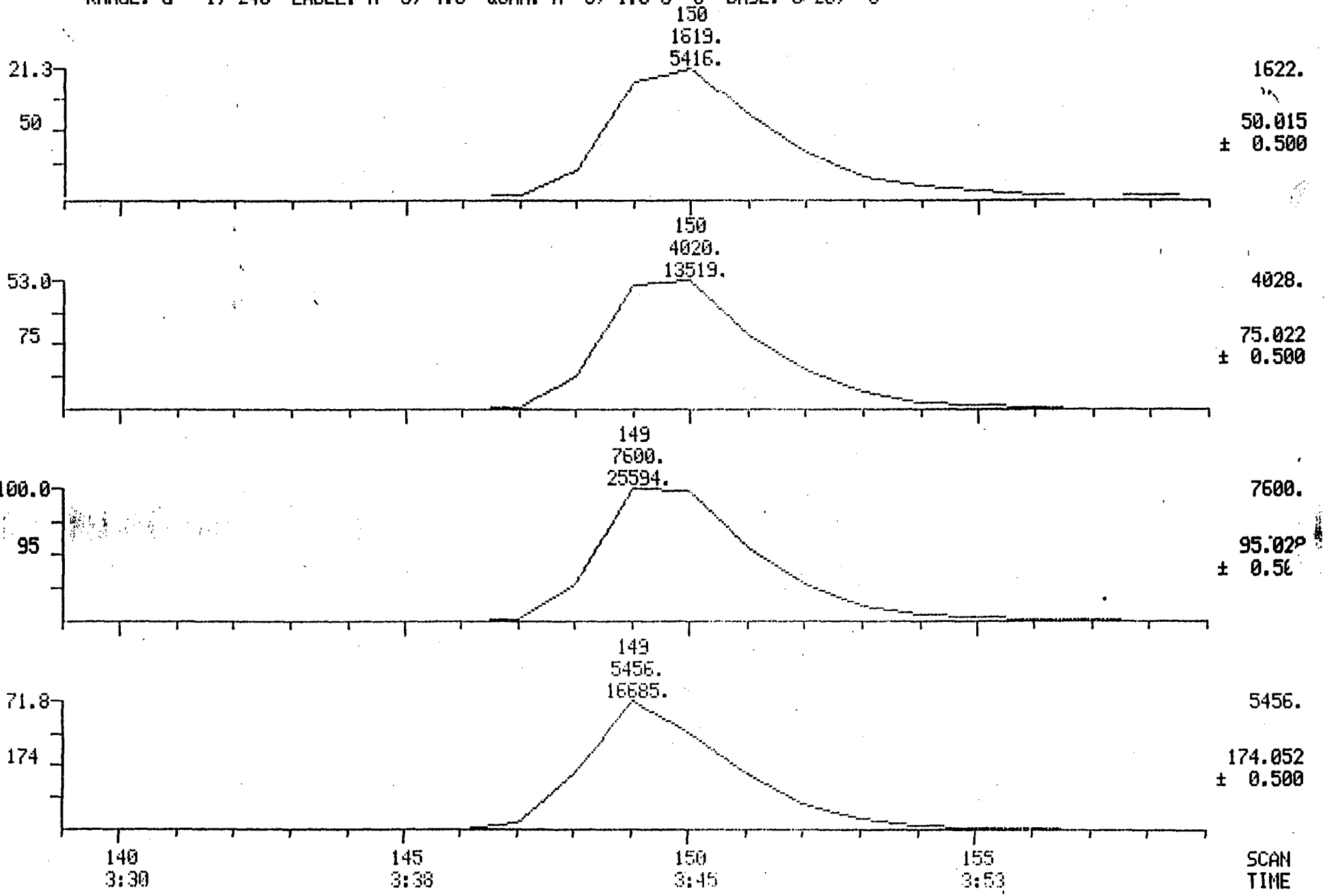


88

Base List Data: BFB922 # 149 Base m/z: 95
9/22/94 10:01:00 + 3:44 Cali: CALTAB # 3 RIC: 92800.
Sample: 50NG BFB MASS SPECTROMETER TUNE CHECK
Conds.: EPA METHOD 624
#148 to #150 summed

36	0.00	0.	Minima	Min Inten:	0.
300			Maxima	# 0	
Mass	% RA	Inten.	Mass	% RA	Inten.
36?	1.17	202.	103	0.54	94.
37?	6.30	1090.	104	0.20	34.
38?	5.75	995.	105	2.92	506.
39?	3.28	567.	106	0.30	52.
40?	0.12	20.	107	0.21	36.
41?	1.85	321.	112	0.53	92.
42?	0.10	17.	117	0.42	72.
43?	2.58	446.	118	0.12	21.
44?	7.19	1244.	119	2.46	426.
45?	3.44	596.	121	1.79	310.
47?	1.05	181.	133	0.86	149.
48?	0.13	23.	135	3.90	676.
49?	4.53	785.	137	0.26	45.
50?	19.80	3428.	141	0.87	150.
51?	6.70	1160.	143	1.03	178.
52?	0.27	46.	148	0.09	16.
55?	0.95	164.	149	0.66	115.
56?	2.15	372.	163	0.88	153.
57?	3.92	679.	165	0.59	103.
59?	3.68	637.	174	69.78	12080.
60?	1.14	198.	175	5.00	866.
61?	5.85	1012.	176	67.93	11760.
62?	4.86	841.	177	5.00	866.
63?	3.74	648.	179	2.28	395.
64?	0.23	39.	180	0.13	23.
65?	0.12	21.	181	0.16	27.
67?	0.21	37.	193	2.74	475.
68?	10.28	1780.	194	0.28	48.
69	10.66	1846.	195	0.88	152.
70	0.85	147.	223	0.61	105.
72	0.17	29.	225	0.73	127.
73	11.22	1942.	237	0.22	38.
74	17.44	3020.	238	0.09	15.
75	53.70	9296.	239	2.70	467.
76	4.57	792.	240	0.32	55.
77	2.09	362.	241	0.65	112.
78	2.37	411.	253	2.12	367.
79	5.27	912.	254	0.13	23.
80	1.29	224.	255	0.41	71.
81	5.14	890.	299	1.28	222.
82	1.32	228.	300	0.09	16.
87	4.11	711.			
88	3.40	589.			
89	0.46	79.			
91	3.28	568.			
92	2.92	506.			
93	4.12	713.			
94	10.82	1874.			
95	100.00	17312.			
96	7.07	1224.			

MASS CHROMATOGRAMS DATA: BFB922 #148 SCANS 139 TO 159
09/22/94 10:01:00 CALI: CALTAB #3
SAMPLE: 50NG BFB MASS SPECTROMETER TUNE CHECK
CONDS.: EPA METHOD 624
RANGE: G 1, 240 LABEL: N 3, 4.0 QUAN: A 3, 1.0 J 0 BASE: U 20, 3



06

'BROMOFLUOROBENZENE

Tuning Report
09/23/94 10:55:00 + 3:45
Instrument: FINN
#149 to #151 summed
Case Number:

Data: BFB923 # 150
Cali: CALTAB # 3
Analyst: UC
Laboratory:

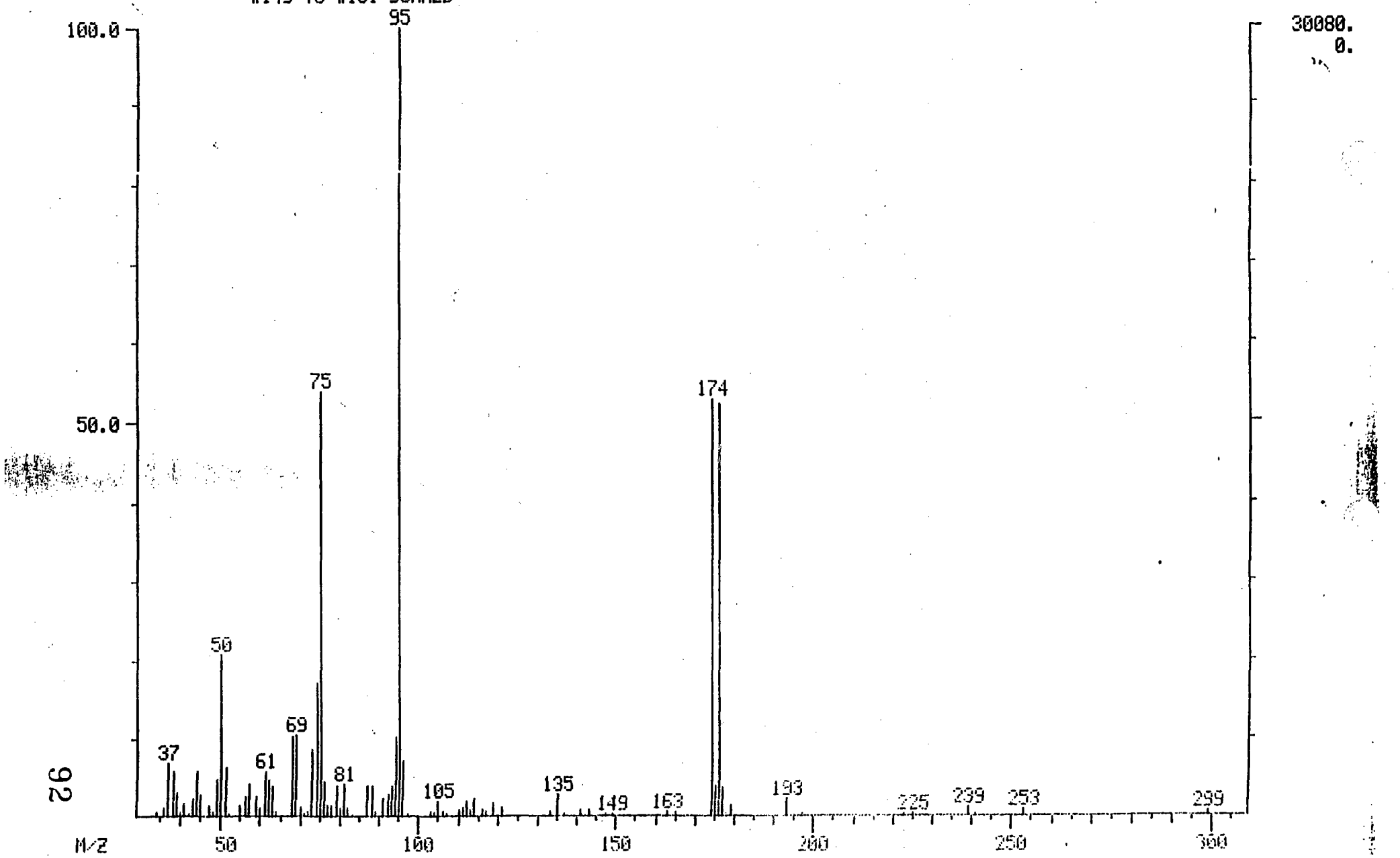
Base m/z: 95
RIC: 146176.
Acct. No.: 4667-001
Contract:

m/z	Intensity	% RA	Ion Abundance Criteria Min %	Max %	Mass	Actual	Status
50	6224.	20.7	15.0	40.0	95	20.7	PASS
75	16208.	53.9	30.0	60.0	95	53.9	PASS
95	30080.	100.0	100.0	---	---	100.0	PASS
96	2200.	7.3	5.0	9.0	95	7.3	PASS
173	0.	0.0	---	2.0	174	0.0	PASS
174	15856.	52.7	50.0	---	95	52.7	PASS
175	1144.	3.8	5.0	9.0	174	7.2	PASS
176	15744.	52.3	95.0	101.0	174	99.3	PASS
177	1100.	3.7	5.0	9.0	176	7.0	PASS

MASS SPECTRUM
09/23/94 10:55:00 + 3:45
SAMPLE: 50NG BFB MASS SPECTROMETER TUNE CHECK
CONDS.: EPA METHOD 8240
TEMP: 160 DEG. C
#149 TO #151 SUMMED

DATA: BFB923 #150
CALI: CALTAB #3

BASE M/Z: 95
RIC: 146176.

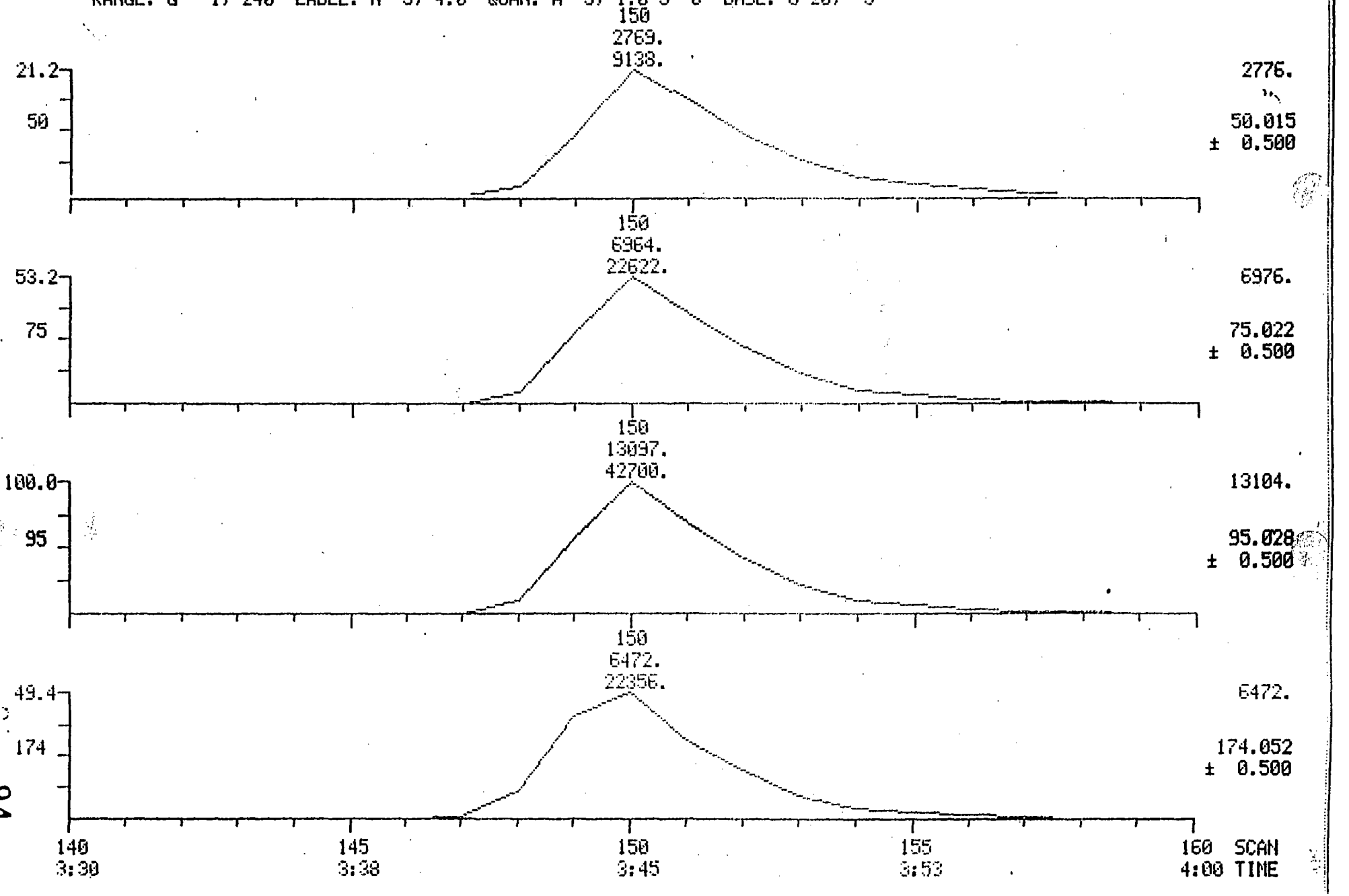


ass List Data: BFB923 # 150 Base m/z: 95
9/23/94 10:55:00 + 3:45 Cali: CALTAB # 3 RIC: 146176.
Sample: 50NG BFB MASS SPECTROMETER TUNE CHECK
onds.: EPA METHOD 8240
#149 to #151 summed

34 0.00 0. Minima Min Inten: 0.
299 Maxima # 0

Mass	% RA	Inten.	Mass	% RA	Inten.
34?	0.60	179.	94	10.31	3100.
36?	1.22	368.	95	100.00	30080.
37?	6.87	2068.	96	7.31	2200.
38?	5.66	1704.	97	0.18	54.
39?	3.07	922.	103	0.58	175.
40?	0.45	136.	104	0.54	161.
41?	1.78	534.	105	1.96	589.
42?	0.27	82.	106	0.55	166.
43?	2.16	651.	107	0.39	116.
44?	5.74	1726.	110	0.88	265.
45?	2.77	833.	111	1.09	328.
47?	1.39	417.	112	1.90	572.
48?	0.44	131.	113	0.96	289.
49?	4.64	1396.	114	2.12	637.
50?	20.69	6224.	116	0.82	247.
51?	6.46	1944.	117	0.59	178.
52?	0.23	69.	118	0.13	40.
53?	0.05	15.	119	1.77	533.
55?	1.38	415.	121	1.21	363.
56?	2.44	734.	128	0.05	15.
57?	4.06	1222.	133	0.45	136.
59?	2.47	742.	135	2.69	809.
60?	1.24	374.	137	0.21	63.
61?	5.70	1714.	141	0.81	244.
62?	4.61	1388.	143	0.86	260.
63?	3.86	1162.	145	0.13	38.
64?	0.64	194.	147	0.15	46.
67?	0.26	78.	149	0.25	74.
68?	10.17	3060.	163	0.64	192.
69	10.45	3144.	165	0.56	167.
70	1.06	320.	174	52.71	15856.
71	0.25	76.	175	3.80	1144.
72	0.52	155.	176	52.34	15744.
73	8.70	2616.	177	3.66	1100.
74	17.21	5176.	178	0.15	45.
75	53.88	16208.	179	1.38	415.
76	4.53	1364.	180	0.05	15.
77	1.55	466.	181	0.08	23.
78	1.26	380.	193	2.19	660.
79	3.95	1188.	194	0.13	40.
80	1.18	354.	195	0.31	94.
81	4.13	1242.	197	0.25	74.
82	1.10	330.	223	0.26	78.
83	0.20	61.	225	0.35	104.
87	3.86	1162.	237	0.05	16.
88	3.91	1176.	239	1.20	360.
89	0.61	182.	241	0.25	74.
91	2.26	680.	253	0.95	287.
92	2.70	811.	299	0.56	167.
93	3.95	1188.			

MASS CHROMATOGRAMS DATA: BFB923 #149 SCANS 140 TO 160
09/23/94 10:55:00 CALI: CALTAB #3
SAMPLE: 50NG BFB MASS SPECTROMETER TUNE CHECK
CONDS.: EPA METHOD 8240
RANGE: G 1, 240 LABEL: N 3, 4.0 QUAN: A 3, 1.0 J 0 BASE: U 20, 3

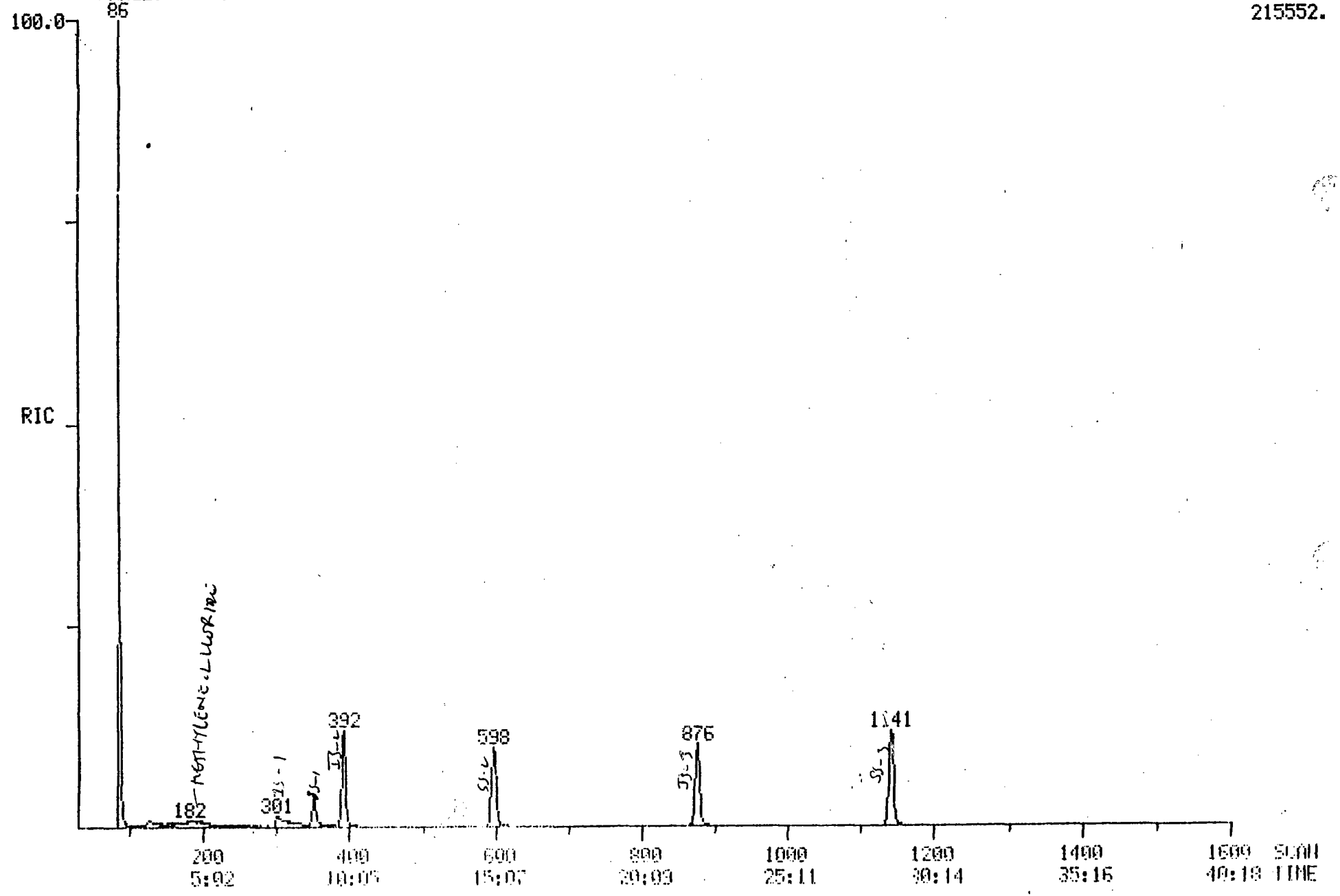


RIC
09/22/94 11:03:00
SAMPLE: M.BLK
CONDS.: EPA METHOD 8240
RANGE: G 1,1600 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: CBLK922 #49
CALI: CBLK922 #3

SCANS 30 TO 1600

215552.



DATAFILE: CV0922Quantitation Report File: CBLK922

Data: CBLK922.TI
09/22/94 11:03:00
Sample: M.BLK
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	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

No	Name
48	C250 O-XYLENE
49	BENZENE-D6 **S. STD. **

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	49	302	7:36	1	1.000	M XX	6468.	50.000 NG	17.02
2	114	392	9:52	2	1.000	A BB	63621.	50.000 NG	17.02
3	117	875	22:02	3	1.000	A BB	47665.	50.000 NG	17.02
4	65	351	8:51	1	1.162	A BB	12250.	56.281 NG	19.15
5	98	598	15:04	3	0.683	A BB	60388.	48.113 NG	16.37
6	95	1141	28:45	3	1.304	A BB	36651.	37.364 NG	12.72
7	NOT FOUND								
8	NOT FOUND								
9	NOT FOUND								
10	NOT FOUND								
11	49	193	4:52	1	0.639	A BB	786.	2.111 NG	0.72
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	611	15:23	3	0.698	A BB	284.	0.200 NG	0.07
41	NOT FOUND								
42	NOT FOUND								
43	NOT FOUND								
44	NOT FOUND								
45	NOT FOUND								
46	NOT FOUND								
47	NOT FOUND								
48	NOT FOUND								
49	NOT FOUND								

DATA FILE: CBLK922 #192 STANDARD FILE: CV0322 #194
TARGET COMPOUND COMPARISON CALI: CBLK922 #3
COMPOUND: C030 METHYLENE CHLORIDE

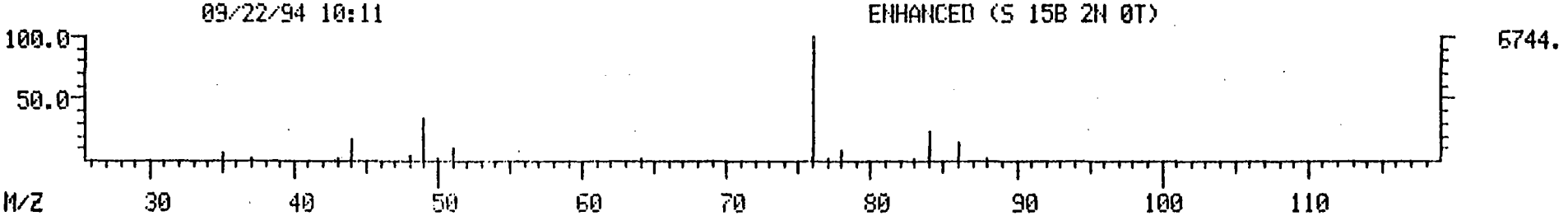
RAW DATA: CBLK922 #192 BASE M/Z: 44 RIC: 1660.
09/22/94 11:03

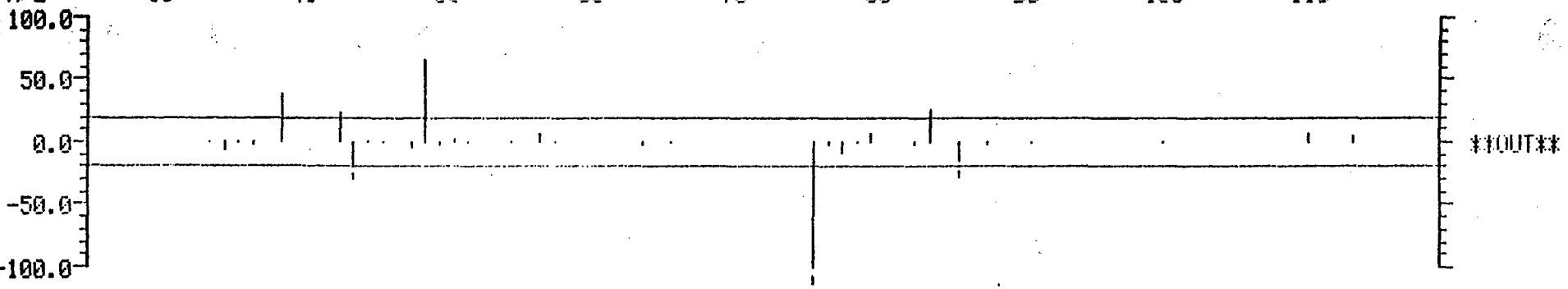


ENHANCED DATA: CBLK922 #192 BASE M/Z: 49 RIC: 221.



STANDARD FILE: CV0322 #194 BASE M/Z: 76 RIC: 16000.
09/22/94 10:11 ENHANCED (S 15B 2N 0T)





Quantitation Report File: CBLK922

Data: CBLK922.TI
09/22/94 11:03:00
Sample: M.BLK
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	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

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	TOT	302	7:36	0	ISINV	A BB	20843.	******	UG/L	00.00
2	TOT	392	9:52	0	ISINV	A BB	133224.	******	UG/L	00.00
3	TOT	876	22:04	0	ISINV	A BB	122081.	******	UG/L	00.00
4	TOT	86	2:10	1	0.285	A BB	416925.	1000.130		*100.

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:13	0.83	1.000						
2	19:21	0.51	1.000						
3	23:54	0.92	1.000						
4					1000.13	1.001000.130		1.0001000.13	

PROCEDURE: FILTER/TIC DIAGNOSTIC REPORT 9/23/94 8:28:07

DATA FILE: CBLK922

FILTER SCAN PARAMETERS

MAX. NUMBER TICS:	15
II-TABLE ENTRIES:	539
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:

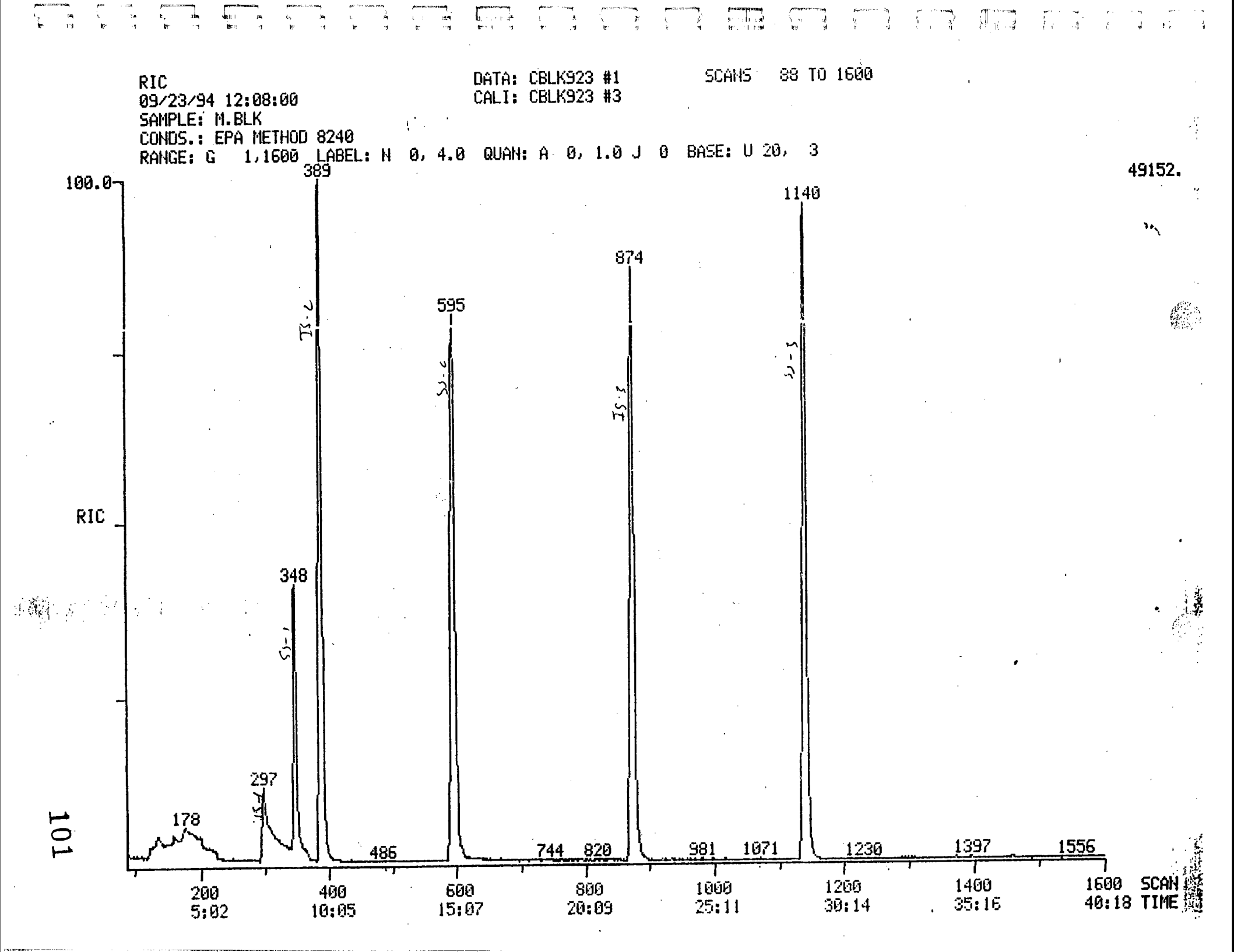
TARGETS (QUAN LIST)	IS PEAKS	TOTAL TARGET PEAKS
5	3	8

FILTER PROCESSING:

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

TIC PROCESSING:

NO.	SCAN#	PURITY	FIT	MW	COMPOUND NAME [BEFORE TIC THRESHOLD]
1	86	374	390	85	ACETIC ACID, CYANO-


RIC
09/23/94 12:08:00
SAMPLE: M.BLK
CONDS.: EPA METHOD 8240
RANGE: G 1,1600 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3
DATA: CBLK923 #1
CALI: CBLK923 #3
SCANS 88 TO 1600
49152.
100.0
RIC
389
595
874
1140
348
297
178
486
744
820
981
1071
1230
1397
1556
200
5:02
400
10:05
600
15:07
800
20:09
1000
25:11
1200
30:14
1400
35:16
1600
40:18
SCAN
TIME
101

Quantitation Report File: CBLK923

Data: CBLK923.TI
09/23/94 12:08:00
Sample: M.BLK
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	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

No	Name
48	C250 O-XYLENE
49	BENZENE-D6 **S. STD. **

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	49	297	7:29	1	1.000	M XX	12703.	50.000 NG	17.19
2	114	389	9:48	2	1.000	A BB	121792.	50.000 NG	17.19
3	117	874	22:01	3	1.000	A BB	88184.	50.000 NG	17.19
4	65	348	8:46	1	1.172	A BB	35778.	55.708 NG	19.15 111
5	98	595	14:59	3	0.681	A BB	106866.	45.270 NG	15.56 91
6	95	1140	28:43	3	1.304	A BB	71221.	39.047 NG	13.42 78
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	43	223	5:37	2	0.573	A VB	1017.	0.605 NG	0.21
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	608	15:19	3	0.696	A BB	851.	0.329 NG	0.11
41	NOT FOUND								
42	NOT FOUND								
43	NOT FOUND								
44	NOT FOUND								
45	NOT FOUND								
46	NOT FOUND								
47	NOT FOUND								
48	NOT FOUND								
49	NOT FOUND								

PROCEDURE: FILTER/TIC DIAGNOSTIC REPORT 9/23/94 12:59:48

DATA FILE: CBLK923

FILTER SCAN PARAMETERS

MAX. NUMBER TICS:	15
I1-TABLE ENTRIES:	539
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
5	3	8

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

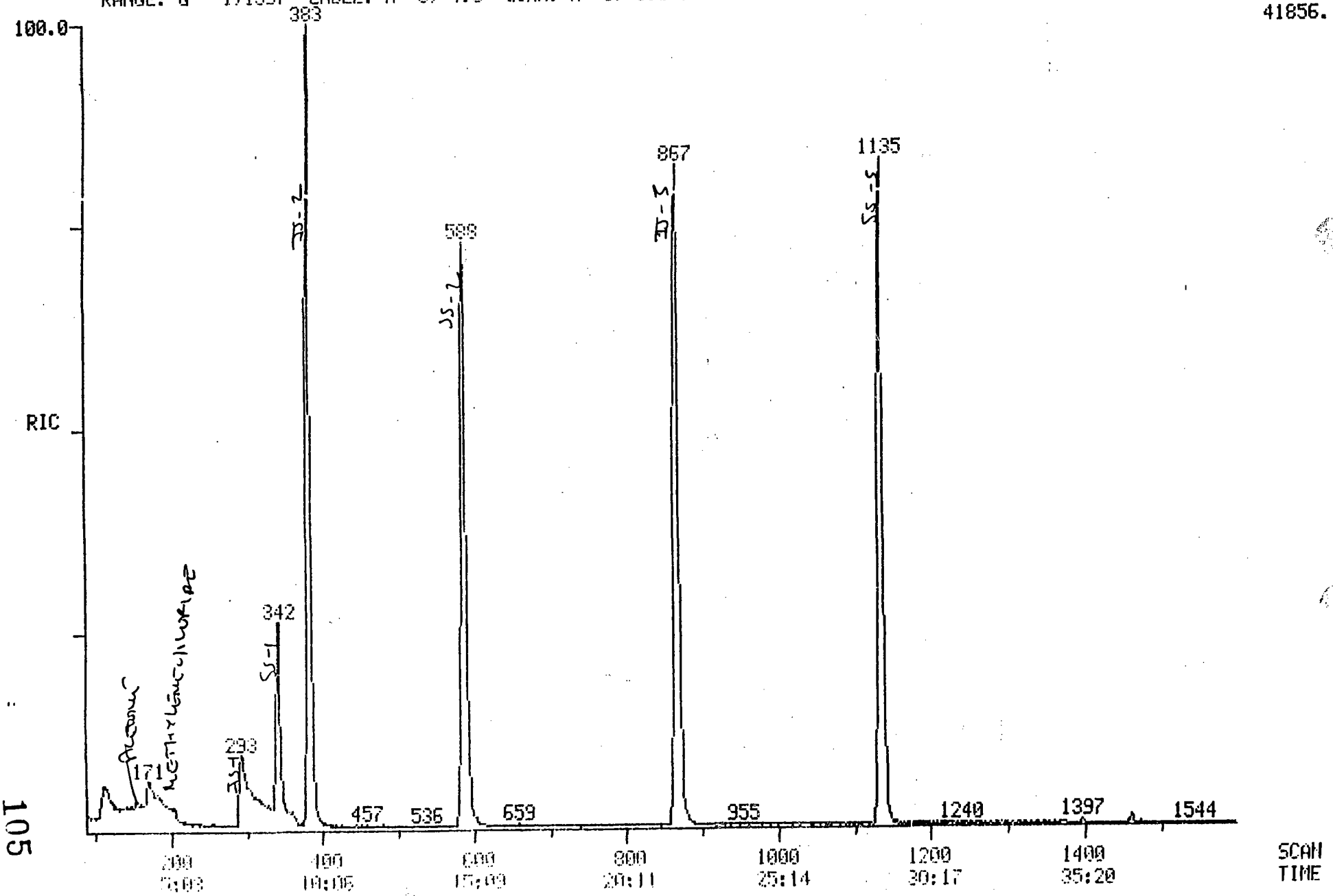
NO UNKNOWN PEAKS TO BE IDENTIFIED.

RIC
10/04/94 13:33:00
SAMPLE: M.BLK
CONDS.: EPA METHOD 8240
RANGE: G 1.1597 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: CBLK1004 #1
CALI: CBLK1004 #3

SCANS 88 TO 155

41856.



105

ntitation Report File: CBLK1004

: CBLK1004.TI
04/94 13:33:00
ple: M.BLK
s.: EPA METHOD 8240
ula: Instrument: FINN Weight: 0.000
mitted by: PTL Analyst: UC Acct. No.: -

NT=AREA * REF AMNT/(REF AREA * RESP FACT)
sp. 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

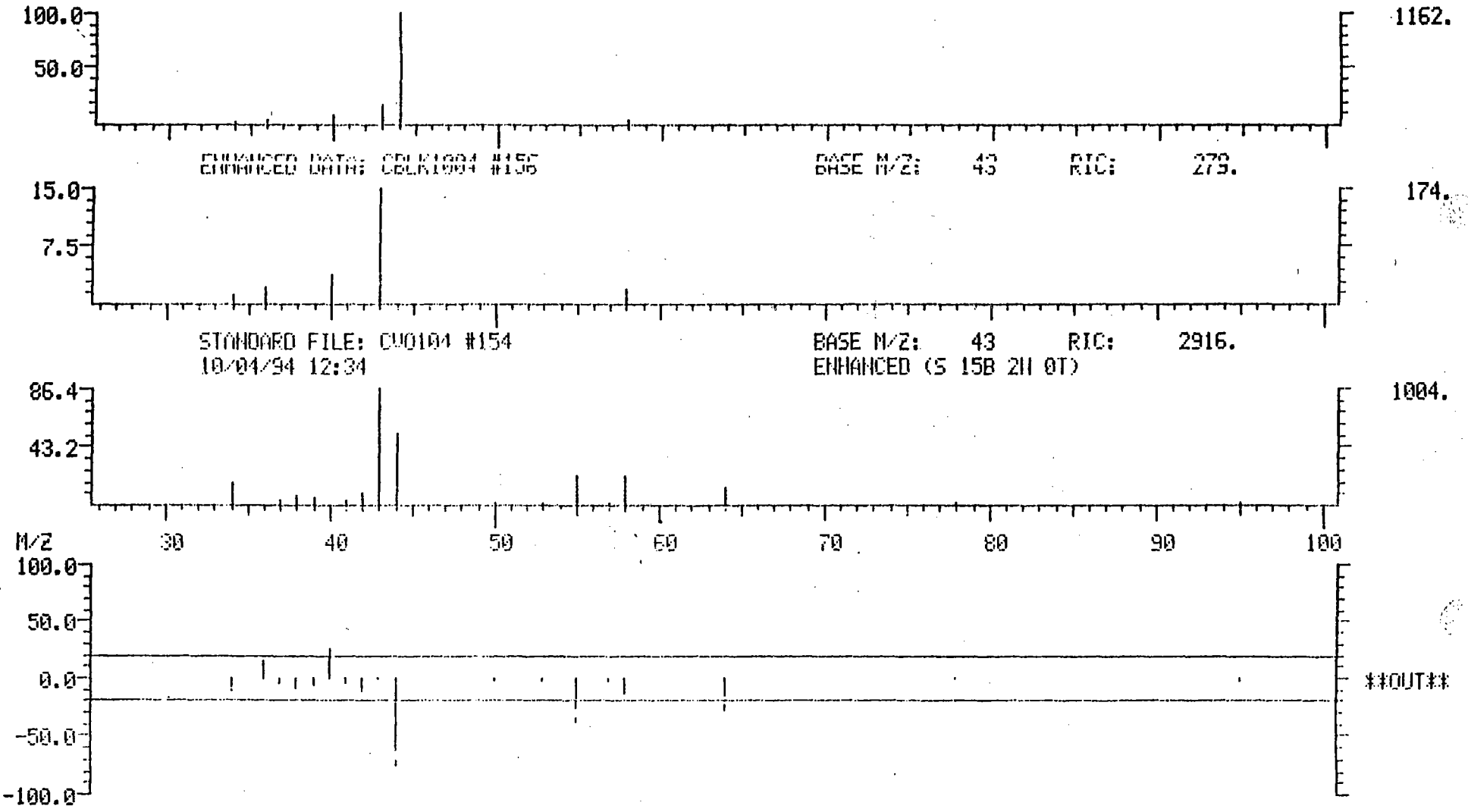
CDUC1004

Name
C250 O-XYLENE
BENZENE-D6 **S. STD. **

	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot	
1	49	293	7:24	1	1.000	M XX	10934.	50.000 NG	16.48	
	114	382	9:38	2	1.000	A BB	102320.	50.000 NG	16.48	
	117	867	21:53	3	1.000	A BB	53294.	50.000 NG	16.48	
4	65	341	8:36	1	1.164	A BB	17544.	44.054 NG	14.52	88
5	98	588	14:50	3	0.678	A BB	71077.	54.167 NG	17.85	108
	95	1135	28:39	3	1.309	A BB	53377.	51.802 NG	17.07	104
	NOT FOUND									
3	NOT FOUND									
	NOT FOUND									
	NOT FOUND									
1	49	182	4:36	1	0.621	A BB	480.	0.667 NG	0.22	
2	NOT FOUND									
	43	156	3:56	1	0.532	M XX	749.	2.560 NG	0.84	
4	NOT FOUND									
5	NOT FOUND									
	NOT FOUND									
	NOT FOUND									
8	NOT FOUND									
	NOT FOUND									
	NOT FOUND									
1	NOT FOUND									
2	NOT FOUND									
	NOT FOUND									
4	NOT FOUND									
5	NOT FOUND									
	NOT FOUND									
	NOT FOUND									
8	NOT FOUND									
9	NOT FOUND									
	NOT FOUND									
	NOT FOUND									
2	NOT FOUND									
	NOT FOUND									
5	NOT FOUND									
	NOT FOUND									
	NOT FOUND									
8	NOT FOUND									
9	NOT FOUND									
	91	601	15:10	3	0.693	A BB	587.	0.381 NG	0.13	
1	NOT FOUND									
2	NOT FOUND									
3	NOT FOUND									
4	NOT FOUND									
5	NOT FOUND									
6	NOT FOUND									
7	NOT FOUND									
8	NOT FOUND									
9	NOT FOUND									

DATA FILE: CBLK1004 #156 STANDARD FILE: CV0104 #154
TARGET COMPOUND COMPARISON CALI: CBLK1004 #3
COMPOUND: C035 ACETONE

RAW DATA: CBLK1004 #156 BASE M/Z: 44 RIC: 1574.
10/04/94 13:33



ıtitation Report File: CBLK1004

:a: CBLK1004.TI
)4/94 13:33:00
ıle: M.BLK
ıds.: EPA METHOD 8240
ınula: Instrument: FINN Weight: 0.000
ınitted by: PTL Analyst: UC Acct. No.: -

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

CAS #	Name
0-00-0	CI01 BROMOCHLOROMETHANE **INT.STD.**
0-00-0	CI10 1,4-DIFLUOROBENZENE **INT. STD.**
0-00-0	CI20 CHLOROBENZENE-D5 **INT.STD.**
0-00-0	UNKNOWN

m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
TOT	292	7:22	0	ISINV	A BB	26158.	******	UG/L	00.00
TOT	383	9:40	0	ISINV	A BB	217284.	******	UG/L	00.00
TOT	867	21:53	0	ISINV	A BB	183485.	******	UG/L	00.00
TOT	80	2:01	1	0.274	A BB	641968.	1227.100		*100.

Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
9:13	0.80	1.000						
19:21	0.50	1.000						
23:54	0.92	1.000						
				1227.10	1.001227.100		1.0001227.10	

EDURE: FILTER/TIC DIAGNOSTIC REPORT 10/05/94 8:28:28

A FILE: CBLK1004

ER SCAN PARAMETERS

NUMBER TICS:	15
ABLE ENTRIES:	539
N TOLERANCE :	2
RIC HT. [%]:	10
T SCAN :	1
SCAN :	1600
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

ET COMPOUND ANALYSIS:

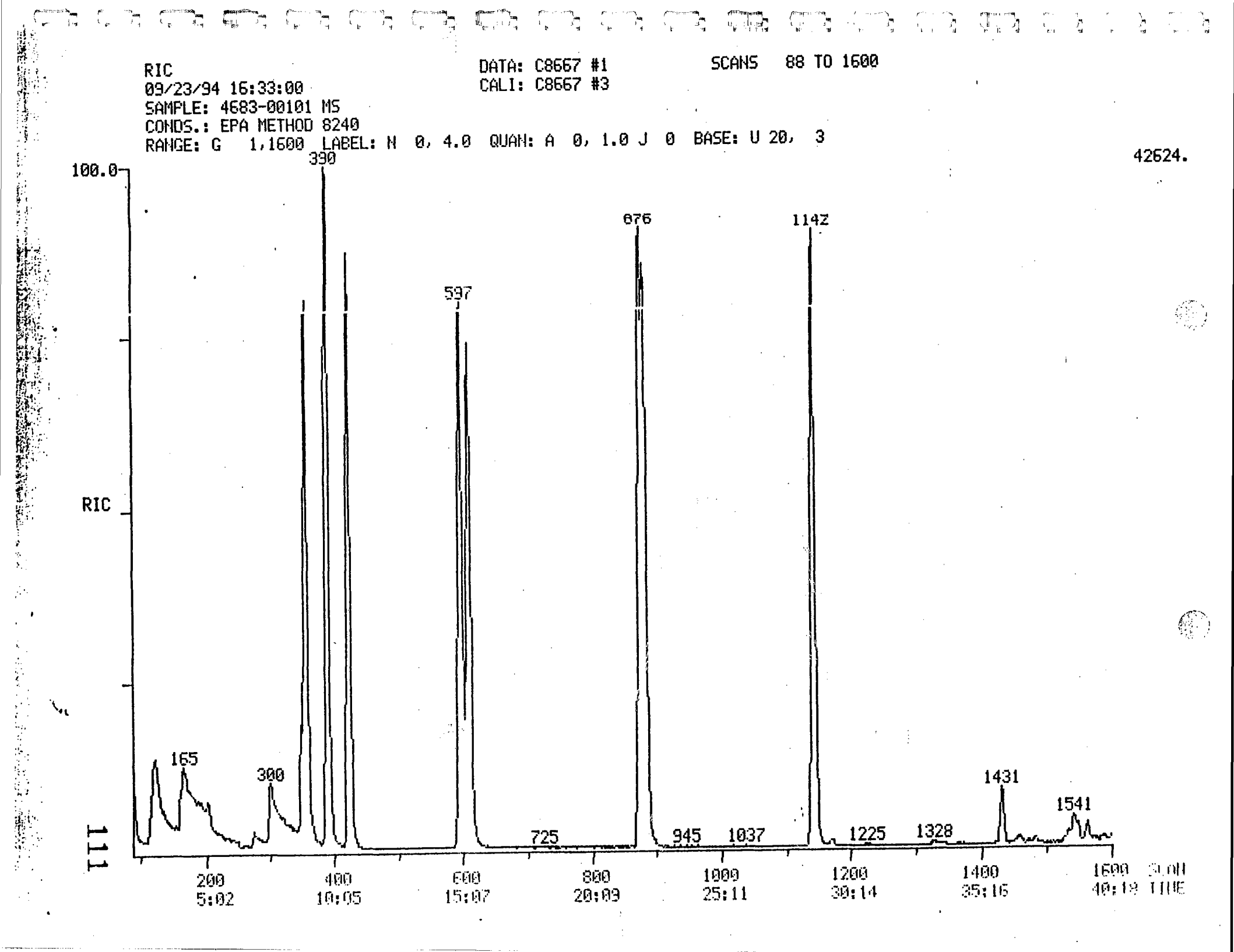
TARGETS (QUAN LIST)	IS PEAKS	TOTAL TARGET PEAKS
6	3	9

TER PROCESSING:

<----------REJECT PEAKS---------->							
OTAL PAKS	< 1ST SCAN	> LAST SCAN	< MIN RIC HT	< SCAN TOL	> MAX # PEAKS	TOTAL REJECTS	TOTAL TICS
8	0	0	1	6	0	7	1

PROCESSING:

SCAN#	PURITY	FIT	MW	COMPOUND NAME [BEFORE TIC THRESHOLD]
80	410	427	85	ACETIC ACID, CYANO-


RIC
09/23/94 16:33:00
SAMPLE: 4683-00101 MS
CONDS.: EPA METHOD 8240
RANGE: G 1,1600 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3
DATA: C8667 #1
CALI: C8667 #3
SCANS 88 TO 1600
42624.
100.0
RIC
111
165
300
390
597
725
876
945
1037
1142
1225
1328
1431
1541
200
5:02
400
10:05
600
15:07
800
20:09
1000
25:11
1200
30:14
1400
35:16
1600
40:18
TIME

Quantitation Report File: C8667

Data: C8667.TI
09/23/94 16:33:00
Sample: 4683-00101 MS
Conds.: EPA METHOD 8240
Formula: 2.5G/5ML Instrument: FINN Weight: 0.000
Submitted by: USARMY Analyst: UC Acct. No.: 4683-001

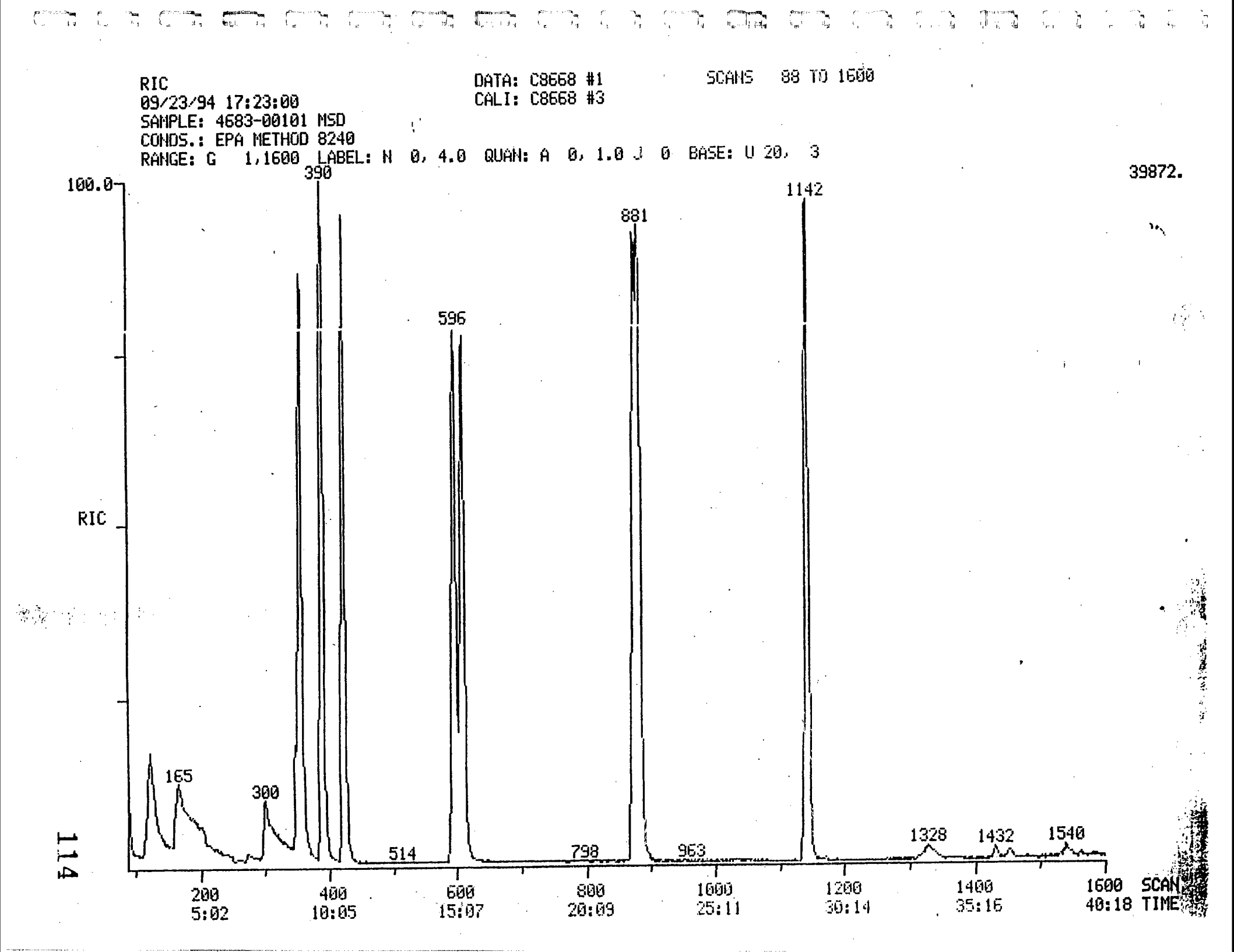
AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

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

My 17

No	Name
48	C250 O-XYLENE
49	BENZENE-D6 **S. STD. **

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	49	300	7:33	1	1.000	A BB	8847.	50.000 NG	10.12
2	114	390	9:49	2	1.000	A BB	101972.	50.000 NG	10.12
3	117	875	22:02	3	1.000	A BB	74708.	50.000 NG	10.12
4	65	349	8:47	1	1.163	M XX	15979.	35.725 NG	7.23
5	98	597	15:02	3	0.682	A BB	93124.	46.564 NG	9.42
6	95	1142	28:46	3	1.305	A BB	59844.	38.727 NG	7.84
7	NOT FOUND								
8	NOT FOUND								
9	NOT FOUND								
10	NOT FOUND								
11	49	189	4:46	1	0.630	A BV	1220.	1.903 NG	0.39
12	NOT FOUND								
13	NOT FOUND								
14	NOT FOUND								
15	NOT FOUND								
16	96	166	4:11	1	0.553	A BB	5724.	44.136 NG	8.93
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	424	10:41	2	1.087	A BB	39899.	45.065 NG	9.12
30	NOT FOUND								
31	NOT FOUND								
32	78	357	9:00	2	0.915	A BB	86662.	44.339 NG	8.97
33	NOT FOUND								
34	NOT FOUND								
35	NOT FOUND								
36	NOT FOUND								
37	NOT FOUND								
38	NOT FOUND								
39	NOT FOUND								
40	91	610	15:22	3	0.697	A BB	90072.	41.129 NG	8.32
41	112	882	22:13	3	1.008	A BB	65297.	46.658 NG	9.44
42	NOT FOUND								
43	NOT FOUND								
44	NOT FOUND								
45	NOT FOUND								
46	NOT FOUND								
47	NOT FOUND								
48	NOT FOUND								
49	NOT FOUND								


RIC
09/23/94 17:23:00
SAMPLE: 4683-00101 MSD
CONDS.: EPA METHOD 8240
RANGE: G 1,1600 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3
DATA: C8668 #1
CALI: C8668 #3
SCANS 88 TO 1600
39872.
100.0
RIC
114
390
881
1142
596
165
300
514
798
963
1328
1432
1540
200
5:02
400
10:05
600
15:07
800
20:09
1000
25:11
1200
30:14
1400
35:16
1600
40:18
SCAN
TIME

Quantitation Report File: C8668

Data: C8668.TI
09/23/94 17:23:00
Sample: 4683-00101 MSD
Cmnds.: EPA METHOD 8240
Formula: 2.5G/5ML Instrument: FINN Weight: 0.000
Submitted by: USARMY Analyst: UC Acct. No.: 4683-001

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

No	Name
48	C250 O-XYLENE
49	BENZENE-D6 **S. STD. **

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	49	300	7:33	1	1.000	A BB	8993.	50.000 NG	9.93
2	114	390	9:49	2	1.000	A BB	96476.	50.000 NG	9.93
3	117	875	22:02	3	1.000	A BB	72942.	50.000 NG	9.93
4	65	349	8:47	1	1.163	M XX	16470.	36.225 NG	7.19
5	98	596	15:01	3	0.681	A BB	86242.	44.167 NG	8.77
6	95	1142	28:46	3	1.305	A BB	59490.	39.431 NG	7.83
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	96	165	4:09	1	0.550	A BB	5812.	44.087 NG	8.75
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	423	10:39	2	1.085	A BB	40842.	48.758 NG	9.68
30	NOT FOUND								
31	NOT FOUND								
32	78	356	8:58	2	0.913	A BB	87207.	47.180 NG	9.36
33	NOT FOUND								
34	NOT FOUND								
35	NOT FOUND								
36	NOT FOUND								
37	NOT FOUND								
38	NOT FOUND								
39	NOT FOUND								
40	91	609	15:20	3	0.696	A BB	92584.	43.300 NG	8.60
41	112	882	22:13	3	1.008	A BB	69143.	50.603 NG	10.05
42	NOT FOUND								
43	NOT FOUND								
44	NOT FOUND								
45	NOT FOUND								
46	NOT FOUND								
47	NOT FOUND								
48	NOT FOUND								
49	NOT FOUND								



	D/T ANALYZED	DATA FILE	JOB NUMBER	PTL ID	CLIENT	DILUTION	NON	SURROGATE	COMMENTS	UNITS
					After the repairs is remaining			Method 8270		
	08/14/94	BSB914		Calib	@ 12:00				#12	
						Spk - Method 8270				
9	✓	CV914SP	SP	PPb	NOA	std			no spkd #34 Missing	
3	✓	CV914 20	20	PPb	NOA	std			#34M	
3	✓	CV914 10	10	PPb	NOA	std	dup		#34M	
3	✓	CV914 00A	100	PPb	NOA	std				
4		CV914 200 ✓	200	PPb	NOA	std				
3	✓	CV914 50	50	PPb	NOA	std			Cont/pc	
5		CV914 00B ✓	100	PPb						
6		CV914 50A ✓	SP	PPb						
7		CV914 20A ✓	20	PPb						

	D/T ANALYZED	DATA FILE	JOB NUMBER	PTL ID	CLIENT	DILUTION	IS NON	SURROGATE Method 8240	COMMENTS	INITS	
	9/22/94										
		BFB927		Prod	@ 10:01				148, 150		
3		CV0927	59	LCS	VOA Std						
4		CB4K922		Meth Blank							
5		C8647	4683-	00101	U.S. Army	2.53/5ml					
6		C8648	4682-	00101	↓	5g/10ml = 2 X 100ml/5ml = 50					
7		C8649	4617-	00103	Ewing	2.53/5ml					
8		C8650	4601-	00101	Delcora				#40↑		
9		C8651	-	00301							R1 X1
10		C8652	-	00401					#40↑		R1
1		C8653	4612-	00101	Briggs	5ml					
2		C8654	-	002							

	D/T ANALYZED	DATA FILE	JOB NUMBER	PTL ID	CLIENT	DILUTION	IS NON	SURROGATE	COMMENTS	UNITS
								Method 8240		
	9/23/94	BB923	Paired @		LCS1	10 : 5			8240/1	u
3		CV0923	SD	CAL	Initial				ok	u
4		CBLK923	M. Blank						Clean ok	u
5		C8663	4714-	001 01	Zenith	0.5/25 (10ml/5ml)	x125 dil		ok	u
6		C8664	4682-	001 01	US Army	5 mL			*4ok	u
7		C8665	4683-	001 01	↓	↓			ok	u
8		C8666	4747-	01	Environmental	2.5/5 mL			ok	u
9		C8667	4683-	MS 001 01	US Army	↓		8240 9/23 SV	ok	u
10		C8668		MSD 001 01	↓	↓			ok	u
11		C8669	4601-	RR 00301	Dollova	5.5/10ml = 2 (10ml/5ml)	x100 dil		ok	u

120

	D/T ANALYZED	DATA FILE	JOB NUMBER	PTL ID	CLIENT	DILUTION	IS NON	SURROGATE methodology	COMMENTS	UNITS
		BLB1004B		Paired @ 11:42					196,145	ug/L
3		CVO1004	SV	BPB	VOA std					
4		CBLK1004	SV	Blank						
5		C8711	4760	00103	U.S Army	5 ml				
6		C8712	4899	00101	↓	15/5 ml	1:5			
7		C8713	4652	00101 13-RP	Aguilar ↓	Base 100 ul/10 ml 100 ul/5 ml	1:2000 dil			
8		C8714	—		↓	Bond 5 ml/5 ml				
9		C8715	4871	00102	CW	55/10 ml 100 ul/5 ml	1:100 dil			
10		C8716	4843	00103	Burlington	2.5 g/5 ml	x2 dil			
1		C8717		MS						
2		C8718		MSD						

LOCAL NAME: _____

FILE NAME: _____

SMITH

APPENDIX D

GROUNDWATER ANALYTICAL DATA PACKAGE

EMSL

environmental
materials
asbestos

New Jersey

Corporate Office &
Main Laboratory
100 Haddon Avenue
Westmont, NJ 08108
(609) 858-4800

30 Cooper Street
Westmont, NJ 08108
(609) 858-9573

116 Stelton Road
Piscataway, NJ 08854
(908) 981-0550

New York

208 Stonehenge Lane
Carle Place, NY 11514
(516) 997-7251

Georgia

1010 Roswell Street, SE
Suite One
Smyrna, GA 30080
(404) 333-6066

Florida

1878 Adams Avenue
Melbourne, FL 32935
(407) 253-4224

Michigan

2 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

000001

ANALYTICAL DATA REPORT
FOR
U. S. ARMY, FORT MONMOUTH
SELFM-PW-EV
Building 173
Fort Monmouth, NJ 07703

PROJECT : **NONE**

EMSL Project: # 9508471

Field Sample No. & Location	Laboratory Sample ID	Matrix	Date & Time of Collection	Date Received
1850.1 Bldg. 697 MW1-2931776	**95-24196**	**Aqueous**	**5/25/95 @ 1340**	**5/26/95**
1850.2 Trip Blank	**95-24197**	**Aqueous**	**5/25/95 @ 0610**	**5/26/95**
1850.3 Field Blank	**95-24198**	**Aqueous**	**5/25/95 @ 1350**	**5/26/95**

Laboratory Name: EMSL ANALYTICAL, INC.

Certification No.: NJDEP No. 04653
PADER No. 68-367
NY-ELAP No. 10896

Supervisor/Manager Signature

Printed Name: Paul V. Laraia

Date: 06-28-95

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

	Page
Sample Data Summary Package	4-21
Laboratory Deliverables	22
QA/QC Checklist	23
Chain of Custody Documentation	24-29
Methodology Summary	30-31
Laboratory Chronicle	32
Analysis Conformance/Non-Conformance Summary Format	33-37
GC/MS Volatile Organic Data Package	38-112
. Initial Calibration BFB Tune	
. Initial Calibration Data	
. Continuing Calibration BFB Tune	
. Continuing Calibration Data	
. Internal Standards Area Summary	
. Sample Results	
. Surrogate Recovery Form	
. Method Blank Data	
. Matrix Spike/Matrix Spike Duplicate Data	
GC/MS Semivolatile Organic Data Package	113-217
. Initial Calibration DFTPP Tune	
. Initial Calibration Data	
. Continuing Calibration DFTPP Tune	
. Continuing Calibration Data	
. Internal Standards Area Summary	
. Sample Results	
. Surrogate Recovery Form	
. Method Blank Data	
. Matrix Spike/Matrix Spike Duplicate Data	
Pesticides & PCB Analysis Data Package	218-353
. Standard Data	
. Sample Results	
. Surrogate Recovery Form	
. Method Blank	
. Matrix Spike/Matrix Spike Duplicate Data	

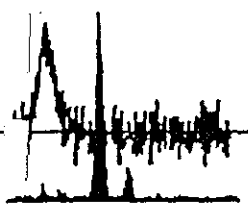


TABLE OF CONTENTS, cont.

	Page
Metals Analysis Data Package	354-368
. Sample Results	
. Calibrations	
. Blanks	
. Spike Recovery	
. Duplicates	
. Laboratory Control Sample	
General Chemistry Analytical Data Package	369-374
. Sample Results	
. Blanks	
. Quality Assurance Data	
Statement of Authentication	375

SAMPLE DATA SUMMARY PACKAGE

EMSL

Date of Report: 06/25/95
Project Number: 09508471
Lab ID: 95-0024196
Date Collected: 05/25/95 13:40
Collected By: Client
Date Received: 05/26/95 07:00

Attention: Charles Appleby
U.S. Army - Fort Monmouth
SELFM-PW-EV
Building 173
Fort Monmouth NJ 07703

Client Project: None

Client Designation: Bldg.697 MW1-2931776 FMTEL # 1850.1

	Conc.	Unit
LIMITED		
Total Cyanide	<0.010	mg/l
METALS		
Ag-CLP	<0.050	mg/l
Aluminum-CLP	3.8	mg/l
Arsenic-CLP	<0.0050	mg/l
Barium-CLP	0.042	mg/l
Beryllium-CLP	<0.0050	mg/l
Calcium-CLP	15	mg/l
Cadmium-CLP	<0.010	mg/l
Cobalt-CLP	<0.050	mg/l
Chromium-CLP	<0.050	mg/l
Copper-CLP	<0.050	mg/l
Iron-CLP	19	mg/l
Mercury, CLP	<0.001	mg/l
Potassium-CLP	6.8	mg/l
Magnesium-CLP	6.8	mg/l
Manganese-CLP	0.031	mg/l
Sodium-CLP	22	mg/l
Nickel-CLP	<0.050	mg/l
Lead-CLP	<0.0025	mg/l
Antimony-CLP	<0.0050	mg/l
Selenium-CLP	<0.0050	mg/l
Thallium-CLP	<0.0050	mg/l
Vanadium-CLP	<0.050	mg/l
Zinc-CLP	0.031	mg/l
ORGANIC		
Pesticides		
Pesticides and PCBs by 608	see attached	ug/l
Semi-Volatiles		
TCL BNA's with Library Search	see attached	ug/l
Volatiles		
Methyl tertiary-butyl ether	see attached	ug/l
tert-Butyl alcohol	see attached	ug/l
Volatiles by 524.2 w/ Library Search	see attached	ug/l

US Army Ft. Monmouth N.J. 000006

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FMETL # 1850.1
Bldg 697 MW1-2931776

Lab Name: EMSL Contract:

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

Matrix: (soil/water) water Lab Sample ID: 95-24196

Sample wt/vol: 990 (g/mL) mL Lab File ID: E:JU06E64

% Moisture N/A decanted: (Y/N) N Date Received: 05/26/95

Extraction: (SepF/Cont/Sonc) Cont Date Extracted: 06/01/95

Concentrated Extract Volume: 10 (ml) Date Analyzed: 06/08/95

Injection Volume: 1 (uL) Dilution Factor 1

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
319-84-6	alpha-BHC	0.02	U
319-85-7	beta-BHC	0.04	U
319-86-8	delta-BHC	0.02	U
58-89-9	gamma-BHC (Lindane)	0.03	U
76-44-8	Heptachlor	0.02	U
309-00-2	Aldrin	0.04	U
1024-57-3	Heptachlor epoxide	0.04	U
959-98-8	Endosulfan I	0.02	U
60-57-1	Dieldrin	0.03	U
72-55-9	4,4'-DDE	0.04	U
72-20-8	Endrin	0.04	U
33213-65-9	Endosulfan II	0.04	U
72-54-8	4,4'-DDD	0.27	P
1031-07-8	Endosulfan sulfate	0.04	U
50-29-3	4,4'-DDT	0.22	P
7421-36-3	Endrin aldehyde	0.1	U
57-74-9	Chlordane	1.3	
8001-35-2	Toxaphene	1	U
12674-11-2	Aroclor-1016	1	U
11104-28-2	Aroclor-1221	1	U
11141-16-5	Aroclor-1232	1	U
53469-21-9	Aroclor-1242	1	U
12672-29-6	Aroclor-1248	1	U
11097-69-1	Aroclor-1254	1	U
11096-82-5	Aroclor-1260	1	U

U.S. Army Ft. Monmouth N.J.

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO. 0000007

FMETL#1850.1
9524196B
Bldg 697/MW1-2831776

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Matrix: (soil/water) WATER Lab Sample ID: 9524196B

Sample wt/vol: 1000.0 (g/mL ML Lab File ID: B7859.D

Level: (low/med) _____ Date Received: 5/26/95

% Moisture: _____ decanted: (Y/N): N Date Extracted: 6/1/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 6/7/95

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
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	bis(2-chloroisopropyl)ether	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U

US Army Ft. Monmouth N.J. FMETL # 1850.1

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO. 000003

9524196B

Bldg 697 MW1-231776

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Matrix: (soil/water) WATER Lab Sample ID: 9524196B

Sample wt/vol: 1000.0 (g/mL ML Lab File ID: B7859.D

Level: (low/med) _____ Date Received: 5/26/95

% Moisture: _____ decanted: (Y/N): N Date Extracted: 6/1/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 6/7/95

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
51-28-5	2,4-Dinitrophenol	25	U
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
86-73-7	Fluorene	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	n-Nitrosodiphenylamine	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-08	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
56-55-3	Benzo[a]anthracene	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	10	U
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo[b]fluoranthene	10	U
207-08-9	Benzo[k]fluoranthene	10	U
50-32-8	Benzo[a]pyrene	10	U
193-39-5	Indeno[1,2,3-cd]pyrene	10	U
53-70-3	Dibenz[a,h]anthracene	10	U
191-24-2	Benzo[g,h,i]perylene	10	U

US Army Ft. Monmouth N.J.

FMETL # 1850.1

1F

SAMPLE NO. 900009

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

9524196B
Bldg 697 MW-2831876

Lab Name: EMSL ANALYTICAL Contract:

Project No.: Site: Location: Group:

Matrix: (soil/water) WATER Lab Sample ID: 9524196B

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: B7859.D

Level: (low/med) Date Received: 5/26/95

% Moisture: decanted: (Y/N) N Date Extracted: 6/1/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 6/7/95

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 5 Concentration Units: (ug/L or ug/Kg) ug/L

CAS Number	Compound Name	RT	Est. Conc	Q
1. 112-80-1	Oleic Acid	25.03	17	J
2. 57-10-3	Hexadecanoic acid	25.27	4	J
3. 112-60-7	Ethanol, 2,2'-[oxybis(2,1-et	26.44	9	J
4. 112-27-6	Triethylene glycol	29.66	18	J
5.	UNKNOWN	32.55	19	J
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 Ft. Monmouth NJ.

000010

1A
VOLATILE ORGANIC ANALYSIS DATA SHEET
EPA 524.2

FMETC # 1850.1

Bldg 697 MW1-2931776

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: 9524196
Lab File ID: C8403.D
Date Received: 05/26/95
Date Analyzed: 06/07/95
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	1.3	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	1.0	
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 Ft. Monmouth N.J. 000311

1A
VOLATILE ORGANIC ANALYSIS DATA SHEET
EPA 524.2

FMETC #1850,1
Bldg 697 MW1-2931776

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: 9524196
Lab File ID: C8403.D
Date Received: 05/26/95
Date Analyzed: 06/07/95
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

Date of Report: 06/15/95
Project Number: 09508471
Lab ID: 95-0024197
Date Collected: 05/25/95 06:10
Collected By: Client
Date Received: 05/26/95 07:00

Attention: Charles Appleby
U.S. Army - Fort Monmouth
SELFM-PW-EV
Building 173
Fort Monmouth NJ 07703

Client Project: None

Client Designation: Trip Blank

	Conc.	Unit
ORGANIC		
Volatiles		
Methyl tertiary-butyl ether	see attached	ug/l
tert-Butyl alcohol	see attached	ug/l
Volatiles by 524.2 w/ Library Search	see attached	ug/l

US Army Ft. Monmouth NJ 000013

FMETC# 1850,2

1A

VOLATILE ORGANIC ANALYSIS DATA SHEET Bldg. 697

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: 9524197
Lab File ID: C8401.D
Date Received: 05/26/95
Date Analyzed: 06/07/95
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	1.5	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	1.0	
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 Ft. Monmouth N.J. 000614

1A
VOLATILE ORGANIC ANALYSIS DATA SHEET
EPA 524.2

FMETC # 1850.2
Bldg 697
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: 9524197
Lab File ID: C8401.D
Date Received: 05/26/95
Date Analyzed: 06/07/95
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	7.7	
106-43-4	4-Chlorotoluene	2.5	
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	.60	
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

EMSL

Date of Report: 06/25/95
Project Number: 09508471
Lab ID: 95-0024198
Date Collected: 05/25/95 13:50
Collected By: Client
Date Received: 05/26/95 07:00

Attention: Charles Appleby
U.S. Army - Fort Monmouth
SELFM-PW-EV
Building 173
Fort Monmouth NJ 07703

Client Project: None

Client Designation: Field Blank Bldg 697 FMETC #1850,3

	Conc.	Unit
LIMITED		
Total Cyanide	<0.010	mg/l
METALS		
Ag-CLP	<0.050	mg/l
Aluminum-CLP	<0.20	mg/l
Arsenic-CLP	<0.0050	mg/l
Barium-CLP	<0.020	mg/l
Beryllium-CLP	<0.0050	mg/l
Calcium-CLP	<0.40	mg/l
Cadmium-CLP	<0.010	mg/l
Cobalt-CLP	<0.050	mg/l
Chromium-CLP	<0.050	mg/l
Copper-CLP	<0.050	mg/l
Iron-CLP	0.10	mg/l
Mercury, CLP	<0.001	mg/l
Potassium-CLP	<3.0	mg/l
Magnesium-CLP	<0.10	mg/l
Manganese-CLP	<0.020	mg/l
Sodium-CLP	<0.40	mg/l
Nickel-CLP	<0.050	mg/l
Lead-CLP	<0.0025	mg/l
Antimony-CLP	<0.0050	mg/l
Selenium-CLP	<0.0050	mg/l
Thallium-CLP	<0.0050	mg/l
Vanadium-CLP	<0.050	mg/l
Zinc-CLP	<0.020	mg/l
ORGANIC		
Pesticides		
Pesticides and PCBs by 608	see attached	ug/l
Semi-Volatiles		
TCL BNA's with Library Search	see attached	ug/l
Volatiles		
Methyl tertiary-butyl ether	see attached	ug/l
tert-Butyl alcohol	see attached	ug/l
Volatiles by 524.2 w/ Library Search	see attached	ug/l

Us Army Ft. Monmouth N.J. 000016

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

FtMETL #1850.3 Bldg 697 Field Blank

Lab Name: EMSL Contract:

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

Matrix: (soil/water) water Lab Sample ID: 95-24198

Sample wt/vol: 1000 (g/mL) mL Lab File ID: E:JU06E63

% Moisture N/A decanted: (Y/N) N Date Received: 05/26/95

Extraction: (SepF/Cont/Sonc) Cont Date Extracted: 06/01/95

Concentrated Extract Volume: 10 (ml) Date Analyzed: 06/08/95

Injection Volume: 1 (uL) Dilution Factor 1

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
319-84-6	alpha-BHC	0.02	U
319-85-7	beta-BHC	0.04	U
319-86-8	delta-BHC	0.02	U
58-89-9	gamma-BHC (Lindane)	0.03	U
76-44-8	Heptachlor	0.02	U
309-00-2	Aldrin	0.04	U
1024-57-3	Heptachlor epoxide	0.04	U
959-98-8	Endosulfan I	0.02	U
60-57-1	Dieldrin	0.03	U
72-55-9	4,4'-DDE	0.04	U
72-20-8	Endrin	0.04	U
33213-65-9	Endosulfan II	0.04	U
72-54-8	4,4'-DDD	0.04	U
1031-07-8	Endosulfan sulfate	0.04	U
50-29-3	4,4'-DDT	0.04	U
7421-36-3	Endrin aldehyde	0.1	U
57-74-9	Chlordane	0.1	U
8001-35-2	Toxaphene	1	U
12674-11-2	Aroclor-1016	1	U
11104-28-2	Aroclor-1221	1	U
11141-16-5	Aroclor-1232	1	U
53469-21-9	Aroclor-1242	1	U
12672-29-6	Aroclor-1248	1	U
11097-69-1	Aroclor-1254	1	U
11096-82-5	Aroclor-1260	1	U

US ARMY Ft. Monmouth NJ FMETL # 1850.3

1B

SAMPLE NO. 000017

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Bldg 697
9524198B
Field Blank

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Matrix: (soil/water) WATER Lab Sample ID: 9524198B

Sample wt/vol: 1000.0 (g/mL ML Lab File ID: B7860.D

Level: (low/med) _____ Date Received: 5/26/95

% Moisture: _____ decanted: (Y/N): N Date Extracted: 6/1/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 6/7/95

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
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	bis(2-chloroisopropyl)ether	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U

US ARMY Ft. Monmouth N.J. FMETL #1850.2

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO 000318

Bldg 697
9524198B
Field Blank

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Matrix: (soil/water) WATER Lab Sample ID: 9524198B

Sample wt/vol: 1000.0 (g/mL ML Lab File ID: B7860.D

Level: (low/med) _____ Date Received: 5/26/95

% Moisture: _____ decanted: (Y/N): N Date Extracted: 6/1/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 6/7/95

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
51-28-5	2,4-Dinitrophenol	25	U
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
86-73-7	Fluorene	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	n-Nitrosodiphenylamine	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-08	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
56-55-3	Benzo[a]anthracene	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	10	U
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo[b]fluoranthene	10	U
207-08-9	Benzo[k]fluoranthene	10	U
50-32-8	Benzo[a]pyrene	10	U
193-39-5	Indeno[1,2,3-cd]pyrene	10	U
53-70-3	Dibenz[a,h]anthracene	10	U
191-24-2	Benzo[g,h,i]perylene	10	U

US Army Ft. Monmouth NJ

EMSL # 10501

1F

SAMPLE NO. 000319

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Bldg 697
9524198B
Field Blank

Lab Name: EMSL ANALYTICAL Contract:

Project No.: Site: Location: Group:

Matrix: (soil/water) WATER Lab Sample ID: 9524198B

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: B7860.D

Level: (low/med) Date Received: 5/26/95

% Moisture: decanted: (Y/N) N Date Extracted: 6/1/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 6/7/95

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	6.21	5	J
2.	Unknown	29.89	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.				

US ARMY Ft. Monmouth N.J.

000320

1A
VOLATILE ORGANIC ANALYSIS DATA SHEET
EPA 524.2

FMETC # 1850.3
Bldg 697
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: 9524198
Lab File ID: C8402.D
Date Received: 05/26/95
Date Analyzed: 06/07/95
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	1.6	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	1.6	
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 Ft. Monmouth N.J.

000021

FMETL # 1850.3
Bldg 697
Field 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: 9524198
Lab File ID: C8402.D
Date Received: 05/26/95
Date Analyzed: 06/07/95
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	7.7	
106-43-4	4-Chlorotoluene	6.4	
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	.60	
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

2/a

BLDG.#: 697 MW#: 1 NJDEPE WELL ID # 293174

U.S. ARMY FORT MONMOUTH

MONITORING WELL SAMPLING DATASHEET

DATE: 5-25-95

IJO#95-0091

SAMPLING CONTRACTOR: EMSL Analytical Services Inc.

LABORATORY: EMSL Analytical Services, NJDEP CERT #: 04653

SAMPLERS NAMES: Tom Baxter Susan Palilonis

WEATHER CONDITIONS: overcast, humid, cool breeze

ELEVATION OF CASING SURVEY MARK: ____.____

TOTAL DEPTH OF WELL FROM TOP OF SURVEYORS MARK: 19.82 FT

DEPTH FROM SURVEYORS MARK TO SCREEN: ____.____FT

LENGTH OF SCREENED SECTION: _____FT.

DEPTH TO WATER PRIOR TO PURGING AND SAMPLING: 13.16 FT

ELEVATION OF GW PRIOR TO PURGING: _____.___FT

THICKNESS OF LNAPL PRIOR TO PURGING : ____.___FT

PID/Hnu READING IMMEDIATELY AFTER THE WELL CAP IS

(6) REMOVED: 3.8 PPM 1311 pm D.O. → 2.1 ppm

pH: 5.19 TEMP: 17.8 C, SPECIFIC CONDUCTIVITY: 261 µs/cm

DEPTH OF WELL: ____.___FT

HEIGHT OF WATER: ____.____FT

EVACUATED GAL. H2O: 13 GAL (6.66 X .65 X 3 = 12.987)

PURGING START TIME: 13:17 END TIME: 13:26

PURGE METHOD: (FLOW RATE OF <0.5 GPM TO >5.0 GPM) Pump

PURGE RATE (<0.5 GPM): 2 GPM

TOTAL VOLUME PURGED: 13 GAL.

DEPTH TO WATER AFTER PURGING AND BEFORE SAMPLING: 13.22 FT

(2) DISSOLVED OXYGEN: 2.5 ppm pH: 5.11 TEMP: 16.5 °C

SPECIFIC CONDUCTIVITY: 247 µs/cm

SAMPLING METHOD: DEDICATED, DECONTAMINATED (IAW NJDEP FSPM 1992) TEFLON® BAILER

START TIME OF SAMPLING: 13:30 END TIME: 13:40

(3) DISSOLVED OXYGEN: 2.6 ppm pH: 5.44 TEMP: 15.4 °C

SPECIFIC CONDUCTIVITY: 275 µs/cm

COMMENTS: on site 1309

pale yellow / no odor

* Field Blank 1350

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 Faraig
Laboratory Manager or Environmental Consultant's Signature

06-27-95
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.
4-21	12.	Sample results and corresponding units for each parameter.

CHAIN OF CUSTODY AND PRESERVATION CHECKLIST

U.S. ARMY FORT MONMOUTH

9508471

P.O. #: IJO # 95-0091 / SAI

Chain of Custody

Project #: None

Customer: Charles Applebee SEL/Env-Rel-EV

Phone: 908-532-6224

Sampler: EMSL (Baxter)

Date / Time: 5/25/95 1340

Site Name: Bldg 697 mw sampling

Analysis Parameters: TCL+30 TAL (524.2 calib. for xylene); VOA 524.2 Library (TMB, xylene)

Start:

Finish:

Lab Sample ID Number	Date/Time	Customer Sample Location/ID Number	Sample Matrix	# of Bottles	TCL+30 TAL (524.2 calib. for xylene)	VOA 524.2 Library (TMB, xylene)	Preservation Method	Remarks
1850.1	5/25 1340	Bldg 697 mw1-293776	aq	9	X		24196	
.2	0000	Trip Blank		3		X	24197	
.3	1350	Field Blank		9	X		24198	

Relinquished By (signature)	Date / Time	Received By (signature)	Shipped By:
	5/25/95 1500		EMSL

Relinquished By (signature)	Date / Time	Received for Lab by (signature):	Date / Time
			5/26 0700

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

SAI-ENV COC Form 01

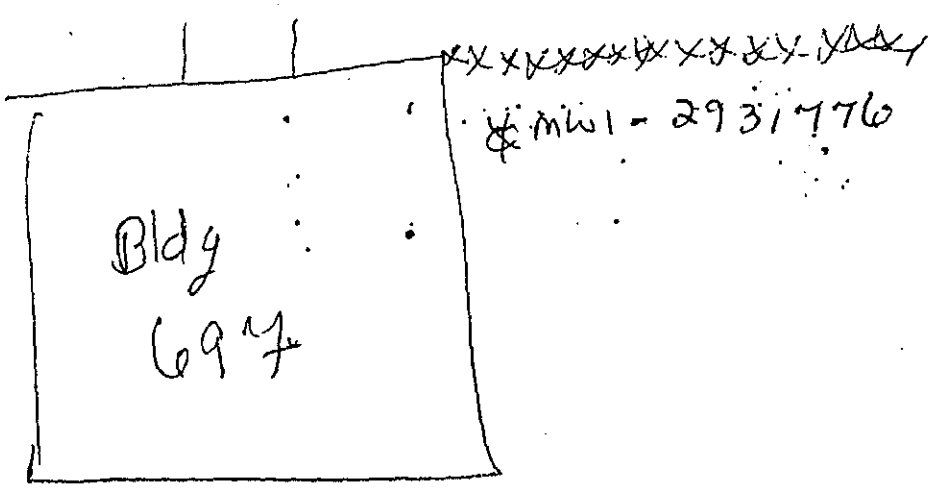
Page 1 of 1 Pages

Rev. A Date: 02 Apr 93

Enviornmental Laboratory

00023

Sherrill Ave.



Compost

000026

[illegible]

1. Place an X in box if okay.
2. Record actual pH if outside acceptable range
3. Record temperature of cool blank or note 'NW' if samples are cooled.
4. 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]	[illegible]	H2SO4	HCL	H2SO4	H2SO4	H2SO4	H2SO4	HNO3	HNO3	H2SO4	H2SO4	NaOH ZNAC	NaOH			
				X					X					X	4	24196	
				X												97	
				X					X					X		98	

EMSL ANALYTICAL, INC.

000028

INTERNAL CHAIN OF CUSTODY

EMSL LAB ID NO. 24196-24198 PROJECT NO. 9508471

SAMPLE/CONTAINERS

PARAMETERS

BNA, TCN, VOA, P/P, Metals

DATE	TIME	ANALYSIS	NAME (PRINT)	SIGNATURE
6/1/95		BN Extraction Prep	Charles Bartolone	Charles Bartolone
6/5/95		Cyanide Prep	Pavitaar Singh	(illegible)
6/5/95		Metals Prep	Domenic Tetenzi	(illegible)
6/1/95		Pesticides Prep.	James J. Kelley	(illegible)
5/31/95		Mercury Prep.	John Lewis	(illegible)

000029

Project #: 9508471

Lab ID #'s: 24196-24198

Analyst

	Name (please print)	Signature	Date
1. Base/Neutrals	Scott Van Etten		6/7/95
2. Acids			
3. Pesticides			
4. Herbicides			
5. PCB's	David Roberts	David Roberts	6/8/95
6. Metals:			
Flame			
Furnace	Mike Boyle		6/7/95
ICP	David Kliauga		6/6/95
7. Volatiles:			
GC			
GC/MS	Scott Kessler		6/7/95
8. TOC			
9. TOX			
10. Phenols (Total)			
11. Cyanide (Total)	Parvtaar Singh		6/5/95
12. TPH -IR			
13. Mercury	John Lewis		5/31/95
14. Other			
15. Other			
16. Other			

METHODOLOGY SUMMARY

EMSL

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.

Pesticides/PCB's - Aqueous

EPA Method 608 - This method covers the determination of pesticides and polychlorinated biphenyls (PCB's) in samples by extraction/concentration with organic solvents and subsequent qualification/quantification by Gas Chromatography. The gas chromatograph utilizes an electron capture detector (ECD) which is applicable for the determination of the compounds listed for this method in the U.S.E.P.A. Manual entitled "Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater".

Cyanide

An aliquot of sample is acidified under analysis conditions liberating cyanide as HCN. A distillation follows leaving behind interferences and scrubbing the distilled HCN in sodium hydroxide solution. An aliquot of the NaOH solution is analyzed colorimetrically for cyanide ion. Reference method is EPA Method 335.2.

Metals - Aqueous (Total)

This is a procedure used to determine metals concentrations in aqueous matrices. It involves an acidic digestion under oxidizing conditions of approximately 100 milliliters of sample. Nitric and hydrochloric acids as well as hydrogen peroxide are employed in the digestion. The digested sample is filtered and diluted to 100 milliliters. The analysis is performed by ICP, furnace atomic absorption or flame atomic absorption. Reference methods are SW-846 3rd Edition, September 1986, Revised July 1992, EPA Methods for the Chemical Analysis of Water and Wastes, Revised, March 1983 and Methods for the Determination of Metals in Environmental Samples EPA/600/4-91/010 June 1991.

LABORATORY CHRONICLE

Lab ID: **95-24196 to 95-24198**

Client: **U.S. Army, Fort Monmouth**

	I DATE	II	Hold Time
Date Sampled	5/25/95		
Receipt/Refrigeration	5/26/95		
Extractions			
1. Semivolatile Organics	**6/1/95**		**7 days**
2. Metals Prep.	**6/5/95**		**6 months**
3. Pest/PCBs	**6/1/95**		**7 days**
Analyses			
1. Semivolatile Organics	**6/7/95**		**40 days**
2. Metals	**6/6-7/95**		**6 months**
3. Mercury	**5/31/95**		**28 days**
4. Volatile Organics	**6/7/95**		**14 days**
5. Pest/PCBs	**6/8/95**		**40 days**
6. T. Cyanide	**6/5/95**		**28 days**

QC Supervisor
Review & Approval

(Signature) Paul Tarantino for

(Printed Name) Peter B. Panton

(Date) 06-27-95

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.

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 2.2 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 **See MS/MSD form.**		
	b. B/N Fraction		
	c. Acid Fraction		
9.	Internal Standard Area/Retention Time Shift Meet Criteria		X

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 Tonarig Date: 6-27-95

EMSL

GC ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY FORMAT

		No	Yes
1.	Chromatograms Labeled/Compounds Identified (Field Samples and Method Blanks)		X
2.	Standards Summary Submitted		X
3.	Calibration-Initial Calibration performed within 30 days before sample analysis and continuing calibration performed within 24 hours of sample analysis.	X *	
4.	Blank Contamination - If yes, list compounds and concentrations in each blank:	X	
	a. VOA Fraction		
	b. B/N Fraction		
	c. Acid Fraction		
	d. Pesticides/PCB's		
	e. Other		
5.	Surrogate Recoveries Meet Criteria (If Applicable)		X
	a. VOA Fraction		
	b. B/N Fraction		
	c. Acid Fraction		
	d. Pesticides/PCB's		
	e. Other		
	If not Met, were the calculations checked and the results qualified (if applicable)		
6.	Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria (if applicable)		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		
	d. Pesticides/PCB's		
	e. Other		
7.	Retention Time Shift Meet Criteria (if applicable)		X

EMSL

GC ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY FORMAT, cont.

		No	Yes
8.	Extraction Holding Time Met		X
	If not met, list number of days exceeded for each sample:		
9.	Analysis Holding Time Met		X
	If not met, list number of days exceeded for each sample:		

10. Definitions:
U=Not Detected. J=Detected, but below report detection limit. B=Compound found in blank. E=Estimated concentration. NA=Not Applicable

Additional Comments: * **Initial Calibration was performed greater than 30 days. Continuing Calibration performed within 24 hours of sample analysis.**
NOTE: DDD and DDT scored at 0.27 ug/l and 0.22 ug/l respectively. However the amounts calculated on both GC columns differs by more than 25% and for this reason the results are flagged with "P".

Laboratory Manager: Paul Saraiva Date: 06-28-95

000037

EMSL

METALS ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY FORMAT

		No	Yes
1.	Calibration Summary Meet Criteria		X
2.	ICP Interference Check Sample Results Summary Submitted (if applicable) Meet Criteria		X
3.	Serial Dilution Summary Submitted (if applicable) / Meet Criteria	X	
4.	Laboratory Control Sample Summary Submitted (if applicable) / Meet Criteria		X
5.	Blank Contamination - If yes, list compounds and concentrations in each blank.	X	
6.	Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria (if not met, list those compounds and their recoveries which fall outside the acceptable range) **Calcium 1%, Magnesium 44%, Sodium 416%.**	X	
7.	Extraction Holding Time Met		X
	If not met, list number of days exceeded for each sample:		
8.	Analysis Holding Time Met		X
	If not met, list number of days exceeded for each sample:		

9. 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 Tarara Date: 06-28-95

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:

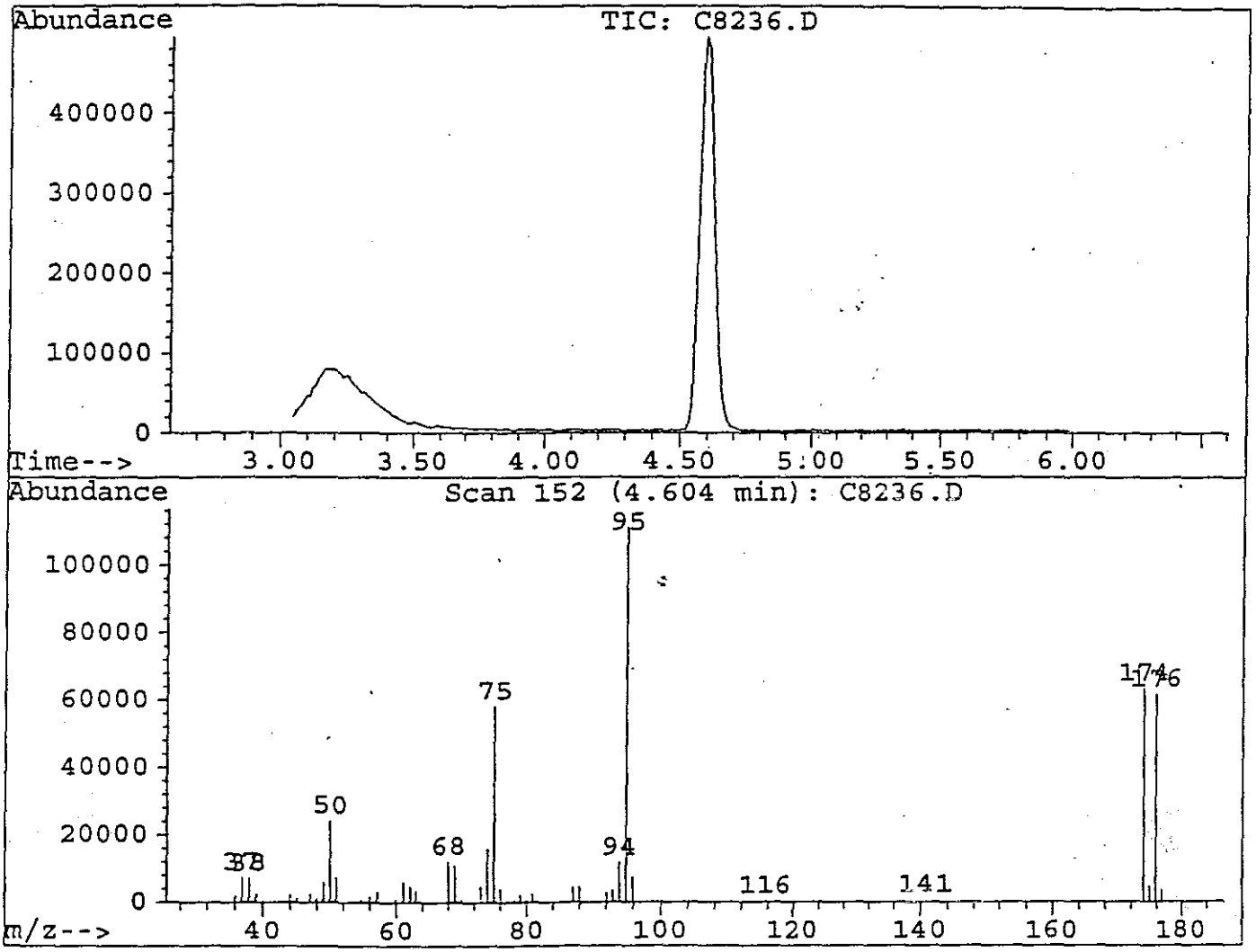
	CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01		4 PPB STANDARD	C8237.D	05/26/95	1035
02		10 PPB STANDARD	C8238.D	05/26/95	1117
03		20 PPB STANDARD	C8239.D	05/26/95	1151
04		30 PPB STANDARD	C8240.D	05/26/95	1226
05		40 PPB STANDARD	C8241.D	05/26/95	1300
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

CLPBFB

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

c_n 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

c 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
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

000044

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

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

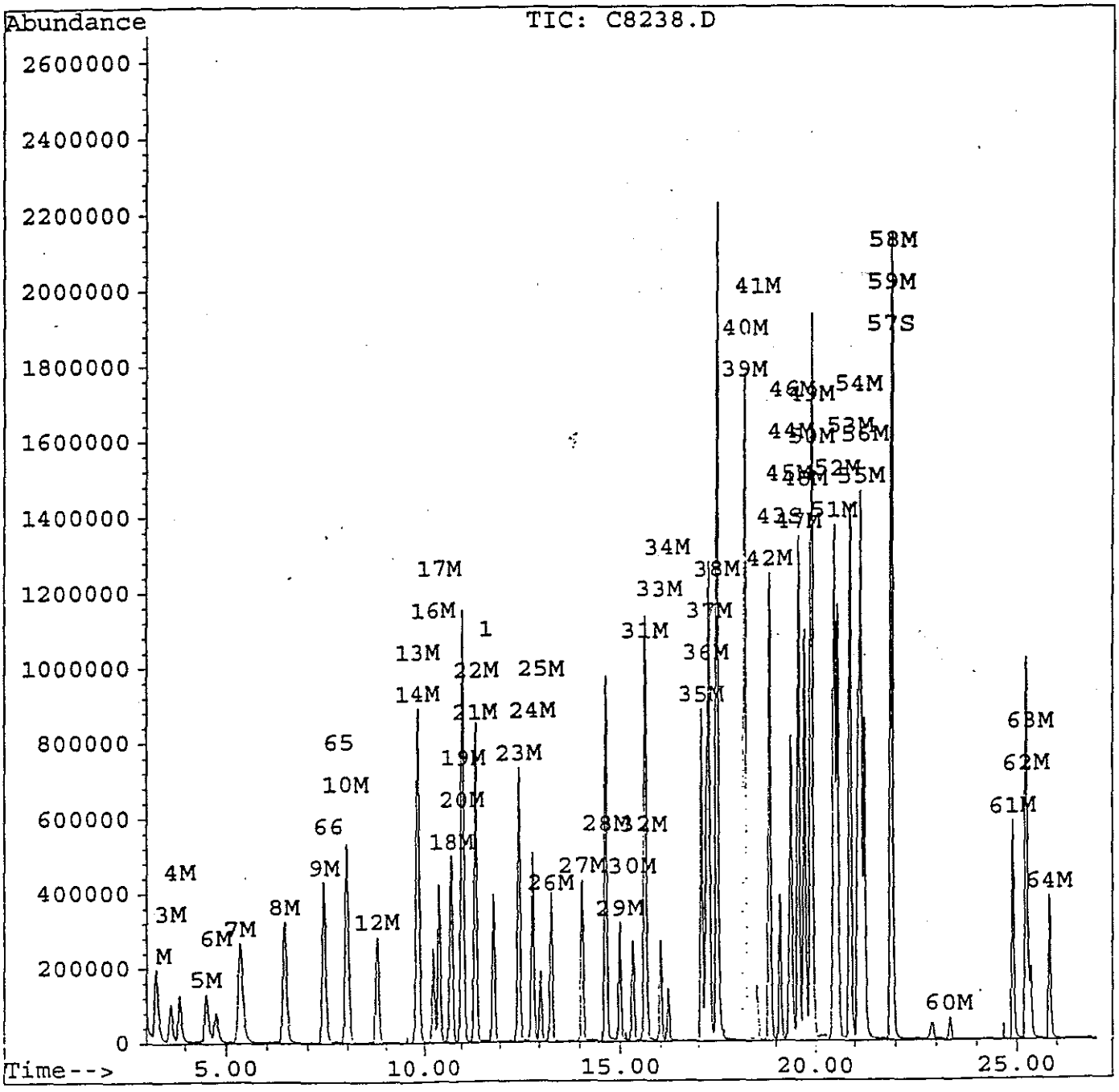
(#) = qualifier out of range (m) = manual integration

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

000049

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

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

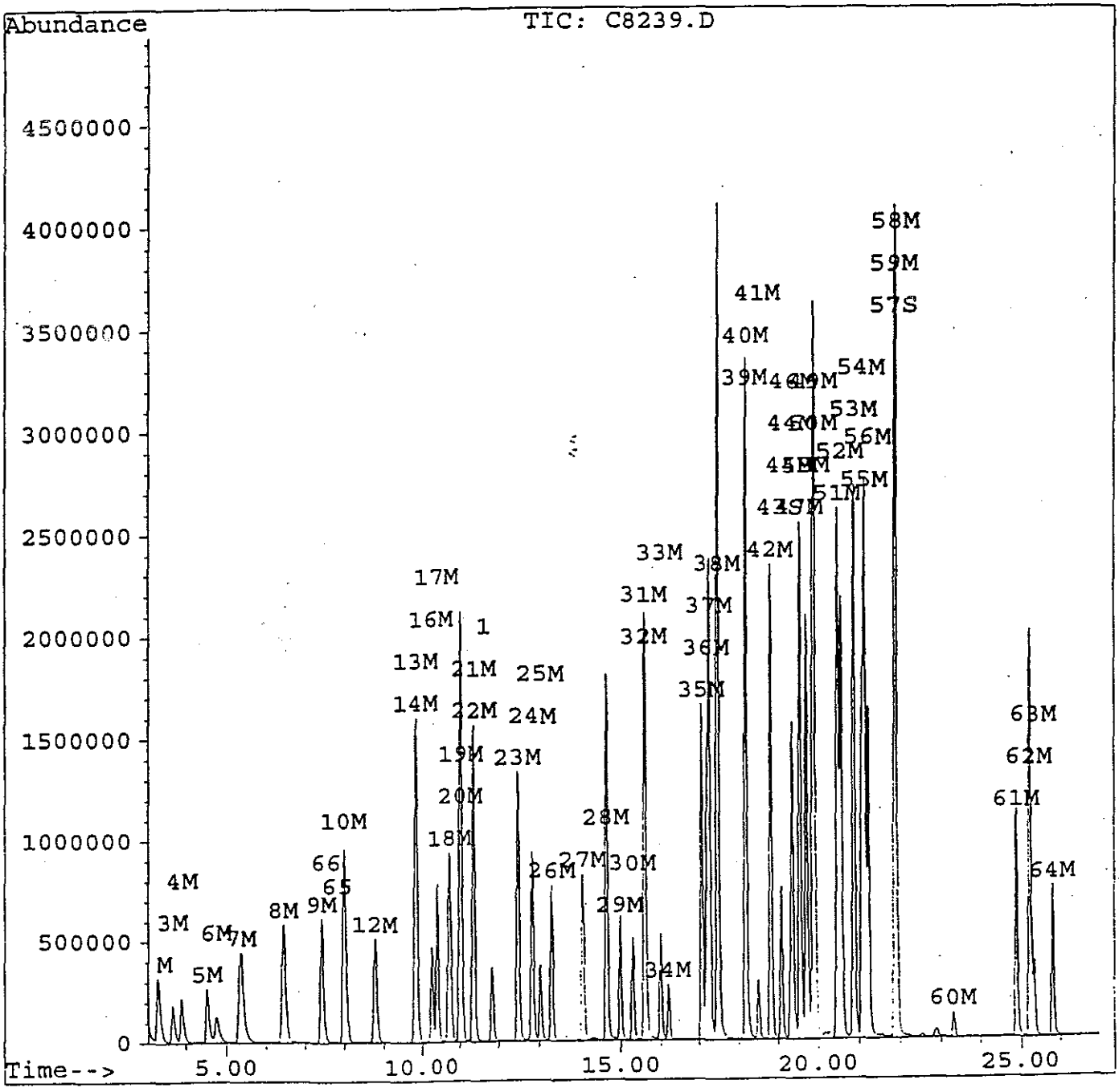
Quantitation Report

000051

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

000052

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

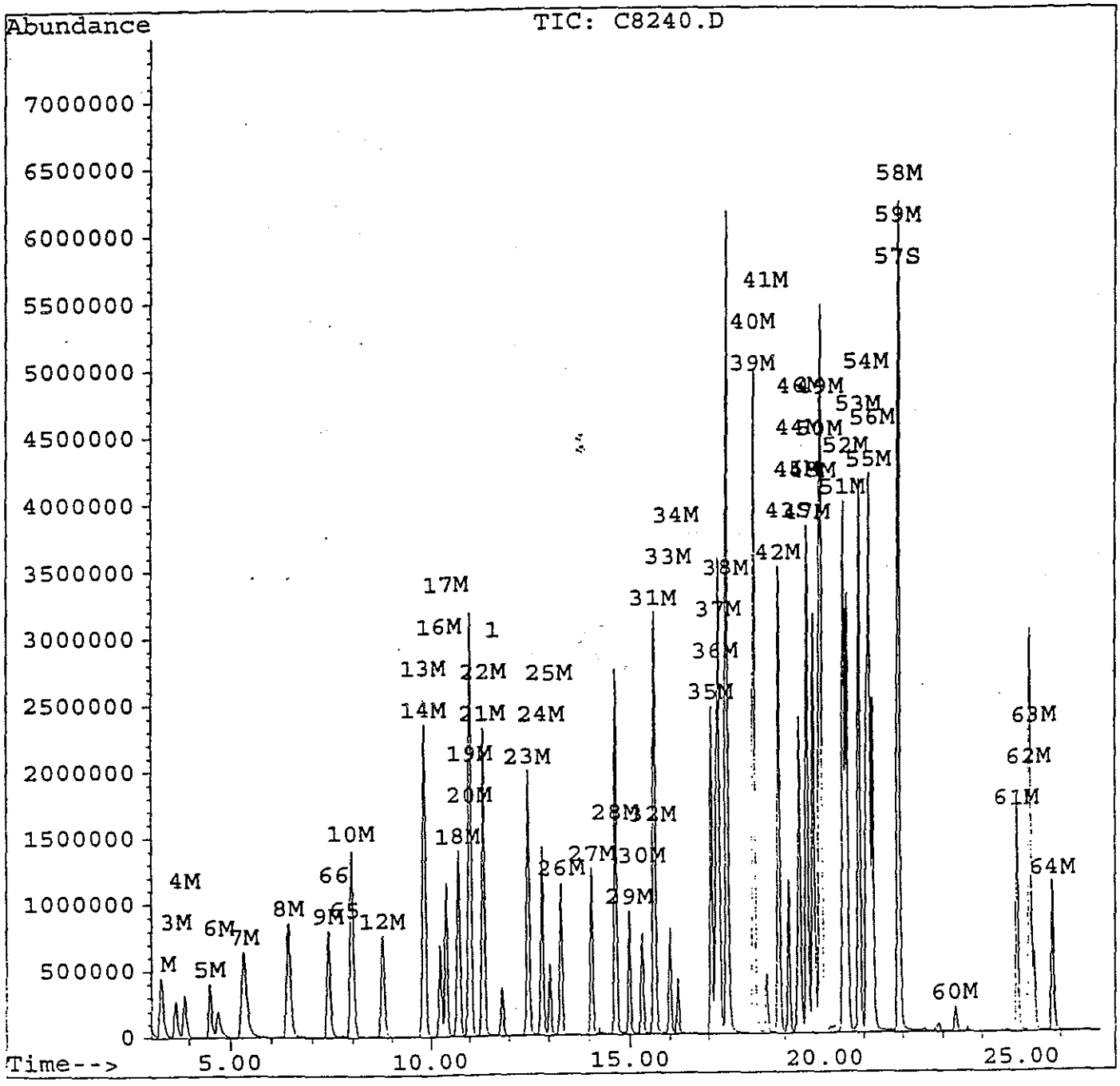
(#) = qualifier out of range (m) = manual integration

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

000055

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
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

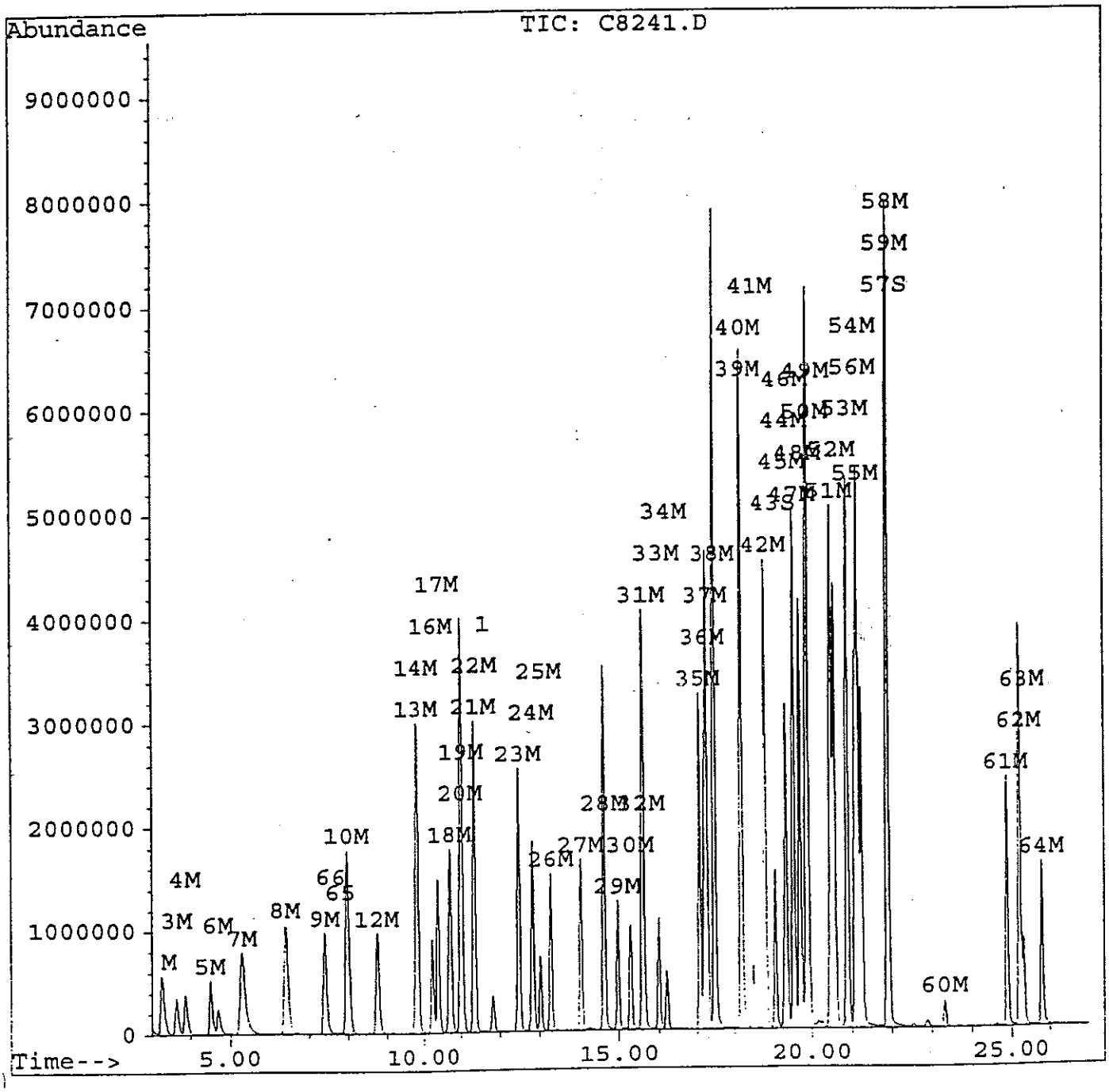
Quantitation Report

000057

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

000058

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name : EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Lab File ID: C8392.D BFB Injection Date: 6/7/95

Instrument ID: 5972-INSTRUMENT 1 BFB Injection Time: 1639

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	22.3
75	30.0 - 66.0% of mass 95	48.9
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	50.0 - 120.0% of mass 95	52.7
175	4.0 - 9.0% of mass 174	3.8 (7.2)1
176	93.0 - 101.0% of mass 174	52.8 (100.2)1
177	5.0 - 9.0% of mass 176	3.5 (6.6)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	C8393.D	6/7/95	1655
02	1PPB STD	1PPB STD	C8394.D	6/7/95	1732
03	VBLK01	M. BLANK	C8395.D	6/7/95	1809
04	9523969V	9523969V	C8396.D	6/7/95	1845
05	9523970V	9523970V	C8397.D	6/7/95	1921
06	9523959V	9523959V	C8398.D	6/7/95	1957
07	9523967V	9523967V	C8399.D	6/7/95	2033
08	9523968V	9523968V	C8400.D	6/7/95	2108
09	9524197V	9524197V	C8401.D	6/7/95	2144
10	9524198V	9524198V	C8402.D	6/7/95	2219
11	9524196V	9524196V	C8403.D	6/7/95	2254
12	9524199V	9524199V	C8404.D	6/7/95	2329
13	9524199MS	24199MS	C8405.D	6/8/95	0004
14	9524199MSD	24199MSD	C8406.D	6/8/95	0039
15					
16					
17					
18					
19					
20					
21					
22					

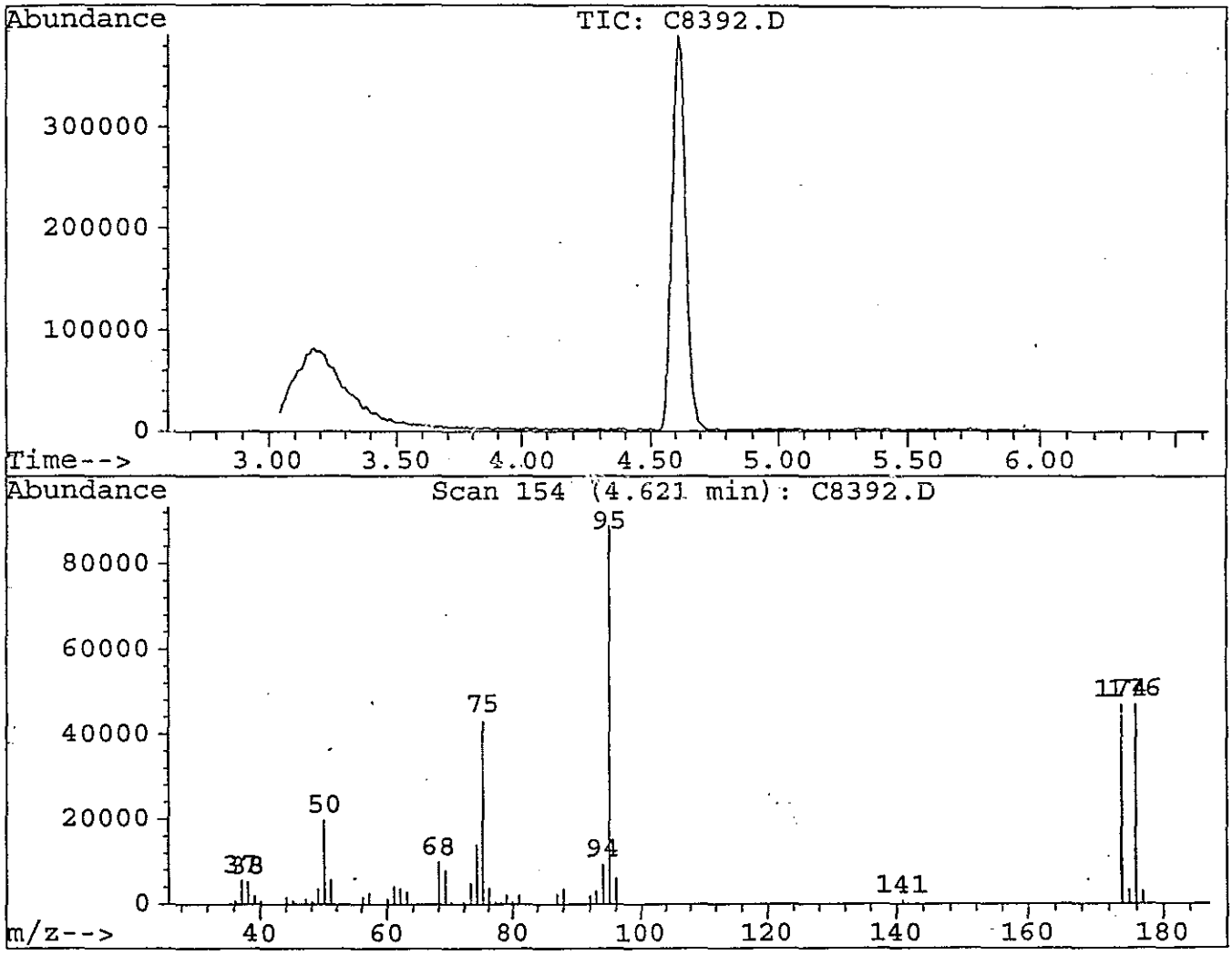
CLPBFB

000059

Data File : D:\HPCHEM\1\DATA\C8392.D
Acq On : 7 Jun 95 4:39 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: 154

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	22.3	19808	PASS
75	95	30	60	48.9	43488	PASS
95	95	100	100	100.0	88944	PASS
96	95	5	9	6.8	6074	PASS
173	174	0	2	0.0	0	PASS
174	95	50	100	52.7	46896	PASS
175	174	5	9	7.2	3384	PASS
176	174	95	101	100.2	46968	PASS
177	176	5	9	6.6	3105	PASS

n 154 (4.621 min): C8392.D
BFB TUNE

000060

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.10	829	51.05	5810	73.05	5017	92.05	1999
37.10	5727	56.10	1628	74.05	14058	92.95	3043
38.10	5372	57.10	2662	75.05	43488	94.05	9344
39.10	1981	60.00	1206	76.05	3866	95.05	88944
40.00	781	61.00	4179	77.10	666	96.05	6074
44.00	1746	62.00	3671	78.00	564	140.90	815
45.00	905	63.00	2997	78.90	2208	173.95	46896
47.05	1336	68.05	9926	79.90	654	174.95	3384
48.05	683	69.05	8107	81.00	2024	175.95	46968
49.05	3656	69.95	635	87.00	2385	176.95	3105
50.05	19808	71.95	513	88.05	3711		

7A

VOLATILE CONTINUING CALIBRATION CHECK

000061

Lab Name: EMSL ANALYTICAL Contract: _____

Project No. _____ Site: _____ Location: _____ Group: _____

Instrument ID: 5972-INSTRUMENT 1 Calibration Date: 6/7/95 Time: 1655

Lab File ID: C8393.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	0.334		15.7	30.0
Chloromethane	0.233	0.197		15.5	30.0
Vinyl chloride	0.263	0.227		13.7	30.0
Bromomethane	0.178	0.164		7.9	30.0
Chloroethane	0.154	0.145		5.8	30.0
Trichlorofluoromethane	0.588	0.533		9.4	30.0
1,1-Dichloroethene	0.258	0.236		8.5	30.0
Methylene chloride	0.274	0.272		0.7	30.0
trans-1,2-Dichloroethene	0.273	0.261		4.4	30.0
1,1-Dichloroethane	0.545	0.526		3.5	30.0
2,2-Dichloropropane	0.534	0.518		3.0	30.0
cis-1,2-Dichloroethene	0.257	0.249		3.1	30.0
Bromochloromethane	0.090	0.089		1.1	30.0
Chloroform	0.512	0.501		2.1	30.0
1,1,1-Trichloroethane	0.566	0.560		1.1	30.0
Carbon tetrachloride	0.526	0.507		3.6	30.0
1,1-Dichloropropene	0.495	0.475		4.0	30.0
Benzene	0.871	0.854		2.0	30.0
1,2-Dichloroethane	0.214	0.223		-4.2	30.0
Trichloroethene	0.386	0.379		1.8	30.0
1,2-Dichloropropane	0.285	0.288		-1.1	30.0
Dibromomethane	0.115	0.119		-3.5	30.0
Bromodichloromethane	0.396	0.406		-2.5	30.0
cis-1,3-Dichloropropene	0.342	0.345		-0.9	30.0
Toluene	0.619	0.618		0.2	30.0
trans-1,3-Dichloropropene	0.236	0.248		-5.1	30.0
1,1,2-Trichloroethane	0.110	0.113		-2.7	30.0
Tetrachloroethene	0.388	0.369		4.9	30.0
1,3-Dichloropropane	0.219	0.235		-7.3	30.0
Dibromochloromethane	0.215	0.221		-2.8	30.0
1,2-Dibromomethane	0.152	0.162		-6.6	30.0
Chlorobenzene	0.644	0.630		2.2	30.0
1,1,1,2-Tetrachloroethane	0.256	0.264		-3.1	30.0
Ethylbenzene	1.302	1.311		-0.7	30.0
Xylene (para & meta)	0.468	0.457		2.4	30.0
Xylene (Ortho)	0.414	0.416		-0.5	30.0

7A

VOLATILE CONTINUING CALIBRATION CHECK

000062

Lab Name: EMSL ANALYTICAL Contract: _____

Project No. _____ Site: _____ Location: _____ Group: _____

Instrument ID: 5972-INSTRUMENT 1 Calibration Date: 6/7/95 Time: 1655

Lab File ID: C8393.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	0.642		-0.2	30.0
Bromoform	0.105	0.115		-9.5	30.0
Isopropylbenzene	1.330	1.306		1.8	30.0
Bromobenzene	0.240	0.250		-4.2	30.0
1,1,2,2-Tetrachloroethane	0.118	0.136		-15.3	30.0
1,2,3-Trichloropropane	0.143	0.163		-14.0	30.0
n-Propylbenzene	1.731	1.743		-0.7	30.0
2-Chlorotoluene	0.960	1.033		-7.6	30.0
4-Chlorotoluene	1.140	1.174		-3.0	30.0
1,3,5-Trimethylbenzene	1.101	1.101		0.0	30.0
tert-Butylbenzene	1.142	1.170		-2.5	30.0
1,2,4-Trimethylbenzene	1.009	1.042		-3.3	30.0
sec-Butylbenzene	1.693	1.642		3.0	30.0
1,3-Dichlorobenzene	0.489	0.501		-2.5	30.0
4-Isopropyltoluene	1.264	1.290		-2.1	30.0
1,4-Dichlorobenzene	0.485	0.499		-2.9	30.0
1,2-Dichlorobenzene	0.364	0.384		-5.5	30.0
n-Butylbenzene	1.355	1.388		-2.4	30.0
1,2-Dibromo-3-chloropropane	0.030	0.035		-16.7	30.0
1,2,4-Trichlorobenzene	0.268	0.276		-3.0	30.0
Hexachlorobutadiene	0.323	0.309		4.3	30.0
Naphthalene	0.232	0.251		-8.2	30.0
1,2,3-Trichlorobenzene	0.187	0.204		-9.1	30.0
4-Bromofluorobenzene	0.499	0.471		5.6	30.0
1,2-Dichlorobenzene-d4	0.228	0.222		2.6	30.0
TMTBE	0.292	0.318		-8.7	30.0
TBA	0.004	0.006		-23.2	30.0

Evaluate Continuing Calibration Report

000063

Data File : D:\HPCHEM\1\DATA\C8393.D
Acq On : 7 Jun 95 4:55 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)
		Fluorobenzene	1.000	1.000	0.0	88	0.07
2	M	Dichlorodifluoromethane	0.396	0.334	15.8	69	0.06
	M	Chloromethane	0.233	0.197	15.4	70	0.08
	M	Vinyl chloride	0.263	0.227	13.7	73	0.08
5	M	Bromomethane	0.178	0.164	7.6	73	0.08
6	M	Chloroethane	0.154	0.145	5.7	74	0.08
	M	Trichlorofluoromethane	0.588	0.533	9.2	78	0.10
8	M	1,1-Dichloroethene	0.258	0.236	8.4	78	0.10
9	M	Methylene chloride	0.274	0.272	0.7	68	0.09
1	M	trans-1,2-Dichloroethene	0.273	0.261	4.4	82	0.09
1		Hexane	0.000	0.000#	0.0	0#	-9.46#
12	M	1,1-Dichloroethane	0.545	0.526	3.5	85	0.09
1	M	2,2-Dichloropropane	0.534	0.518	3.1	83	0.08
1	M	cis-1,2-Dichloroethene	0.257	0.249	3.3	83	0.08
15		2-Butanone	0.000	0.000#	0.0	0#	-0.10
16	M	Bromochloromethane	0.090	0.089	1.3	89	0.08
1	M	Chloroform	0.512	0.501	2.1	86	0.09
18	M	1,1,1-Trichloroethane	0.566	0.560	1.0	87	0.08
19	M	Carbon tetrachloride	0.526	0.507	3.6	86	0.07
2	M	1,1-Dichloropropene	0.495	0.475	3.9	83	0.08
2	M	Benzene	0.871	0.854	1.9	85	0.09
22	M	1,2-Dichloroethane	0.214	0.223	-4.4	93	0.08
2	M	Trichloroethene	0.386	0.379	1.7	86	0.08
2	M	1,2-Dichloropropane	0.285	0.288	-1.2	90	0.08
25	M	Dibromomethane	0.115	0.119	-3.3	93	0.07
26	M	Bromodichloromethane	0.396	0.406	-2.6	93	0.08
2	M	cis-1,3-Dichloropropene	0.342	0.345	-0.8	91	0.08
28	M	Toluene	0.619	0.618	0.1	90	0.07
29	M	trans-1,3-Dichloropropene	0.236	0.248	-5.0	95	0.07
3	M	1,1,2-Trichloroethane	0.110	0.113	-2.7	93	0.07
3	M	Tetrachloroethene	0.388	0.369	4.8	84	0.06
32	M	1,3-Dichloropropane	0.219	0.235	-7.3	97	0.08
33	M	Dibromochloromethane	0.215	0.221	-3.0	95	0.07
3	M	1,2-Dibromomethane	0.152	0.162	-6.3	98	0.07
35	M	Chlorobenzene	0.644	0.630	2.2	87	0.07
36	M	1,1,1,2-Tetrachloroethane	0.256	0.264	-3.2	94	0.07
3	M	Ethylbenzene	1.302	1.311	-0.7	90	0.06
38	M	Xylene (para & meta)	0.468	0.457	2.2	87	0.07
39	M	Xylene (Ortho)	0.414	0.416	-0.6	89	0.07
4	M	Styrene	0.641	0.642	-0.2	90	0.06
4	M	Bromoform	0.105	0.115	-9.0	102	0.06
42	M	Isopropylbenzene	1.330	1.306	1.8	88	0.06

#) = Out of Range

Evaluate Continuing Calibration Report

000064

Data File : D:\HPCHEM\1\DATA\C8393.D
Acq On : 7 Jun 95 4:55 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)
3	S	4-Bromofluorobenzene	0.499	0.471	5.5	86	0.07
4	M	Bromobenzene	0.240	0.250	-4.4	95	0.06
5	M	1,1,2,2-Tetrachloroethane	0.118	0.136	-15.0	107	0.05
6	M	1,2,3-Trichloropropane	0.143	0.163	-13.9	104	0.05
7	M	n-Propylbenzene	1.731	1.743	-0.7	91	0.06
8	M	2-Chlorotoluene	0.960	1.033	-7.5	98	0.06
9	M	4-Chlorotoluene	1.140	1.174	-3.0	93	0.06
0	M	1,3,5-Trimethylbenzene	1.101	1.101	0.0	91	0.05
1	M	tert-Butylbenzene	1.142	1.170	-2.5	93	0.06
2	M	1,2,4-Trimethylbenzene	1.009	1.042	-3.3	92	0.06
3	M	sec-Butylbenzene	1.693	1.642	3.0	88	0.06
4	M	1,3-Dichlorobenzene	0.489	0.501	-2.4	94	0.06
5	M	4-Isopropyltoluene	1.264	1.290	-2.0	92	0.06
6	M	1,4-Dichlorobenzene	0.485	0.499	-2.8	94	0.06
7	S	1,2-Dichlorobenzene-d4	0.228	0.222	2.6	89	0.06
8	M	1,2-Dichlorobenzene	0.364	0.384	-5.3	96	0.06
9	M	n-Butylbenzene	1.355	1.388	-2.4	94	0.06
0	M	1,2-Dibromo-3-chloropropane	0.030	0.035	-15.7	112	0.05
1	M	1,2,4-Trichlorobenzene	0.268	0.276	-3.1	95	0.05
2	M	Hexachlorobutadiene	0.323	0.309	4.5	89	0.06
3	M	Naphthalene	0.232	0.251	-8.4	100	0.06
4	M	1,2,3-Trichlorobenzene	0.187	0.204	-9.4	103	0.06
5		Methyl-tert butyl ether	0.292	0.318	-8.7	98	0.09
6		tert-Butyl Alcohol	0.004	0.006	-23.2	124	0.07

(..) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report

000065

Data File : d:\hpchem\1\data\c8393.d
Acq On : 7 Jun 95 4:55 pm
Sample : 10 PPB CHK STANDARD
Misc :
Quant Time: Jun 8 12:45 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	11.91	96	677243	5.00	ug/L	0.07
System Monitoring Compounds						%Recovery
43) 4-Bromofluorobenzene	19.16	95	319186	4.72	ug/L	94.49%
57) 1,2-Dichlorobenzene-d4	21.94	152	150263	4.87	ug/L	97.38%
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.34	85	451863	8.42	ug/L	99
3) Chloromethane	3.73	50	267340	8.46	ug/L	98
4) Vinyl chloride	3.95	62	307322	8.63	ug/L	100
5) Bromomethane	4.60	94	222562	9.24	ug/L	96
6) Chloroethane	4.84	64	196832	9.43	ug/L	89
7) Trichlorofluoromethane	5.45	101	722458	9.08	ug/L	98
8) 1,1-Dichloroethene	6.52	96	320180	9.16	ug/L	98
9) Methylene chloride	7.50	84	368206	9.93	ug/L	93
10) trans-1,2-Dichloroethene	8.07	96	352963	9.56	ug/L	96
12) 1,1-Dichloroethane	8.85	63	712916	9.65	ug/L	97
13) 2,2-Dichloropropane	9.91	77	701749	9.69	ug/L	98
14) cis-1,2-Dichloroethene	9.91	96	336673	9.67	ug/L	91
16) Bromochloromethane	10.32	128	120399	9.87	ug/L	92
17) Chloroform	10.48	83	678252	9.79	ug/L	100
18) 1,1,1-Trichloroethane	10.81	97	759140	9.90	ug/L	95
19) Carbon tetrachloride	11.11	117	686783	9.64	ug/L	99
20) 1,1-Dichloropropene	11.10	75	643805	9.61	ug/L	97
21) Benzene	11.45	78	1157227	9.81	ug/L	99
22) 1,2-Dichloroethane	11.45	62	302094	10.44	ug/L	100
23) Trichloroethene	12.56	95	513898	9.83	ug/L	97
24) 1,2-Dichloropropane	12.91	63	390522	10.12	ug/L	96
25) Dibromomethane	13.11	93	161513	10.33	ug/L	96
26) Bromodichloromethane	13.38	83	550186	10.26	ug/L	99
27) cis-1,3-Dichloropropene	14.14	75	467172	10.08	ug/L	97
28) Toluene	14.72	92	836812	9.99	ug/L	94
29) trans-1,3-Dichloropropene	15.06	75	336082	10.50	ug/L	98
30) 1,1,2-Trichloroethane	15.38	83	153595	10.27	ug/L	97
31) Tetrachloroethene	15.68	166	500087	9.52	ug/L	97
32) 1,3-Dichloropropane	15.67	76	318056	10.73	ug/L	97
33) Dibromochloromethane	16.07	129	299785	10.30	ug/L	96
34) 1,2-Dibromomethane	16.26	107	219474	10.63	ug/L	94
35) Chlorobenzene	17.14	112	853432	9.78	ug/L	96
36) 1,1,1,2-Tetrachloroethane	17.27	131	357626	10.32	ug/L	97
37) Ethylbenzene	17.33	91	1775565	10.07	ug/L	96
38) Xylene (para & meta)	17.54	106	1238859	19.56	ug/L	91
39) Xylene (Ortho)	18.24	106	563584	10.06	ug/L	96
40) Styrene	18.25	104	870125	10.02	ug/L	93

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c8393.d
Acq On : 7 Jun 95 4:55 pm
Sample : 10 PPB CHK STANDARD
Misc :
Quant Time: Jun 8 12:45 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	18.57	173	155629	10.90	ug/L		91
42)	Isopropylbenzene	18.89	105	1769070	9.82	ug/L		91
44)	Bromobenzene	19.44	156	339062	10.44	ug/L		98
45)	1,1,2,2-Tetrachloroethane	19.38	83	183658	11.50	ug/L		98
46)	1,2,3-Trichloropropane	19.45	75	220925	11.39	ug/L	#	39
47)	n-Propylbenzene	19.63	91	2361052	10.07	ug/L		100
48)	2-Chlorotoluene	19.79	91	1398573	10.75	ug/L		98
49)	4-Chlorotoluene	19.98	91	1590655	10.30	ug/L		81
50)	1,3,5-Trimethylbenzene	19.94	105	1491690	10.00	ug/L		100
51)	tert-Butylbenzene	20.54	119	1585335	10.25	ug/L		99
52)	1,2,4-Trimethylbenzene	20.62	105	1411754	10.33	ug/L		96
53)	sec-Butylbenzene	20.94	105	2224364	9.70	ug/L		98
54)	1,3-Dichlorobenzene	21.14	146	678728	10.24	ug/L		99
55)	4-Isopropyltoluene	21.20	119	1746824	10.20	ug/L		97
56)	1,4-Dichlorobenzene	21.31	146	675633	10.28	ug/L		92
58)	1,2-Dichlorobenzene	21.98	146	519703	10.53	ug/L	m	0
59)	n-Butylbenzene	21.95	91	1880046	10.24	ug/L		100
60)	1,2-Dibromo-3-chloropropan	23.37	75	46930	11.57	ug/L		83
61)	1,2,4-Trichlorobenzene	24.94	180	374355	10.31	ug/L		96
62)	Hexachlorobutadiene	25.30	225	417898	9.55	ug/L		99
63)	Naphthalene	25.40	128	340492	10.84	ug/L		100
64)	1,2,3-Trichlorobenzene	25.87	180	276725	10.94	ug/L		99
65)	Methyl-tert butyl ether	8.09	73	430215	10.87	ug/L		97
66)	tert-Butyl Alcohol	7.80	59	14935	24.63	ug/L		100

(#) = qualifier out of range (m) = manual integration

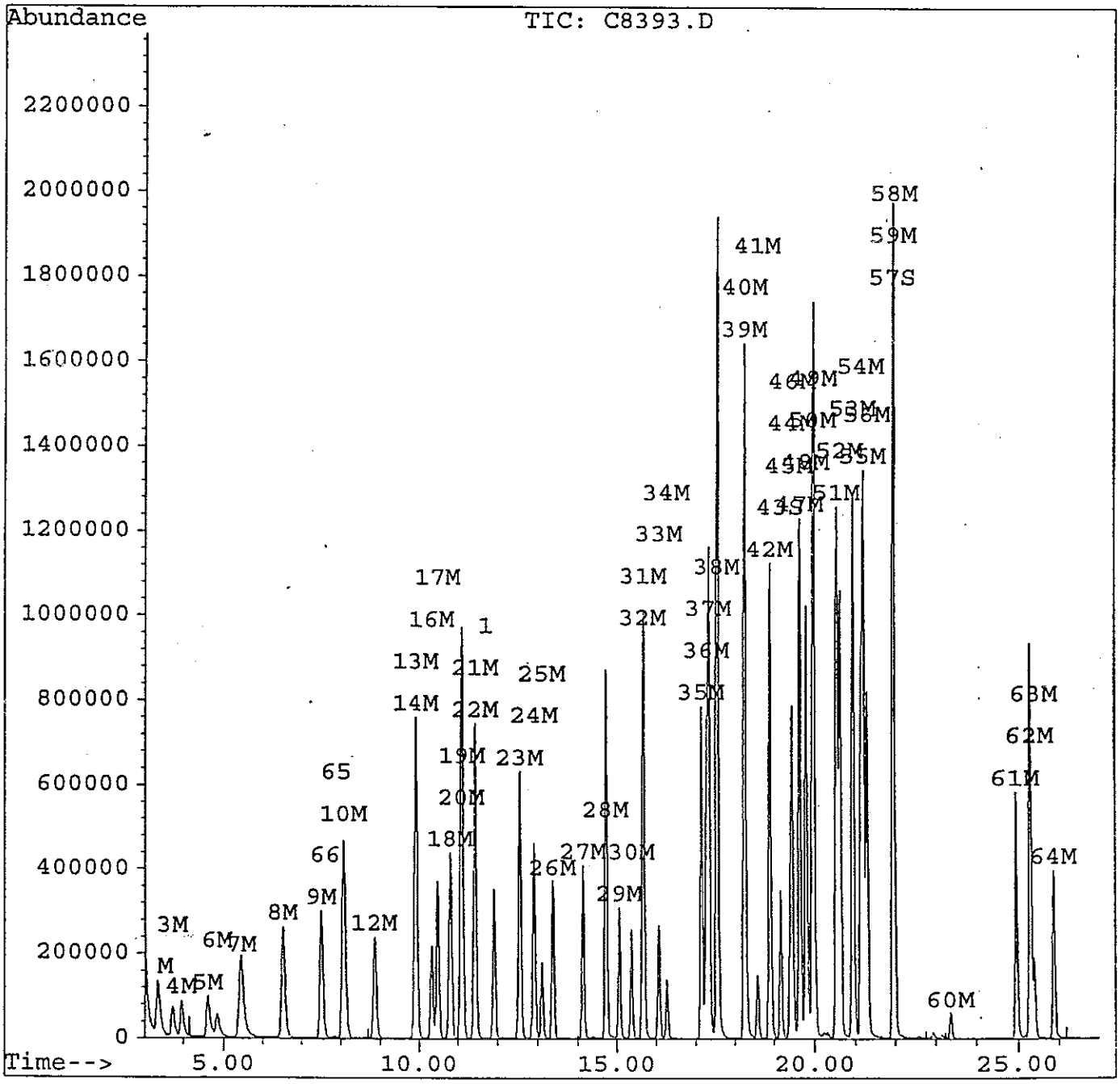
Quantitation Report

000067

Data File : d:\hpchem\1\data\c8393.d
Acq On : 7 Jun 95 4:55 pm
Sample : 10 PPB CHK STANDARD
Misc :
Quant Time: Jun 8 12:45 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

Data File : d:\hpchem\1\data\c8394.d
Acq On : 7 Jun 95 5:32 pm
Sample : 1 PPB CHK STANDARD
Misc :
Quant Time: Jun 7 18:00 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	11.91	96	615987	5.00	ug/L		0.07
System Monitoring Compounds							%Recovery
43) 4-Bromofluorobenzene	19.15	95	336480	5.48	ug/L		109.52%
57) 1,2-Dichlorobenzene-d4	21.94	152	162453	5.79	ug/L		115.75%
Target Compounds							Qvalue
2) Dichlorodifluoromethane	3.38	85	48141	0.99	ug/L		79
3) Chloromethane	3.75	50	29653	1.03	ug/L		79
4) Vinyl chloride	3.94	62	31848	0.98	ug/L		96
5) Bromomethane	4.62	94	27614	1.26	ug/L		98
6) Chloroethane	4.86	64	21770	1.15	ug/L		99
7) Trichlorofluoromethane	5.45	101	74735	1.03	ug/L		100
8) 1,1-Dichloroethene	6.53	96	33182	1.04	ug/L		98
9) Methylene chloride	7.49	84	145704	4.32	ug/L		99
10) trans-1,2-Dichloroethene	8.07	96	37290	1.11	ug/L		95
12) 1,1-Dichloroethane	8.85	63	78114	1.16	ug/L		90
13) 2,2-Dichloropropane	9.91	77	72985	1.11	ug/L		98
14) cis-1,2-Dichloroethene	9.92	96	36490	1.15	ug/L		97
16) Bromochloromethane	10.32	128	12704	1.15	ug/L	#	74
17) Chloroform	10.48	83	73811	1.17	ug/L		100
18) 1,1,1-Trichloroethane	10.81	97	79139	1.13	ug/L		91
19) Carbon tetrachloride	11.12	117	70610	1.09	ug/L		93
20) 1,1-Dichloropropene	11.09	75	67390	1.11	ug/L		94
21) Benzene	11.45	78	127206	1.19	ug/L		95
22) 1,2-Dichloroethane	11.45	62	33233	1.26	ug/L		100
23) Trichloroethene	12.56	95	54428	1.14	ug/L		95
24) 1,2-Dichloropropane	12.91	63	42461	1.21	ug/L		89
25) Dibromomethane	13.11	93	18031	1.27	ug/L		96
26) Bromodichloromethane	13.38	83	61449	1.26	ug/L		96
27) cis-1,3-Dichloropropene	14.14	75	52272	1.24	ug/L		100
28) Toluene	14.73	92	92928	1.22	ug/L		89
29) trans-1,3-Dichloropropene	15.07	75	36348	1.25	ug/L		92
30) 1,1,2-Trichloroethane	15.38	83	16102	1.18	ug/L	#	85
31) Tetrachloroethene	15.68	166	54268	1.14	ug/L		96
32) 1,3-Dichloropropane	15.67	76	34513	1.28	ug/L		99
33) Dibromochloromethane	16.06	129	31145	1.18	ug/L		90
34) 1,2-Dibromomethane	16.26	107	22455	1.20	ug/L		92
35) Chlorobenzene	17.14	112	94241	1.19	ug/L		96
36) 1,1,1,2-Tetrachloroethane	17.27	131	37763	1.20	ug/L		97
37) Ethylbenzene	17.33	91	188788	1.18	ug/L		98
38) Xylene (para & meta)	17.53	106	135884	2.36	ug/L		98
39) Xylene (Ortho)	18.23	106	58289	1.14	ug/L	#	79
40) Styrene	18.25	104	94319	1.19	ug/L		94

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c8394.d
Acq On : 7 Jun 95 5:32 pm
Sample : 1 PPB CHK STANDARD
Misc :
Quant Time: Jun 7 18:00 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	15796	1.22	ug/L		79
42)	Isopropylbenzene	18.89	105	183967	1.12	ug/L		92
44)	Bromobenzene	19.43	156	37049	1.25	ug/L	#	88
45)	1,1,2,2-Tetrachloroethane	19.40	83	19387	1.33	ug/L		96
46)	1,2,3-Trichloropropane	19.46	75	24182	1.37	ug/L		96
47)	n-Propylbenzene	19.64	91	244715	1.15	ug/L		96
48)	2-Chlorotoluene	19.79	91	150772	1.27	ug/L		100
49)	4-Chlorotoluene	19.98	91	178075	1.27	ug/L		79
50)	1,3,5-Trimethylbenzene	19.94	105	155904	1.15	ug/L		98
51)	tert-Butylbenzene	20.54	119	168635	1.20	ug/L		100
52)	1,2,4-Trimethylbenzene	20.63	105	152186	1.22	ug/L		98
53)	sec-Butylbenzene	20.94	105	236499	1.13	ug/L		98
54)	1,3-Dichlorobenzene	21.14	146	76296	1.27	ug/L		96
55)	4-Isopropyltoluene	21.20	119	179872	1.15	ug/L		95
56)	1,4-Dichlorobenzene	21.30	146	73777	1.23	ug/L		91
58)	1,2-Dichlorobenzene	21.99	146	57815	1.29	ug/L		89
59)	n-Butylbenzene	21.96	91	192369	1.15	ug/L		98
60)	1,2-Dibromo-3-chloropropan	23.39	75	4882	1.32	ug/L		95
61)	1,2,4-Trichlorobenzene	24.95	180	46633	1.41	ug/L		88
62)	Hexachlorobutadiene	25.29	225	45087	1.13	ug/L		96
63)	Naphthalene	25.40	128	45063	1.58	ug/L		100
64)	1,2,3-Trichlorobenzene	25.88	180	35982	1.56	ug/L		91
65)	Methyl-tert butyl ether	8.08	73	51947	1.44	ug/L		97

(#) = qualifier out of range (m) = manual integration

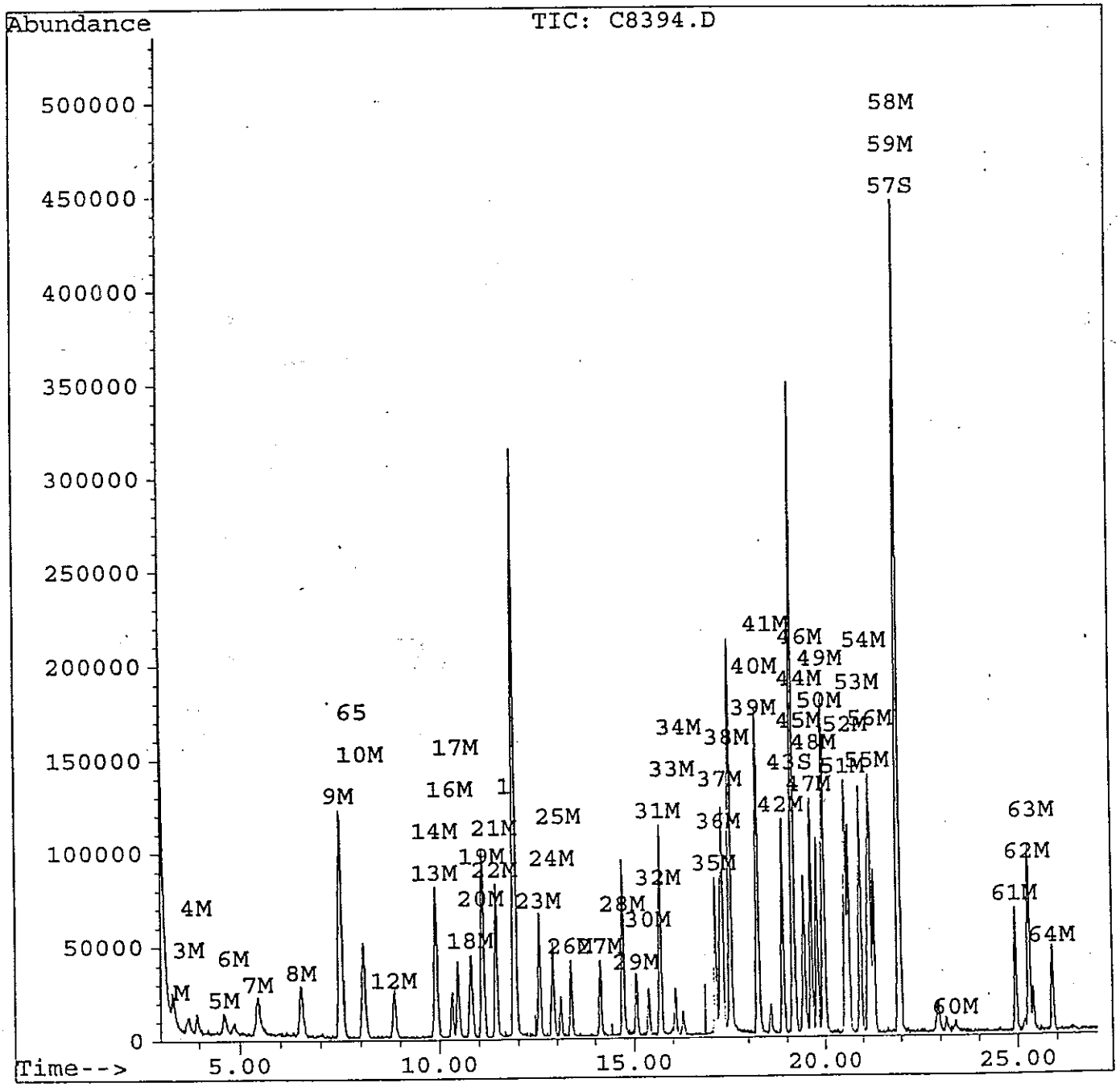
Quantitation Report

000070

Data File : d:\hpchem\1\data\c8394.d
Acq On : 7 Jun 95 5:32 pm
Sample : 1 PPB CHK STANDARD
Misc :
Quant Time: Jun 7 18:00 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



8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Lab File ID (Standard): C8393.D Date Analyzed: 6/7/95

Instrument ID: 5972-INSTRUMENT 1 Time Analyzed: 1655

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	677243	11.91				
	UPPER LIMIT	1354486	12.41				
	LOWER LIMIT	338622	11.41				
	SAMPLE NO.						
01	1PPB STD	615987	11.91				
02	VBLK01	534236	11.91				
03	9523969V	615203	11.92				
04	9523970V	585904	11.92				
05	9523959V	600438	11.92				
06	9523967V	591728	11.92				
07	9523968V	623668	11.92				
08	9524197V	628315	11.92				
09	9524198V	594619	11.91				
10	9524196V	594132	11.93				
11	9524199V	584583	11.92				
12	9524199MS	554159	11.92				
13	9524199MSD	548354	11.92				
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: 9524196 MW1-2931776
Lab File ID: C8403.D
Date Received: 05/26/95
Date Analyzed: 06/07/95
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	1.3	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	1.0	
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: 9524196 MW1-293 776
Lab File ID: C8403.D
Date Received: 05/26/95
Date Analyzed: 06/07/95
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

SAMPLE NO. 000074

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

9524196V
MW1-293776

Lab Name: EMSL ANALYTICAL Contract:

Project No. Site: Location: Group:

Matrix: (soil/water) WATER Lab Sample ID: 9524196V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C8403.D

Level: (low/med) LOW Date Received: 5/26/95

% Moisture: not dec. NA Date Analyzed: 6/7/95

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: 2 Concentration Units: (ug/L or ug/Kg) ug/L

CAS Number	Compound Name	RT	Est. Conc.	Q
1.	Unknown	16.42	3	J
2.	Unknown	16.43	1	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 : d:\hpchem\1\data\c8403.d
Acq On : 7 Jun 95 10:54 pm
Sample : 9524196
Misc : 25 ML
Quant Time: Jun 8 13:14 1995

Vial: 12
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	11.93	96	594132	5.00	ug/L	0.09
System Monitoring Compounds						%Recovery
43) 4-Bromofluorobenzene	19.17	95	330965	5.58	ug/L	111.68%
57) 1,2-Dichlorobenzene-d4	21.94	152	156076	5.77	ug/L	115.30%
Target Compounds						Qvalue
9) Methylene chloride	7.50	84	40998	1.26	ug/L	97
31) Tetrachloroethene	15.67	166	43938	0.95	ug/L	91

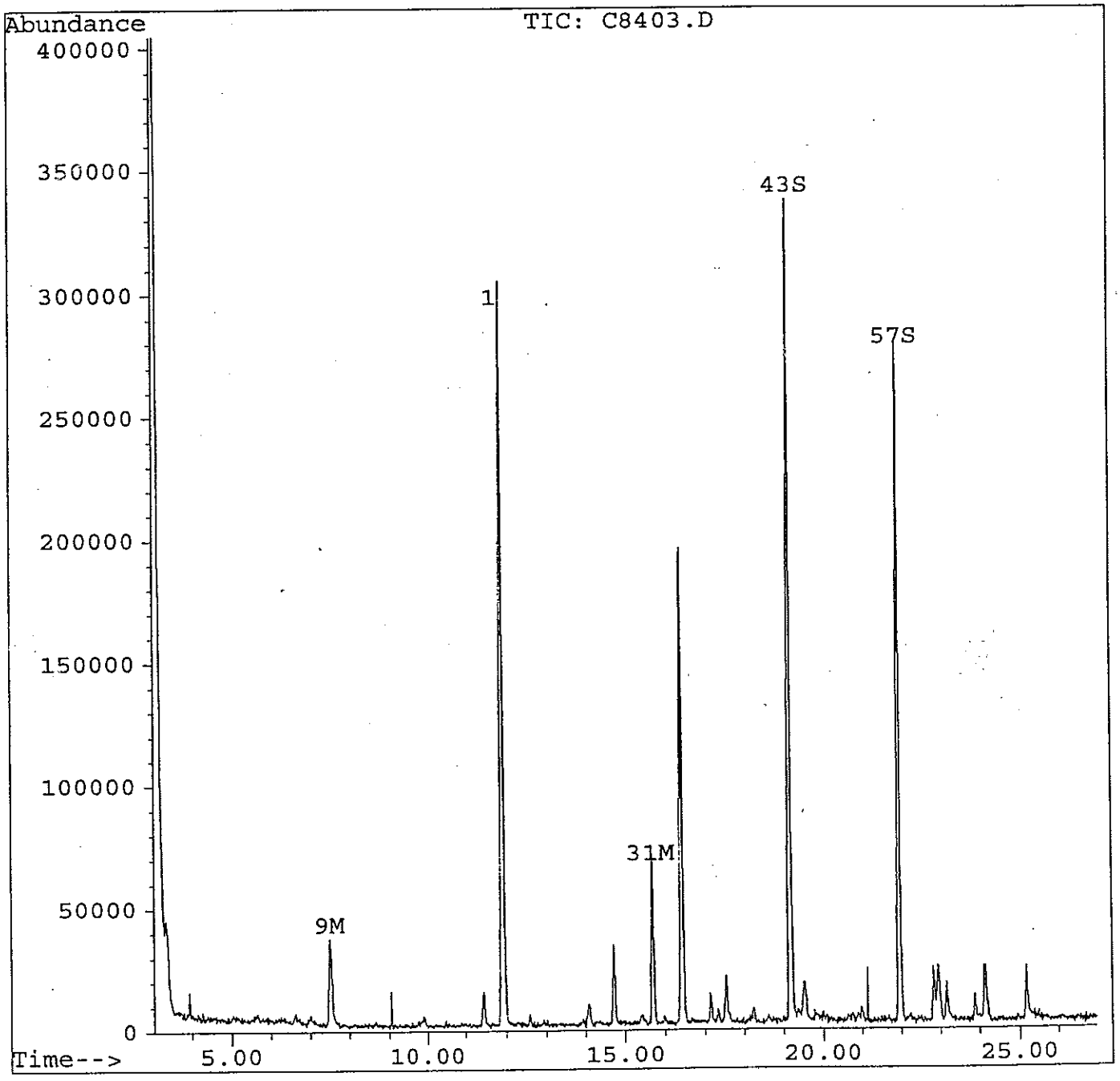
(#) = qualifier out of range (m) = manual integration

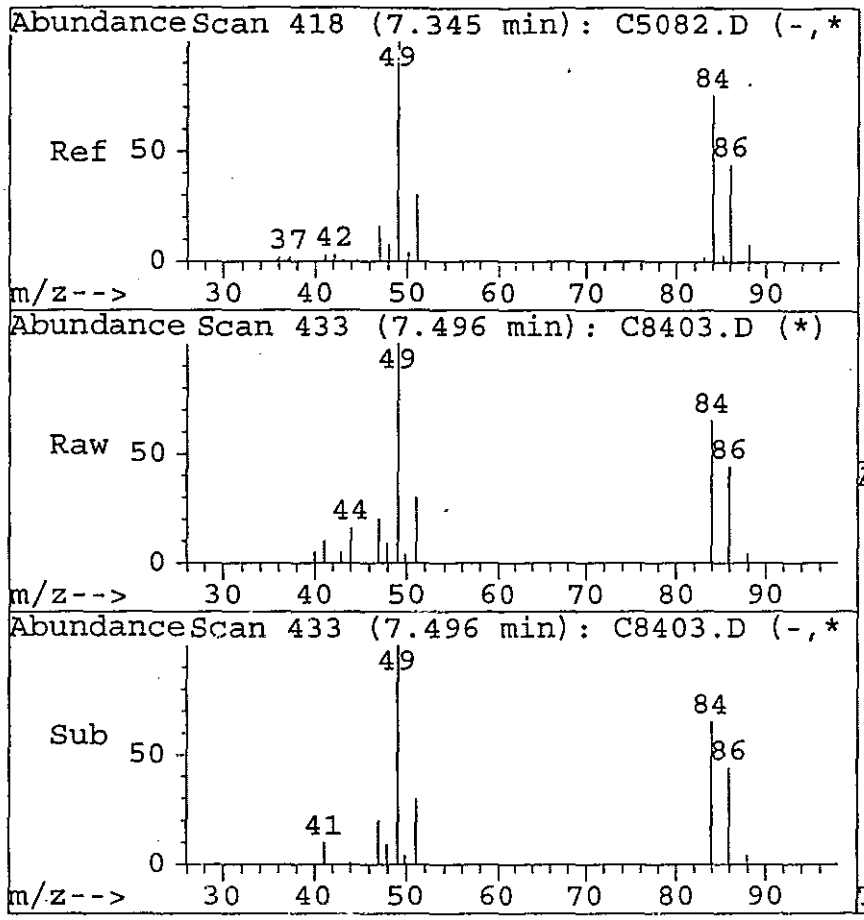
Quantitation Report

Data File : d:\hpchem\1\data\c8403.d
Acq On : 7 Jun 95 10:54 pm
Sample : 9524196
Misc : 25 ML
Quant Time: Jun 8 13:14 1995

Vial: 12
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

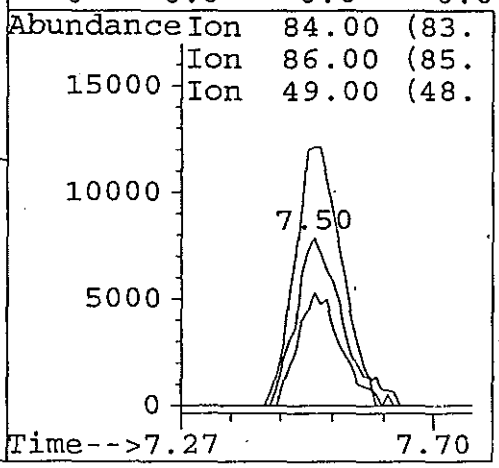


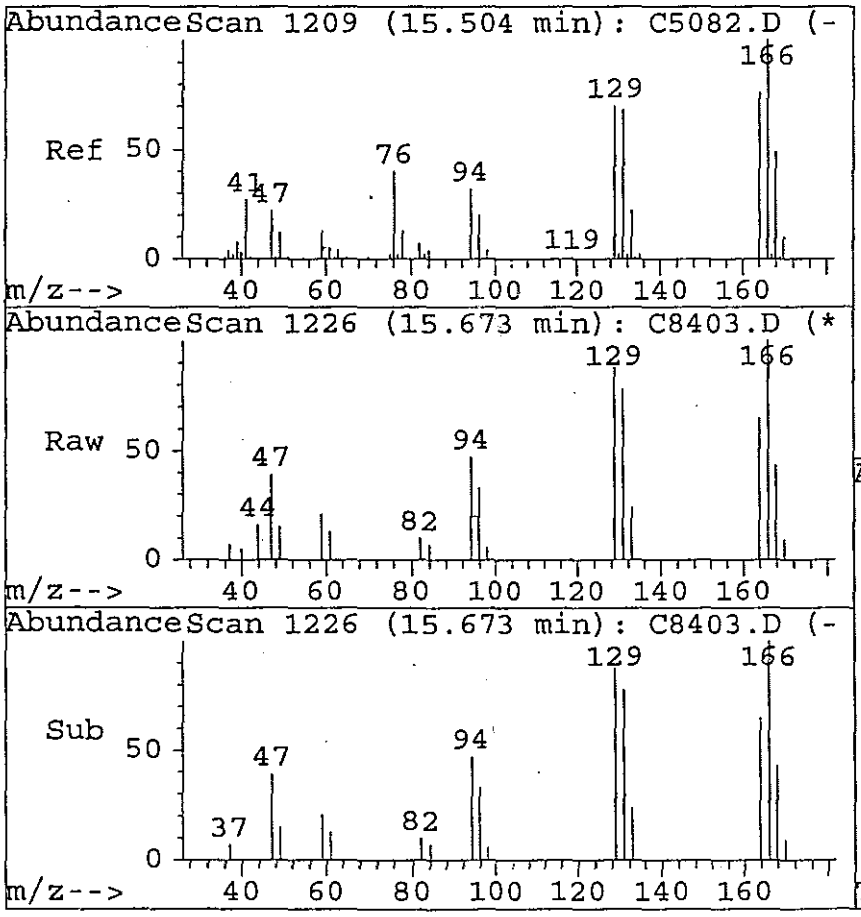


#9
Methylene chloride
Concen: 1.26 ug/L
RT: 7.50 min Scan# 433
Delta R.T. 0.09 min
Lab File: c8403.d
Acq: 7 Jun 95 10:54 pm

Tgt Ion:84 Resp: 40998

Ion	Ratio	Lower	Upper
84	100		
86	67.7	43.1	83.1
49	153.7	136.3	176.3
0	0.0	0.0	0.0

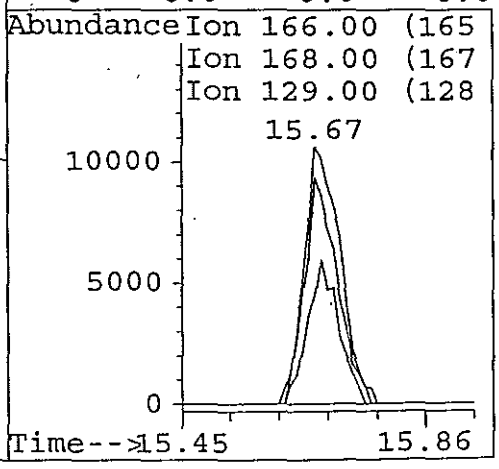




#31
Tetrachloroethene
Concen: 0.95 ug/L
RT: 15.67 min Scan# 1226
Delta R.T. 0.06 min
Lab File: c8403.d
Acq: 7 Jun 95 10:54 pm

Tgt Ion:166 Resp: 43938

Ion	Ratio	Lower	Upper
166	100		
168	42.6	27.7	67.7
129	87.9	59.2	99.2
0	0.0	0.0	0.0



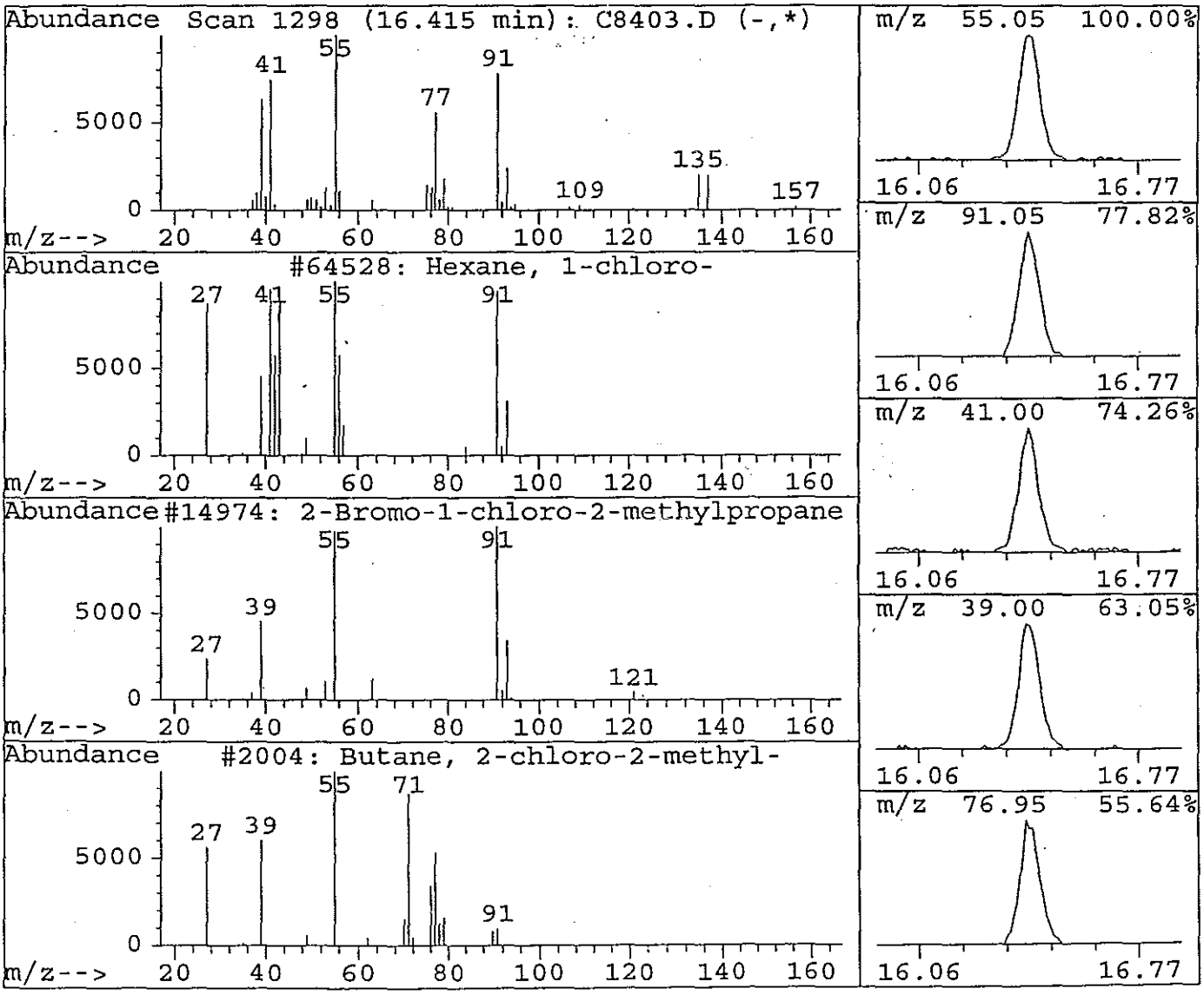
Data File : d:\hpchem\1\data\c8403.d
Acq On : 7 Jun 95 10:54 pm
Sample : 9524196
Misc : 25 ML

Vial: 12
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.
16.42	2.57 ug/L	700914	Fluorobenzene	11.93

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Hexane, 1-chloro-	64528	000544-10-5	8
2	2-Bromo-1-chloro-2-methylpropane	14974	002074-80-8	12
3	Butane, 2-chloro-2-methyl-	2004	000594-36-5	25
4	Butane, 1-bromo-4-chloro-	68171	006940-78-9	8
5	Hexane, 1-chloro-5-methyl-	6105	033240-56-1	9



Library Search Compound Report

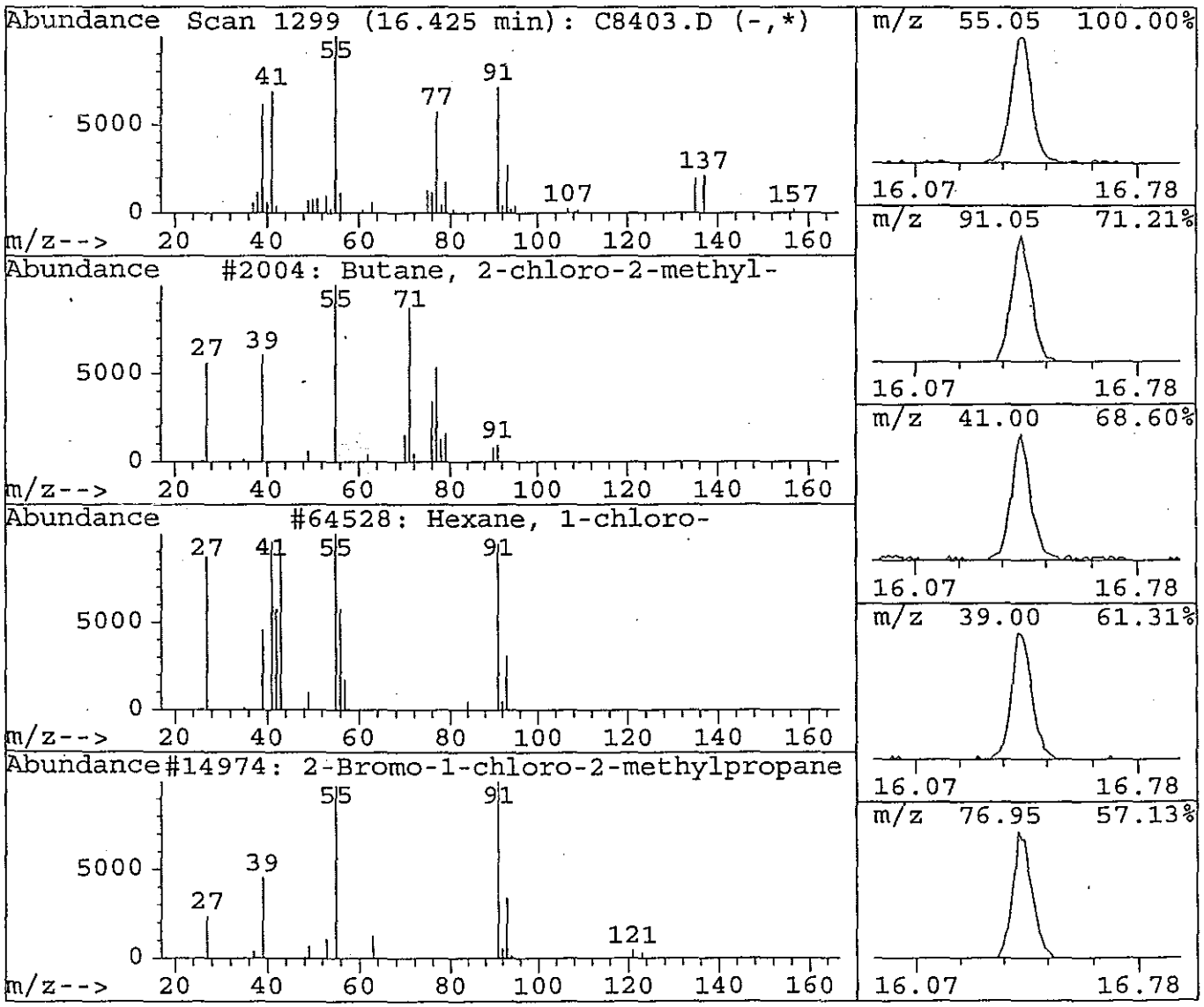
Data File : d:\hpchem\1\data\c8403.d
Acq On : 7 Jun 95 10:54 pm
Sample : 9524196
Misc : 25 ML

Vial: 12
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.
16.43	0.68 ug/L	184755	Fluorobenzene	11.93

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Butane, 2-chloro-2-methyl-	2004	000594-36-5	25
2	Hexane, 1-chloro-	64528	000544-10-5	8
3	2-Bromo-1-chloro-2-methylpropane	14974	002074-80-8	10
4	1-Propene, 3-chloro-2-methyl-	62981	000563-47-3	12
5	2-Hexenal	63218	000505-57-7	10



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: 9524197 TB
Lab File ID: C8401.D
Date Received: 05/26/95
Date Analyzed: 06/07/95
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	1.5	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	1.0	
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: 9524197 TB
Lab File ID: C8401.D
Date Received: 05/26/95
Date Analyzed: 06/07/95
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	7.7	
106-43-4	4-Chlorotoluene	2.5	
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	.60	
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. 9524197V VB

Lab Name: EMSL ANALYTICAL Contract: _____

Project No. _____ Site: _____ Location: _____ Group: _____

Matrix: (soil/water) WATER Lab Sample ID: 9524197V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C8401.D

Level: (low/med) LOW Date Received: 5/26/95

% Moisture: not dec. NA Date Analyzed: 6/7/95

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

000033

Data File : d:\hpchem\1\data\c8401.d
Acq On : 7 Jun 95 9:44 pm
Sample : 9524197
Misc : 25 ML
Quant Time: Jun 8 13:11 1995

Vial: 10
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	11.92	96	628315	5.00	ug/L	0.08
System Monitoring Compounds						%Recovery
43) 4-Bromofluorobenzene	19.16	95	333641	5.32	ug/L	106.46%
57) 1,2-Dichlorobenzene-d4	21.94	152	160812	5.62	ug/L	112.34%
Target Compounds						Qvalue
9) Methylene chloride	7.51	84	51341	1.49	ug/L	95
28) Toluene	14.73	92	77104	0.99	ug/L	86
48) 2-Chlorotoluene	19.79	91	936856	7.76	ug/L	99
49) 4-Chlorotoluene	19.98	91	355992	2.48	ug/L	88
56) 1,4-Dichlorobenzene	21.30	146	33968	0.56	ug/L	90

(#) = qualifier out of range (m) = manual integration

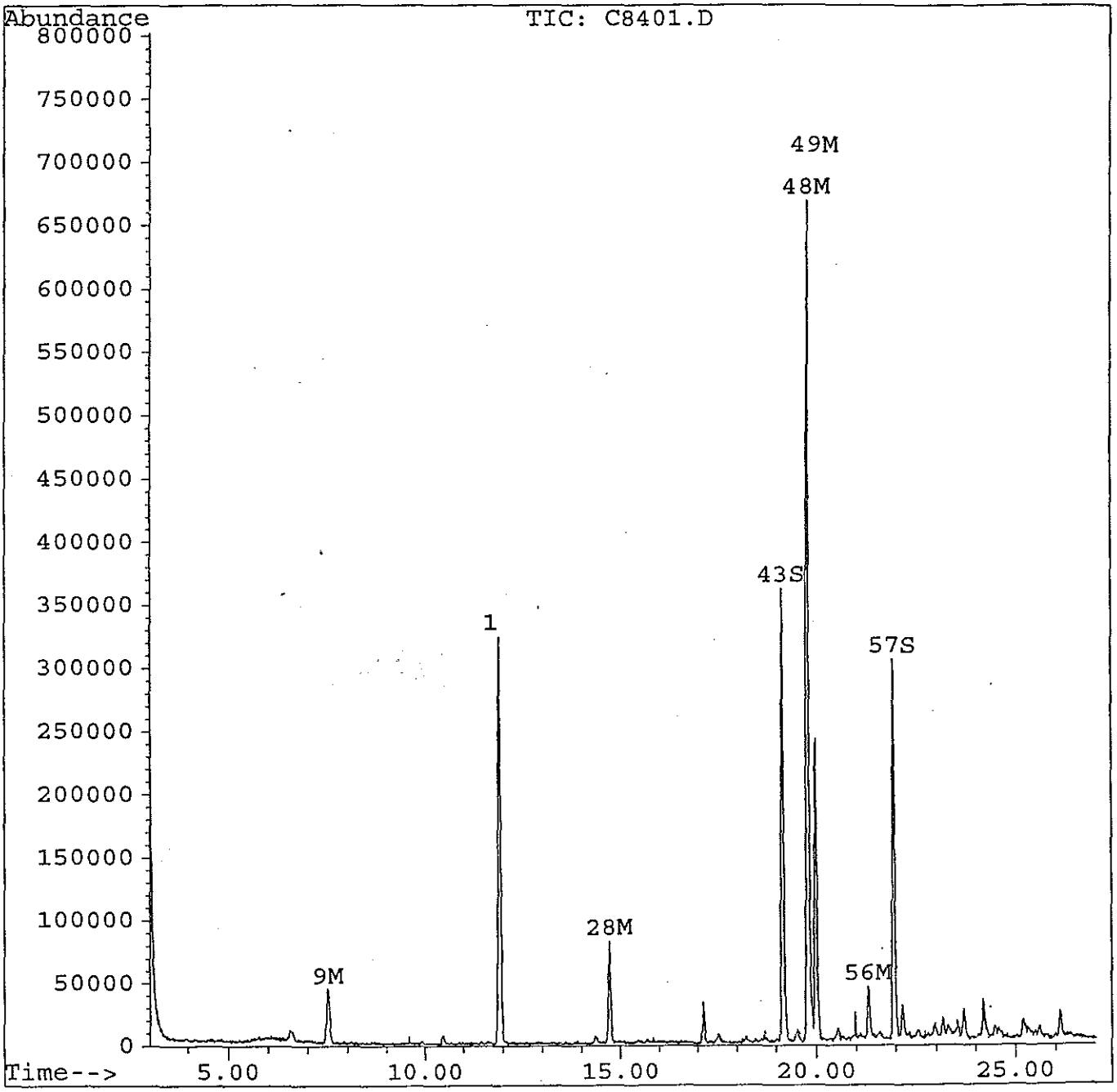
Quantitation Report

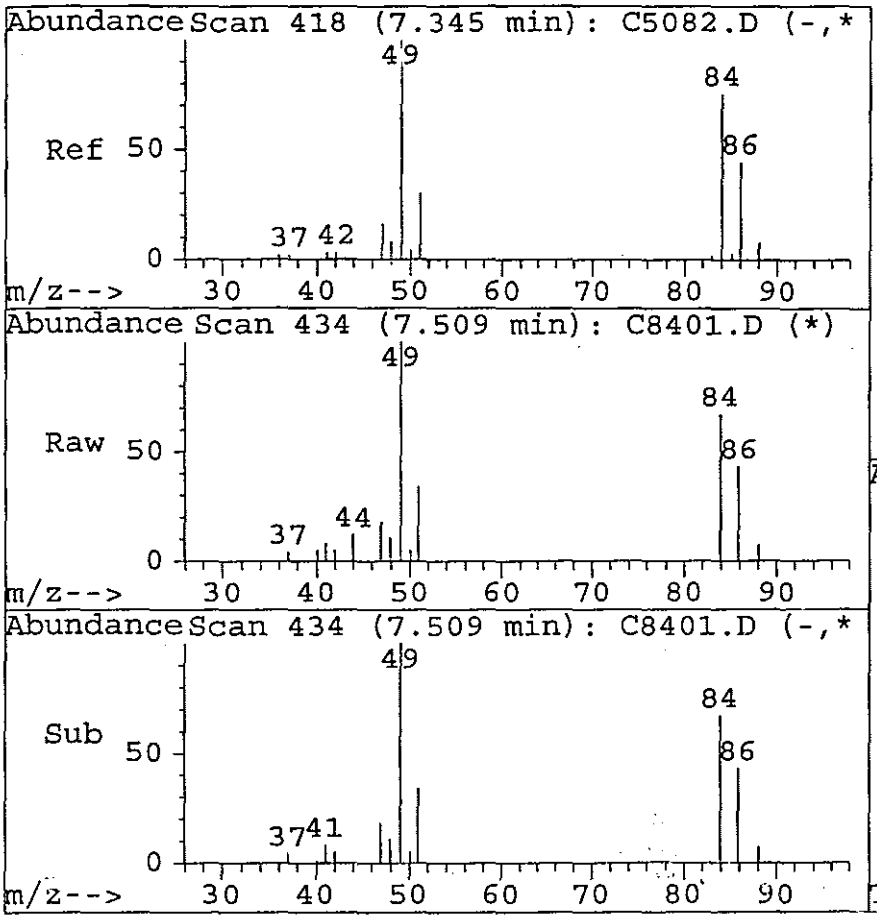
000034

Data File : d:\hpchem\1\data\c8401.d
Acq On : 7 Jun 95 9:44 pm
Sample : 9524197
Misc : 25 ML
Quant Time: Jun 8 13:11 1995

Vial: 10
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

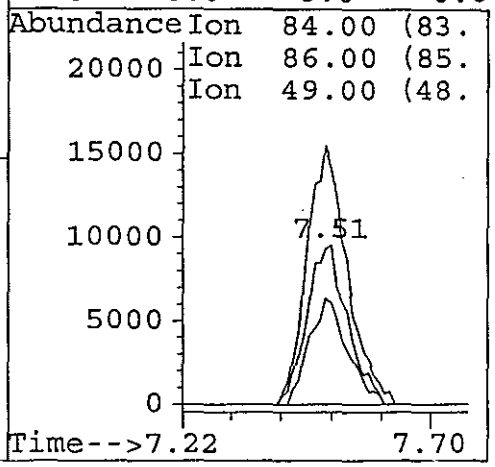


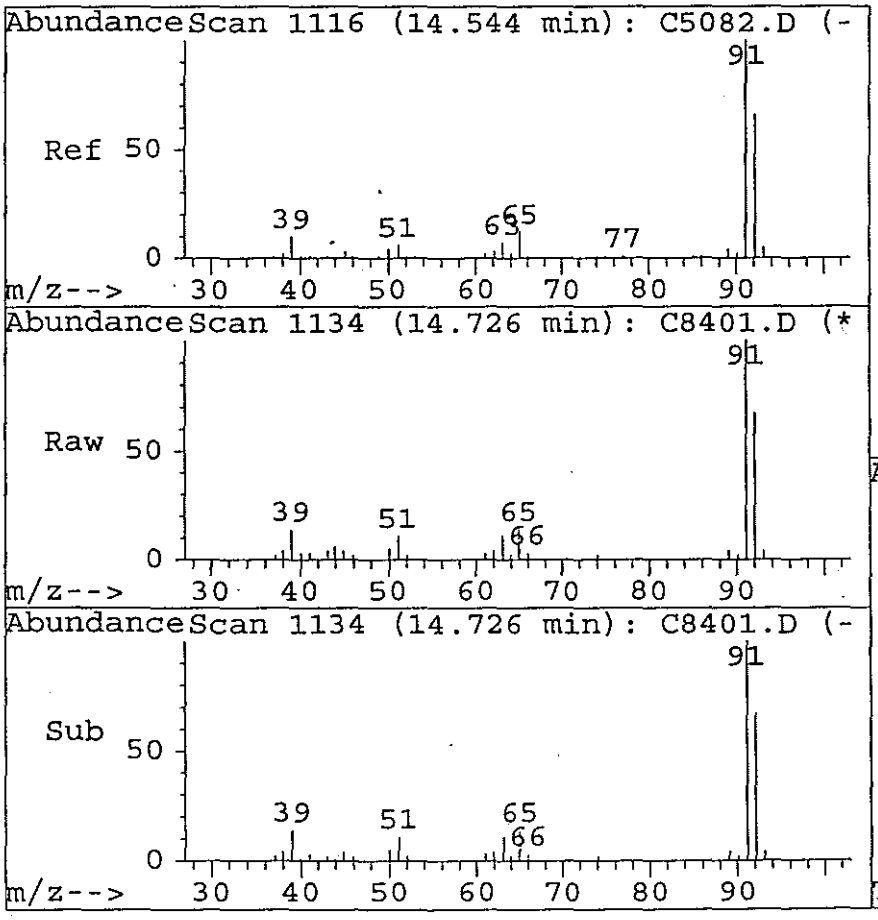


#9
Methylene chloride
Concen: 1.49 ug/L
RT: 7.51 min Scan# 434
Delta R.T. 0.10 min
Lab File: c8401.d
Acq: 7 Jun 95 9:44 pm

Tgt Ion:84 Resp: 51341

Ion	Ratio	Lower	Upper
84	100		
86	64.2	43.1	83.1
49	148.5	136.3	176.3
0	0.0	0.0	0.0

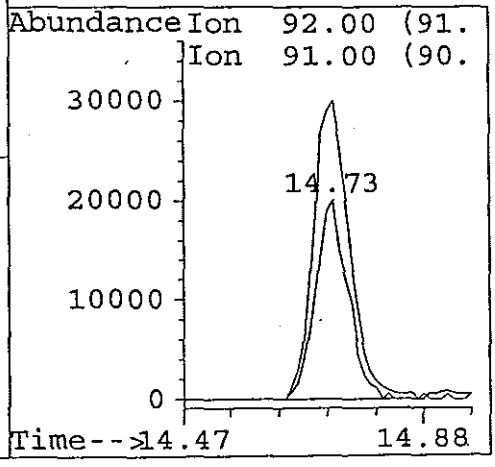


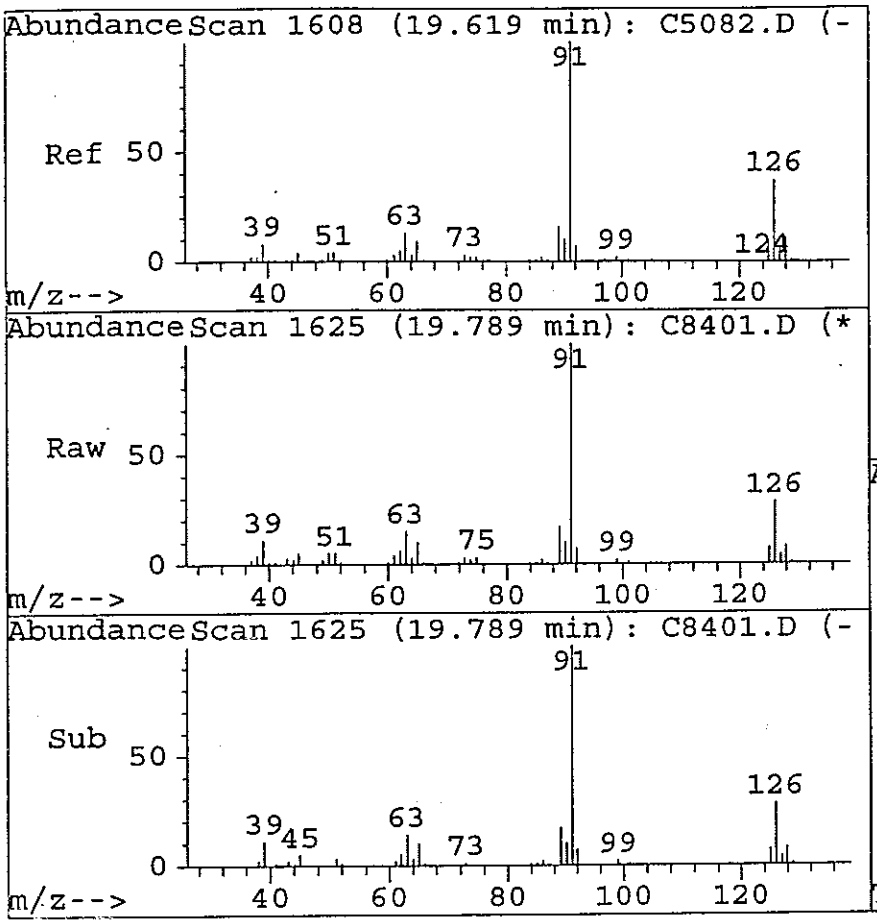


#28
Toluene
Concen: 0.99 ug/L
RT: 14.73 min Scan# 1134
Delta R.T. 0.08 min
Lab File: c8401.d
Acq: 7 Jun 95 9:44 pm

Tgt Ion:92 Resp: 77104

Ion	Ratio	Lower	Upper
92	100		
91	149.6	149.4	189.4
0	0.0	0.0	0.0
0	0.0	0.0	0.0

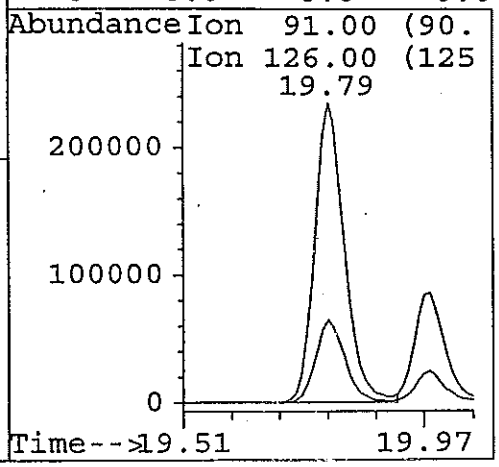


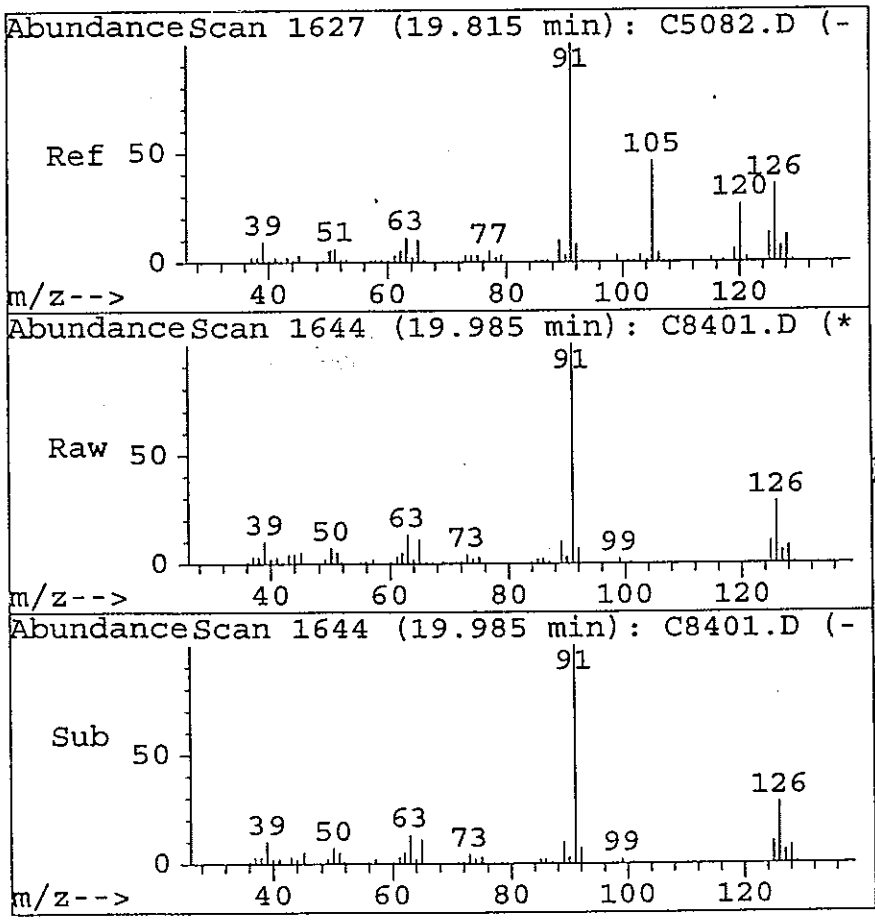


#48
2-Chlorotoluene
Concen: 7.76 ug/L
RT: 19.79 min Scan# 1625
Delta R.T. 0.06 min
Lab File: c8401.d
Acq: 7 Jun 95 9:44 pm

Tgt Ion:91 Resp: 936856

Ion	Ratio	Lower	Upper
91	100		
126	27.6	8.1	48.1
0	0.0	0.0	0.0
0	0.0	0.0	0.0

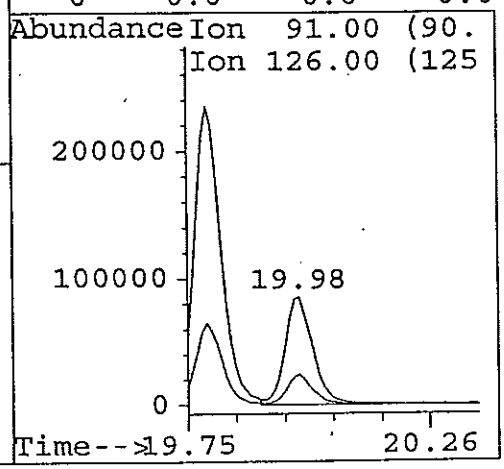


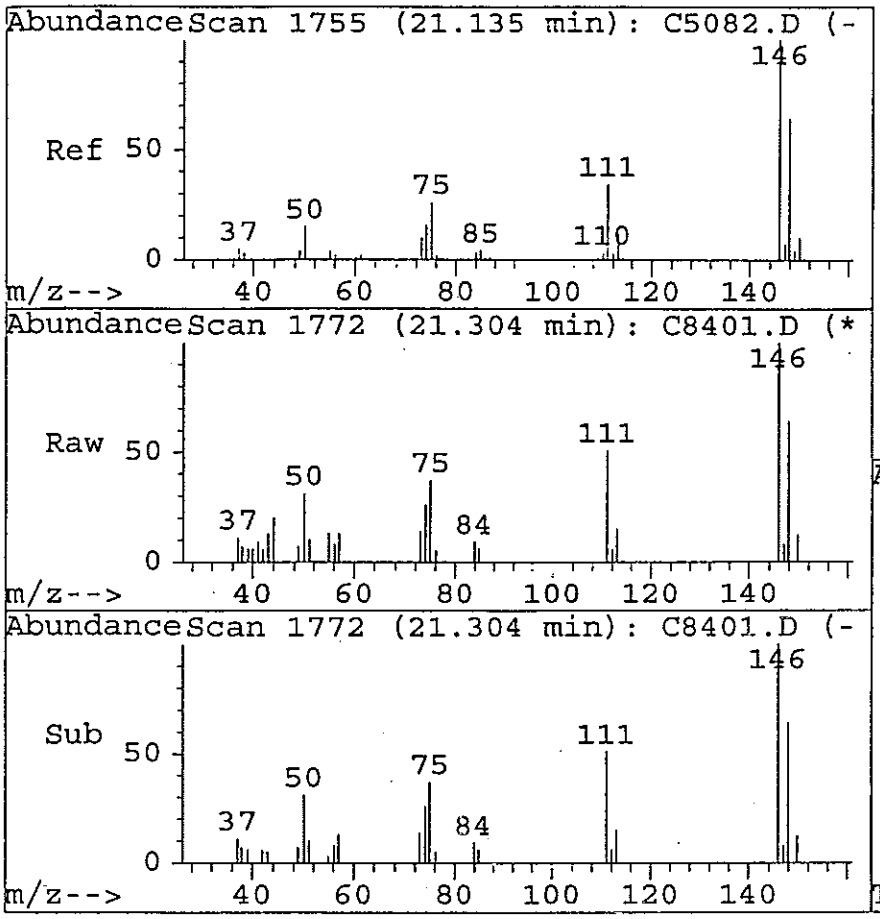


#49
4-Chlorotoluene
Concen: 2.48 ug/L
RT: 19.98 min Scan# 1644
Delta R.T. 0.07 min
Lab File: c8401.d
Acq: 7 Jun 95 9:44 pm

Tgt Ion:91 Resp: 355992

Ion	Ratio	Lower	Upper
91	100		
126	28.2	14.9	54.9
0	0.0	0.0	0.0
0	0.0	0.0	0.0

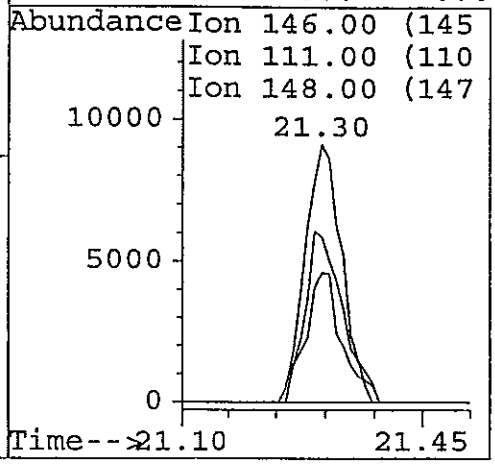




#56
1,4-Dichlorobenzene
Concen: 0.56 ug/L
RT: 21.30 min Scan# 1772
Delta R.T. 0.06 min
Lab File: c8401.d
Acq: 7 Jun 95 9:44 pm

Tgt Ion:146 Resp: 33968

Ion	Ratio	Lower	Upper
146	100		
111	50.6	14.4	54.4
148	64.3	44.4	84.4
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: 9524198 FB
Lab File ID: C8402.D
Date Received: 05/26/95
Date Analyzed: 06/07/95
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	1.6	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	1.6	
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: 9524198 FB
Lab File ID: C8402.D
Date Received: 05/26/95
Date Analyzed: 06/07/95
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	7.7	
106-43-4	4-Chlorotoluene	6.4	
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	.60	
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. 000090

9524198V FB

Lab Name: EMSL ANALYTICAL Contract: _____

Project No. _____ Site: _____ Location: _____ Group: _____

Matrix: (soil/water) WATER Lab Sample ID: 9524198V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C8402.D

Level: (low/med) LOW Date Received: 5/26/95

% Moisture: not dec. NA Date Analyzed: 6/7/95

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

000091

Data File : d:\hpchem\1\data\c8402.d
Acq On : 7 Jun 95 10:19 pm
Sample : 9524198
Misc : 25 ML
Quant Time: Jun 8 13:13 1995

Vial: 11
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	594619	5.00	ug/L	0.07
System Monitoring Compounds						%Recovery
43) 4-Bromofluorobenzene	19.16	95	330501	5.57	ug/L	111.44%
57) 1,2-Dichlorobenzene-d4	21.94	152	158917	5.87	ug/L	117.30%
Target Compounds						Qvalue
9) Methylene chloride	7.50	84	52325	1.61	ug/L	97
28) Toluene	14.73	92	114144	1.55	ug/L	94
48) 2-Chlorotoluene	19.79	91	877791	7.69	ug/L	97
49) 4-Chlorotoluene	19.97	91	358841	2.65	ug/L m	85
56) 1,4-Dichlorobenzene	21.30	146	31572	0.55	ug/L	87

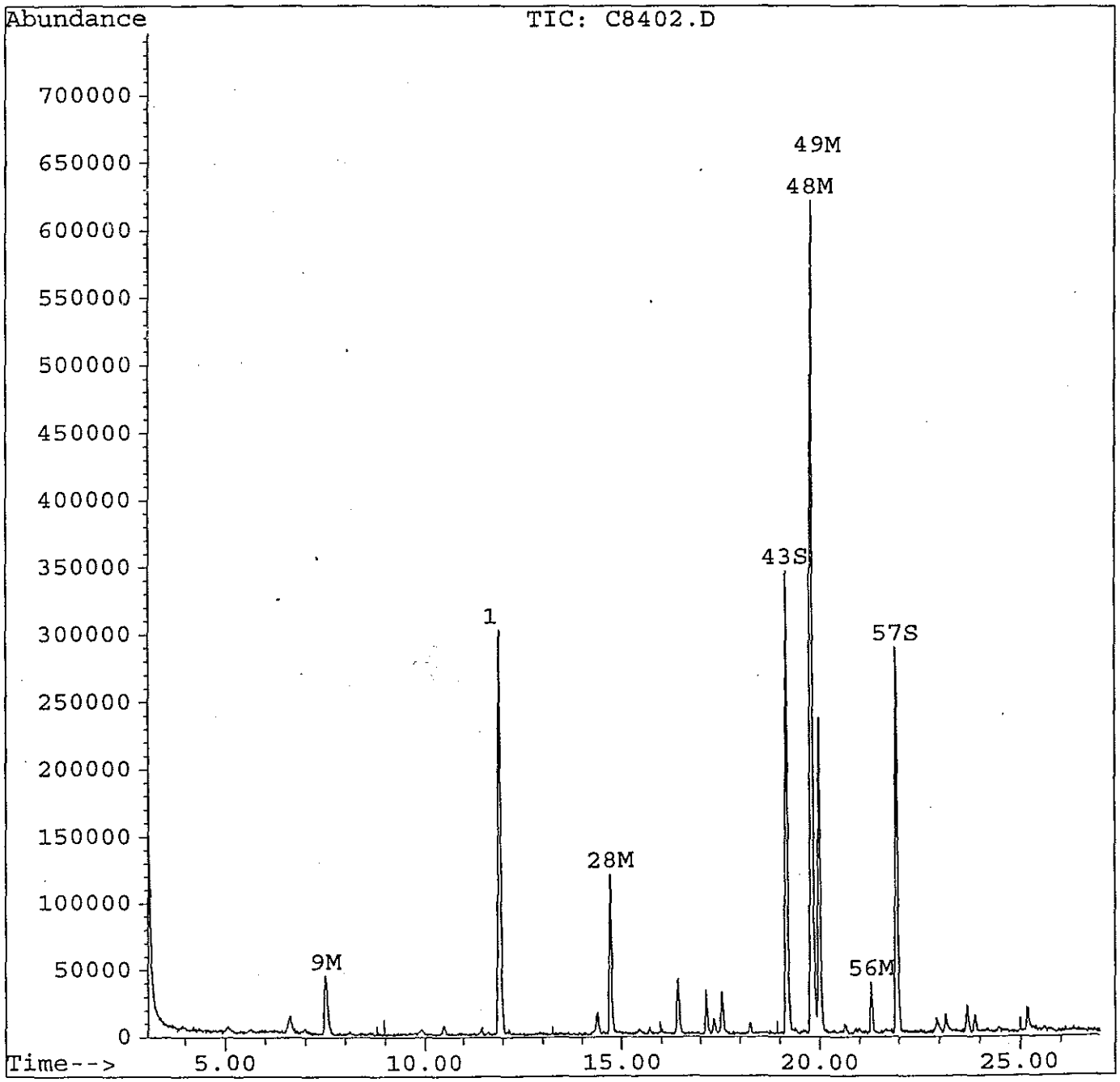
(#) = qualifier out of range (m) = manual integration

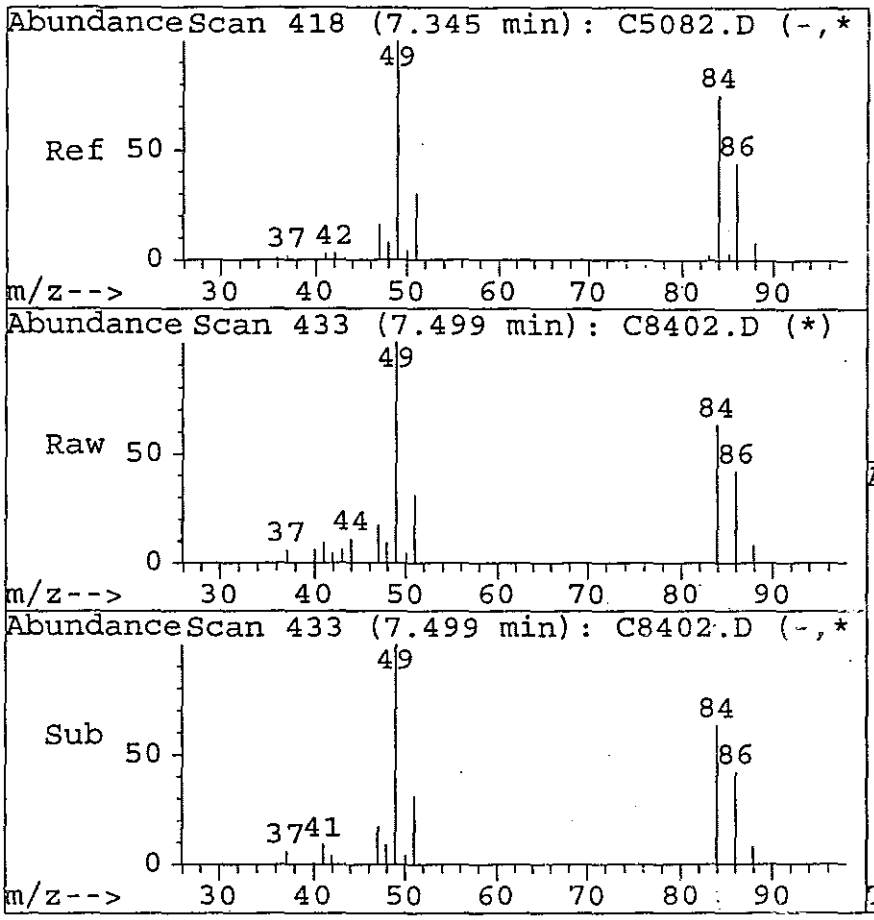
Quantitation Report

Data File : d:\hpchem\1\data\c8402.d
Acq On : 7 Jun 95 10:19 pm
Sample : 9524198
Misc : 25 ML
Quant Time: Jun 8 13:13 1995

Vial: 11
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

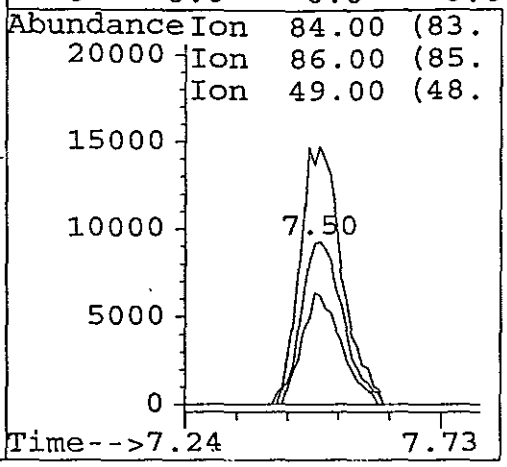


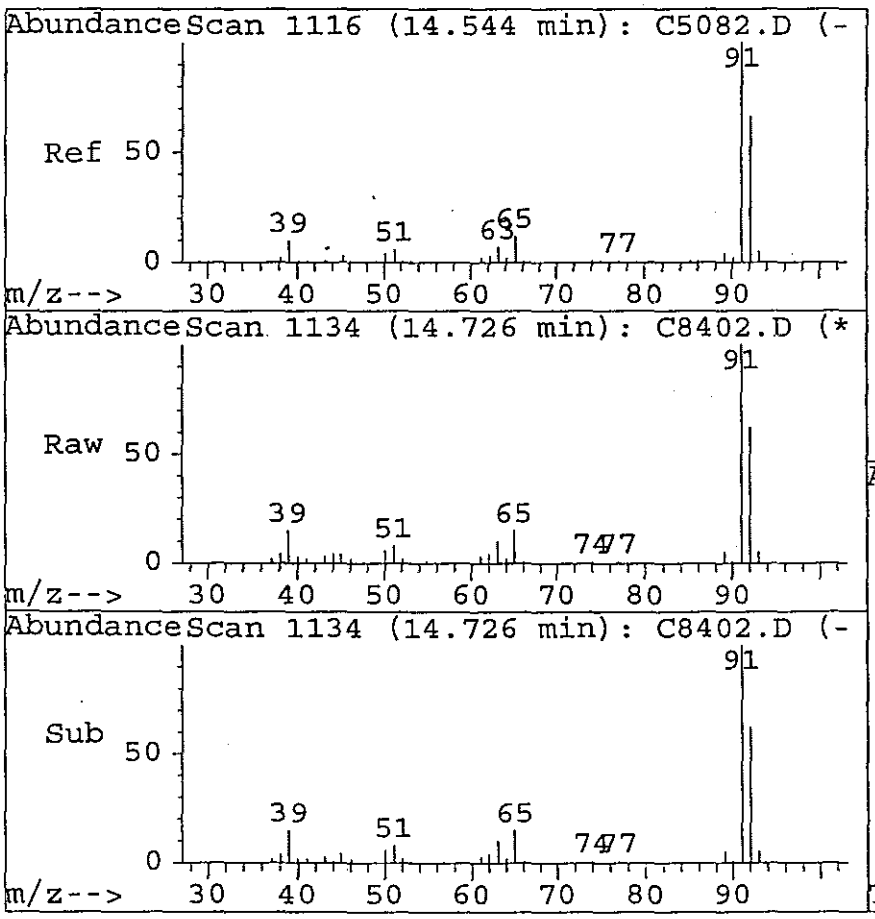


#9
Methylene chloride
Concen: 1.61 ug/L
RT: 7.50 min Scan# 433
Delta R.T. 0.09 min
Lab File: c8402.d
Acq: 7 Jun 95 10:19 pm

Tgt Ion:84 Resp: 52325

Ion	Ratio	Lower	Upper
84	100		
86	67.0	43.1	83.1
49	159.3	136.3	176.3
0	0.0	0.0	0.0

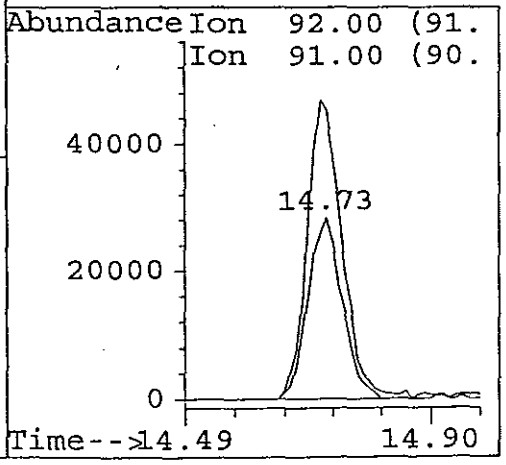


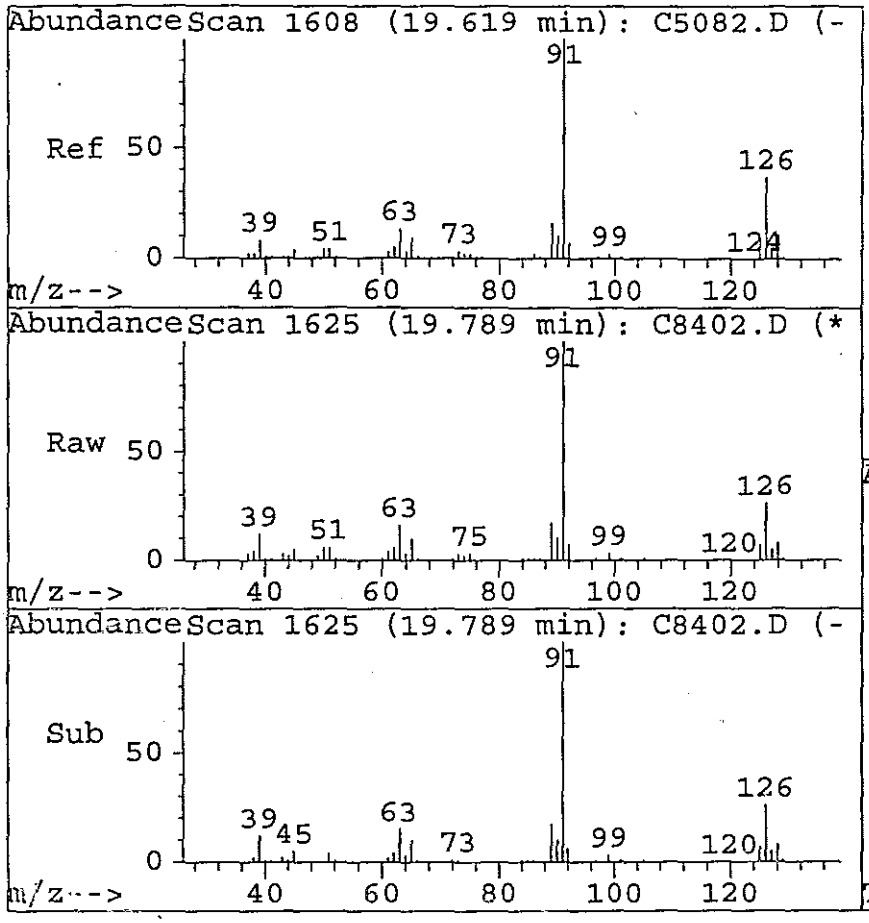


#28
Toluene
Concen: 1.55 ug/L
RT: 14.73 min Scan# 1134
Delta R.T. 0.08 min
Lab File: c8402.d
Acq: 7 Jun 95 10:19 pm

Tgt Ion:92 Resp: 114144

Ion	Ratio	Lower	Upper
92	100		
91	160.6	149.4	189.4
0	0.0	0.0	0.0
0	0.0	0.0	0.0

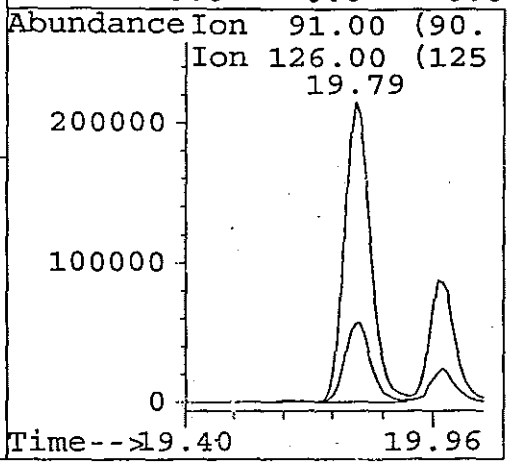


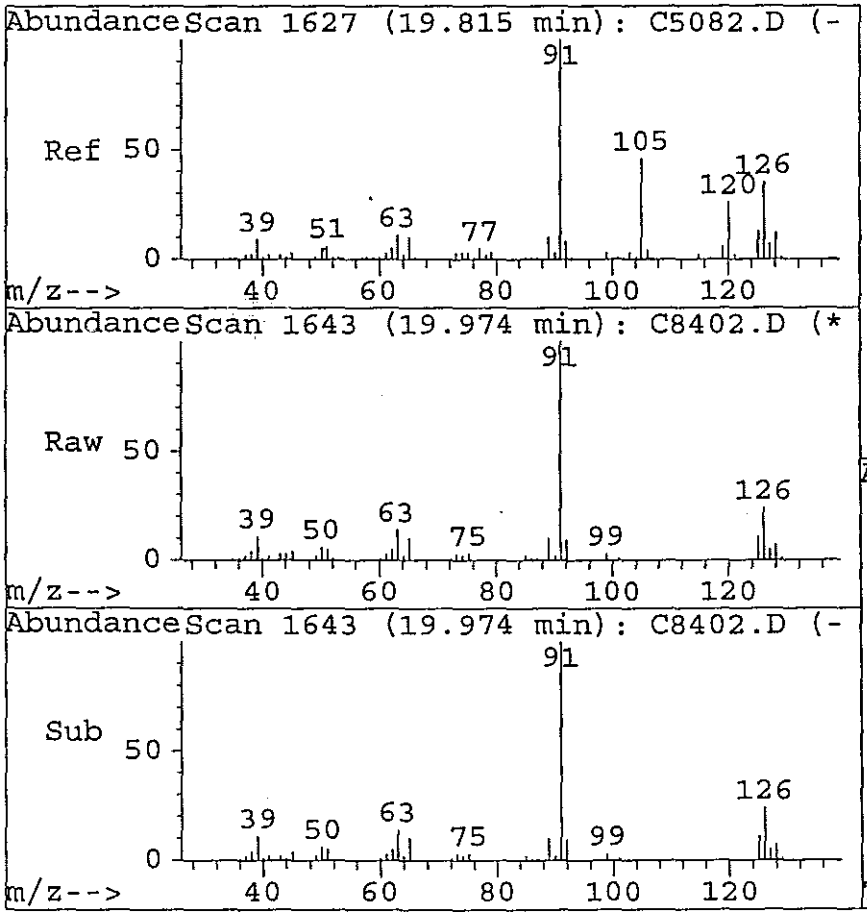


#48
2-Chlorotoluene
Concen: 7.69 ug/L
RT: 19.79 min Scan# 1625
Delta R.T. 0.06 min
Lab File: c8402.d
Acq: 7 Jun 95 10:19 pm

Tgt Ion:91 Resp: 877791

Ion	Ratio	Lower	Upper
91	100		
126	26.3	8.1	48.1
0	0.0	0.0	0.0
0	0.0	0.0	0.0

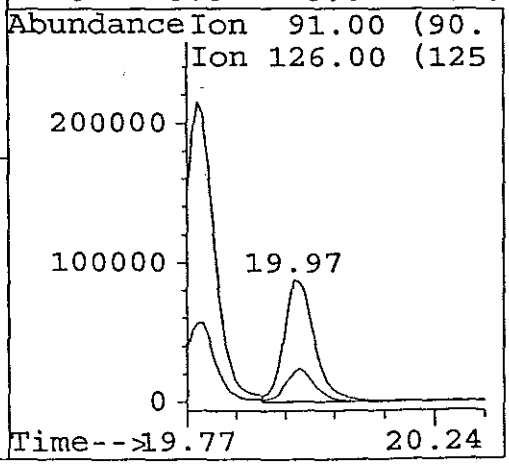


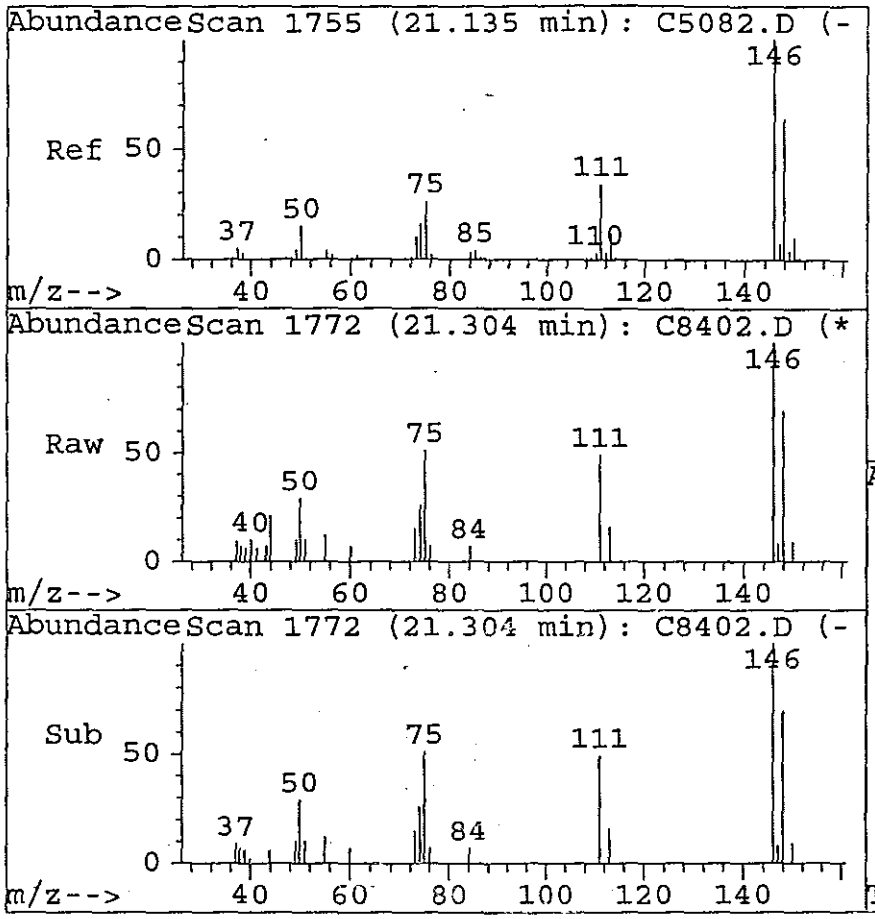


#49
4-Chlorotoluene
Concen: 2.65 ug/L m
RT: 19.97 min Scan# 1643
Delta R.T. 0.06 min
Lab File: c8402.d
Acq: 7 Jun 95 10:19 pm

Tgt Ion:91 Resp: 358841

Ion	Ratio	Lower	Upper
91	100		
126	34.9	14.9	54.9
0	0.0	0.0	0.0
0	0.0	0.0	0.0



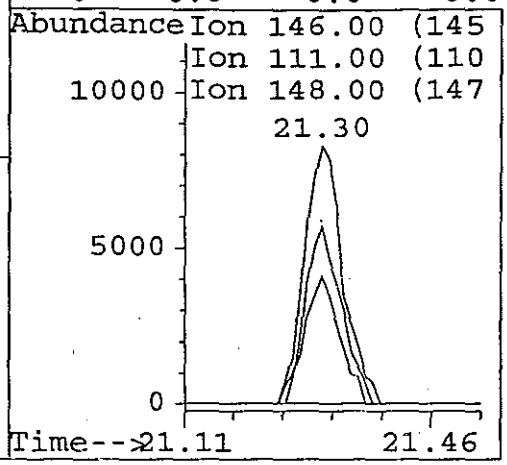


000095

#56
1,4-Dichlorobenzene
Concen: 0.55 ug/L
RT: 21.30 min Scan# 1772
Delta R.T. 0.06 min
Lab File: c8402.d
Acq: 7 Jun 95 10:19 pm

Tgt Ion:146 Resp: 31572

Ion	Ratio	Lower	Upper
146	100		
111	49.5	14.4	54.4
148	68.8	44.4	84.4
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	110	116			
02	VBLK01	116	113			
03	9523969V	105	112			
04	9523970V	112	119			
05	9523959V	110	115			
06	9523967V	111	119			
07	9523968V	109	115			
08	9524197V	106	112			
09	9524198V	111	117			
10	9524196V	112	115			
11	9524199V	111	111			
12	9524199MS	118	110			
13	9524199MSD	117	109			
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

VOLATILE METHOD BLANK SUMMARY

SAMPLE NO. 000007

VBLK01

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Lab File ID: C8395.D Lab Sample ID: M. BLANK

Date Analyzed: 6/7/95 Time Analyzed: 1809

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	C8394.D	1732
02	9523969V	9523969V	C8396.D	1845
03	9523970V	9523970V	C8397.D	1921
04	9523959V	9523959V	C8398.D	1957
05	9523967V	9523967V	C8399.D	2033
06	9523968V	9523968V	C8400.D	2108
07	9524197V	9524197V	C8401.D	2144
08	9524198V	9524198V	C8402.D	2219
09	9524196V	9524196V	C8403.D	2254
10	9524199V	9524199V	C8404.D	2329
11	9524199MS	24199MS	C8405.D	0004
12	9524199MSD	24199MSD	C8406.D	0039
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: C8395.D
Date Received: NA
Date Analyzed: 06/07/95
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	2.2	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: METHOD BLANK
Lab File ID: C8395.D
Date Received: NA
Date Analyzed: 06/07/95
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

000100

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: C8395.D

Level: (low/med) LOW Date Received: NA

% Moisture: not dec. NA Date Analyzed: 6/7/95

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\c8395.d
Acq On : 7 Jun 95 6:09 pm
Sample : METHOD BLANK
Misc : 25 ML
Quant Time: Jun 8 12:48 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	11.91	96	534236	5.00	ug/L	0.08
System Monitoring Compounds						%Recovery
43) 4-Bromofluorobenzene	19.16	95	309994	5.82	ug/L	116.34%
57) 1,2-Dichlorobenzene-d4	21.95	152	137529	5.65	ug/L	112.99%
Target Compounds						Qvalue
9) Methylene chloride	7.50	84	65634	2.24	ug/L	93

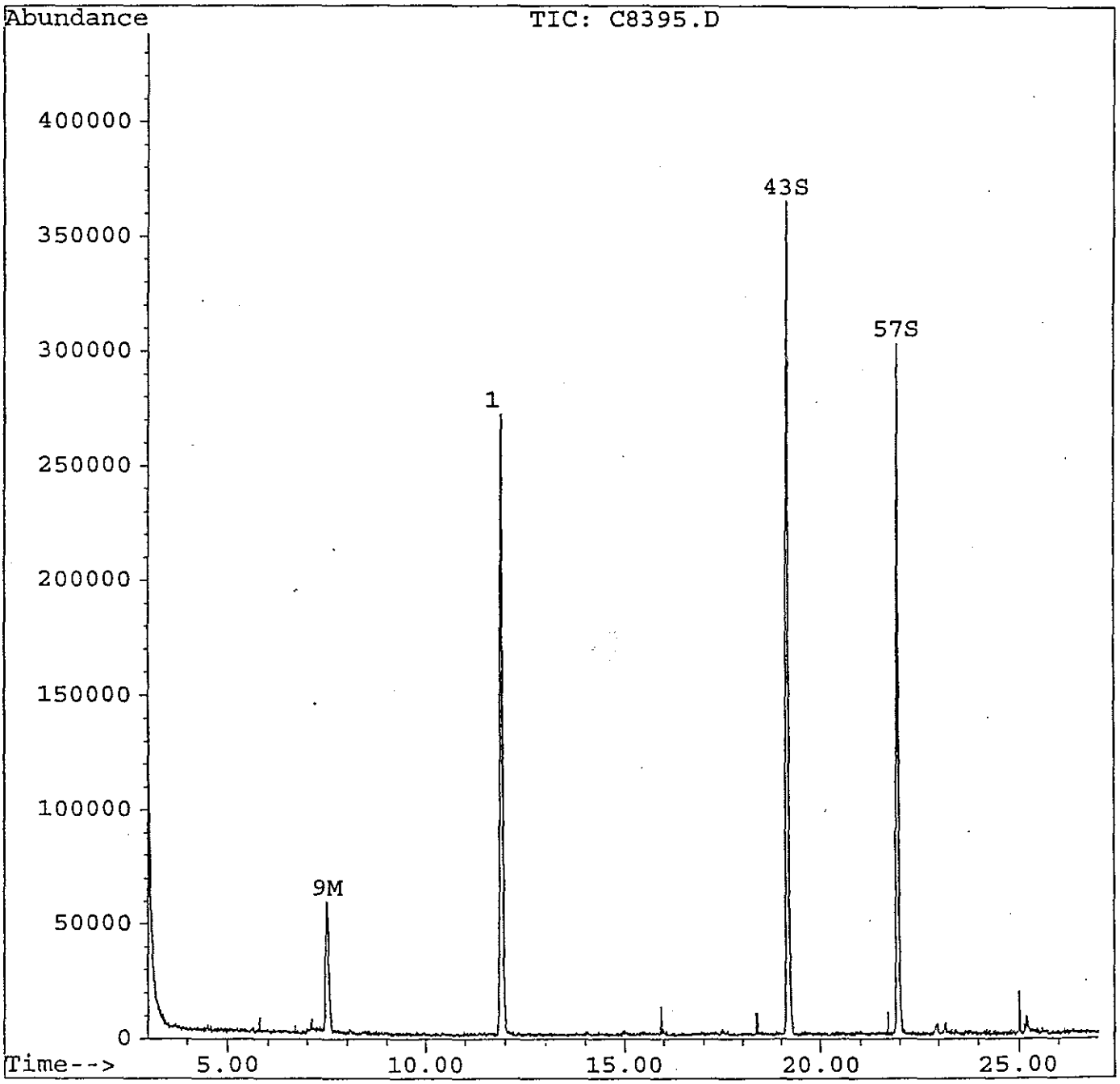
(#) = qualifier out of range (m) = manual integration

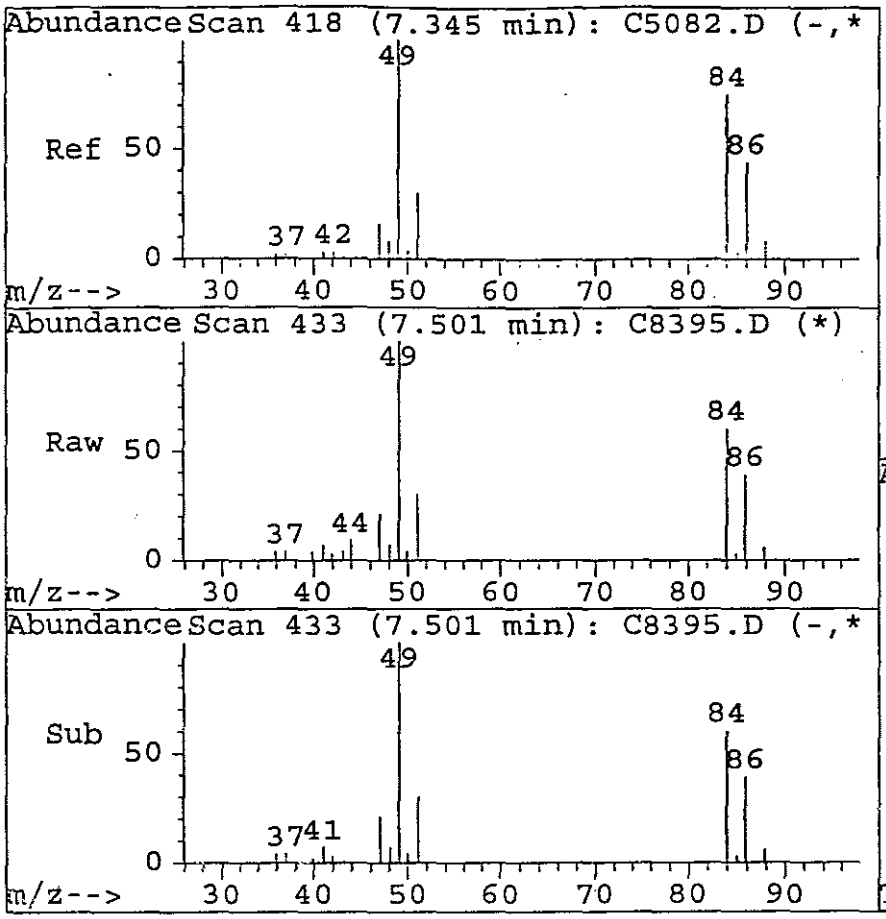
Quantitation Report

Data File : d:\hpchem\1\data\c8395.d
Acq On : 7 Jun 95 6:09 pm
Sample : METHOD BLANK
Misc : 25 ML
Quant Time: Jun 8 12:48 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

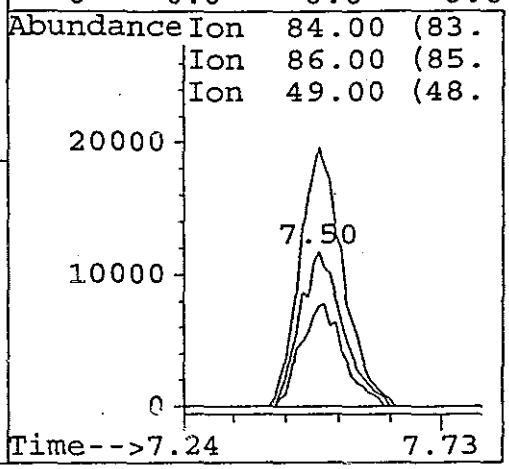




#9
Methylene chloride
Concen: 2.24 ug/L
RT: 7.50 min Scan# 433
Delta R.T. 0.10 min
Lab File: c8395.d
Acq: 7 Jun 95 6:09 pm

Tgt Ion:84 Resp: 65634

Ion	Ratio	Lower	Upper
84	100		
86	65.0	43.1	83.1
49	167.3	136.3	176.3
0	0.0	0.0	0.0



Library Search Compound Report

000104

Data File : d:\hpchem\1\data\c8395.d
Acq On : 7 Jun 95 6:09 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

000105

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: C8404.D

	Spike Sample	Spike Duplicate Sample
File ID :	C8405.D	C8406.D
Sample :	9524199 MS	9524199 MSD
Acq Time:	8 Jun 95 12:04 am	8 Jun 95 12:39 am

Compound	Sample Conc	Spike Added	Spike Res	Dup Res	Spike %Rec	Dup %Rec	RPD	QC Limits RPD	QC Limits % Rec
Dichlorodifluorometh	0.0	10	9	9	92	93	1	25	80-120
Chloromethane	0.0	10	10	10	99	99	1	25	80-120
Vinyl chloride	0.0	10	10	10	101	99	2	25	80-120
Bromomethane	0.0	10	11	11	109	108	1	25	80-120
Chloroethane	0.0	10	11	11	112	112	0	25	80-120
Trichlorofluorometha	0.0	10	10	10	105	104	1	25	80-120
1,1-Dichloroethene	0.0	10	10	10	104	104	0	25	80-120
Methylene chloride	1.5	10	9	10	79#	80	2	25	80-120
trans-1,2-Dichloroet	0.0	10	11	10	106	103	3	25	80-120
1,1-Dichloroethane	0.0	10	11	11	110	110	0	25	80-120
2,2-Dichloropropane	0.0	10	9	9	89	86	3	25	80-120
cis-1,2-Dichloroethe	0.0	10	11	11	112	110	2	25	80-120
Bromochloromethane	0.0	10	12	12	122#	118	3	25	80-120
Chloroform	0.0	10	11	11	112	112	0	25	80-120
1,1,1-Trichloroethan	0.0	10	11	11	107	107	1	25	80-120
Carbon tetrachloride	0.0	10	10	10	104	102	2	25	80-120
1,1-Dichloropropene	0.0	10	11	10	106	104	2	25	80-120
Benzene	0.0	10	11	11	110	107	2	25	80-120
1,2-Dichloroethane	0.0	10	13	13	129#	127#	2	25	80-120
Trichloroethene	0.0	10	11	10	105	104	1	25	80-120
1,2-Dichloropropane	0.0	10	12	12	119	118	1	25	80-120
Dibromomethane	0.0	10	13	13	128#	131#	2	25	80-120
Bromodichloromethane	0.0	10	12	12	118	116	2	25	80-120
cis-1,3-Dichloroprop	0.0	10	12	11	117	112	4	25	80-120
Toluene	0.0	10	12	11	109	106	3	25	80-120
trans-1,3-Dichloropr	0.0	10	12	12	123#	119	3	25	80-120
1,1,2-Trichloroethan	0.0	10	13	13	129#	129#	1	25	80-120
Tetrachloroethene	0.0	10	10	10	105	105	0	25	80-120
1,3-Dichloropropane	0.0	10	13	13	128#	130#	1	25	80-120
Dibromochloromethane	0.0	10	12	12	122#	120	2	25	80-120
1,2-Dibromomethane	0.0	10	13	13	130#	130#	0	25	80-120
Chlorobenzene	0.0	10	11	11	112	112	0	25	80-120
1,1,1,2-Tetrachloroe	0.0	10	12	11	116	113	3	25	80-120
Ethylbenzene	0.0	10	11	11	110	107	3	25	80-120
Xylene (para & meta)	0.5	20	22	22	107	105	2	25	80-120
Xylene (Ortho)	0.0	10	11	11	111	109	2	25	80-120
Styrene	0.0	10	11	11	111	110	1	25	80-120
Bromoform	0.0	10	13	13	125#	127#	1	25	80-120
Isopropylbenzene	0.0	10	11	11	107	106	1	25	80-120
Bromobenzene	0.0	10	12	12	122#	121#	1	25	80-120
1,1,2,2-Tetrachloroe	0.0	10	16	16	157#	156#	1	25	80-120
1,2,3-Trichloropropa	0.0	10	12	13	120#	126#	5	25	80-120
n-Propylbenzene	0.0	10	11	11	110	107	2	25	80-120

2-Chlorotoluene	0.0	10	12	12	120#	118	2	25	80-120
4-Chlorotoluene	0.0	10	11	11	115	113	1	25	80-120
1,3,5-Trimethylbenze	0.0	10	11	11	105	106	1	25	80-120
tert-Butylbenzene	0.0	10	11	11	111	111	0	25	80-120
1,2,4-Trimethylbenze	0.0	10	11	11	112	113	1	25	80-120
sec-Butylbenzene	0.0	10	11	11	107	107	0	25	80-120
1,3-Dichlorobenzene	0.0	10	12	12	117	115	1	25	80-120
4-Isopropyltoluene	0.0	10	11	11	109	107	1	25	80-120
1,4-Dichlorobenzene	0.0	10	12	12	119	118	1	25	80-120
1,2-Dichlorobenzene	0.0	10	11	12	115	125#	9	25	80-120
n-Butylbenzene	0.0	10	11	11	110	112	2	25	80-120
1,2-Dibromo-3-chloro	0.0	10	14	13	140#	134#	4	25	80-120
1,2,4-Trichlorobenze	0.0	10	13	13	127#	129#	2	25	80-120
Hexachlorobutadiene	0.0	10	11	11	107	111	4	25	80-120
Naphthalene	0.0	10	15	15	146#	152#	4	25	80-120
1,2,3-Trichlorobenze	0.0	10	12	14	124#	139#	11	25	80-120

VOA524.M Wed Jun 21 11:47:27 1995 VOA

Quantitation Report

Data File : d:\hpchem\1\data\c8405.d
Acq On : 8 Jun 95 12:04 am
Sample : 9524199 MS
Misc : 25 ML
Quant Time: Jun 8 13:25 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	11.92	96	554159	5.00	ug/L		0.09
System Monitoring Compounds							%Recovery
43) 4-Bromofluorobenzene	19.16	95	326366	5.90	ug/L		118.08%
57) 1,2-Dichlorobenzene-d4	21.96	152	139018	5.51	ug/L		110.11%
Target Compounds							Qvalue
2) Dichlorodifluoromethane	3.35	85	409563	9.32	ug/L		99
3) Chloromethane	3.73	50	257194	9.95	ug/L		99
4) Vinyl chloride	3.94	62	294939	10.12	ug/L		96
5) Bromomethane	4.59	94	214832	10.90	ug/L		94
6) Chloroethane	4.84	64	191887	11.24	ug/L		98
7) Trichlorofluoromethane	5.43	101	682702	10.48	ug/L		99
8) 1,1-Dichloroethene	6.52	96	298108	10.42	ug/L		88
9) Methylene chloride	7.50	84	284169	9.37	ug/L		99
10) trans-1,2-Dichloroethene	8.06	96	319551	10.58	ug/L		96
12) 1,1-Dichloroethane	8.85	63	663991	10.99	ug/L		96
13) 2,2-Dichloropropane	9.91	77	524279	8.85	ug/L		96
14) cis-1,2-Dichloroethene	9.92	96	318200	11.17	ug/L		99
16) Bromochloromethane	10.33	128	121498	12.17	ug/L		96
17) Chloroform	10.48	83	637477	11.24	ug/L		96
18) 1,1,1-Trichloroethane	10.82	97	674378	10.74	ug/L		96
19) Carbon tetrachloride	11.12	117	604830	10.38	ug/L		100
20) 1,1-Dichloropropene	11.10	75	583915	10.65	ug/L		99
21) Benzene	11.45	78	1087900	11.27	ug/L		98
22) 1,2-Dichloroethane	11.45	62	304981	12.88	ug/L		97
23) Trichloroethene	12.55	95	449492	10.51	ug/L		97
24) 1,2-Dichloropropane	12.91	63	375274	11.88	ug/L		100
25) Dibromomethane	13.11	93	164208	12.83	ug/L	m	100
26) Bromodichloromethane	13.39	83	521465	11.88	ug/L		97
27) cis-1,3-Dichloropropene	14.13	75	443557	11.69	ug/L		98
28) Toluene	14.72	92	799979	11.67	ug/L		93
29) trans-1,3-Dichloropropene	15.06	75	322265	12.30	ug/L		95
30) 1,1,2-Trichloroethane	15.38	83	158191	12.93	ug/L		99
31) Tetrachloroethene	15.69	166	450598	10.49	ug/L		98
32) 1,3-Dichloropropane	15.67	76	310231	12.79	ug/L		94
33) Dibromochloromethane	16.07	129	291454	12.24	ug/L		94
34) 1,2-Dibromomethane	16.26	107	218757	12.95	ug/L		93
35) Chlorobenzene	17.14	112	797754	11.17	ug/L		99
36) 1,1,1,2-Tetrachloroethane	17.28	131	330223	11.65	ug/L		96
37) Ethylbenzene	17.34	91	1605933	11.13	ug/L		99
38) Xylene (para & meta)	17.54	106	1140105	22.00	ug/L		99
39) Xylene (Ortho)	18.24	106	517482	11.29	ug/L		89
40) Styrene	18.25	104	786840	11.07	ug/L		99

(#) = qualifier out of range (m) = manual integration

Quantitation Report

000103

Data File : d:\hpchem\1\data\c8405.d
Acq On : 8 Jun 95 12:04 am
Sample : 9524199 MS
Misc : 25 ML
Quant Time: Jun 8 13:25 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	18.57	173	146515	12.54	ug/L		88
42) Isopropylbenzene	18.89	105	1589348	10.78	ug/L		90
44) Bromobenzene	19.44	156	324873	12.22	ug/L		94
45) 1,1,2,2-Tetrachloroethane	19.38	83	205323	15.71	ug/L		93
46) 1,2,3-Trichloropropane	19.46	75	190883	12.03	ug/L		90
47) n-Propylbenzene	19.64	91	2107229	10.99	ug/L		99
48) 2-Chlorotoluene	19.79	91	1283098	12.05	ug/L		99
49) 4-Chlorotoluene	19.99	91	1451904	11.49	ug/L	m	88
50) 1,3,5-Trimethylbenzene	19.96	105	1286996	10.54	ug/L		98
51) tert-Butylbenzene	20.54	119	1404243	11.09	ug/L		97
52) 1,2,4-Trimethylbenzene	20.64	105	1274215	11.39	ug/L		98
53) sec-Butylbenzene	20.95	105	2021112	10.77	ug/L		100
54) 1,3-Dichlorobenzene	21.15	146	635427	11.72	ug/L		94
55) 4-Isopropyltoluene	21.21	119	1537701	10.97	ug/L		97
56) 1,4-Dichlorobenzene	21.31	146	638620	11.88	ug/L		93
58) 1,2-Dichlorobenzene	21.99	146	462724	11.46	ug/L	m	0
59) n-Butylbenzene	21.96	91	1654056	11.01	ug/L		100
60) 1,2-Dibromo-3-chloropropan	23.38	75	46397	13.98	ug/L		90
61) 1,2,4-Trichlorobenzene	24.96	180	375766	12.65	ug/L		95
62) Hexachlorobutadiene	25.30	225	382184	10.67	ug/L		98
63) Naphthalene	25.40	128	375885	14.62	ug/L		100
64) 1,2,3-Trichlorobenzene	25.88	180	257709	12.45	ug/L	m	95
65) Methyl-tert butyl ether	8.09	73	4589734	141.76	ug/L	m	0
66) tert-Butyl Alcohol	7.81	59	609527	1228.49	ug/L		100

(#) = qualifier out of range (m) = manual integration

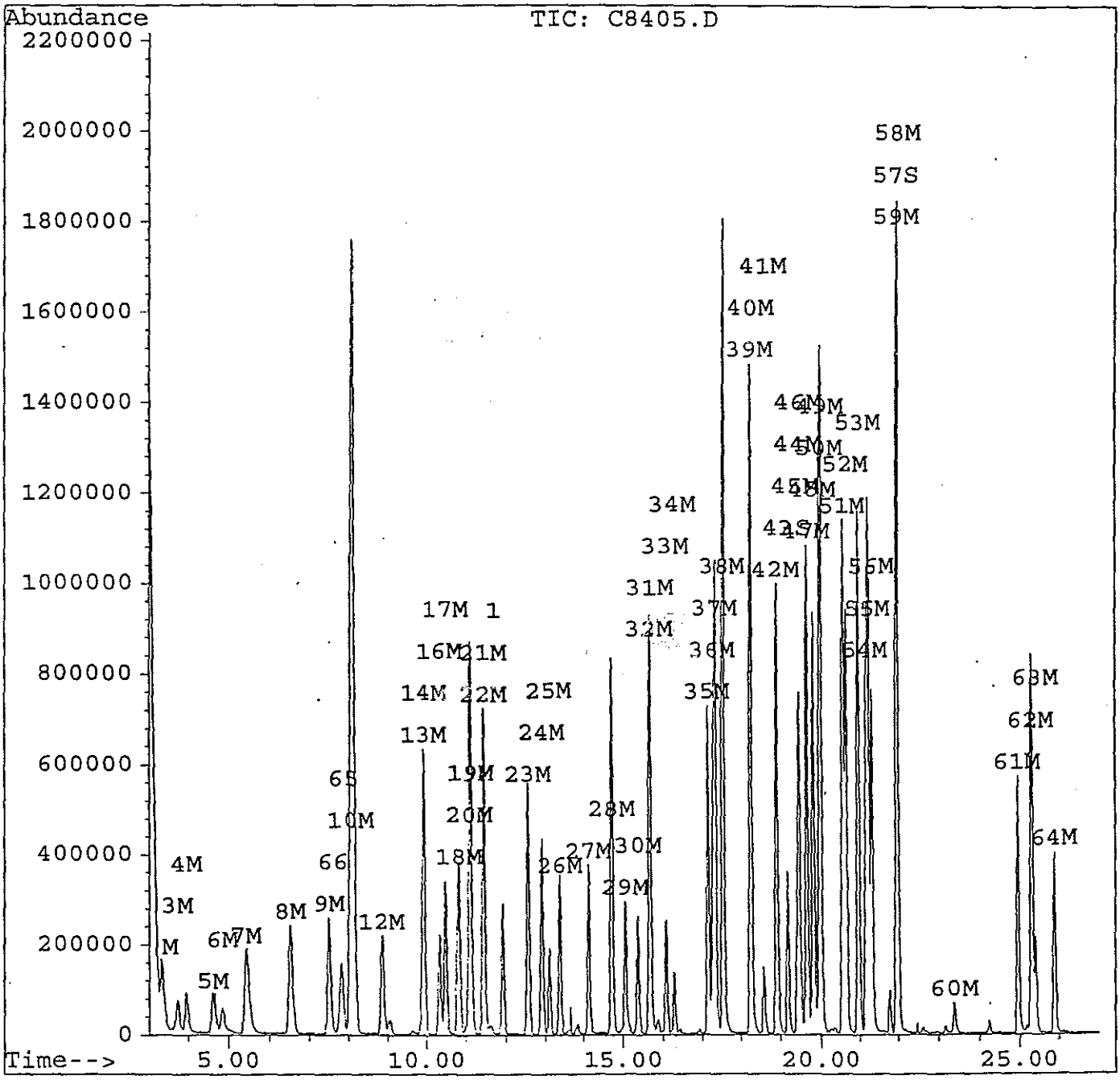
Quantitation Report

000109

Data File : d:\hpchem\1\data\c8405.d
Acq On : 8 Jun 95 12:04 am
Sample : 9524199 MS
Misc : 25 ML
Quant Time: Jun 8 13:25 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



Quantitation Report

000110

Data File : d:\hpchem\1\data\c8406.d
Acq On : 8 Jun 95 12:39 am
Sample : 9524199 MSD
Misc : 25 ML
Quant Time: Jun 8 13:26 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	11.92	96	548354	5.00	ug/L	0.08
System Monitoring Compounds						%Recovery
43) 4-Bromofluorobenzene	19.17	95	321009	5.87	ug/L	117.37%
57) 1,2-Dichlorobenzene-d4	21.95	152	136594	5.47	ug/L	109.33%
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.35	85	409268	9.42	ug/L	96
3) Chloromethane	3.73	50	253060	9.89	ug/L	98
4) Vinyl chloride	3.95	62	286756	9.94	ug/L	99
5) Bromomethane	4.60	94	210466	10.79	ug/L	96
6) Chloroethane	4.83	64	189503	11.21	ug/L	100
7) Trichlorofluoromethane	5.45	101	668148	10.37	ug/L	97
8) 1,1-Dichloroethene	6.51	96	295300	10.43	ug/L	96
9) Methylene chloride	7.50	84	286411	9.54	ug/L	97
10) trans-1,2-Dichloroethene	8.07	96	306891	10.26	ug/L	93
12) 1,1-Dichloroethane	8.85	63	658026	11.00	ug/L	93
13) 2,2-Dichloropropane	9.92	77	501146	8.55	ug/L	99
14) cis-1,2-Dichloroethene	9.92	96	309988	11.00	ug/L	98
16) Bromochloromethane	10.33	128	117005	11.85	ug/L	97
17) Chloroform	10.49	83	630359	11.23	ug/L	98
18) 1,1,1-Trichloroethane	10.82	97	662615	10.67	ug/L	98
19) Carbon tetrachloride	11.12	117	587316	10.18	ug/L	96
20) 1,1-Dichloropropene	11.11	75	566308	10.44	ug/L	98
21) Benzene	11.45	78	1053750	11.04	ug/L	96
22) 1,2-Dichloroethane	11.45	62	296979	12.67	ug/L	99
23) Trichloroethene	12.56	95	440344	10.40	ug/L	98
24) 1,2-Dichloropropane	12.91	63	368530	11.79	ug/L	100
25) Dibromomethane	13.12	93	165845	13.10	ug/L	99
26) Bromodichloromethane	13.39	83	503627	11.60	ug/L	98
27) cis-1,3-Dichloropropene	14.14	75	420615	11.21	ug/L	98
28) Toluene	14.73	92	769696	11.34	ug/L	99
29) trans-1,3-Dichloropropene	15.07	75	309514	11.94	ug/L	96
30) 1,1,2-Trichloroethane	15.38	83	155628	12.85	ug/L	93
31) Tetrachloroethene	15.68	166	445322	10.47	ug/L	98
32) 1,3-Dichloropropane	15.66	76	310840	12.95	ug/L	94
33) Dibromochloromethane	16.08	129	282590	11.99	ug/L	96
34) 1,2-Dibromomethane	16.27	107	217221	13.00	ug/L	95
35) Chlorobenzene	17.15	112	791344	11.20	ug/L	99
36) 1,1,1,2-Tetrachloroethane	17.27	131	316294	11.28	ug/L	97
37) Ethylbenzene	17.33	91	1548028	10.84	ug/L	98
38) Xylene (para & meta)	17.54	106	1103000	21.51	ug/L	92
39) Xylene (Ortho)	18.24	106	504363	11.12	ug/L	95
40) Styrene	18.26	104	770728	10.96	ug/L	99

(#) = qualifier out of range (m) = manual integration

Data File : d:\hpchem\1\data\c8406.d
Acq On : 8 Jun 95 12:39 am
Sample : 9524199 MSD
Misc : 25 ML
Quant Time: Jun 8 13:26 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	18.58	173	146445	12.66	ug/L		90
42)	Isopropylbenzene	18.90	105	1557092	10.67	ug/L		90
44)	Bromobenzene	19.45	156	317211	12.06	ug/L		93
45)	1,1,2,2-Tetrachloroethane	19.40	83	201613	15.59	ug/L		99
46)	1,2,3-Trichloropropane	19.48	75	198580	12.65	ug/L	#	55
47)	n-Propylbenzene	19.64	91	2038050	10.74	ug/L		99
48)	2-Chlorotoluene	19.80	91	1242322	11.80	ug/L		96
49)	4-Chlorotoluene	19.98	91	1420536	11.36	ug/L	m	86
50)	1,3,5-Trimethylbenzene	19.96	105	1285608	10.64	ug/L		100
51)	tert-Butylbenzene	20.55	119	1387375	11.08	ug/L		97
52)	1,2,4-Trimethylbenzene	20.64	105	1268326	11.46	ug/L		98
53)	sec-Butylbenzene	20.95	105	1991087	10.72	ug/L		99
54)	1,3-Dichlorobenzene	21.15	146	619515	11.55	ug/L		97
55)	4-Isopropyltoluene	21.21	119	1504932	10.85	ug/L		98
56)	1,4-Dichlorobenzene	21.31	146	625656	11.76	ug/L		92
58)	1,2-Dichlorobenzene	21.99	146	498660	12.48	ug/L		99
59)	n-Butylbenzene	21.96	91	1671417	11.25	ug/L		100
60)	1,2-Dibromo-3-chloropropan	23.40	75	43899	13.37	ug/L		83
61)	1,2,4-Trichlorobenzene	24.96	180	378446	12.88	ug/L		99
62)	Hexachlorobutadiene	25.29	225	392730	11.08	ug/L		97
63)	Naphthalene	25.41	128	386522	15.20	ug/L		100
64)	1,2,3-Trichlorobenzene	25.88	180	284267	13.87	ug/L		96
65)	Methyl-tert butyl ether	8.10	73	4296795	134.12	ug/L	m	0
66)	tert-Butyl Alcohol	7.82	59	601123	1224.38	ug/L		100

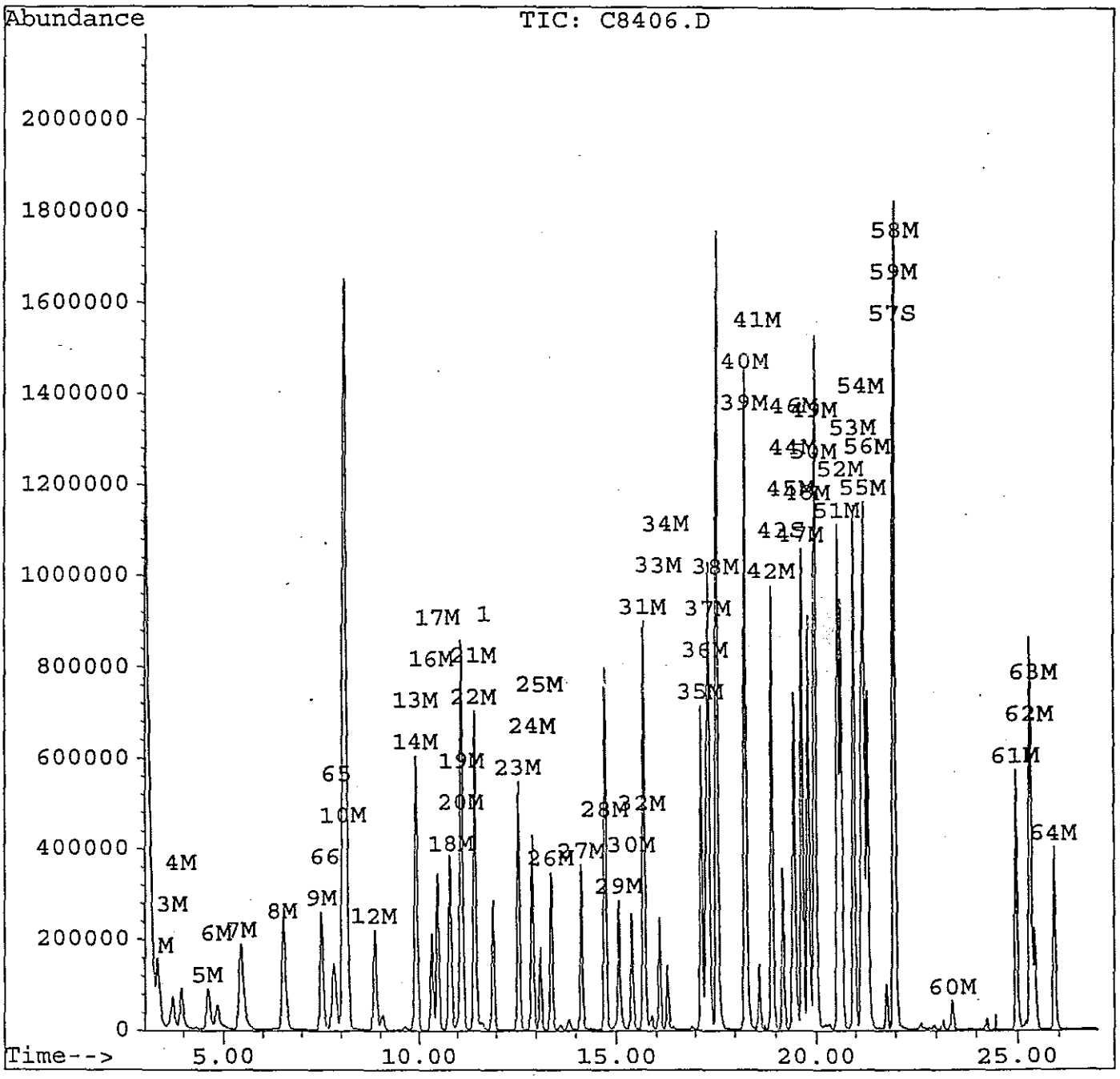
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c8406.d
Acq On : 8 Jun 95 12:39 am
Sample : 9524199 MSD
Misc : 25 ML
Quant Time: Jun 8 13:26 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



GC/MS SEMIVOLATILE DATA PACKAGE

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

000114

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
#					
#					
#					
#					
#					
#					
#					
#					
#					
#					
#					
#					
#					
#					
#					
#					

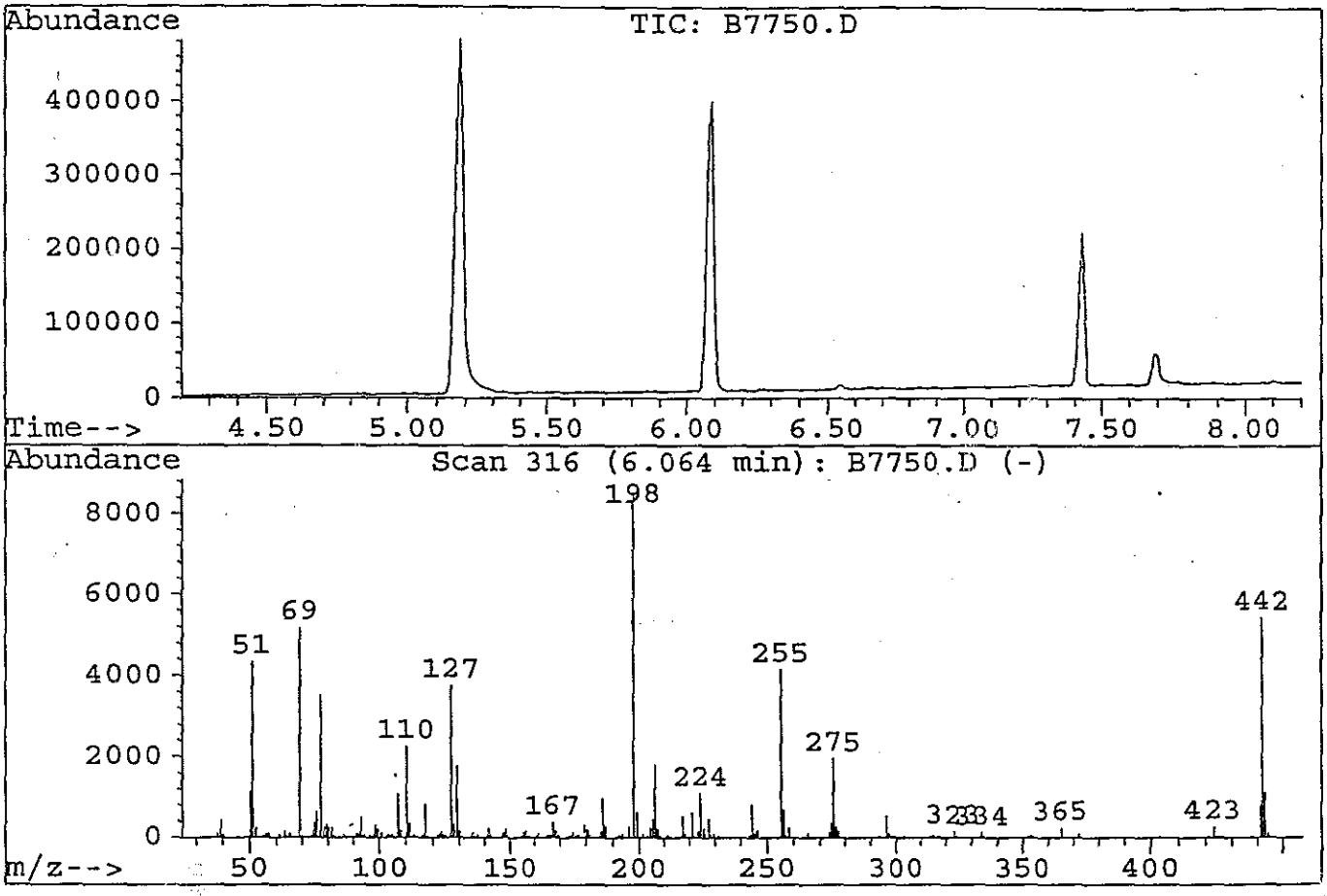
DFTPP

000115

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

c n 316 (6.064 min): B7750.D

000116

odified: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

can 316 (6.064 min): B7750.D

ic ified: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

c n 316 (6.064 min): B7750.D

odified: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

can 316 (6.064 min): B7750.D

ic ified: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				
34.00	124	443.00	1105				
352.10	49	444.10	101				
353.10	51						

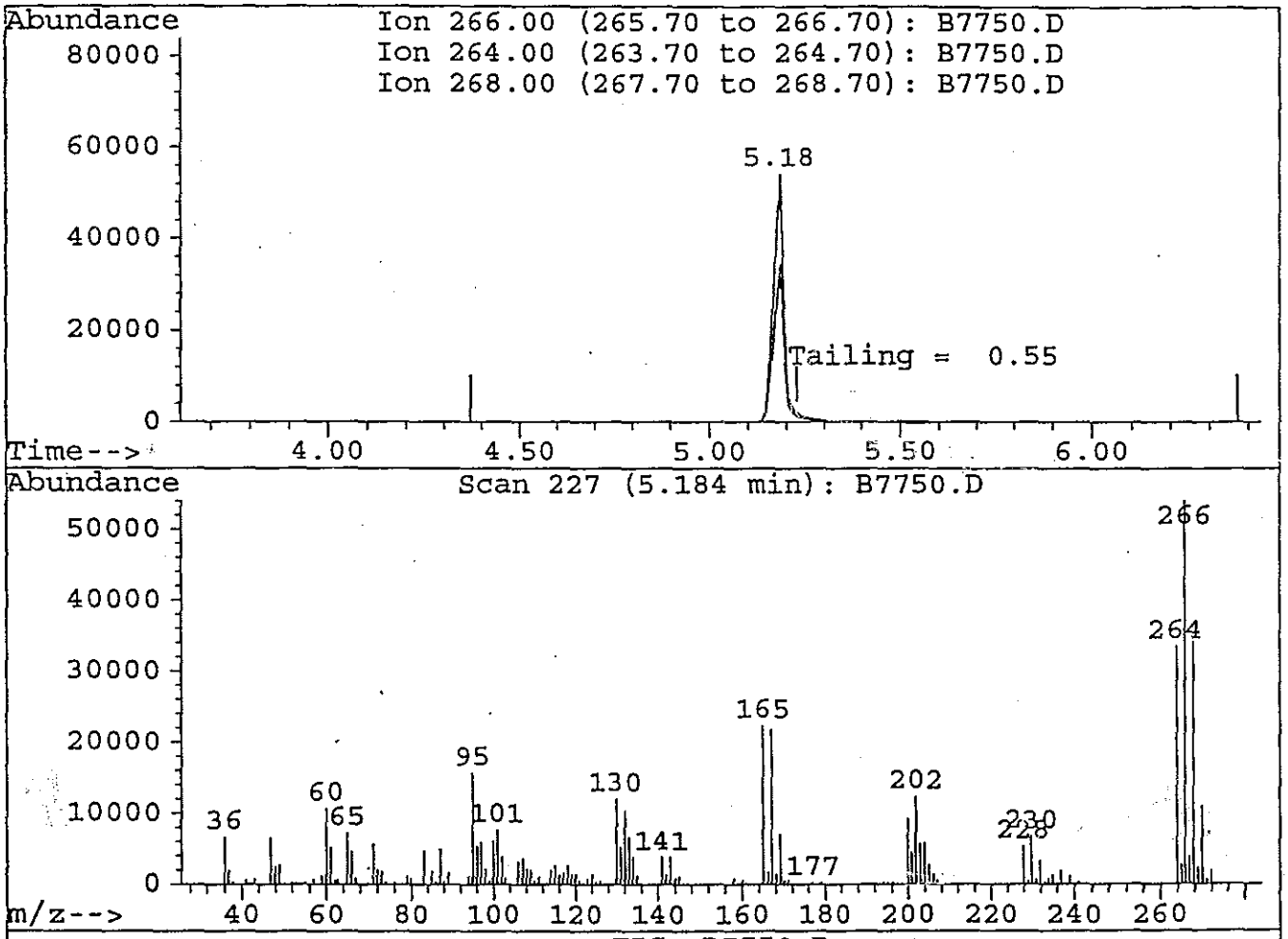
Quantitation Report

000117

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

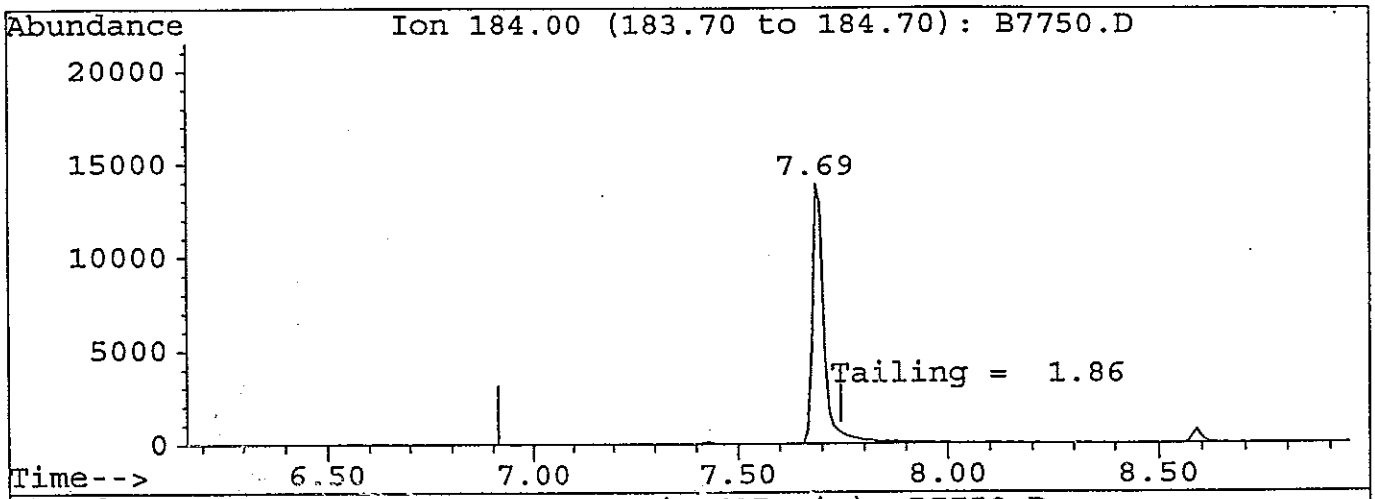
Ion	Exp%	Act%
266.00	100	100
264.00	64.30	62.02
268.00	64.70	63.47
0.00	0.00	0.00

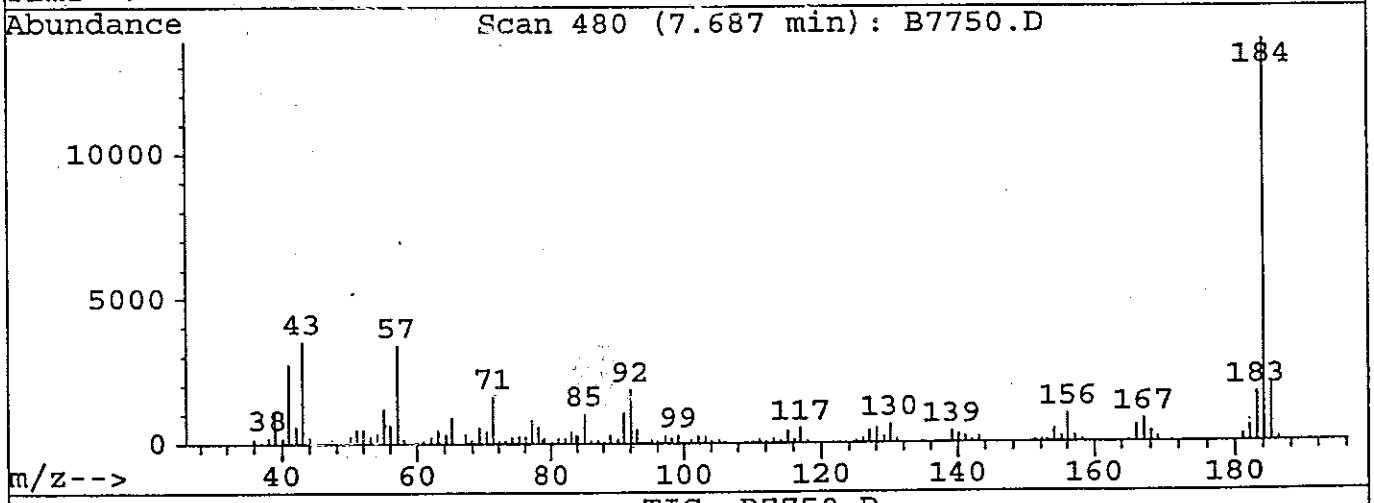
Quantitation Report

000113

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

000119

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

000120

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

000121

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

060122

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

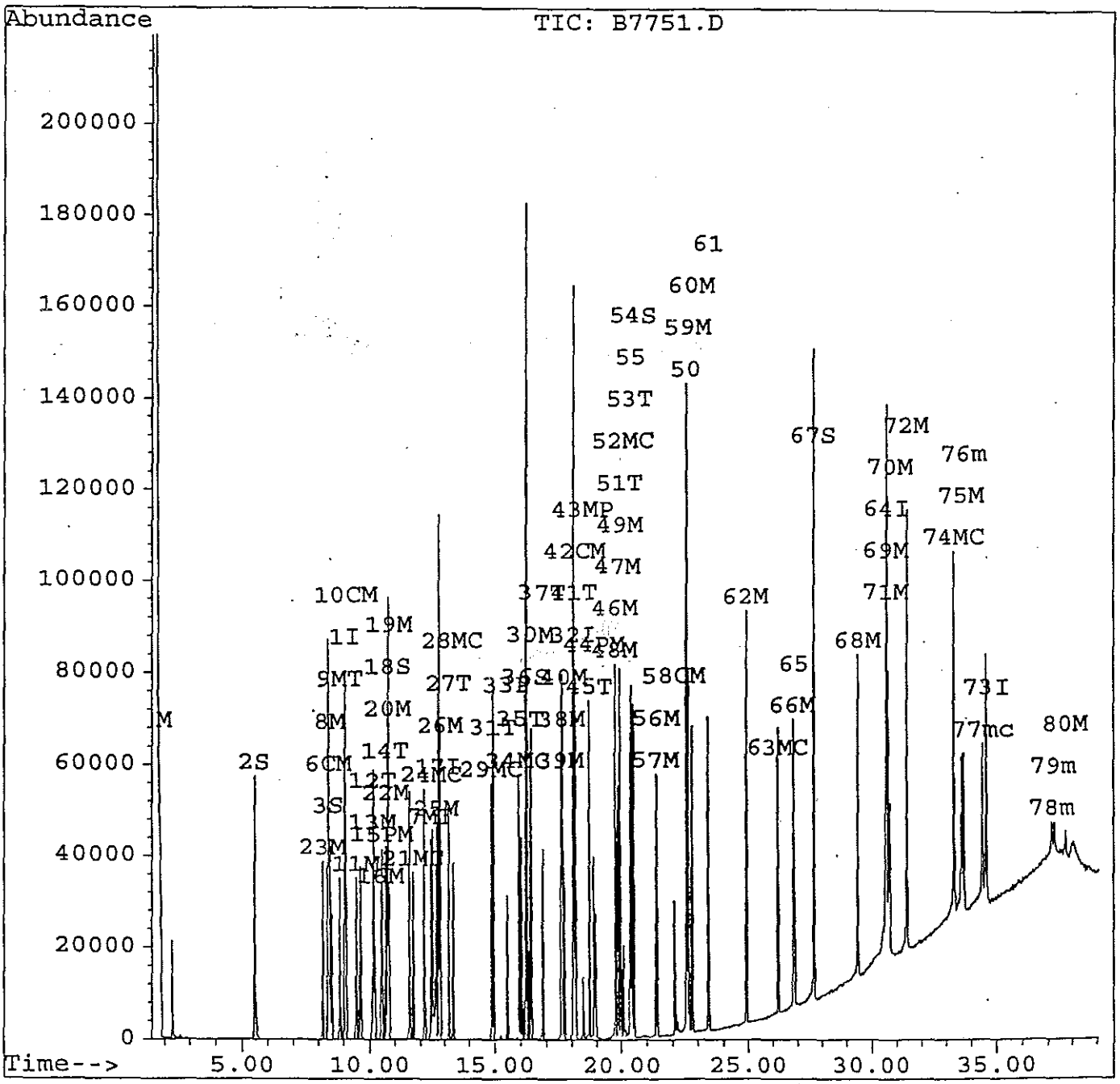
Quantitation Report

000123

Data File : c:\hpchem\1\data2\b7751.d
Acq On : 30 May 95 9:44 am
Sample : 20 STD..... Converted from RTE d
Misc :
Quant Time: May 31 10:03 1995

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



Quantitation Report

060124

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

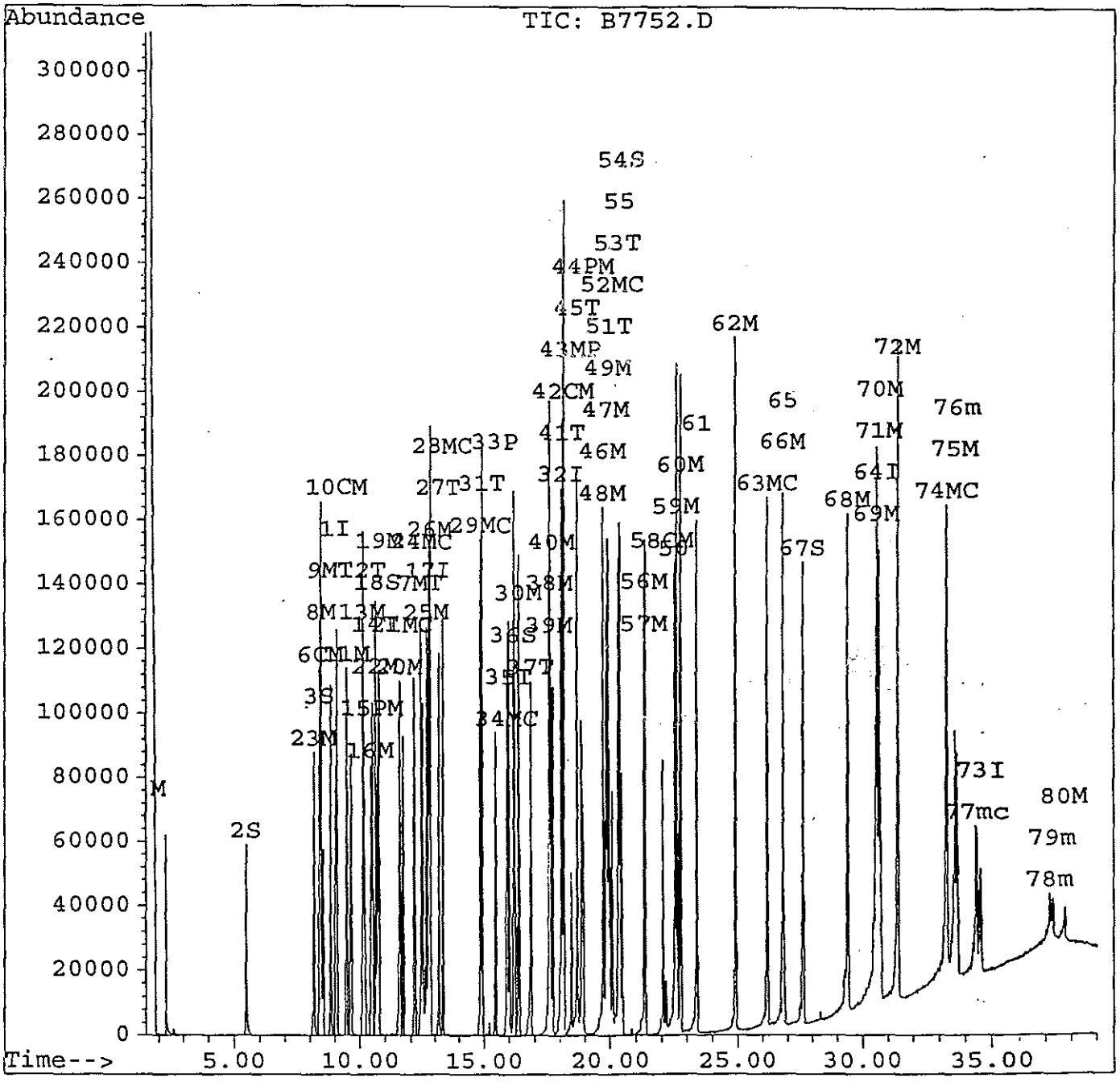
(#) = qualifier out of range (m) = manual integration

000126

Data File : c:\hpchem\1\data2\b7752.d
Acq On : 30 May 95 10:35 am
Sample : 50 STD..... Converted from RTE d
Misc :
Quant Time: May 31 10:04 1995

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



Quantitation Report

000127

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

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

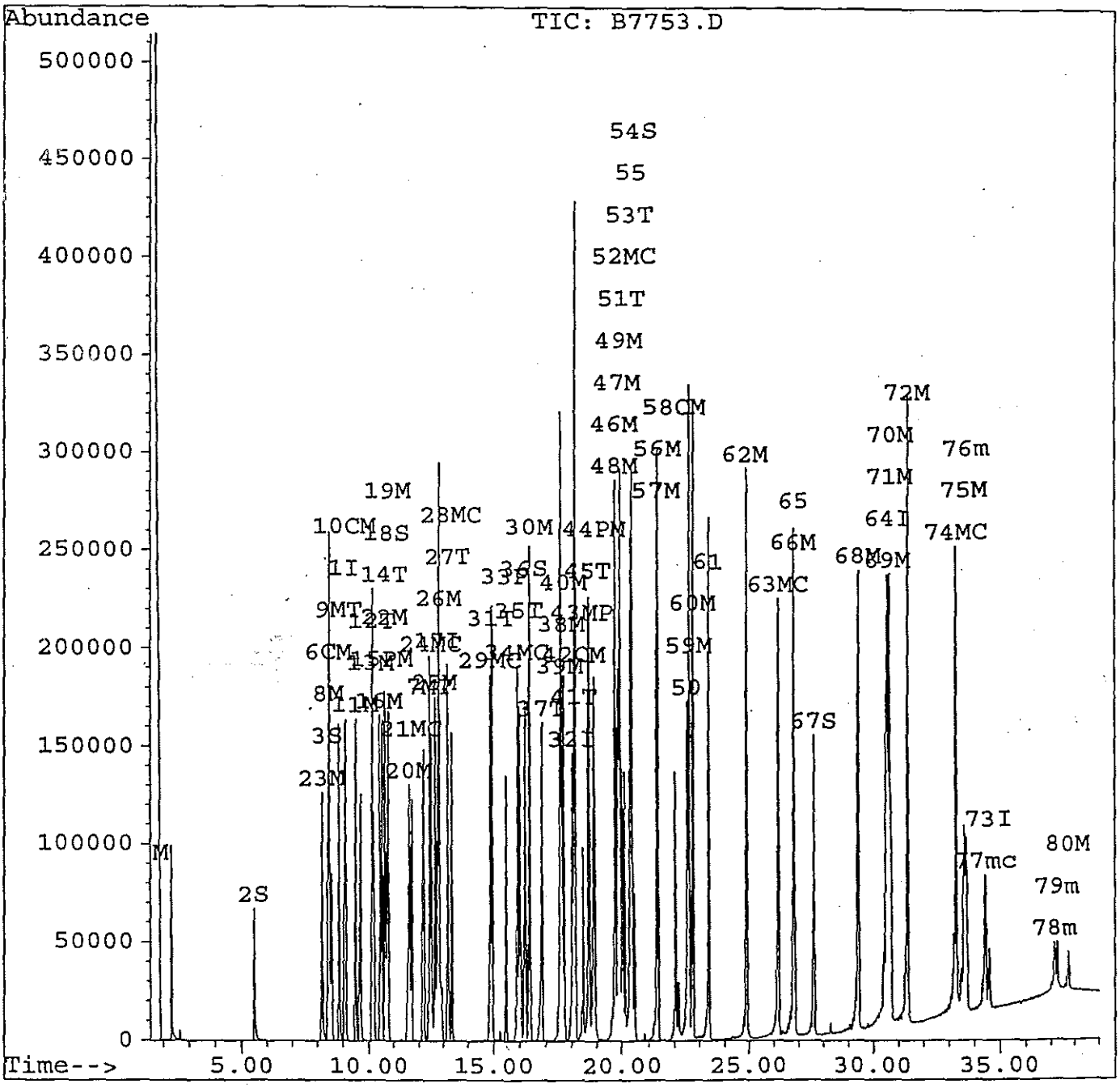
(#) = qualifier out of range (m) = manual integration

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

Vial: 4
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

000130

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

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

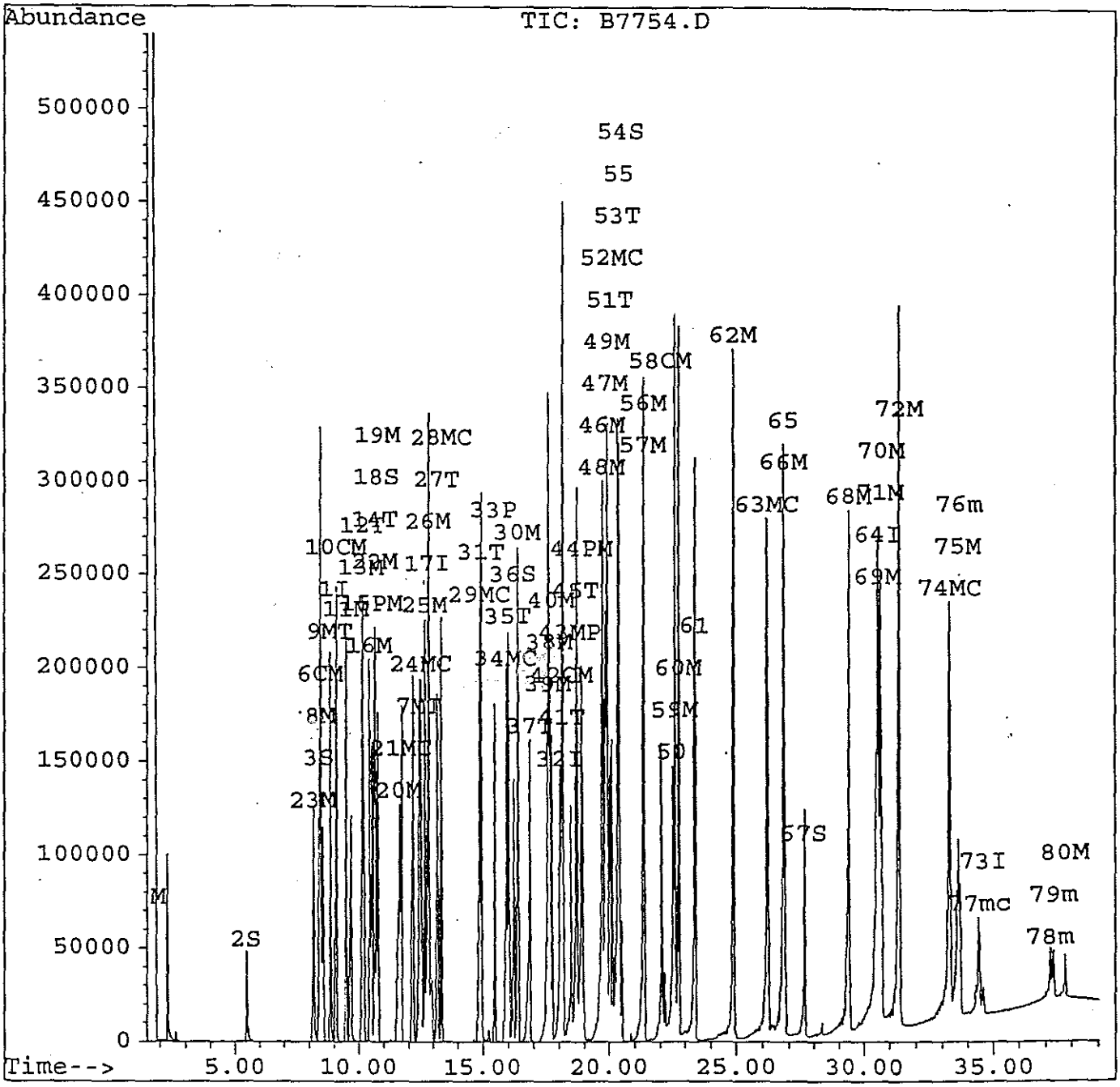
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data2\b7754.d
Acq On : 30 May 95 12:20 pm
Sample : 120 STD..... Converted from RTE d
Misc :
Quant Time: May 31 9:49 1995

Vial: 5
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\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

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

	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

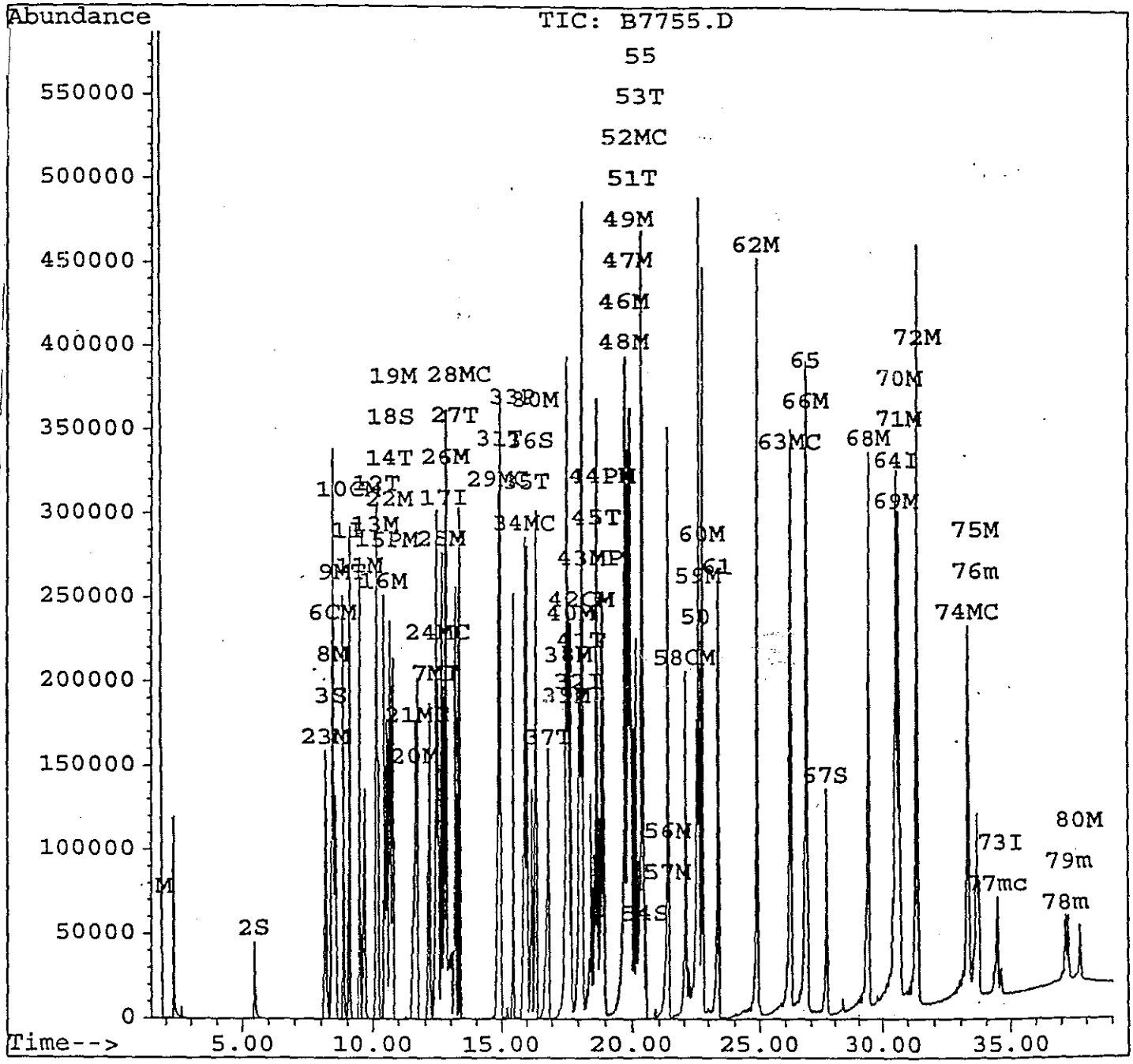
Quantitation Report

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

Converted from RTE d

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



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)

000137

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

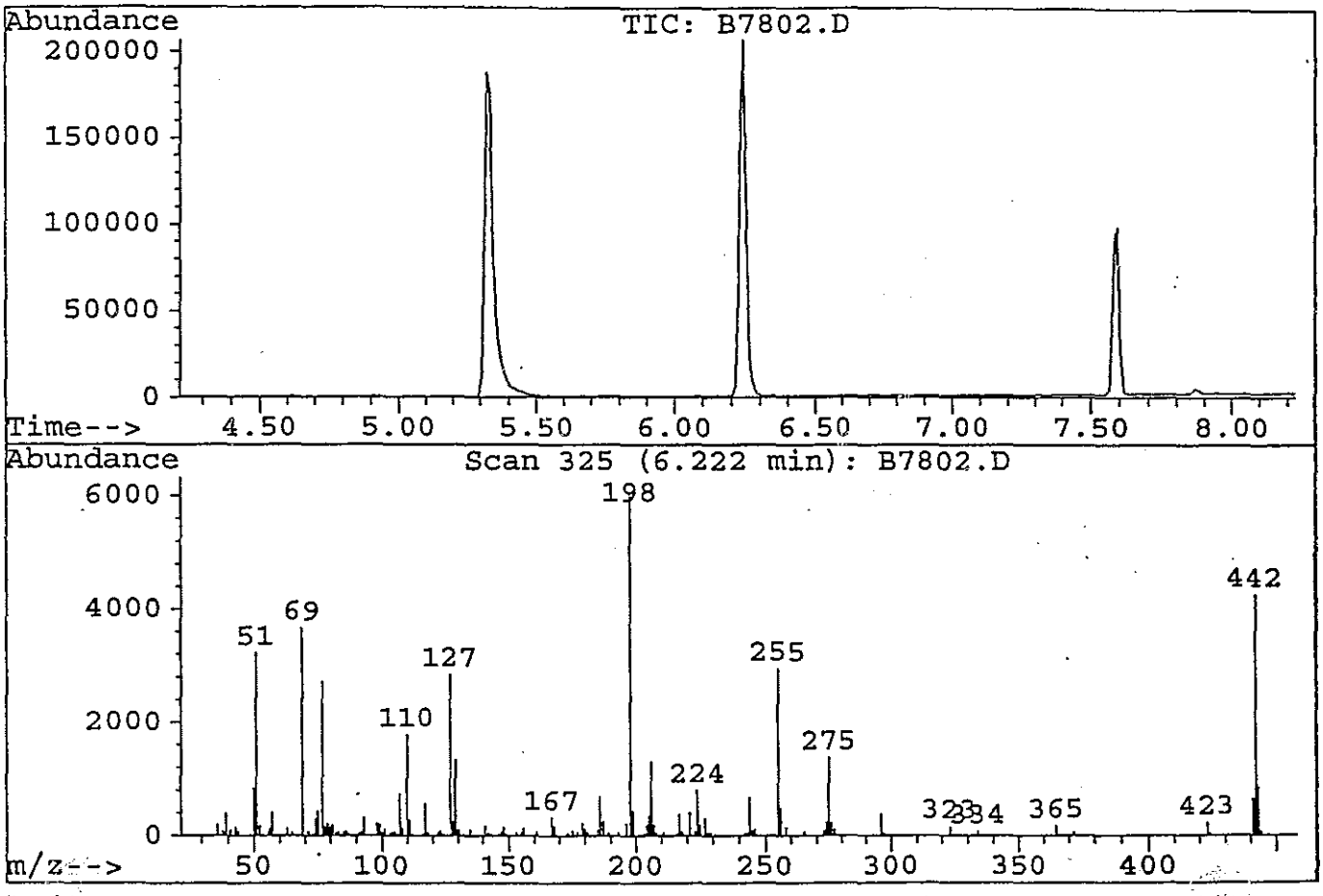
This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

	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
Acq On : 3 Jun 95 9:53 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: 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

ar 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.
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

an 325 (6.222 min): B7802.D
T P..... Converted from RTE data file >B7802::D5

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
11.85	36	134.90	114	160.00	39	186.00	683
16.05	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
21.90	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
27.00	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
30.10	102	156.00	130	185.00	110	205.05	353

a 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		

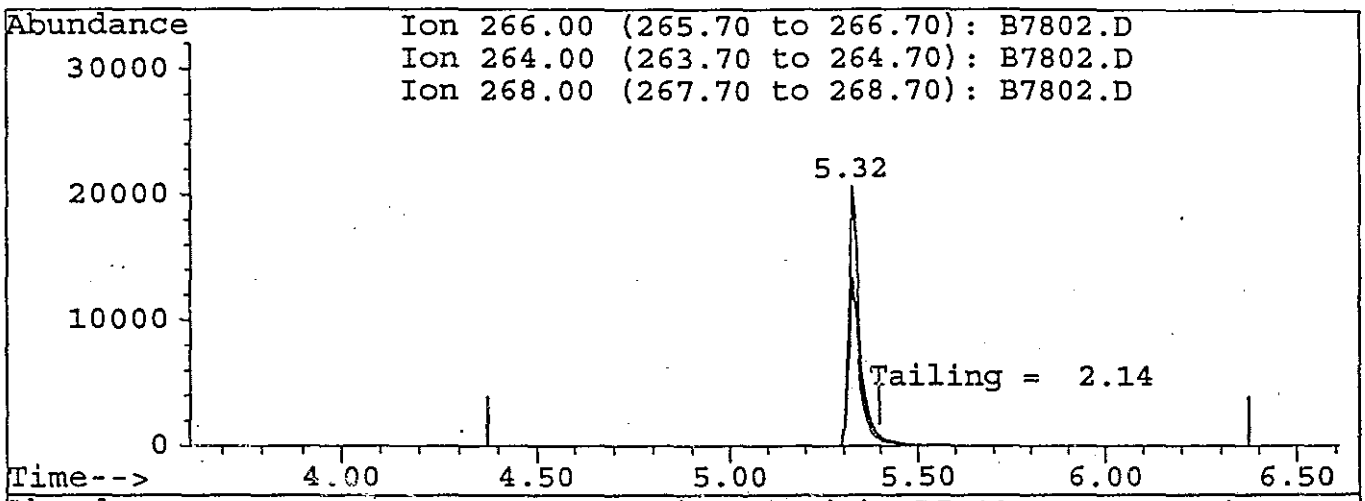
Quantitation Report

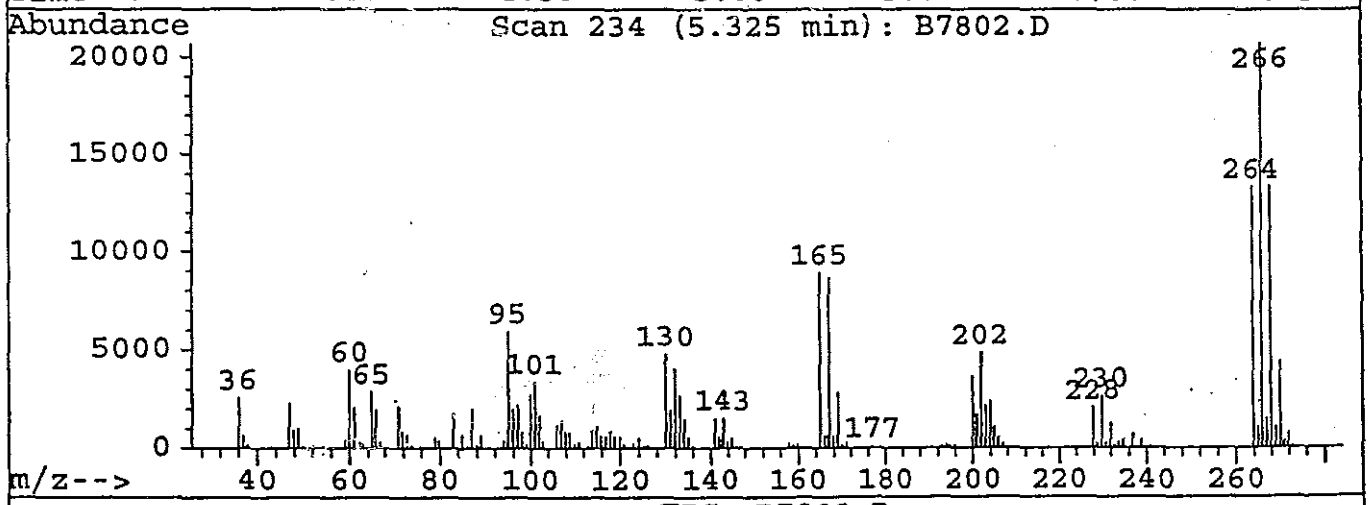
000140

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

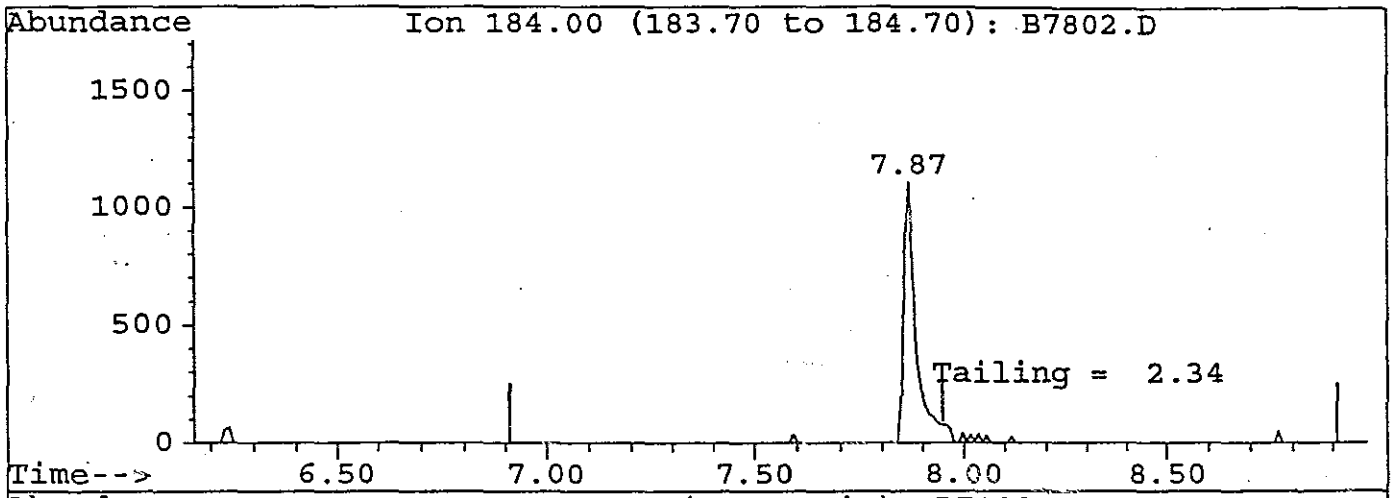
Quantitation Report

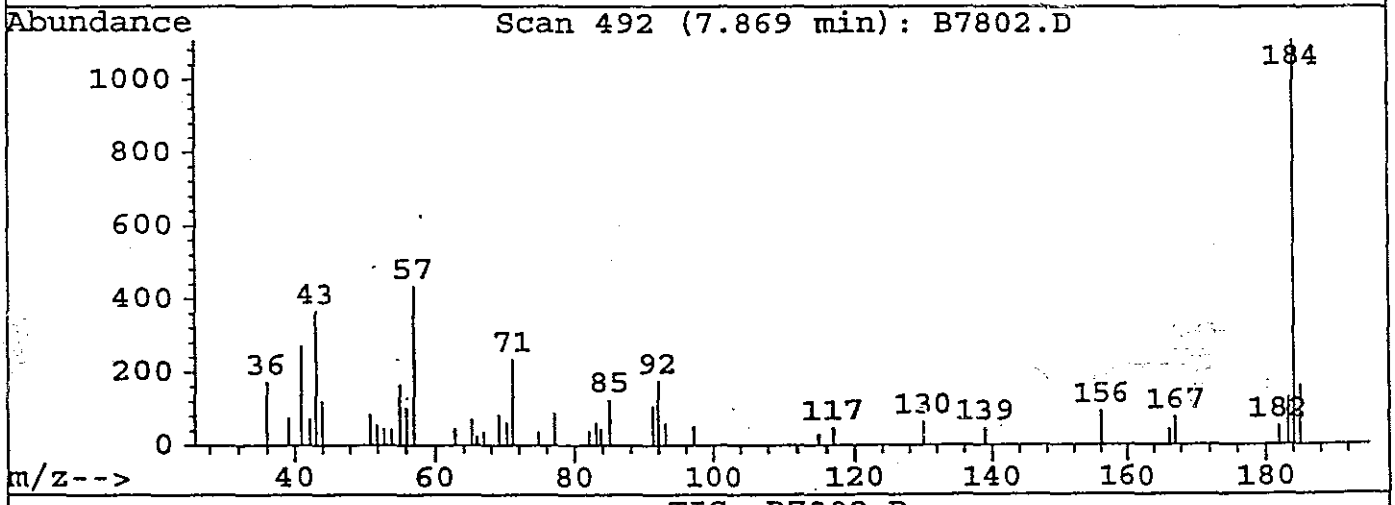
000141

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

7B

SEMIVOLATILE CONTINUING CALIBRATION CHECK

000142

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

000143

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
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

000144

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
38	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)
4	T	3-Nitroaniline	0.346	0.344	0.6	94	0.21
42	CM	Acenaphthene	1.025	1.040	-1.5	100	0.21
4	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
45	T	Dibenzofuran	1.609	1.625	-1.0	96	0.21
4	M	2,4-Dinitrotoluene	1.167	1.125	3.6	97	0.23
4	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
5		Phenanthrene-d10	1.000	1.000	0.0	102	0.25
51	T	4-Nitroaniline	0.166	0.194	-16.9	93	0.21
5	MC	4,6-Dinitro-2-methylphenol	0.132	0.139	-5.1	109	0.21
5	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
5		1,2-Diphenylhydrazine (as a	1.211	1.189	1.8	92	0.23
5	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
5	M	Phenanthrene	1.094	1.129	-3.2	105	0.25
6	M	Anthracene	1.009	1.064	-5.5	105	0.25
61		Carbazole	0.944	1.015	-7.5	107	0.25
6	M	Di-n-butylphthalate	1.606	1.633	-1.6	102	0.23
6	MC	Fluoranthene	1.035	1.139	-10.1	103	0.27
6	I	Chrysene-d12	1.000	1.000	0.0	110	0.31
6		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
6	M	Butylbenzylphthalate	0.962	0.769	20.0	100	0.27
6	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
7	M	Chrysene	0.843	0.806	4.4	115	0.31
7	M	bis(2-Ethylhexyl)phthalate	1.364	1.148	15.8	101	0.27
7	I	Perylene-d12	1.000	1.000	0.0	206#	0.30
7	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
7	nc	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

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

#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report

Data File : c:\hpchem\1\data2\b7803.d
Acq On : 3 Jun 95 10:13 am
Sample : 50 STD..... Converted from RTE d
Misc :
Quant Time: Jun 7 9:32 1995

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

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

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

	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

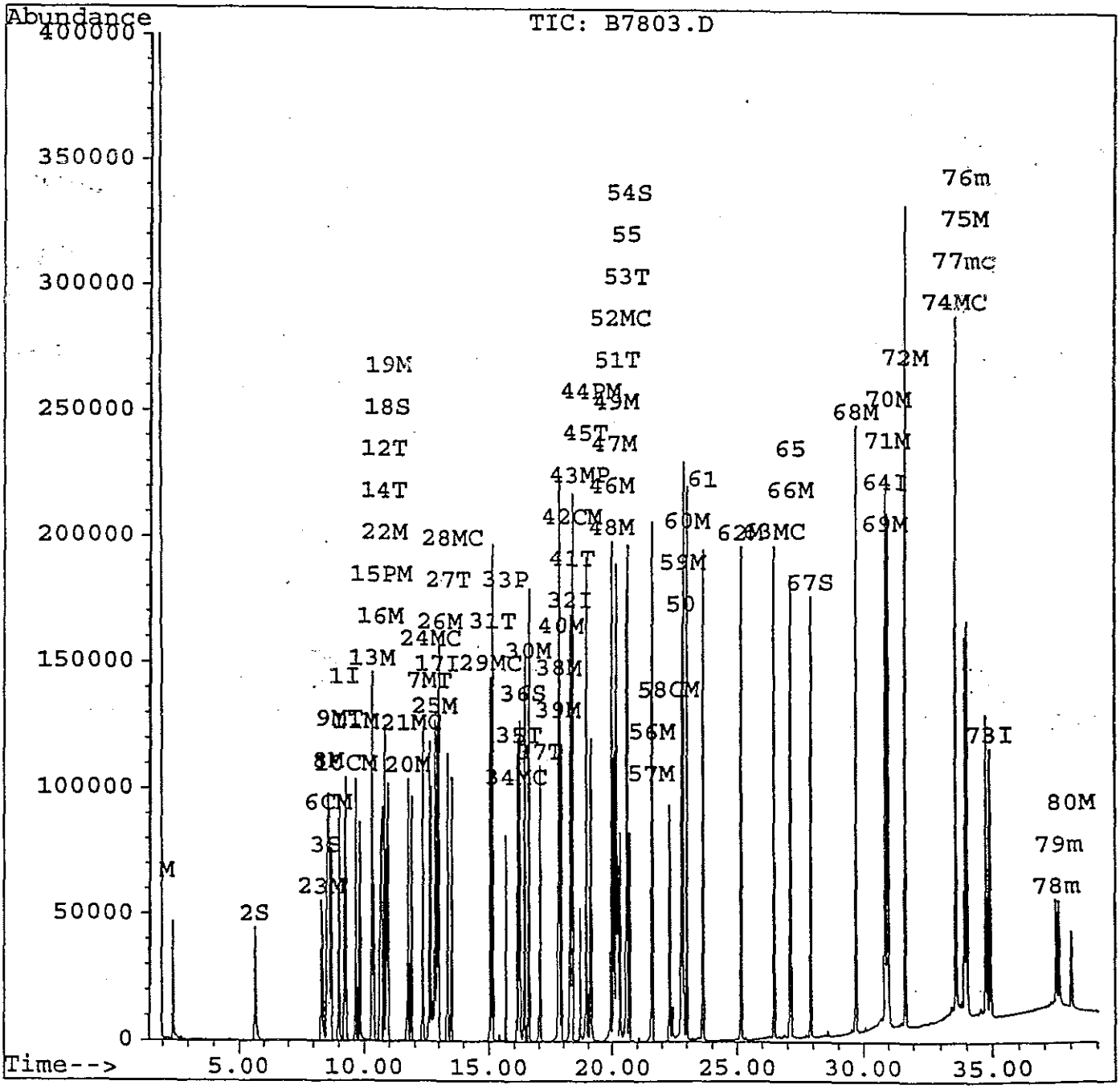
000143

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



5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

000150

Lab Name : EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Lab File ID: B7846.D DFTPP Injection Date: 6/7/95

Instrument ID: ABNA DFTPP Injection Time: 0838

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
51	30.0 - 80.0% of mass 198	57.6
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	66.2
70	Less than 2.0% of mass 69	0.0 (0.0)1
127	25.0 - 75.0% of mass 198	45.8
197	Less than 1.0% of mass 198	0.6
198	Base Peak, 100 % relative abundance	100.0
199	5.0 - 9.0% of mass 198	7.1
275	10.0 - 30.0% of mass 198	21.8
365	Greater than 0.75% of mass 198	2.7
441	Present, but less than mass 443	6.1
442	40.0 - 110.0% of mass 198	41.4
443	15.0 - 24.0% of mass 442	7.5 (18.0)2

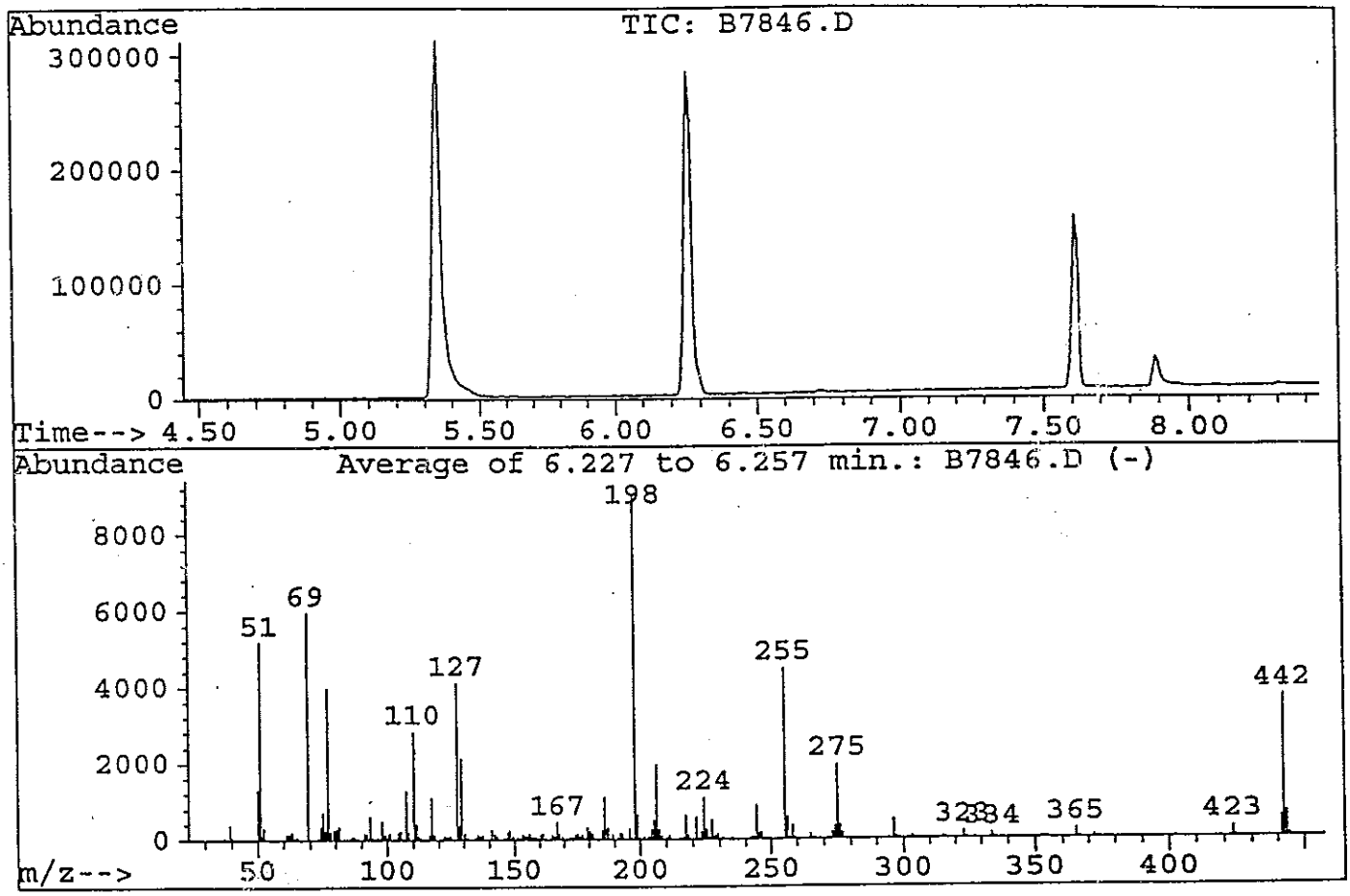
1-Value is % mass 69 2-Value is % mass 442

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	B7847.D	6/7/95	0907
02	SBLK01	BLANK1	B7848.D	6/7/95	1017
03	9524564B	9524564B	B7849.D	6/7/95	1124
04	9524565B	9524565B	B7850.D	6/7/95	1216
05	9524566B	9524566B	B7851.D	6/7/95	1308
06	SBLK02	BLANK2	B7852.D	6/7/95	1359
07	9525096B	9525096B	B7853.D	6/7/95	1452
08	9525099B	9525099B	B7854.D	6/7/95	1544
09	9525105B	9525105B	B7855.D	6/7/95	1637
10	SBLK03	BLANK3	B7858.D	6/7/95	1913
11	9524196B	9524196B	B7859.D	6/7/95	2004
12	9524198B	9524198B	B7860.D	6/7/95	2055
13	9524205B	9524205B	B7861.D	6/7/95	2146
14	9524206B	9524206B	B7862.D	6/7/95	2236
15					
16					
17					
18					
19					
20					
21					
22					

Data File : C:\HPCHEM\1\DATA2\B7846.D Vial: 1
Acq On : 7 Jun 95 8:38 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: 355

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	57.6	5183	PASS
68	69	0	2	0.0	0	PASS
69	198	0	100	66.2	5957	PASS
70	69	0	2	0.0	0	PASS
127	198	40	60	45.8	4116	PASS
197	198	0	1	0.6	55	PASS
198	198	100	100	100.0	8996	PASS
199	198	5	9	7.1	639	PASS
275	198	10	30	21.8	1959	PASS
365	198	1	100	2.7	245	PASS
441	443	0	100	81.7	548	PASS
442	198	40	100	41.4	3724	PASS
443	442	17	23	18.0	671	PASS

e age of 6.227 to 6.257 min.: B7846.D

dified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
37.05	58	64.10	46	80.05	281	95.10	22
39.10	385	65.05	74	81.05	347	96.10	44
0.10	62	66.05	9	82.05	11	97.95	473
44.95	10	69.05	5957	86.05	82	99.05	137
50.00	1328	73.10	64	87.10	80	100.10	64
51.05	5183	74.05	344	88.15	18	100.95	161
52.05	306	75.05	712	91.05	165	102.05	10
53.05	20	76.15	240	91.95	13	103.05	36
61.05	143	77.05	3984	92.10	153	104.05	203
62.05	146	78.00	221	93.05	618	105.05	224
63.05	207	79.05	274	94.15	69	107.05	1296

erage of 6.227 to 6.257 min.: B7846.D

d fied:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
107.95	194	123.00	87	136.05	100	146.10	71
09.15	11	124.05	106	137.10	112	147.05	190
10.05	2841	125.05	41	138.05	26	148.00	253
111.05	423	127.10	4116	138.90	10	149.10	76
12.15	92	128.05	369	139.20	12	150.10	11
13.15	36	129.00	2134	140.10	41	151.15	46
116.10	153	130.10	164	141.00	257	151.80	34
17.05	1100	131.05	52	142.10	148	152.10	13
18.10	136	132.10	19	143.05	82	153.10	133
120.05	14	134.05	86	144.10	11	154.05	97
122.00	98	135.10	131	145.00	8	155.10	106

e age of 6.227 to 6.257 min.: B7846.D

dified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
56.10	171	168.00	151	179.10	318	192.10	175
157.15	67	169.10	66	180.10	208	193.10	158
158.05	70	170.20	9	181.10	159	194.10	27
159.05	51	171.00	20	182.15	29	195.20	11
160.05	133	172.05	64	184.15	40	196.00	277
161.10	174	173.10	67	185.10	242	196.90	55
162.10	27	174.10	128	186.10	1114	198.10	8996
164.10	16	175.10	146	187.10	296	199.10	639
165.10	136	176.05	84	188.10	24	200.10	51
166.10	106	177.10	121	189.10	130	201.60	60
167.10	460	178.05	41	191.15	51	203.05	80

verage of 6.227 to 6.257 min.: B7846.D

oc fied:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
204.05	288	217.05	624	231.10	51	249.05	40
205.05	511	218.05	113	234.05	38	253.15	13
206.15	1963	221.10	576	235.05	35	255.05	4480
207.15	264	223.05	194	237.15	25	256.15	575
208.05	102	224.15	1096	241.05	30	257.15	58
209.05	21	225.05	267	242.15	69	258.10	365
210.15	52	226.15	49	243.15	74	259.15	51
10.65	10	227.05	514	244.15	915	265.15	128
11.10	117	228.05	104	245.15	161	272.05	8
215.05	19	229.05	145	246.15	177	273.15	186
216.10	67	230.05	10	247.10	40	274.15	342

ge of 6.227 to 6.257 min.: B7846.D

000153

dified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
75.15	1959	310.00	7	341.20	13	421.25	11
276.15	368	314.10	16	346.10	36	422.25	31
7.05	160	315.10	69	352.20	46	423.20	290
78.15	18	316.15	35	353.15	29	424.20	46
285.10	19	321.10	12	354.15	47	439.75	9
293.10	26	323.15	199	365.15	245	441.10	548
96.10	523	324.10	41	366.05	29	442.20	3724
97.00	14	327.00	17	372.15	84	443.20	671
297.15	73	333.20	8	373.15	11	444.15	65
03.10	80	334.15	125	402.15	30		
04.10	12	335.15	30	403.15	22		

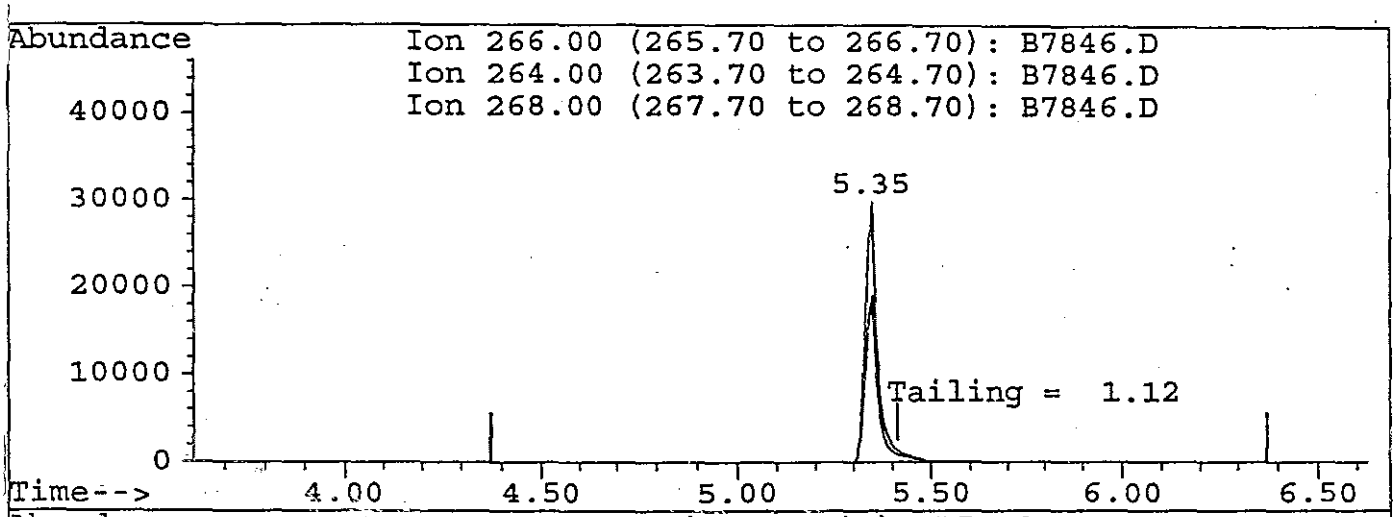
Quantitation Report

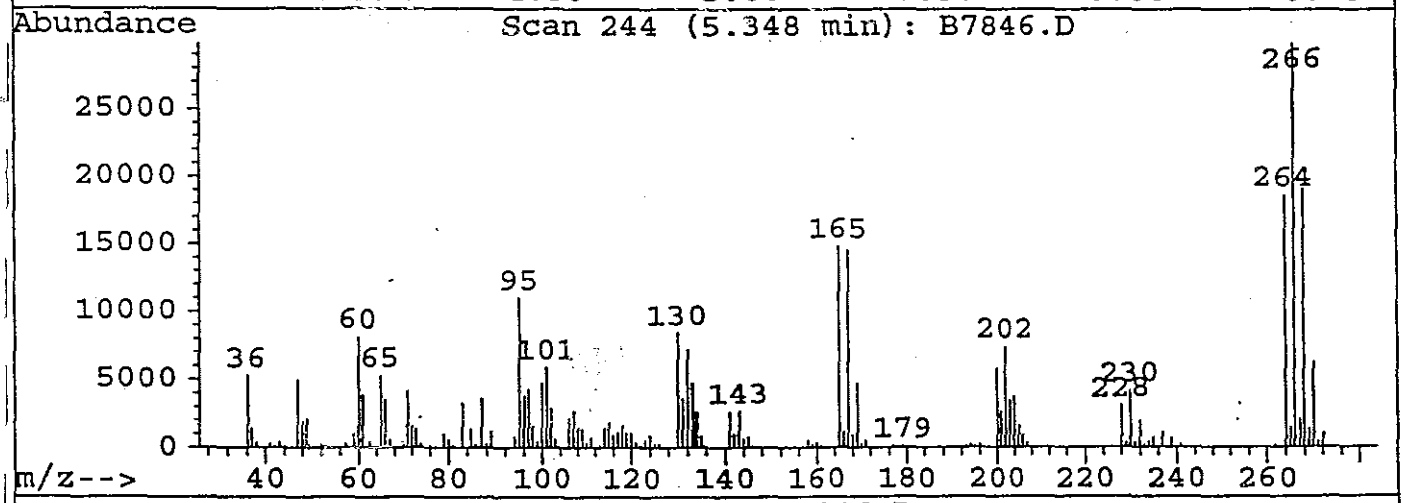
000154

Data File : C:\HPCHEM\1\DATA2\B7846.D
Acq On : 7 Jun 95 8:38 am
Sample : DFTPP..... Converted from RTE d
Misc :
Quant Time: Jun 7 7:51 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: B7846.D

(1) Pentachlorophenol (CM)

5.35min 205.46ug/mL

response 67865

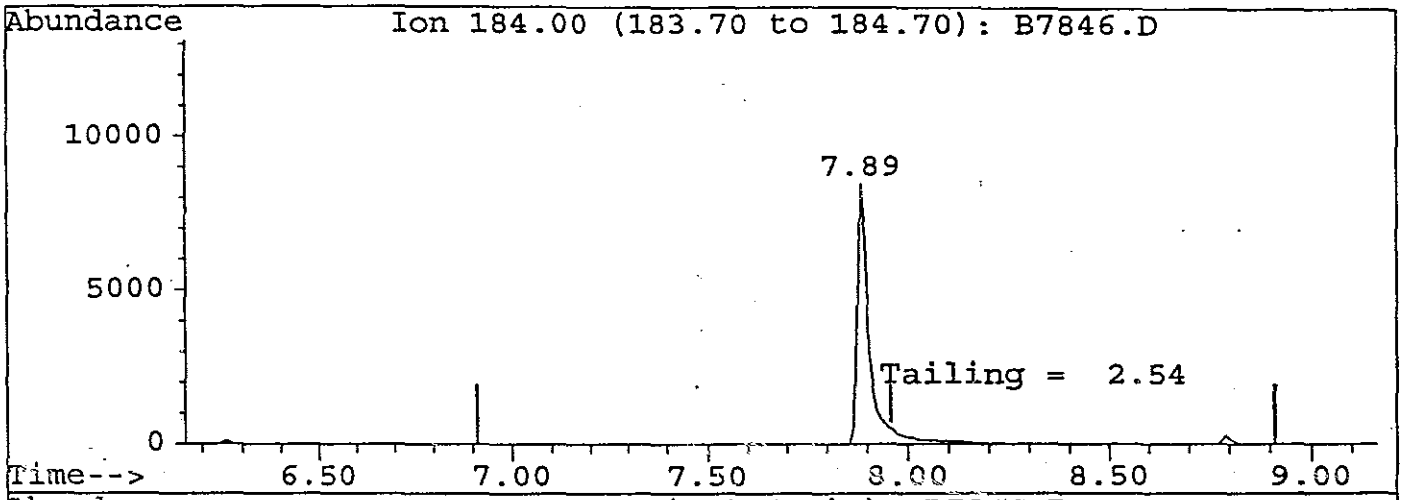
Ion	Exp%	Act%
266.00	100	100
264.00	64.30	62.45
268.00	64.70	64.03
0.00	0.00	0.00

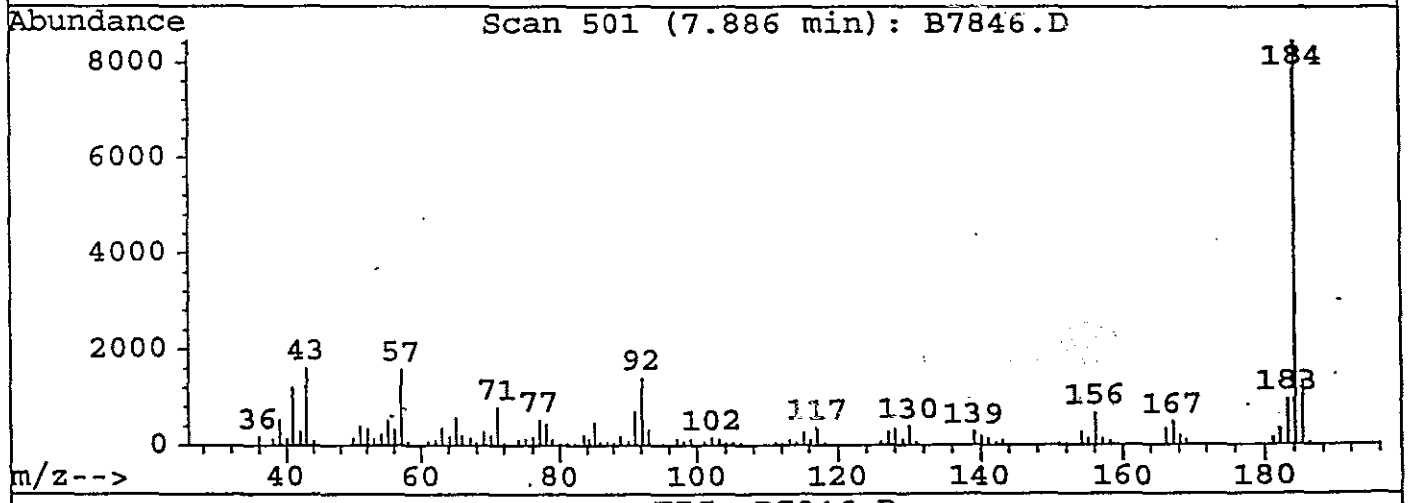
Quantitation Report

Data File : C:\HPCHEM\1\DATA2\B7846.D
Acq On : 7 Jun 95 8:38 am
Sample : DFTPP..... Converted from RTE d
Misc :
Quant Time: Jun 7 7:51 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: B7846.D

(2) Benzidine
7.89min 59.10ug/ml
response 18157

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

7B

SEMIVOLATILE CONTINUING CALIBRATION CHECK

000156

Lab Name: EMSL ANALYTICAL Contract: _____

Project No. _____ Site: _____ Location: _____ Group: _____

Instrument ID: ABNA Calibration Date: 6/7/95 Time: 0907

Lab File ID: B7847.D Init. Calib. Date(s): 6/7/95 1/0/00

Init. Calib. Times: 0907 0000

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
N-nitrosodimethylamine	0.578	0.657		-13.7	
bis(2-Chloroethyl)ether	2.026	2.278		-12.4	
1,3-Dichlorobenzene	1.385	1.453		-4.9	
1,4-Dichlorobenzene	1.429	1.495		-4.6	30.0
1,2-Dichlorobenzene	1.357	1.428		-5.2	
bis(2-chloroisopropyl)ether	1.868	2.073		-11.0	
N-Nitroso-Di-n-propylamine	1.346	1.495	0.050	-11.1	
Hexachloroethane	0.737	0.799		-8.4	
Nitrobenzene	0.424	0.503		-18.6	
Isophorone	0.893	0.925		-3.6	
bis(2-Chloroethoxy)methane	0.456	0.491		-7.7	
1,2,4-Trichlorobenzene	0.317	0.300		5.4	
Naphthalene	0.979	1.022		-4.4	
Hexachlorobutadiene	0.185	0.156		15.7	30.0
Hexachlorocyclopentadiene	0.278	0.289	0.050	-4.0	
2-Chloronaphthalene	0.696	0.644		7.5	
Dimethylphthalate	1.299	1.237		4.8	
Acenaphthylene	1.704	1.706		-0.1	
2,6-Dinitrotoluene	0.310	0.300		3.2	
Acenaphthene	1.025	1.077		-5.1	30.0
2,4-Dinitrotoluene	1.167	1.105		5.3	
Diethylphthalate	1.443	1.451		-0.6	
Fluorene	1.259	1.198		4.8	
4-Chlorophenyl-phenylether	0.596	0.521		12.6	
n-Nitrosodiphenylamine	0.508	0.512		-0.8	
1,2-Diphenylhydrazine(as azo)	0.000	0.000			
4-Bromophenyl-phenylether	0.206	0.177		14.1	
Hexachlorobenzene	0.215	0.173		19.5	
Phenanthrene	1.094	1.108		-1.3	
Anthracene	1.009	1.141		-13.1	
Di-n-butylphthalate	1.606	1.786		-11.2	
Fluoranthene	1.035	1.186		-14.6	30.0
Benzidine	0.437	0.401		8.2	
Pyrene	1.502	1.309		12.8	
Butylbenzylphthalate	0.962	0.936		2.7	
Benzo[a]anthracene	1.516	1.581		-4.3	
3,3'-Dichlorobenzidine	0.386	0.336		13.0	

All other compounds must meet a minimum RRF of 0.010.

7B

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: EMSL ANALYTICAL Contract: _____

Project No. _____ Site: _____ Location: _____ Group: _____

Instrument ID: ABNA Calibration Date: 6/7/95 Time: 0907

Lab File ID: B7847.D Init. Calib. Date(s): 6/7/95 1/0/00

Init. Calib. Times: 0907 0000

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
Chrysene	0.843	0.993		-17.8	
bis(2-Ethylhexyl)phthalate	1.364	1.373		-0.7	
Di-n-octylphthalate	5.094	5.126		-0.6	30.0
Benzo[b]fluoranthene	2.467	2.162		12.4	
Benzo[k]fluoranthene	1.190	1.280		-7.6	
Benzo[a]pyrene	1.227	1.077		12.2	30.0
Indeno[1,2,3-cd]pyrene	0.452	0.466		-3.1	
Dibenz[a,h]anthracene	0.436	0.362		17.0	
Benzo[g,h,i]perylene	0.356	0.337		5.3	
Nitrobenzene-d5	0.456	0.489		-7.2	
2-Fluorobiphenyl	1.200	1.174		2.2	
Terphenyl-d14	1.062	0.795		25.1	

All other compounds must meet a minimum RRF of 0.010.

Evaluate Continuing Calibration Report

000153

Data File : C:\HPCHEM\1\DATA2\B7847.D Vial: 2
Acq On : 7 Jun 95 9:07 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	83	0.19
2	S	2-Fluorophenol	1.131	1.158	-2.4	90	0.17
3	S	Phenol-d5	1.873	1.851	1.1	89	0.15
4	M	N-nitrosodimethylamine	0.578	0.657	-13.6	74	-0.08
5		Pyridine	0.428	0.000#	100.0#	0#	-1.62#
6	CM	Phenol	1.668	1.797	-7.8	88	0.15
7	MT	bis(2-Chloroethyl)ether	2.026	2.278	-12.4	92	0.19
8	M	2-Chlorophenol	1.269	1.356	-6.8	90	0.17
9	MT	1,3-Dichlorobenzene	1.385	1.453	-4.9	85	0.19
0	CM	1,4-Dichlorobenzene	1.429	1.495	-4.6	84	0.19
1	M	1,2-Dichlorobenzene	1.357	1.428	-5.2	86	0.19
2	T	2-Methylphenol	1.204	1.367	-13.5	97	0.67#
3	M	bis(2-chloroisopropyl)ether	1.868	2.073	-11.0	99	0.21
4	T	4-Methylphenol	1.322	1.367	-3.4	86	0.17
5	PM	N-Nitroso-Di-n-propylamine	1.346	1.495	-11.1	98	0.19
6	M	Hexachloroethane	0.737	0.799	-8.4	89	0.21
7	I	Naphthalene-d8	1.000	1.000	0.0	80	0.21
8	S	Nitrobenzene-d5	0.456	0.489	-7.3	89	0.19
9	M	Nitrobenzene	0.424	0.503	-18.7	92	0.19
0	M	Isophorone	0.893	0.925	-3.6	90	0.19
1	MC	2-Nitrophenol	0.210	0.201	4.2	80	0.21
2	M	2,4-Dimethylphenol	0.394	0.415	-5.4	86	0.17
3	M	bis(2-Chloroethoxy)methane	0.456	0.491	-7.7	86	0.17
4	MC	2,4-Dichlorophenol	0.298	0.281	5.9	77	0.19
5	M	1,2,4-Trichlorobenzene	0.317	0.300	5.2	74	0.19
6	M	Naphthalene	0.979	1.022	-4.4	85	0.21
7	T	4-Chloroaniline	0.463	0.471	-1.8	80	0.21
28	MC	Hexachlorobutadiene	0.185	0.156	15.9	67	0.21
29	MC	4-Chloro-3-methylphenol	0.384	0.378	1.5	78	0.19
30	M	2-Chloronaphthalene	0.696	0.644	7.5	73	0.23
31	T	2-Methylnaphthalene	0.786	0.709	9.7	81	0.21
32	I	Acenaphthene-d10	1.000	1.000	0.0	77	0.23
33	P	Hexachlorocyclopentadiene	0.278	0.289	-3.8	85	0.21
34	MC	2,4,6-Trichlorophenol	0.415	0.336	19.1	67	0.23
35	T	2,4,5-Trichlorophenol	0.324	0.352	-8.7	73	0.21
36	S	2-Fluorobiphenyl	1.200	1.174	2.2	76	0.23
37	T	2-Nitroaniline	0.549	0.637	-15.9	84	0.23
38	M	Dimethylphthalate	1.299	1.237	4.8	73	0.23
39	M	Acenaphthylene	1.704	1.706	-0.1	76	0.23
40	M	2,6-Dinitrotoluene	0.310	0.300	3.2	70	0.23

#) = Out of Range

Evaluate Continuing Calibration Report

000159

Data File : C:\HPCHEM\1\DATA2\B7847.D Vial: 2
Acq On : 7 Jun 95 9:07 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)
4	T	3-Nitroaniline	0.346	0.372	-7.6	78	0.23
42	CM	Acenaphthene	1.025	1.077	-5.1	80	0.25
4	MP	2,4-Dinitrophenol	0.172	0.162	5.7	80	0.25
4	PM	4-Nitrophenol	0.166	0.188	-13.6	85	0.21
45	T	Dibenzofuran	1.609	1.571	2.3	72	0.23
46	M	2,4-Dinitrotoluene	1.167	1.105	5.3	74	0.25
4	M	Diethylphthalate	1.443	1.451	-0.6	76	0.23
48	M	Fluorene	1.259	1.198	4.8	75	0.25
49	M	4-Chlorophenyl-phenylether	0.596	0.521	12.6	67	0.25
5		Phenanthrene-d10	1.000	1.000	0.0	75	0.28
51	T	4-Nitroaniline	0.166	0.186	-12.1	65	0.25
5	MC	4,6-Dinitro-2-methylphenol	0.132	0.141	-6.9	81	0.25
5	T	n-Nitrosodiphenylamine	0.508	0.512	-0.7	72	0.25
54	S	2,4,6-Tribromophenol	0.108	0.072	33.2#	51	0.27
55		1,2-Diphenylhydrazine (as a	1.211	1.224	-1.1	70	0.27
5	M	4-Bromophenyl-phenylether	0.206	0.177	14.3	60	0.27
57	M	Hexachlorobenzene	0.215	0.173	19.6	57	0.27
58	CM	Pentachlorophenol	0.137	0.133	3.2	75	0.26
5	M	Phenanthrene	1.094	1.108	-1.3	76	0.28
6	M	Anthracene	1.009	1.141	-13.0	83	0.28
61		Carbazole	0.944	1.114	-18.0	86	0.28
6	M	Di-n-butylphthalate	1.606	1.786	-11.2	81	0.26
6	MC	Fluoranthene	1.035	1.186	-14.6	79	0.30
64	I	Chrysene-d12	1.000	1.000	0.0	81	0.35
6		Benzidine	0.437	0.401	8.4	81	-8.17#
66	M	Pyrene	1.502	1.309	12.8	83	0.30
67	S	Terphenyl-d14	1.062	0.795	25.1	73	0.30
6	M	Butylbenzylphthalate	0.962	0.936	2.7	89	0.30
6	M	Benzo[a]anthracene	1.516	1.581	-4.3	95	0.33
70	M	3,3'-Dichlorobenzidine	0.386	0.336	13.0	77	0.33
7	M	Chrysene	0.843	0.993	-17.8	104	0.35
7	M	bis(2-Ethylhexyl)phthalate	1.364	1.373	-0.7	89	0.29
73	I	Perylene-d12	1.000	1.000	0.0	148	0.35
7	MC	Di-n-octylphthalate	5.094	5.126	-0.6	161#	0.31
75	M	Benzo[b]fluoranthene	2.467	2.162	12.4	127	0.43
76	m	Benzo[k]fluoranthene	1.190	1.280	-7.5	171#	0.35
	mc	Benzo[a]pyrene	1.227	1.077	12.2	118	0.35
7	m	Indeno[1,2,3-cd]pyrene	0.452	0.466	-3.1	166#	0.33
79	m	Dibenz[a,h]anthracene	0.436	0.362	16.8	147	0.31

(#) = Out of Range

Data File : C:\HPCHEM\1\DATA2\B7847.D Vial: 2
Acq On : 7 Jun 95 9:07 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)
	Benzo[g,h,i]perylene	0.356	0.337	5.1	153#	0.32
	1-Methyl naphthalene	0.000	0.000#	0.0	78	0.21
	7,12-Dimethylbenz(a)anthrac	0.000	0.000#	0.0	143	0.35
	Quinoline	0.000	0.000#	0.0	81	0.21
	Thiophenol	0.000	0.000#	0.0	72	0.17
	4-Methyl chrysene	0.000	0.000#	0.0	92	0.35
	Dibenz(a,j)acridine	0.000	0.000#	0.0	75	0.29
	Indene	0.000	0.000#	0.0	86	0.19

( ) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report

000161

Data File : c:\hpchem\1\data2\b7847.d
Acq On : 7 Jun 95 9:07 am
Sample : 50 STD.....
Misc :
Quant Time: Jun 12 14:29 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 : 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	9.22	152	24559	40.00	ug/mL	0.19
17) Naphthalene-d8	12.96	136	98952	40.00	ug/mL	0.21
32) Acenaphthene-d10	18.28	164	62560	40.00	ug/mL	0.23
50) Phenanthrene-d10	22.80	188	98447	40.00	ug/ml	0.28
64) Chrysene-d12	30.93	240	95317	40.00	ug/mL	0.35
73) Perylene-d12	34.94	264	66983	40.00	ug/mL	0.35
System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	5.64	112	35554	51.18	ug/mL	51.18%
3) Phenol-d5	8.55	99	56835	49.43	ug/mL	49.43%
18) Nitrobenzene-d5	10.90	82	60512	53.67	ug/mL	53.67%
36) 2-Fluorobiphenyl	16.43	172	91781	48.91	ug/mL	48.91%
54) 2,4,6-Tribromophenol	20.72	330	8883	33.41	ug/mL	33.41%
67) Terphenyl-d14	27.95	244	94692	37.43	ug/mL	37.43%
Target Compounds						Qvalue
4) N-nitrosodimethylamine	1.87	74	20158	56.78	ug/mlm	0
6) Phenol	8.59	94	55173	53.88	ug/mL	100
7) bis(2-Chloroethyl)ether	12.61	93	69929	56.22	ug/mL	97
8) 2-Chlorophenol	8.63	128	41618	53.40	ug/mL#	85
9) 1,3-Dichlorobenzene	9.03	146	44607	52.46	ug/mL#	97
10) 1,4-Dichlorobenzene	9.28	146	45889	52.30	ug/mL#	97
11) 1,2-Dichlorobenzene	9.67	146	43850	52.61	ug/mL	99
12) 2-Methylphenol	10.80	108	41968	56.75	ug/mL	65
13) bis(2-chloroisopropyl)ethe	10.30	45	63644	55.48	ug/mL#	10
14) 4-Methylphenol	10.80	108	41968	51.72	ug/mL	98
15) N-Nitroso-Di-n-propylamine	10.69	70	45907	55.56	ug/mL	90
16) Hexachloroethane	10.63	117	24542	54.20	ug/mL	91
19) Nitrobenzene	10.96	77	62267	59.37	ug/mL	91
20) Isophorone	11.77	82	114424	51.78	ug/mL	95
21) 2-Nitrophenol	11.90	139	24919	47.89	ug/mL	95
22) 2,4-Dimethylphenol	10.80	107	51291	52.68	ug/mL#	32
23) bis(2-Chloroethoxy)methane	8.34	93	60735	53.83	ug/mL#	42
24) 2,4-Dichlorophenol	12.67	162	34700	47.05	ug/mL	99
25) 1,2,4-Trichlorobenzene	12.84	180	37161	47.40	ug/mL	99
26) Naphthalene	13.02	128	126440	52.22	ug/mL#	92
27) 4-Chloroaniline	13.36	127	58291	50.89	ug/mL	98
28) Hexachlorobutadiene	13.54	225	19249	42.05	ug/mL	97
29) 4-Chloro-3-methylphenol	15.06	107	46787	49.27	ug/mL	99
30) 2-Chloronaphthalene	16.60	162	79655	46.26	ug/ml	99
31) 2-Methylnaphthalene	15.16	142	87747	45.14	ug/mL	100
33) Hexachlorocyclopentadiene	15.67	237	22583	51.88	ug/mLm	96
34) 2,4,6-Trichlorophenol	16.14	196	26275	40.44	ug/mL	99
35) 2,4,5-Trichlorophenol	16.21	196	27555	54.36	ug/mL	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data2\b7847.d Vial: 2
Acq On : 7 Jun 95 9:07 am Operator: SCOTTV
Sample : 50 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jun 12 14:29 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	17.08	65	49775	57.94 ug/mL#	100
38)	Dimethylphthalate	17.85	163	96743	47.60 ug/mL	99
39)	Acenaphthylene	17.81	152	133442	50.06 ug/mL	98
40)	2,6-Dinitrotoluene	17.93	165	23478	48.39 ug/mL	93
41)	3-Nitroaniline	18.35	138	29103	53.80 ug/mL	93
42)	Acenaphthene	18.39	153	84239	52.54 ug/mL	99
43)	2,4-Dinitrophenol	18.70	184	12698	47.15 ug/mL#	51
44)	4-Nitrophenol	19.14	109	14709	56.78 ug/mL	85
45)	Dibenzofuran	18.93	168	122891	48.85 ug/mL	98
46)	2,4-Dinitrotoluene	19.97	165	86391	47.33 ug/mL#	32
47)	Diethylphthalate	20.09	149	113505	50.30 ug/mL	98
48)	Fluorene	19.97	166	93698	47.59 ug/mL	99
49)	4-Chlorophenyl-phenylether	20.16	204	40742	43.69 ug/mL	90
51)	4-Nitroaniline	20.24	138	22927	56.04 ug/mLm	99
52)	4,6-Dinitro-2-methylphenol	20.34	198	17341	53.47 ug/mL	100
53)	n-Nitrosodiphenylamine	20.57	169	62967	50.33 ug/mL#	1
55)	1,2-Diphenylhydrazine (as	20.65	77	150679	50.54 ug/mlm	100
56)	4-Bromophenyl-phenylether	21.63	248	21736	42.85 ug/mL	95
57)	Hexachlorobenzene	21.61	284	21247	40.21 ug/mL#	50
58)	Pentachlorophenol	22.32	266	16377	48.40 ug/mL	97
59)	Phenanthrene	22.88	178	136404	50.64 ug/mLm	100
60)	Anthracene	23.03	178	140360	56.52 ug/mL	99
61)	Carbazole	23.67	167	137073	59.01 ug/ml	98
62)	Di-n-butylphthalate	25.17	149	219780	55.59 ug/mL	99
63)	Fluoranthene	26.50	202	145909	57.28 ug/mLm	85
65)	Benzidine	18.70	184	47744	45.81 ug/mlm	100
66)	Pyrene	27.14	202	155954	43.59 ug/mL	95
68)	Butylbenzylphthalate	29.72	149	111467	48.65 ug/mL	90
69)	Benzo[a]anthracene	30.89	228	188346	52.15 ug/mLm	98
70)	3,3'-Dichlorobenzidine	31.05	252	40053	43.50 ug/mL#	94
71)	Chrysene	31.01	228	118345	58.92 ug/mLm	98
72)	bis(2-Ethylhexyl)phthalate	31.68	149	163607	50.33 ug/mL	100
74)	Di-n-octylphthalate	33.61	149	429201	50.31 ug/mLm	99
75)	Benzo[b]fluoranthene	34.06	252	181018	43.82 ug/mLm	95
76)	Benzo[k]fluoranthene	34.06	252	107158	53.77 ug/mL	98
77)	Benzo[a]pyrene	34.79	252	90170	43.90 ug/mLm	96
78)	Indeno[1,2,3-cd]pyrene	37.49	276	39058	51.55 ug/mLm	84
79)	Dibenz[a,h]anthracene	37.59	278	30334	41.58 ug/mLm	86
80)	Benzo[g,h,i]perylene	38.07	276	28249	47.43 ug/mLm	82

(#) = qualifier out of range (m) = manual integration

Quantitation Report

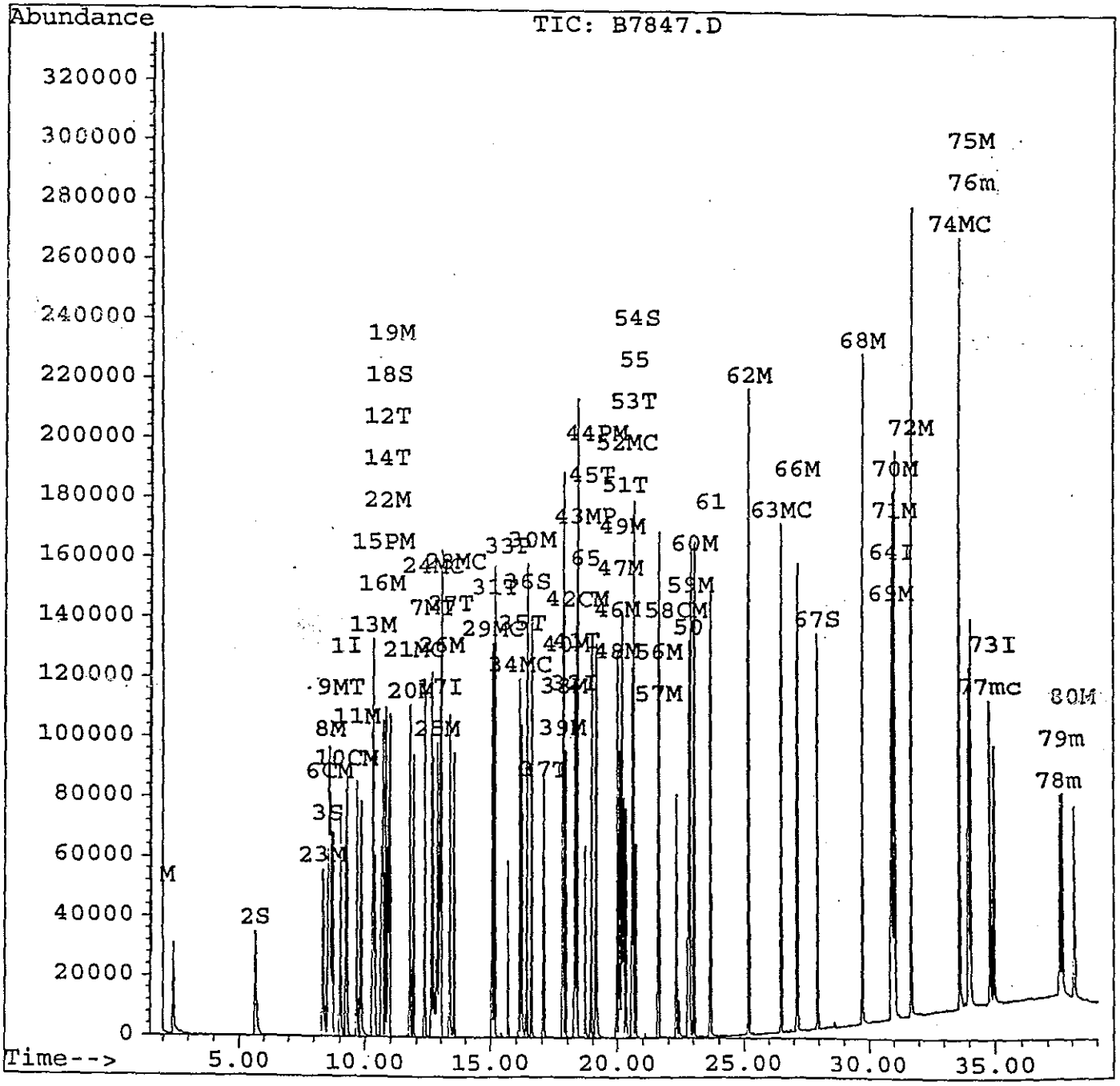
000163

Data File : c:\hpchem\1\data2\b7847.d
Acq On : 7 Jun 95 9:07 am
Sample : 50 STD.....
Misc :
Quant Time: Jun 12 14:29 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.

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

000165

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

000167

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.

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

000168

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Lab File ID (Standard): B7847.D Date Analyzed: 6/7/95

Instrument ID: ABNA Time Analyzed: 0907

		IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
	12 HOUR STD	24559	9.22	98952	12.96	62560	18.28
	UPPER LIMIT	49118	9.72	197904	13.46	125120	18.78
	LOWER LIMIT	12280	8.72	49476	12.46	31280	17.78
	SAMPLE NO.						
01	SBLK01	33478	9.22	143449	12.94	87220	18.29
02	9524564B	46396	9.22	177211	12.94	119986	18.29
03	9524565B	47934	9.23	183522	12.95	96410	18.28
04	9524566B	46255	9.22	121306	12.94	119698	18.29
05	SBLK02	33875	9.23	137132	12.94	87946	18.27
06	9525096B	34109	9.23	138830	12.95	85618	18.29
07	9525099B	33182	9.23	133186	12.94	81316	18.28
08	9525105B	32776	9.23	126711	12.98	70858	18.37
09	SBLK03	48848	9.22	125899	12.96	119545	18.29
10	9524196B	48391	9.23	159269	12.94	123322	18.29
11	9524198B	39306	9.23	160879	12.94	100934	18.28
12	9524205B	35360	9.23	142302	12.94	88160	18.28
13	9524206B	37172	9.21	146746	12.94	91686	18.28
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.

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

000169

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Lab File ID (Standard): B7847.D Date Analyzed: 6/7/95

Instrument ID: ABNA Time Analyzed: 0907

		IS4 (PHN) AREA #		IS5 (CRY) AREA #		IS6 (PRY) AREA #	
			RT #		RT #		RT #
	12 HOUR STD	98447	22.80	95317	30.93	66983	34.94
	UPPER LIMIT	196894	23.30	190634	31.43	133966	35.44
	LOWER LIMIT	49224	22.30	47659	30.43	33492	34.44
	SAMPLE NO.						
01	SBLK01	128146	22.79	129256	30.92	109218	34.94
02	9524564B	196098	22.79	178239	30.92	77969	34.93
03	9524565B	111353	22.78	152068	30.91	125601	34.96
04	9524566B	166319	22.79	177223	30.92	125204	34.95
05	SBLK02	136847	22.80	157121	30.90	129536	34.95
06	9525096B	149925	22.81	151006	30.92	106393	34.95
07	9525099B	135278	22.80	147917	30.91	116272	34.95
08	9525105B	118336	22.91	132864	30.94	111217	34.95
09	SBLK03	150806	22.79	180033	30.92	121128	34.95
10	9524196B	180822	22.80	137424	30.91	102640	34.94
11	9524198B	166157	22.78	185383	30.91	132030	34.95
12	9524205B	145650	22.78	162164	30.92	124411	34.93
13	9524206B	155843	22.78	175434	30.91	127745	34.94
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. 9524196B MW1-293776

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Matrix: (soil/water) WATER Lab Sample ID: 9524196B

Sample wt/vol: 1000.0 (g/mL ML Lab File ID: B7859.D

Level: (low/med) _____ Date Received: 5/26/95

% Moisture: _____ decanted: (Y/N): N Date Extracted: 6/1/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 6/7/95

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
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	bis(2-chloroisopropyl)ether	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO. 9524196B MW1-293176

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Matrix: (soil/water) WATER Lab Sample ID: 9524196B

Sample wt/vol: 1000.0 (g/mL ML Lab File ID: B7859.D

Level: (low/med) _____ Date Received: 5/26/95

% Moisture: _____ decanted: (Y/N): N Date Extracted: 6/1/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 6/7/95

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
51-28-5	2,4-Dinitrophenol	25	U
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
86-73-7	Fluorene	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	n-Nitrosodiphenylamine	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-08	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
56-55-3	Benzo[a]anthracene	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	10	U
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo[b]fluoranthene	10	U
207-08-9	Benzo[k]fluoranthene	10	U
50-32-8	Benzo[a]pyrene	10	U
193-39-5	Indeno[1,2,3-cd]pyrene	10	U
53-70-3	Dibenz[a,h]anthracene	10	U
191-24-2	Benzo[g,h,i]perylene	10	U

000172

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.

9524196B
MW1-293776

Lab Name: EMSL ANALYTICAL Contract:

Project No.: Site: Location: Group:

Matrix: (soil/water) WATER Lab Sample ID: 9524196B

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: B7859.D

Level: (low/med) Date Received: 5/26/95

% Moisture: decanted: (Y/N) N Date Extracted: 6/1/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 6/7/95

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

Number TICs found: 5 Concentration Units: (ug/L or ug/Kg) ug/L

CAS Number	Compound Name	RT	Est. Conc	Q
1. 112-80-1	Oleic Acid	25.03	17	J
2. 57-10-3	Hexadecanoic acid	25.27	4	J
3. 112-60-7	Ethanol, 2,2'-[oxybis(2,1-et	26.44	9	J
4. 112-27-6	Triethylene glycol	29.66	18	J
5.	UNKNOWN	32.55	19	J
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

000173

Data File : c:\hpchem\1\data2\b7859.d Vial: 14
Acq On : 7 Jun 95 8:04 pm Operator: SCOTTV
Sample : 24196..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jun 15 13:32 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Tue Jun 13 15:56:40 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.23	152	48391	40.00	ug/mL	0.20
17) Naphthalene-d8	12.94	136	159269	40.00	ug/mL	0.19
32) Acenaphthene-d10	18.29	164	123322	40.00	ug/mL	0.25
50) Phenanthrene-d10	22.80	188	180822	40.00	ug/ml	0.28
64) Chrysene-d12	30.91	240	137424	40.00	ug/mL	0.33
73) Perylene-d12	34.94	264	102640	40.00	ug/mL	0.35
System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	5.65	112	40811	29.82	ug/mL	29.82%
3) Phenol-d5	8.53	99	72534	32.02	ug/mL	32.02%
18) Nitrobenzene-d5	10.88	82	61529	33.91	ug/mL	33.91%
36) 2-Fluorobiphenyl	16.41	172	74028	20.01	ug/mL	20.01%
54) 2,4,6-Tribromophenol	20.70	330	34127	69.88	ug/mL	69.88%
67) Terphenyl-d14	27.96	244	272385	74.68	ug/mL	74.68%
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration

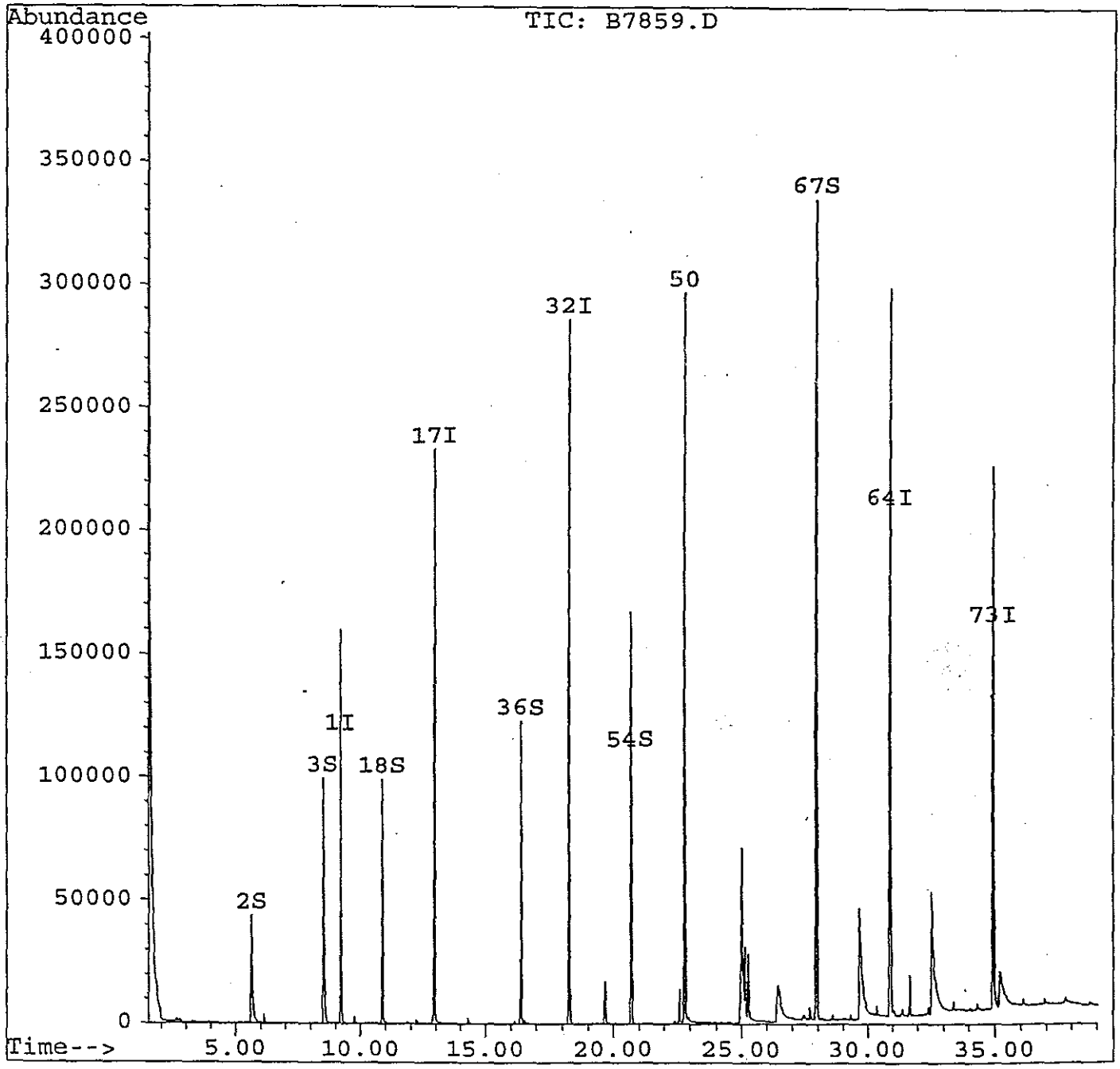
Quantitation Report

Data File : c:\hpchem\1\data2\b7859.d
Acq On : 7 Jun 95 8:04 pm
Sample : 24196.....
Misc :
Quant Time: Jun 13 10:35 1995

Converted from RTE d

Vial: 14
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



Data File : c:\hpchem\1\data2\b7859.d
Acq On : 7 Jun 95 8:04 pm
Sample : 24196.....
Misc :

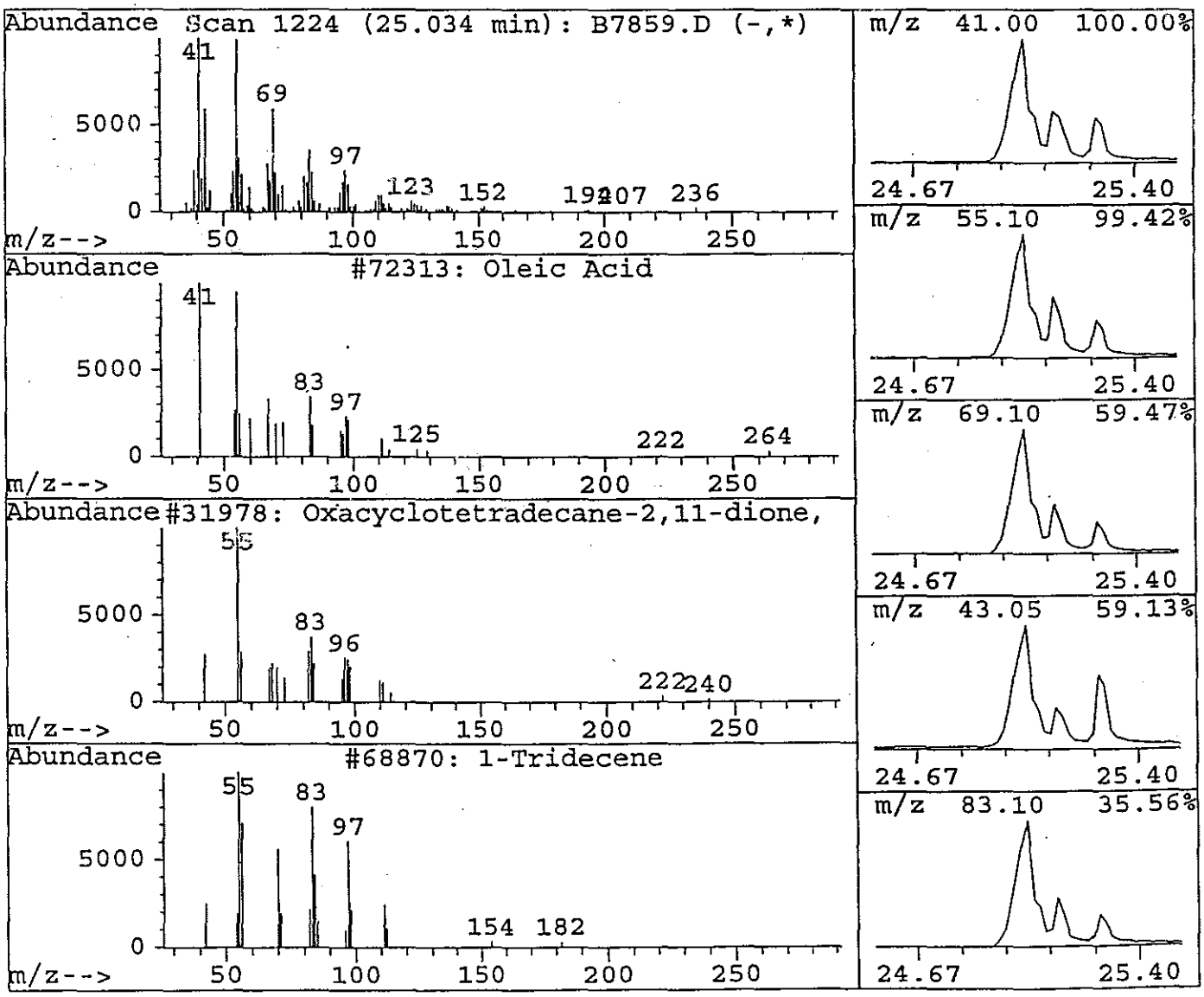
Converted from RTE d

Vial: 14
Operator: SCOTTV
Inst : ABNA
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.
25.03	16.85 ug/ml	310565	Phenanthrene-d10	22.80

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Oleic Acid	72313	000112-80-1	72
2	Oxacyclotetradecane-2,11-dione, 13-	31978	074685-36-2	72
3	1-Tridecene	68870	002437-56-1	52
4	Cyclopentadecanone, 2-hydroxy-	32022	004727-18-8	50
5	1-Undecenoic acid	18875	001333-28-4	47



Library Search Compound Report

000176

Data File : c:\hpchem\1\data2\b7859.d
Acq On : 7 Jun 95 8:04 pm
Sample : 24196.....
Misc :

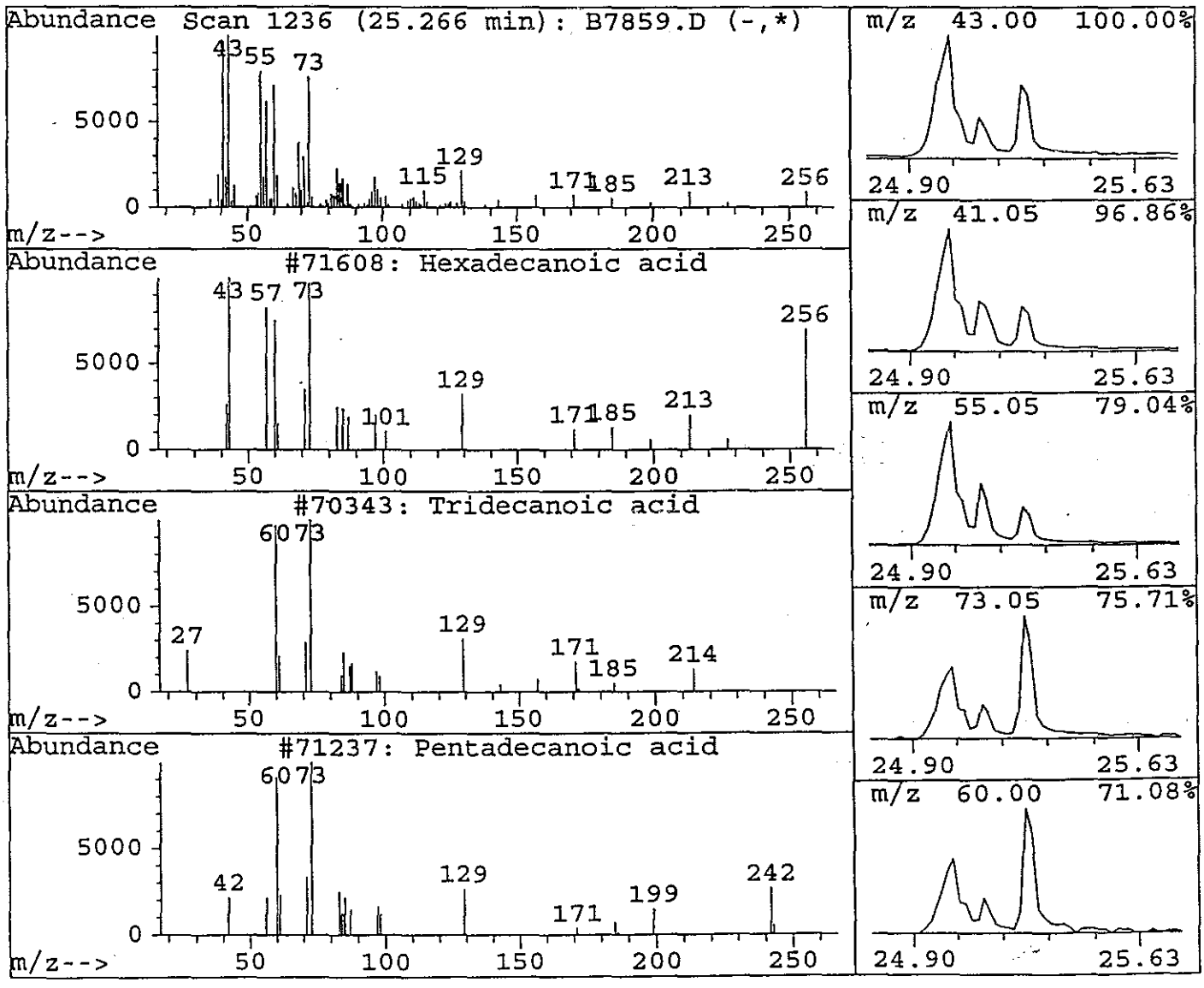
Converted from RTE d

Vial: 14
Operator: SCOTTV
Inst : ABNA
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.
25.27	4.20 ug/ml	77370	Phenanthrene-d10	22.80

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Hexadecanoic acid	71608	000057-10-3	98
2	Tridecanoic acid	70343	000638-53-9	83
3	Pentadecanoic acid	71237	001002-84-2	83
4	Tetradecanoic acid	70840	000544-63-8	83
5	Dodecanamide, N,N-bis(2-hydroxyethy	40673	000120-40-1	59



Library Search Compound Report

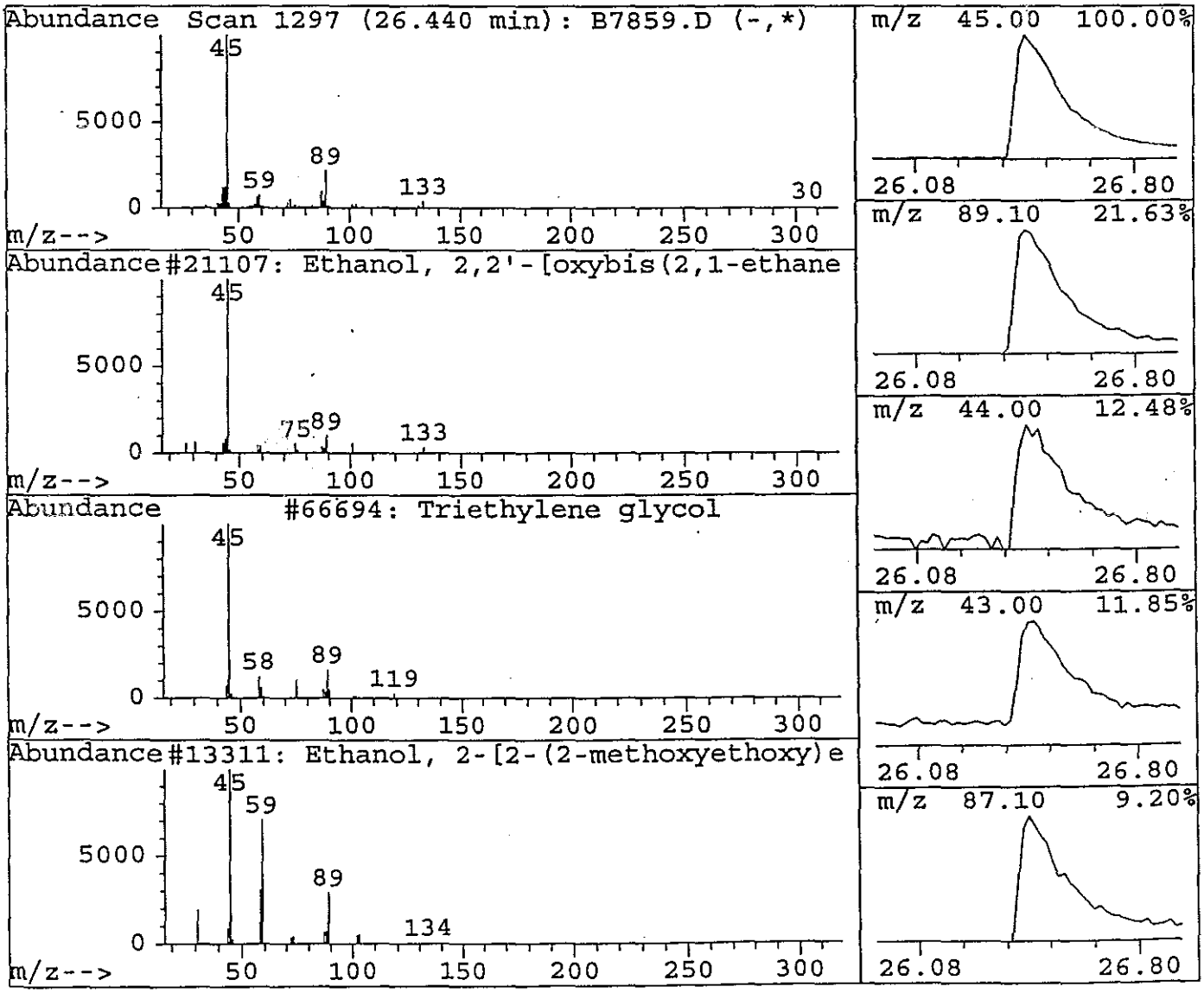
000177

Data File : c:\hpchem\1\data2\b7859.d
Acq On : 7 Jun 95 8:04 pm
Sample : 24196.....
Misc :
Vial: 14
Operator: SCOTTV
Converted from RTE d Inst : ABNA
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.
26.44	9.33 ug/ml	171998	Phenanthrene-d10	22.80

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Ethanol, 2,2'-[oxybis(2,1-ethanediy	21107	000112-60-7	72
2	Triethylene glycol	66694	000112-27-6	64
3	Ethanol, 2-[2-(2-methoxyethoxy)etho	13311	000112-35-6	56
4	12-Crown-4	16610	000294-93-9	56
5	Isopropyl Alcohol	126	000067-63-0	47



Data File : c:\hpchem\1\data2\b7859.d
Acq On : 7 Jun 95 8:04 pm
Sample : 24196.....
Misc :

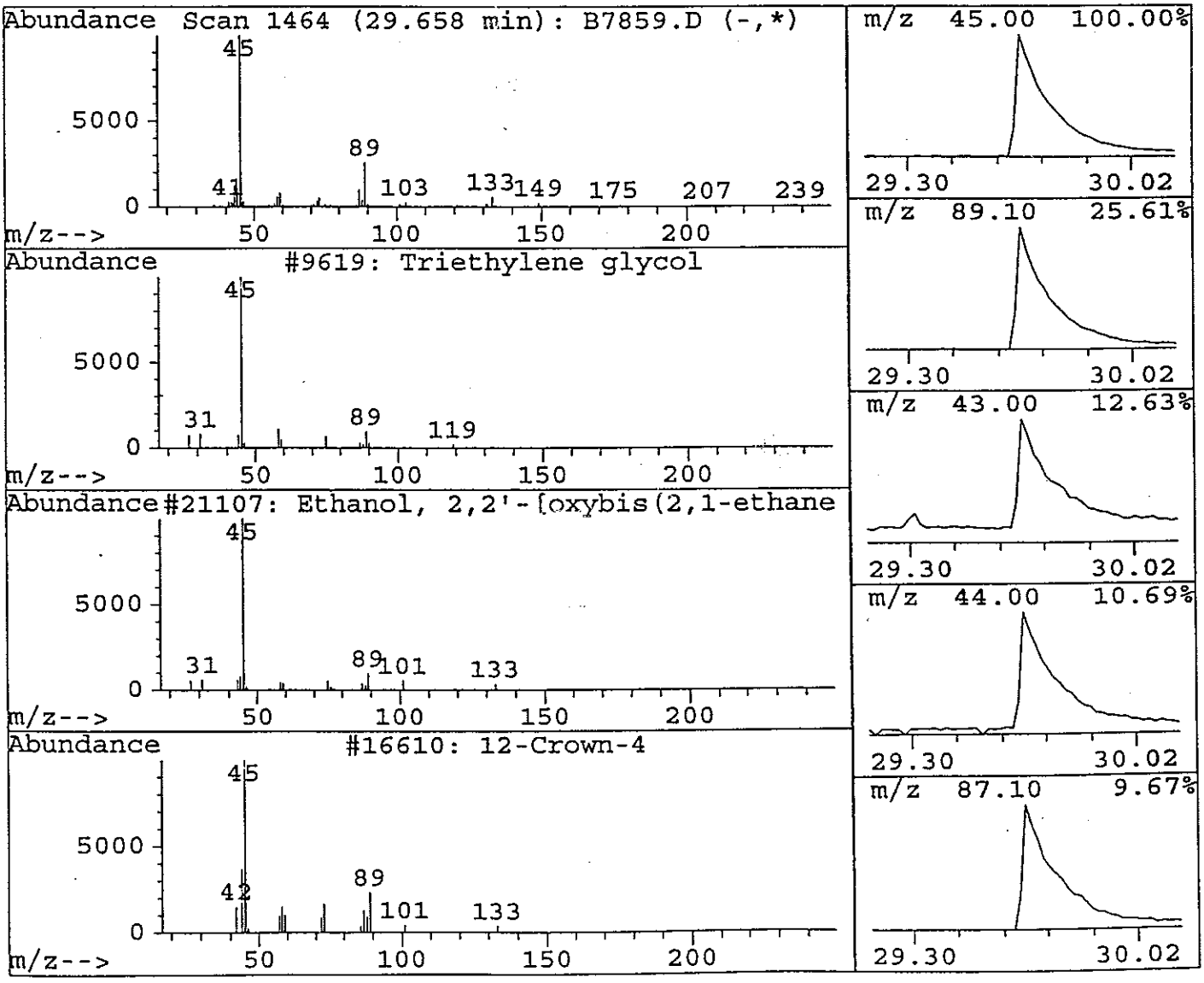
Converted from RTE d

Vial: 14
Operator: SCOTTV
Inst : ABNA
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.
29.66	18.26 ug/ml	367253	Chrysene-d12	30.91

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Triethylene glycol	9619	000112-27-6	78
2	Ethanol, 2,2'-[oxybis(2,1-ethanediy	21107	000112-60-7	72
3	12-Crown-4	16610	000294-93-9	56
4	Paraldehyde	65381	000123-63-7	53
5	Propanoic acid, 2-hydroxy-, methyl	63607	000547-64-8	50



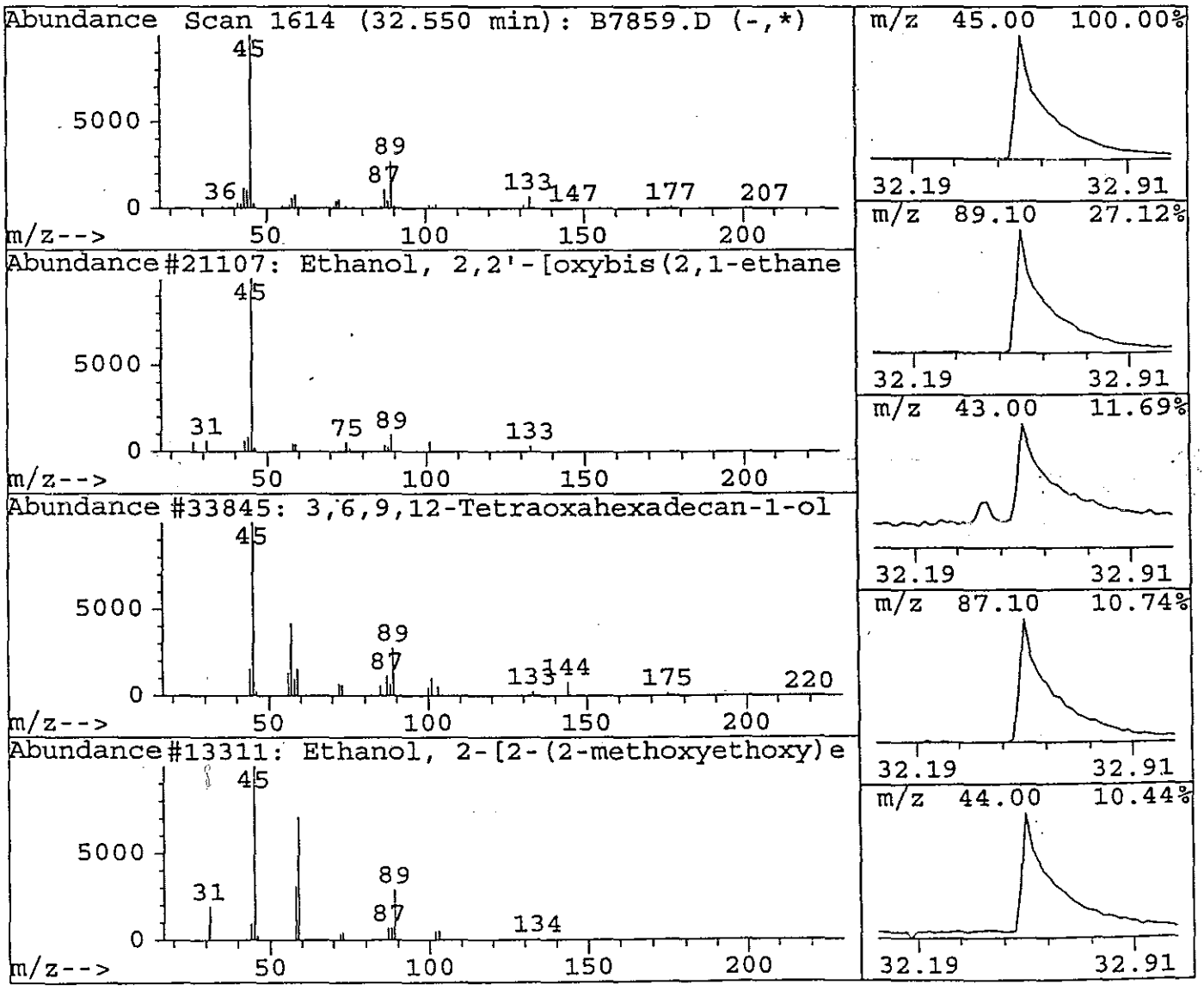
Data File : c:\hpchem\1\data2\b7859.d
Acq On : 7 Jun 95 8:04 pm
Sample : 24196.....
Misc :

Vial: 14
Operator: SCOTTV
Converted from RTE d Inst : ABNA
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.
32.55	18.77 ug/ml	377436	Chrysene-d12	30.91

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Ethanol, 2,2'-[oxybis(2,1-ethanediy	21107	000112-60-7	72
2	3,6,9,12-Tetraoxahexadecan-1-ol	33845	001559-34-8	64
3	Ethanol, 2-[2-(2-methoxyethoxy)etho	13311	000112-35-6	64
4	Triethylene glycol	66694	000112-27-6	64
5	Paraldehyde	5802	000123-63-7	53



1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

9524198B FB

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Matrix: (soil/water) WATER Lab Sample ID: 9524198B

Sample wt/vol: 1000.0 (g/mL ML Lab File ID: B7860.D

Level: (low/med) _____ Date Received: 5/26/95

% Moisture: _____ decanted: (Y/N): N Date Extracted: 6/1/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 6/7/95

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
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	bis(2-chloroisopropyl)ether	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

9524198B FB

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Matrix: (soil/water) WATER Lab Sample ID: 9524198B

Sample wt/vol: 1000.0 (g/mL ML Lab File ID: B7860.D

Level: (low/med) _____ Date Received: 5/26/95

% Moisture: _____ decanted: (Y/N): N Date Extracted: 6/1/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 6/7/95

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
51-28-5	2,4-Dinitrophenol	25	U
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
86-73-7	Fluorene	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	n-Nitrosodiphenylamine	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-08	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
56-55-3	Benzo[a]anthracene	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	10	U
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo[b]fluoranthene	10	U
207-08-9	Benzo[k]fluoranthene	10	U
50-32-8	Benzo[a]pyrene	10	U
193-39-5	Indeno[1,2,3-cd]pyrene	10	U
53-70-3	Dibenz[a,h]anthracene	10	U
191-24-2	Benzo[g,h,i]perylene	10	U

000182

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.: 9524198B FB

Lab Name: EMSL ANALYTICAL Contract:

Project No.: Site: Location: Group:

Matrix: (soil/water) WATER Lab Sample ID: 9524198B

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: B7860.D

Level: (low/med) Date Received: 5/26/95

% Moisture: decanted: (Y/N) N Date Extracted: 6/1/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 6/7/95

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	6.21	5	J
2.	Unknown	29.89	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

000183

Data File : c:\hpchem\1\data2\b7860.d
Acq On : 7 Jun 95 8:55 pm
Sample : 24198.....
Misc :
Quant Time: Jun 13 9:59 1995

Converted from RTE d

Vial: 15
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	9.23	152	39306	40.00	ug/mL	0.20
17) Naphthalene-d8	12.94	136	160879	40.00	ug/mL	0.20
32) Acenaphthene-d10	18.28	164	100934	40.00	ug/mL	0.23
50) Phenanthrene-d10	22.78	188	166157	40.00	ug/ml	0.26
64) Chrysene-d12	30.91	240	185383	40.00	ug/mL	0.33
73) Perylene-d12	34.95	264	132030	40.00	ug/mL	0.36
System Monitoring Compounds						**%Recovery**
2) 2-Fluorophenol	5.65	112	45006	40.48	ug/mL	40.48%
3) Phenol-d5	8.54	99	77425	42.08	ug/mL	42.08%
18) Nitrobenzene-d5	10.88	82	69665	38.01	ug/mL	38.01%
36) 2-Fluorobiphenyl	16.41	172	103692	34.25	ug/mL	34.25%
54) 2,4,6-Tribromophenol	20.70	330	23875	53.21	ug/mL	53.21%
67) Terphenyl-d14	27.96	244	293134	59.57	ug/mL	59.57%
Target Compounds						**Qvalue**

(#) = qualifier out of range (m) = manual integration

Quantitation Report

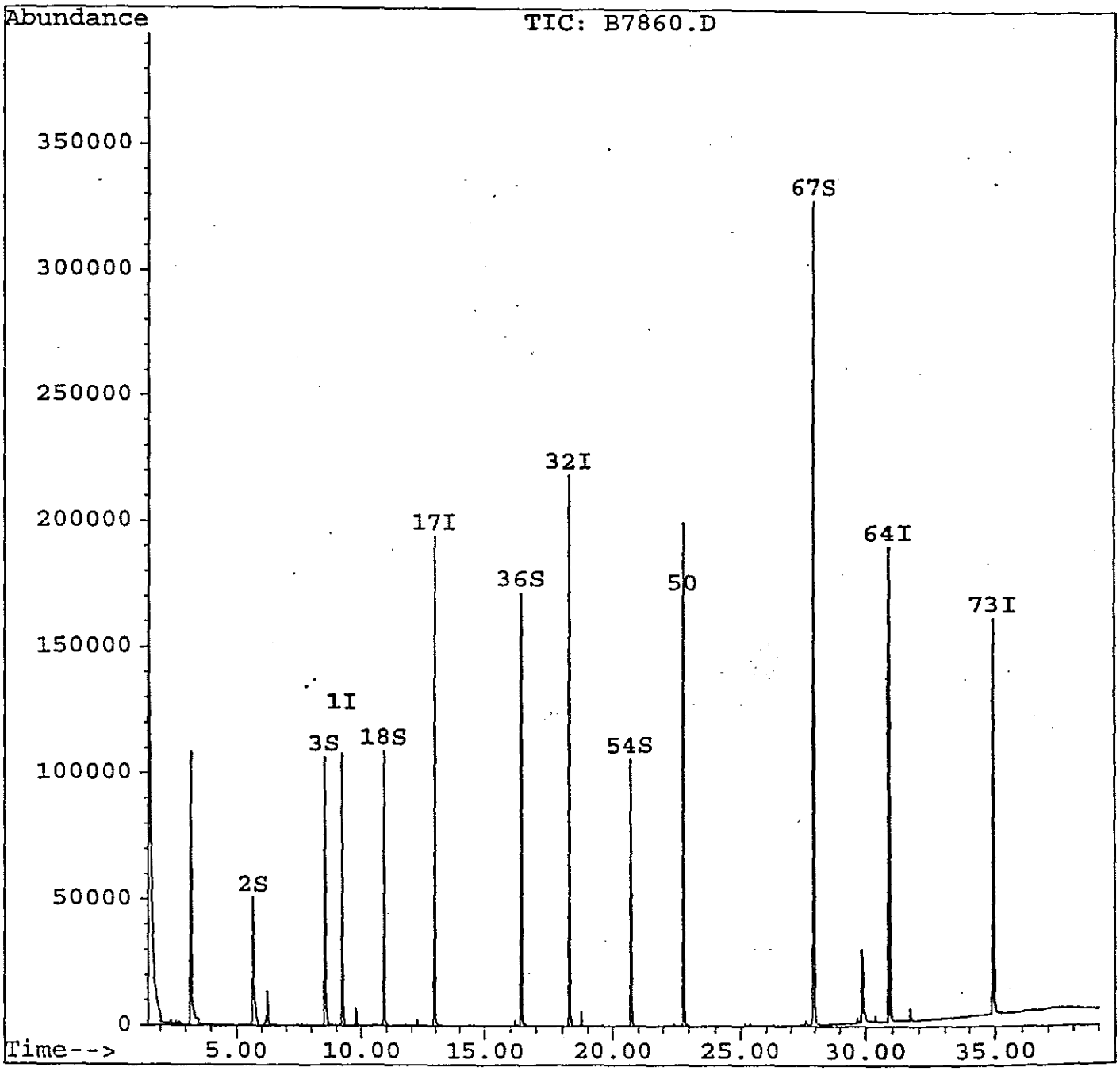
000184

Data File : c:\hpchem\1\data2\b7860.d
Acq On : 7 Jun 95 8:55 pm
Sample : 24198.....
Misc :
Quant Time: Jun 13 9:59 1995

Converted from RTE d

Vial: 15
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

000185

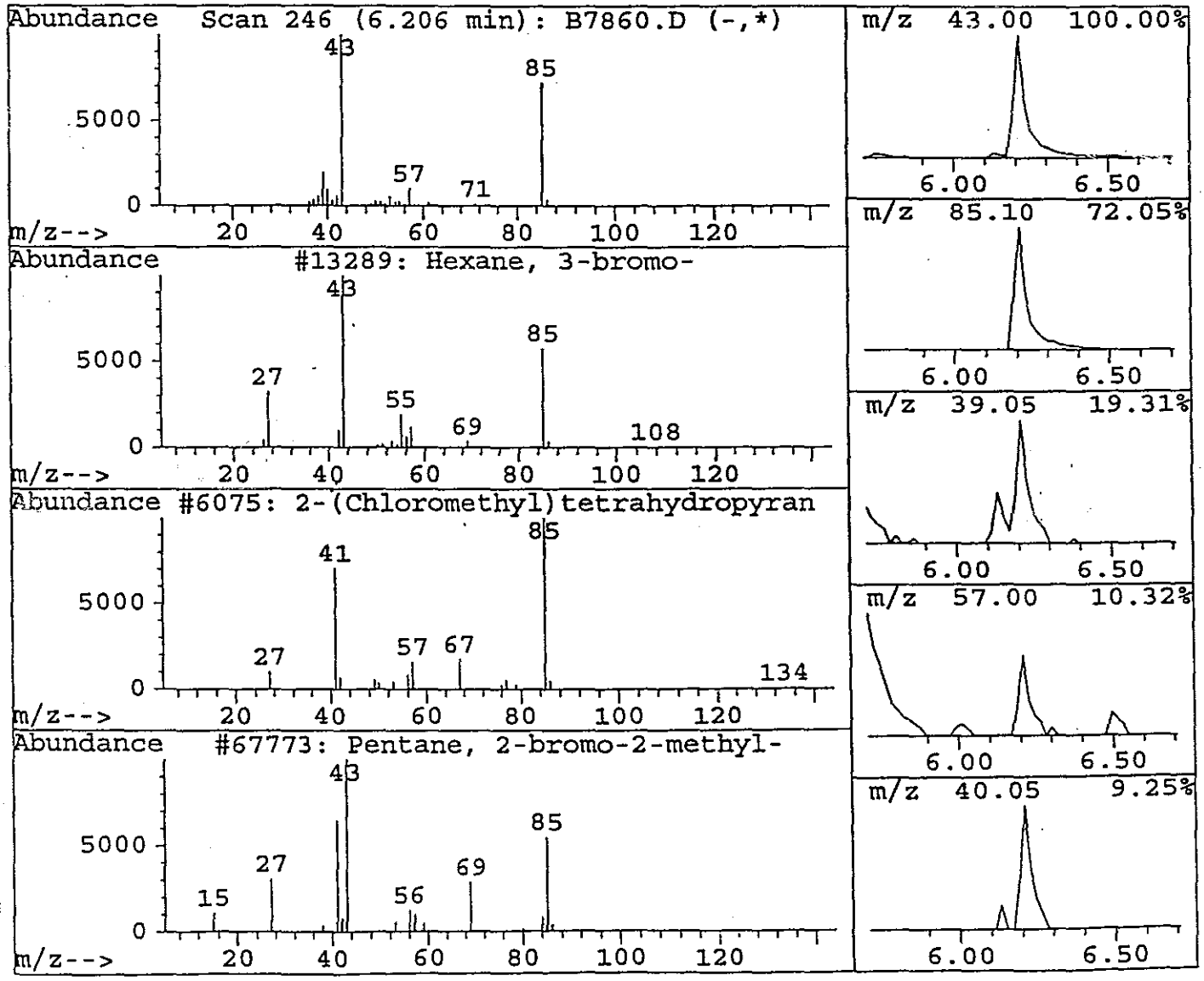
Data File : c:\hpchem\1\data2\b7860.d
Acq On : 7 Jun 95 8:55 pm
Sample : 24198.....
Misc :

Vial: 15
Operator: SCOTTV
Converted from RTE d Inst : ABNA
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.
6.21	4.99 ug/ml	35574	1,4-Dichlorobenzene-d4	9.23

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Hexane, 3-bromo-	13289	003377-87-5	38
2	2-(Chloromethyl)tetrahydropyran	6075	018420-41-2	33
3	Pentane, 2-bromo-2-methyl-	67773	004283-80-1	9
4	Hexane, 1,1'-oxybis-	69125	000112-58-3	9
5	2H-Pyran, 2-(bromomethyl)tetrahydro	17005	034723-82-5	9



Library Search Compound Report

Data File : c:\hpchem\1\data2\b7860.d
Acq On : 7 Jun 95 8:55 pm
Sample : 24198.....
Misc :

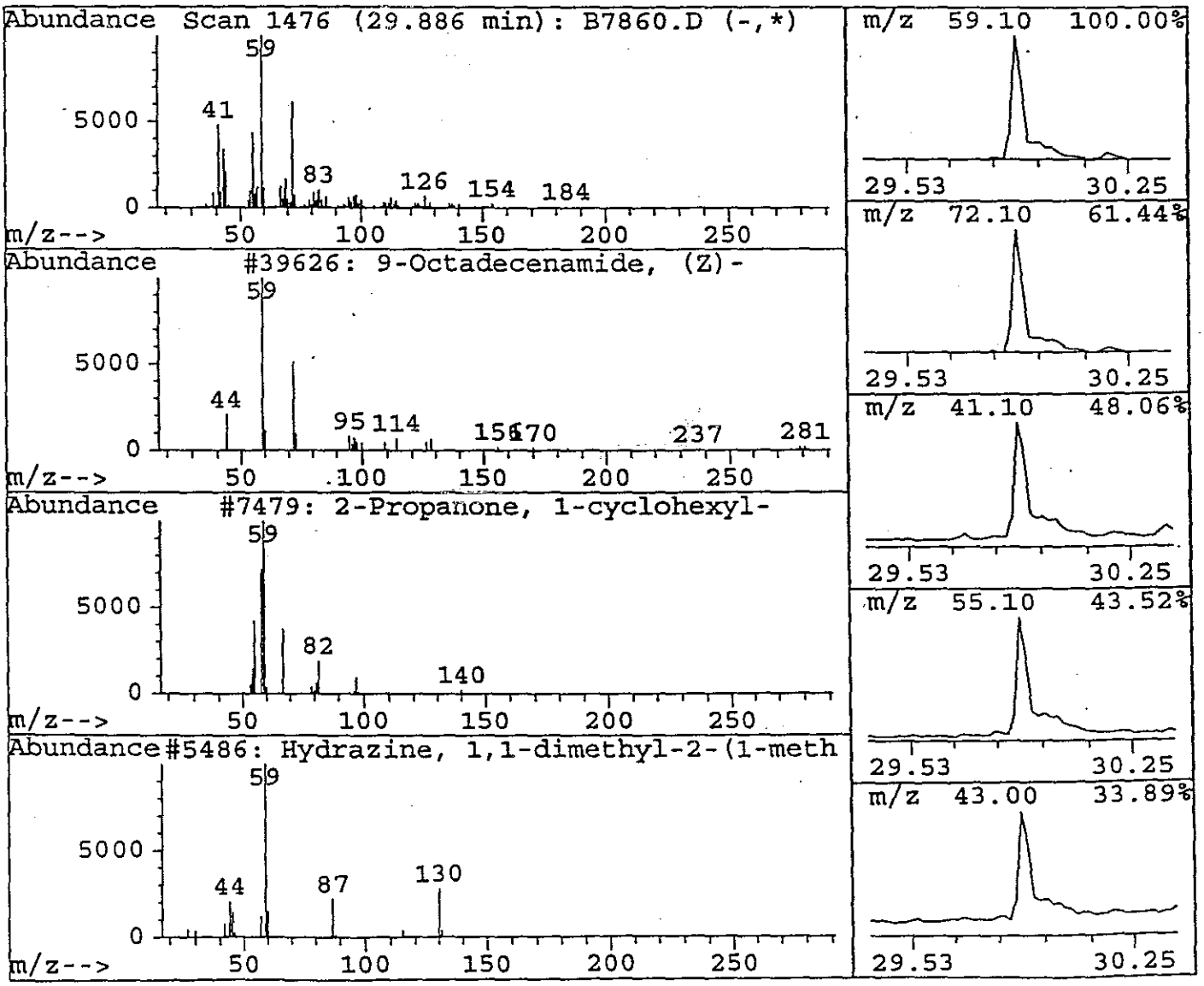
Converted from RTE d

Vial: 15
Operator: SCOTTV
Inst : ABNA
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.
29.89	5.14 ug/ml	71132	Chrysene-d12	30.91

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	9-Octadecenamide, (Z)-	39626	000301-02-0	64
2	2-Propanone, 1-cyclohexyl-	7479	000103-78-6	38
3	Hydrazine, 1,1-dimethyl-2-(1-methyl	5486	075267-97-9	38
4	1,7-Octanediol, 3,7-dimethyl-	16271	000107-74-4	35
5	Cyclooctanemethanol, .alpha.,.alpha	15325	016624-06-9	35



2C

WATER SEMIVOLATILE SURROGATE RECOVERY

000187

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										

S1 (NBZ) = Nitrobenzene-d5 QC LIMITS (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

2C

WATER SEMIVOLATILE SURROGATE RECOVERY

000138

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

	SAMPLE NO.	S1 (2FP) #	S2 (PHL) #	S3 (NBZ) #	S4 (FBP) #	S5 (TBP) #	S6 (TPH) #	#	#	TOT OUT
01	SBLK01	30	17	55	47	40	42			
02	9524564B	18	11	37	39	55	51			
03	9524565B	23	13	44	51	98	64			
04	9524566B	26	16	62	39	71	52			
05										
06										
07										
08										
09	SBLK03	29	29	42	21	53	57			
10	9524196B	30	32	34	20	70	75			
11	9524198B	40	42	38	34	53	60			
12	9524205B	28	33	31	33	63	53			
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23										
24										
25										
26										
27										
28										
29										
30										

	QC LIMITS
S1 (2FP) = 2-Fluorophenol	(4-106)
S2 (PHL) = Phenol-d5	(5-87)
S3 (NBZ) = Nitrobenzene-d5	(22-101)
S4 (FBP) = 2-Fluorobiphenyl	(20-94)
S5 (TBP) = 2,4,6-Tribromophenol	(17-126)
S6 (TPH) = Terphenyl-d14	(35-127)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogate diluted out

000189

4B

SEMIVOLATILE METHOD BLANK SUMMARY

SAMPLE NO.

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.

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.

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.

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
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

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

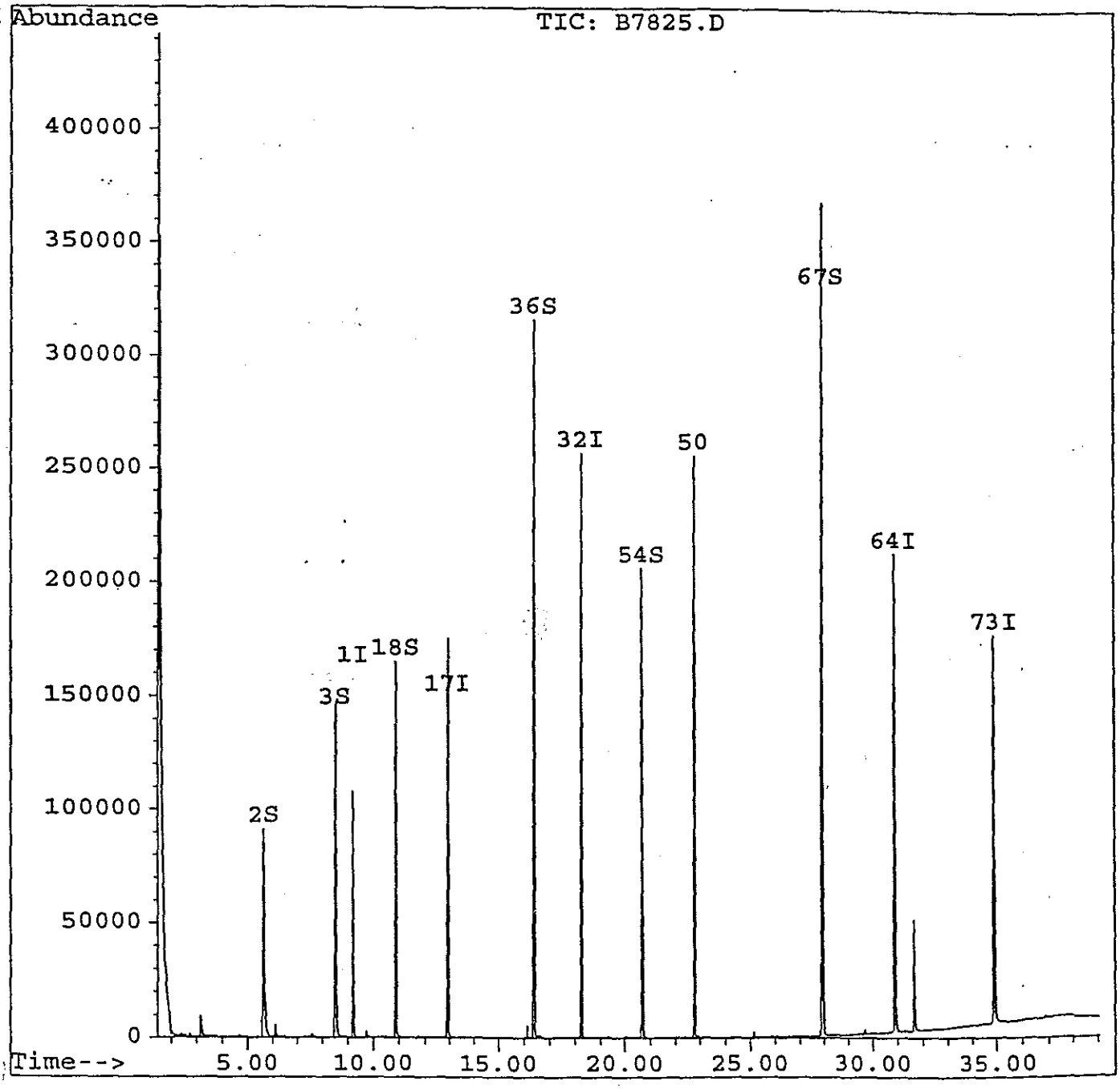
Quantitation Report

000195

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



000196

4B

SEMIVOLATILE METHOD BLANK SUMMARY

SAMPLE NO.

SBLK03

Lab Name: EMSL ANALYTICAL Contract:

Project No.: Site: Location: Group:

Lab File ID: B7858.D Lab Sample ID: BLANK3

Instrument ID: ABNA Date Extracted: 6/1/95

Matrix: (soil/water) WATER Date Analyzed: 6/7/95

Level: (low/med) Time Analyzed: 1913

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	9524196B	9524196B	B7859.D	06/07/95
02	9524198B	9524198B	B7860.D	06/07/95
03	9524205B	9524205B	B7861.D	06/07/95
04	9524206B	9524206B	B7862.D	06/07/95
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.

SBLK03

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: B7858.D

Level: (low/med) _____ Date Received: 5/26/95

% Moisture: _____ decanted: (Y/N): N Date Extracted: 6/1/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 6/7/95

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
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	bis(2-chloroisopropyl)ether	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.: SBLK03

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: B7858.D

Level: (low/med) _____ Date Received: 5/26/95

% Moisture: _____ decanted: (Y/N): N Date Extracted: 6/1/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 6/7/95

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
51-28-5	2,4-Dinitrophenol	25	U
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
86-73-7	Fluorene	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	n-Nitrosodiphenylamine	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-08	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
56-55-3	Benzo[a]anthracene	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	10	U
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo[b]fluoranthene	10	U
207-08-9	Benzo[k]fluoranthene	10	U
50-32-8	Benzo[a]pyrene	10	U
193-39-5	Indeno[1,2,3-cd]pyrene	10	U
53-70-3	Dibenz[a,h]anthracene	10	U
191-24-2	Benzo[g,h,i]perylene	10	U

000199
SAMPLE NO.

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SBLK03

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: B7858.D

Level: (low/med) Date Received: 5/26/95

% Moisture: decanted: (Y/N) N Date Extracted: 6/1/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 6/7/95

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

000200

Data File : c:\hpchem\1\data2\b7858.d
Acq On : 7 Jun 95 7:13 pm
Sample : BLANK.....
Misc :
Quant Time: Jun 13 10:04 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

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.22	152	48848	40.00	ug/mL	0.19
17) Naphthalene-d8	12.96	136	125899	40.00	ug/mL	0.21
32) Acenaphthene-d10	18.29	164	119545	40.00	ug/mL	0.24
50) Phenanthrene-d10	22.79	188	150806	40.00	ug/ml	0.28
64) Chrysene-d12	30.92	240	180033	40.00	ug/mL	0.34
73) Perylene-d12	34.95	264	121128	40.00	ug/mL	0.35
System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	5.64	112	39728	28.75	ug/mL	28.75%
3) Phenol-d5	8.53	99	67163	29.37	ug/mL	29.37%
18) Nitrobenzene-d5	10.88	82	60197	41.97	ug/mL	41.97%
36) 2-Fluorobiphenyl	16.40	172	74607	20.81	ug/mL	20.81%
54) 2,4,6-Tribromophenol	20.72	330	21648	53.15	ug/mL	53.15%
67) Terphenyl-d14	27.97	244	271391	56.79	ug/mL	56.79%
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration

Quantitation Report

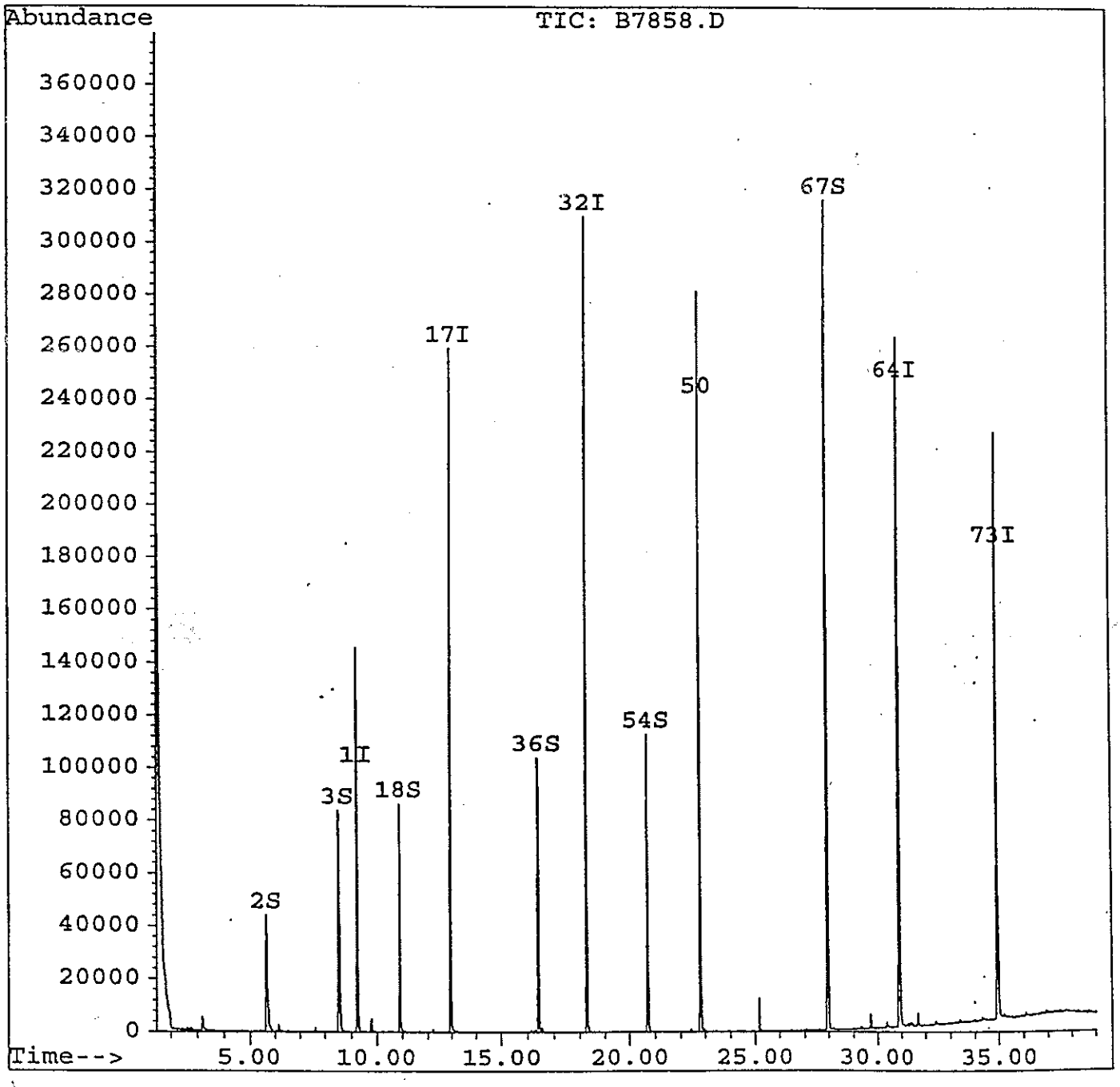
000201

Data File : c:\hpchem\1\data2\b7858.d
Acq On : 7 Jun 95 7:13 pm
Sample : BLANK.....
Misc :
Quant Time: Jun 13 10:04 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



Spike Recovery and RPD Summary Report - WATER

000202

ethod : C:\HPCHEM\1\METHODS\BNACLP.M
itle : CLP BNA Calibration
Last Update : Wed May 31 10:06:36 1995
sponse via : Initial Calibration

Non-Spiked Sample: B7742.D

	Spike Sample	Spike Duplicate Sample
ile ID :	B7826.D	B7827.D
ample :	22654MS.....	Converted from RTE data file >B7826::D5

ompound	Sample Conc	Spike Added	Spike Res	Dup Res	Spike %Rec	Dup %Rec	RPD	QC Limits RPD	QC Limits % Rec
-nitrosodimethylami	0.0	100	108	91	108	91	17	100	1-300
henol	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
-Chlorophenol	0.0	100	76	67	76	67	13	29	23-134
,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
,2-Dichlorobenzene	0.0	100	62	53	62	53	15	31	32-129
is(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
itrobenzene	0.2	100	84	71	83	71	17	39	35-180
sophorone	0.0	100	70	59	70	59	17	63	21-196
2-Nitrophenol	0.0	100	79	65	79	65	19	35	29-182
,4-Dimethylphenol	0.0	100	43	40	43	40	7	26	32-119
is(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
,2,4-Trichlorobenze	0.0	100	67	59	67	59	13	28	44-142
aphthalene	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
-Chloronaphthalene	0.0	100	77	68	77	68	12	13	60-118
,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
cenaphthylene	0.0	100	56	50	56	50	12	40	33-145
,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
,4-Dinitrophenol	0.0	100	68	65	68	65	4	50	1-191
-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
luorene	0.9	100	75	69	74	68	9	21	59-121
-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
-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
henanthrene	0.0	100	81	75	81	75	9	21	54-120
thracene	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
yrene	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

000204

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
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

	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

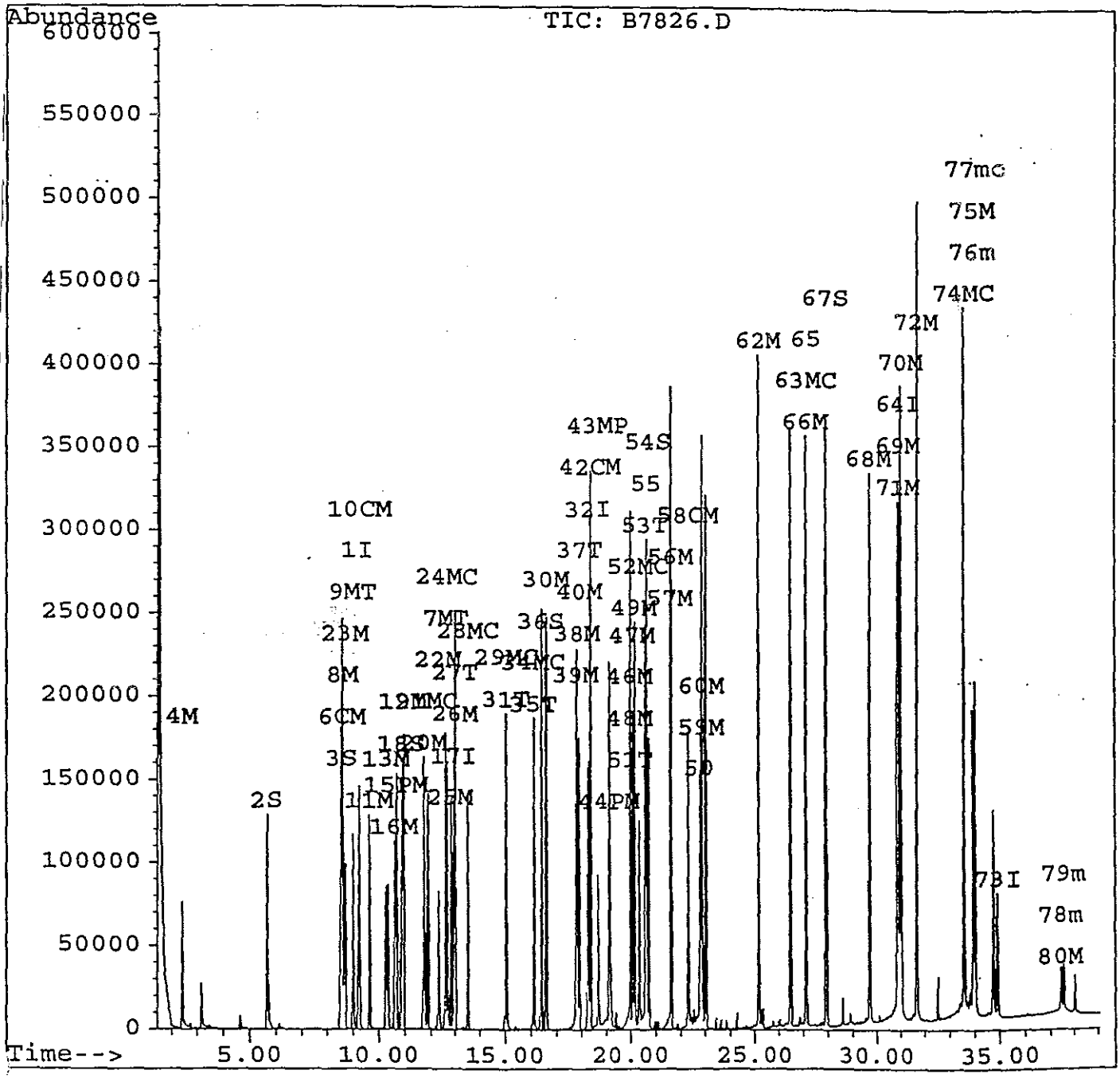
000206

Data File : c:\hpchem\1\data2\b7826.d
Acq On : 4 Jun 95 5:25 am
Sample : 22654MS.....
Misc :
Quant Time: Jun 13 13:06 1995

Converted from RTE d

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(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
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

	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

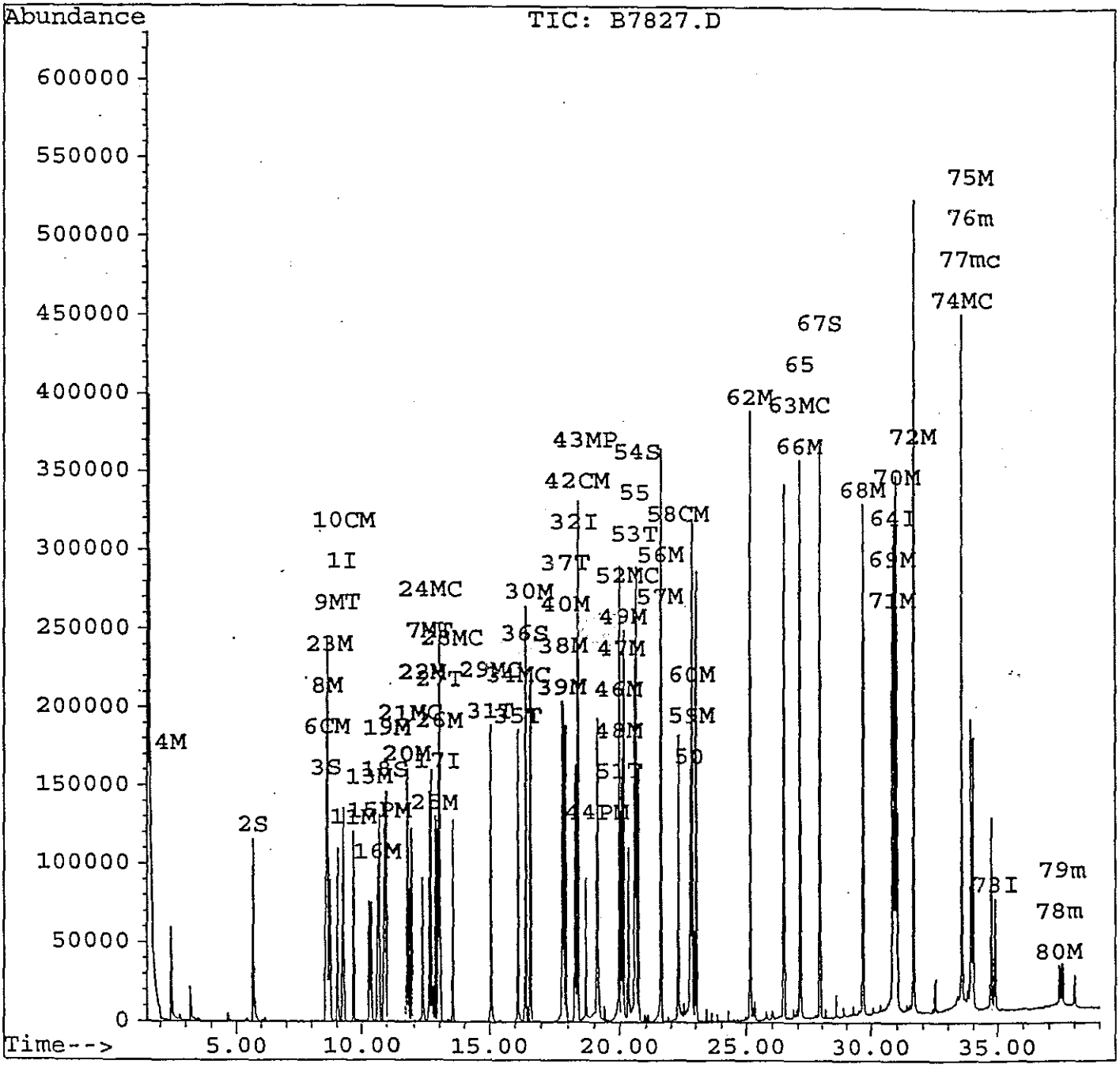
(#) = qualifier out of range (m) = manual integration

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

000210

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	31	20	31	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
D -n-octylphthalate	0.0	100	65	68	65	68	6	31	4-146
B nzo[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
B nzo[a]pyrene	0.1	100	104	103	104	102	2	39	17-163
leno[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 000212

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

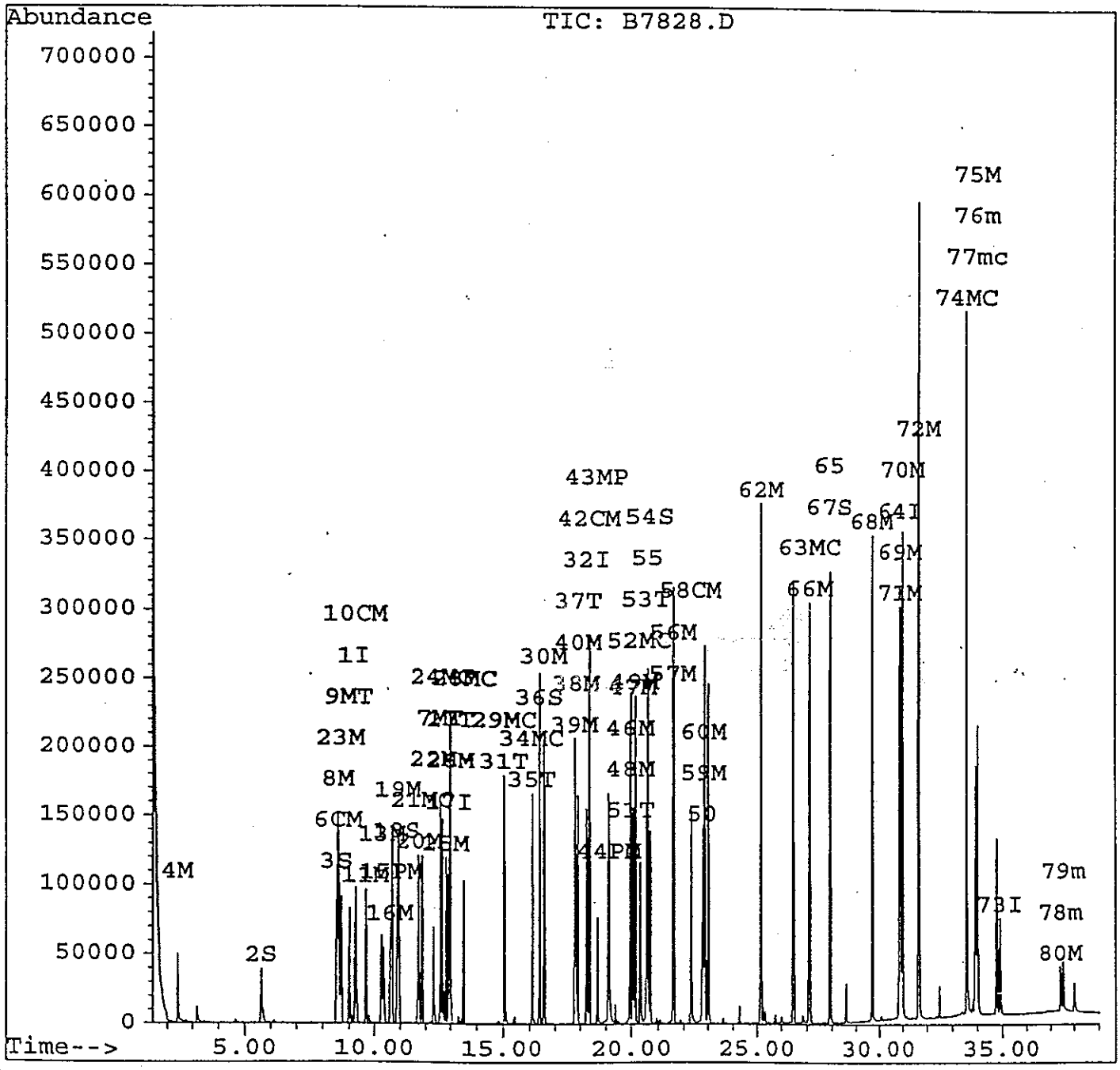
Quantitation Report

000214

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

000215

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

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

	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

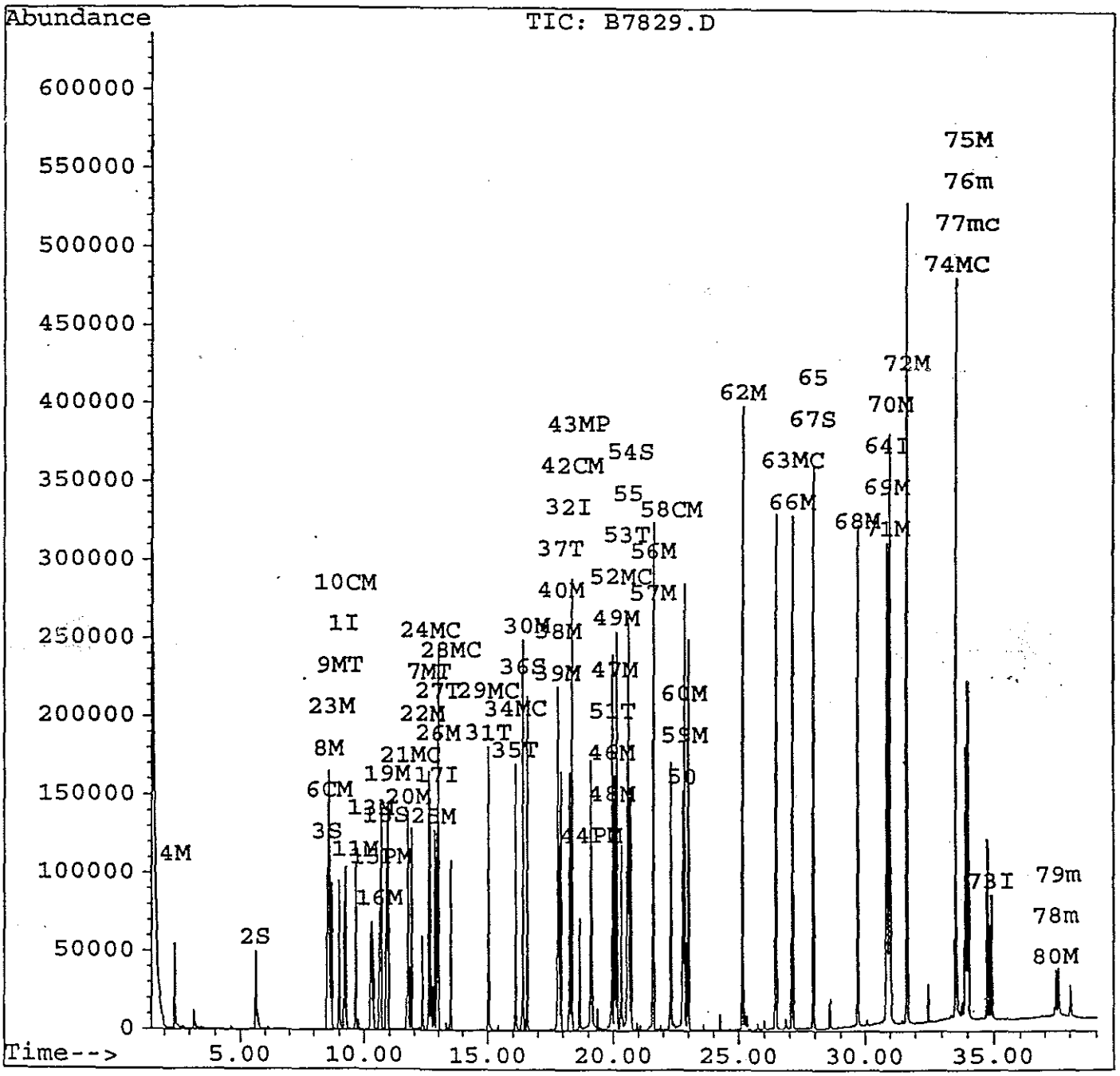
Quantitation Report

000217

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



PESTICIDE/PCB DATA PACKAGE

PESTICIDE/PCB STANDARDS SUMMARY

000219

Lab Name: EMSL Analytical Contract: _____

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

Instrument ID: HP5890/SIIP GC Column ID: DB5

DATE(S) OF ANALYSIS FROM: 6-6-95 TO: 6-6-95
TIME(S) OF ANALYSIS FROM: 17:31 TO: 23:22
DATE OF ANALYSIS 6-9-95
TIME OF ANALYSIS _____
EPA SAMPLE NO. (STANDARD) 1194261

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR	RT	CALIBRATION FACTOR	QNT Y/N	%D
alpha-BHC	5:56	5:51	6:01	1499				
beta-BHC	6:23	6:18	6:28	1197				
delta-BHC	7:03	6:58	7:08	1325				
gamma-BHC	6:40	6:35	6:45	1636				
Heptaclor	8:43	8:38	8:48	2248				
Aldrin	9:47	9:42	9:52	1904				
Hept. epoxide	10:75	10:70	10:80	2052				
Endosulfan I	11:87	11:80	11:94	2102				
Dieldrin	12:74	12:67	12:81	1919				
4,4'-DDE	12:89	12:82	12:96	2058				
Endrin	13:41	13:34	13:48	1783				
Endosulfan II	13:73	13:66	13:80	2000				
4,4'-DDD	14:26	14:19	14:33	1353				
Endo.sulfate	15:18	15:11	15:25	1858				
4,4'-DDT	15:50	15:43	15:57	1435				
Methoxychlor	17:55	17:48	17:62	908				
Endrin ketone	16:63	16:56	16:70	2221				
a. Chlordane	12:02	11:95	12:09	2253				
g. Chlordane	11:52	11:45	11:59	2277				
Toxaphene	13:94	13:87	14:03	47084				
Aroclor-1016	8:02	7:95	8:09	211337	8:02	211885	Y	0.3
Aroclor-1221	5:58	5:51	5:65	71616				
Aroclor-1232	8:02	7:95	8:09	83251				
Aroclor-1242	8:02	7:95	8:09	159006				
Aroclor-1248	8:02	7:95	8:09	137047				
Aroclor-1254	13:08	13:01	13:15	148622				
Aroclor-1260	17:89	17:82	17:96	364791	17:89	383419	Y	5
Endrin Aldehyde	14:38	14:31	14:45	1903				

Under QNT Y/N: enter Y if quantitation was performed, N if not performed. %D must be less than or equal to 15.0% for quantitation, and less than or equal to 20.0% for confirmation.

Note: Determining that no compounds were found above the CRQL is a form of quantitation, and therefore at least one column must meet the 15.0% criteria.

For multicomponent analytes, the single largest peak that is characteristic of the component should be used to establish retention time and %D. Identification of such analytes is based primarily on pattern recognition

PESTICIDE/PCB STANDARDS SUMMARY

000220

Lab Name: EMSL ANALYTICAL Contract: _____

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

Instrument ID: HP5890/SIIP GC Column ID: DB1701

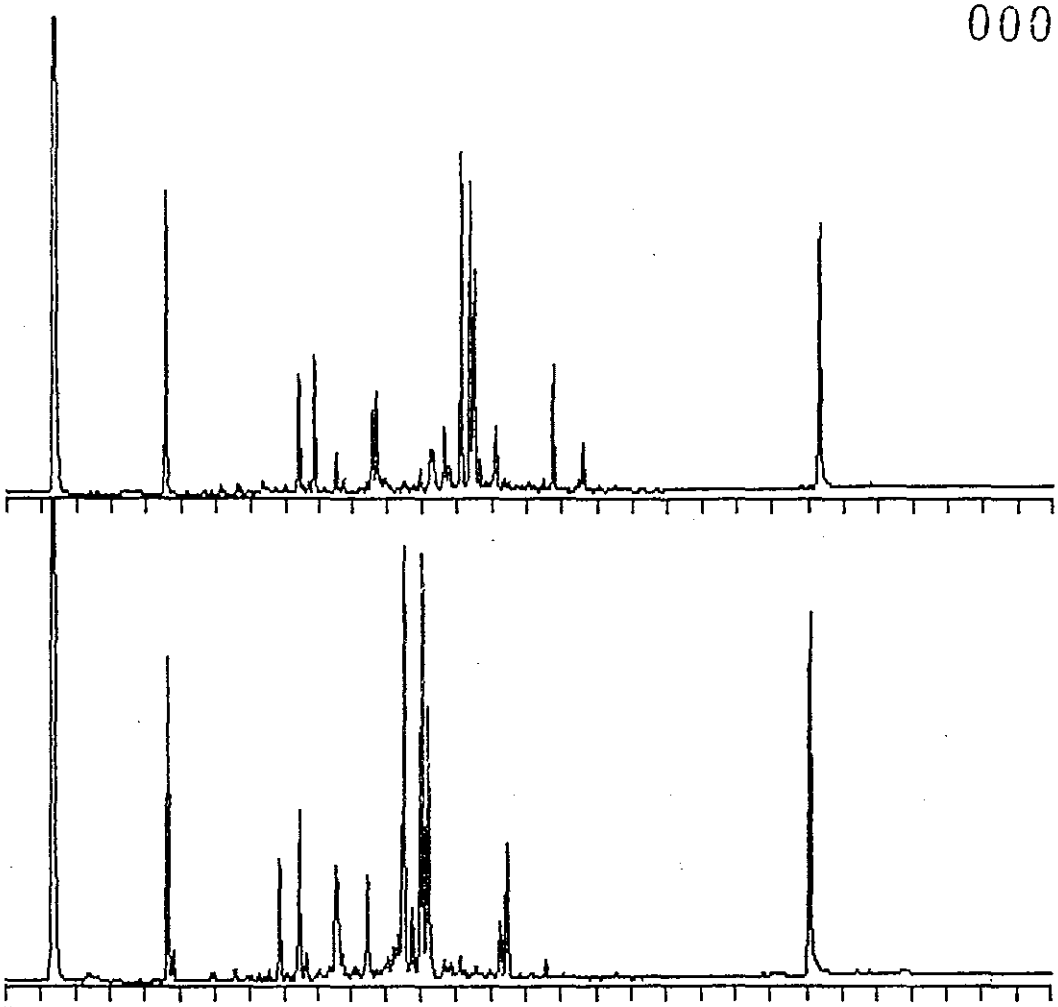
DATE(S) OF ANALYSIS FROM: 6-6-95 TO: 6-6-95
TIME(S) OF ANALYSIS FROM: 17:31 TO: 23:22
DATE OF ANALYSIS 6-9-95
TIME OF ANALYSIS 00:56
EPA SAMPLE NO. (STANDARD) 119426I

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR	RT	CALIBRATION FACTOR	QNT Y/N	%D
alpha-BHC	7:05	7:00	7:10	1503				
beta-BHC	10:94	10:89	10:99	1217				
delta-BHC	11:57	11:52	11:62	1374				
gamma-BHC	8:28	8:23	8:33	1597				
Heptaclor	8:85	8:80	8:90	2058				
Aldrin	9:65	9:60	9:70	1797				
Hept. epoxide	12:02	11:97	12:07	1994				
Endosulfan I	12:83	12:76	12:90	2018				
Dieldrin	14:08	14:01	14:15	1759				
4,4'-DDE	13:76	13:69	13:83	1789				
Endrin	14:71	14:64	14:78	1619				
Endosulfan II	16:43	16:36	16:50	1852				
4,4'-DDD	16:45	16:38	16:52	1222				
Endo.sulfate	18:90	18:83	18:97	1723				
4,4'-DDT	16:97	16:90	17:04	1040				
Methoxychlor	19:24	19:17	19:31	683				
Endrin ketone	20:06	19:99	20:13	1883				
a. Chlordane	13:38	13:31	13:45	2094				
g. Chlordane	13:11	13:04	13:18	2117				
Toxaphene	15:81	15:74	15:88	51071				
Aroclor-1016	8:62	8:55	8:69	170510	8:60	166386	Y	2
Aroclor-1221	6:06	5:99	6:13	60505				
Aroclor-1232	8:60	8:53	8:67	69990				
Aroclor-1242	8:60	8:53	8:67	127556				
Aroclor-1248	8:60	8:53	8:67	111017				
Aroclor-1254	14:03	13:96	14:10	149338				
Aroclor-1260	18:70	18:63	18:77	272141	18:69	268617	Y	1
Endrin Aldehyde	17:80	17:73	17:87	14778				

Under QNT Y/N: enter Y if quantitation was performed, N if not performed. %D must be less than or equal to 15.0% for quantitation, and less than or equal to 20.0% for confirmation.

Note: Determining that no compounds were found above the CRQL is a form of quantitation, and therefore at least one column must meet the 15.0% criteria.

For multicomponent analytes, the single largest peak that is characteristic of the component should be used to establish retention time and %D. Identification of such analytes is based primarily on pattern recognition



[Interface 1] 0-30 Min Scale: 100 Mv Ch.A, 100 Mv Ch.B
CHLORDANES Processed: 06-06-1995 19:44:06, segment 5, cycle 5
RAW DATA SAVED IN FILE E:JU06E5.PTS Second Channel Stored in E:KU06E5.PTS

***** EXTERNAL STANDARD TABLE *****

********** 06-06-1995 19:44:11 Version 5.1.5 **********
* Sample Name: CHLORDANES 1PPM Data File: E:JU06E5 *
* Date: 06-06-1995 19:13:53 Method: M:APES-G 03-08-1995 15:02:41 # 359 *
* Interface: 1 Cycle#: 5 Operator SDR Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 10 Area Threshold: 1000 *
****
* Instrument Type: Perkin-Elmer 8500 Column Type: RTx-5 30m,.35mm *
* Solvent Description: 1.0u df *
* Conditions: 180 for 4.0min then 4.0deg/min to 240, hold 30min *
* Detector 0: Detector 1: ECD *
* Misc. Information: *
****

Starting Delay: 0.00 Ending retention time: 30.00
Area reject: 1000 One sample per 1.002 sec.
Amount injected: 1.00 Dilution factor: 1.00
Sample Weight: 1.00000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	2.388		0.0000	0.0000%	11982	1562	7.7	1			1.0000E-09
2	4.659	TCMX	135.8668	17.0347%	260467	66798	3.9	2	0	-.3571	5.2163E-04
3	4.826		0.0000	0.0000%	24482	6139	4.0	2			1.0000E-09
4	5.000		0.0000	0.0000%	3901	1054	3.7	1			1.0000E-09

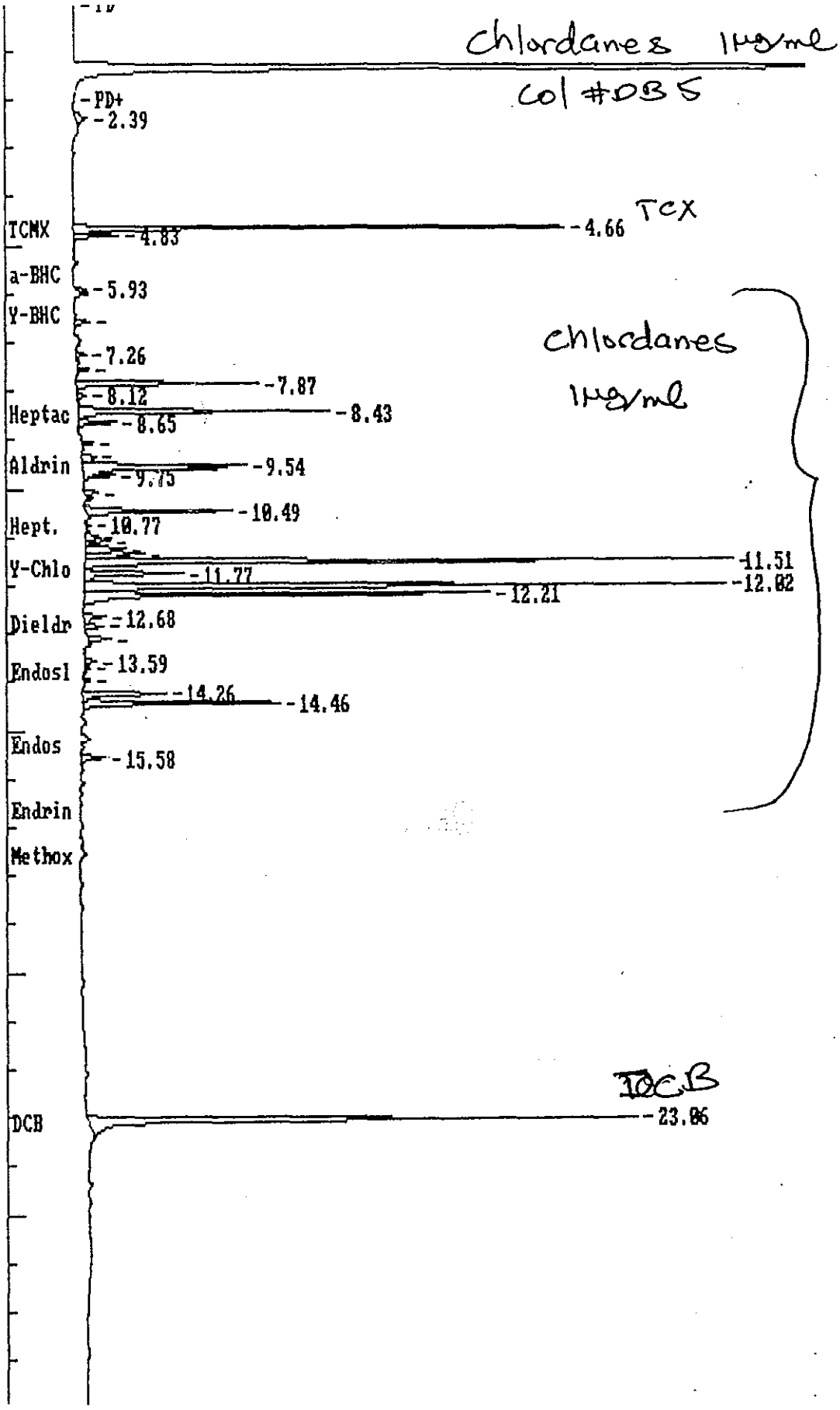
000222

6	7.265		0.0000	0.0000%	6485	1369	4.7	1			1.0000E-09
7	7.565		0.0000	0.0000%	6572	1640	4.0	1			1.0000E-09
8	7.866		0.0001	0.0000%	92524	25036	3.7	2			1.0000E-09
9	8.116		0.0000	0.0000%	5922	1222	4.8	2			1.0000E-09
10	8.433	Heptachlor	62.8625	7.8816%	143400	34612	4.1	2	0	-.3944	4.3837E-04
11	8.651		0.0000	0.0000%	23787	5161	4.6	2			1.0000E-09
12	9.068		0.0000	0.0000%	7344	1632	4.5	1			1.0000E-09
13	9.369		0.0000	0.0000%	13639	1989	6.9	2			1.0000E-09
14	9.536	Aldrin	78.0245	9.7825%	174098	22569	7.7	3	0	.5281	4.4816E-04
15	9.753		0.0000	0.0000%	13627	3416	4.0	4			1.0000E-09
16	10.103		0.0000	0.0000%	7900	1740	4.5	1			1.0000E-09
17	10.488		0.0001	0.0000%	88811	19900	4.5	1			1.0000E-09
18	10.771	Hept. epox.	1.1612	0.1456%	2614	718	3.6	1	0	0	4.4420E-04
19	10.989		0.0000	0.0000%	7549	1616	4.7	2			1.0000E-09
20	11.089		0.0000	0.0000%	14243	3372	4.2	2			1.0000E-09
21	11.256		0.0000	0.0000%	32170	5480	5.9	2			1.0000E-09
22	11.356		0.0000	0.0000%	41890	8092	5.2	2			1.0000E-09
23	11.506	Y-Chlordane	141.4373	17.7331%	368025	88126	4.2	2	0	-1.005	3.8431E-04
24	11.773		0.0001	0.0000%	64495	13533	4.8	2			1.0000E-09
25	12.024	a-Chlordane	141.6218	17.7562%	371432	87187	4.3	2	0	-.2770	3.8129E-04
26	12.208		0.0002	0.0000%	249061	55284	4.5	2			1.0000E-09
27	12.675	Dieldrin	6.7174	0.8422%	16850	3053	5.5	2	0	-.6544	3.9866E-04
28	12.859	4,4-DDE	5.3413	0.6697%	13598	2584	5.3	2	0	-.3881	3.9281E-04
29	13.126		0.0000	0.0000%	12392	3176	3.9	1			1.0000E-09
30	13.594	Endrin	3.3317	0.4177%	6866	1617	4.2	2	0	1.180	4.8522E-04
31	13.727	Endosulf II	1.3873	0.1739%	3275	705	4.6	2	0	-.2427	4.2364E-04
32	13.978		0.0000	0.0000%	4191	910	4.6	1			1.0000E-09
33	14.262	4'4-DDD	36.4523	4.5703%	61407	11465	5.4	2	0	-.1169	5.9361E-04
34	14.462	Endrin ald	57.5602	7.2168%	115746	27200	4.3	2	0	.4057	4.9730E-04
35	15.581	MDT	9.5594	1.1985%	16159	3246	5.0	1	0	.4305	5.9158E-04
36	23.063	DCB	116.2644	14.5770%	397004	74757	5.3	1	0	-.1446	2.9285E-04

TOTAL AMOUNT = 797.5889

GROUP NUMBER	GROUP AMOUNT	GROUP PERCENT

Areas, times, and heights stored in: E:JU06E5.ATB
Data File = E:JU06E5.PTS Printed on 06-06-1995 at 19:44:23
Start time: 0.00 min. Stop time: 30.00 min. Offset: 1 mv.
Full Range: 100 millivolts



***** EXTERNAL STANDARD TABLE *****

********** 06-06-1995 19:45:13 Version 5.1.5 **********

* Sample Name: CHLORDANES 1PPM Data File: E:KU06E5 *
* Date: 06-06-1995 19:13:53 Method: M:BPES-G 03-31-1995 14:31:59 # 358 *
* Interface: 1 Cycle#: 5 Operator SDR Channel#: 1 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 10 Area Threshold: 500 *
* Instrument Type: Perkin-Elmer 8500 Column Type: RTx-5 30m,.35mm *
* Solvent Description: 1.0u df *
* Conditions: 180 for 4.0min then 4.0deg/min to 240, hold 30min *
* Detector 0: Detector 1: ECD *
* Misc. Information: *

Starting Delay: 0.00 Ending retention time: 30.00
Area reject: 500 One sample per 1.002 sec.
Amount injected: 1.00 Dilution factor: 1.00
Sample Weight: 1.00000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	3.674		0.0000	0.0000%	14893	600	24.8	1			1.0000E-09
2	4.559	TCMX	128.7348	17.8504%	231086	62809	3.7	1	0	-.7272	5.5709E-04
3	6.162		0.0000	0.0000%	7439	1733	4.3	1			1.0000E-09
4	6.663		0.0000	0.0000%	7746	1764	4.4	1			1.0000E-09
5	7.148	a-BHC	1.4306	0.1984%	2276	562	4.0	1	0	.9433	6.2867E-04
6	7.348		0.0000	0.0000%	11068	2362	4.7	1			1.0000E-09
7	7.749		0.0000	0.0000%	3365	732	4.6	1			1.0000E-09
8	8.033		0.0000	0.0000%	4150	1154	3.6	1			1.0000E-09
9	8.383	Y-BHC	48.4070	6.7121%	83760	24195	3.5	1	0	.6012	5.7793E-04
10	8.701		0.0000	0.0000%	6238	1656	3.8	2			1.0000E-09
11	8.851	Heptachlor	53.7866	7.4581%	102333	28353	3.6	2	0	-.3759	5.2560E-04
12	9.519		0.0000	0.0000%	36813	7882	4.7	2			1.0000E-09
13	9.753	Aldrin	5.7744	0.8007%	10764	2316	4.6	2	0	.6896	5.3647E-04
14	10.220		0.0000	0.0000%	2373	636	3.7	1			1.0000E-09
15	10.438		0.0000	0.0000%	7537	1609	4.7	2			1.0000E-09
16	10.588		0.0001	0.0000%	68040	16533	4.1	2			1.0000E-09
17	10.705		0.0001	0.0000%	100081	21041	4.8	3			1.0000E-09
18	10.972	B-BHC	18.8591	2.6150%	23420	2533	9.2	4	0	0	8.0526E-04
19	11.523	d-BHC	10.9934	1.5244%	12452	1617	7.7	1		-.8620	8.8288E-04
20	11.807		0.0000	0.0000%	3692	983	3.8	1			1.0000E-09
21	11.957	Hept. epox.	9.9687	1.3823%	19202	4131	4.6	1	0	-.8310	5.1916E-04
22	12.258		0.0001	0.0000%	79019	8540	9.3	1			1.0000E-09
23	12.642		0.0001	0.0000%	51335	12480	4.1	2			1.0000E-09
24	12.759	Endosulf I	11.0927	1.5381%	21760	3939	5.5	2	0	-.7792	5.0978E-04
25	13.109	Y-Chlordane	126.8910	17.5948%	267784	69572	3.8	2	0	-.2541	4.7386E-04
26	13.377	a-Chlordane	118.6520	16.4524%	251770	63748	3.9	2	0	-.2490	4.7127E-04
27	13.494		0.0002	0.0000%	170184	45399	3.7	2			1.0000E-09
28	13.661		0.0000	0.0000%	24029	6083	4.0	3			1.0000E-09
29	13.878	4,4 DDE	3.8227	0.5301%	7355	1212	6.1	4	0	.5444	5.1975E-04
30	14.111	Dieldrin	35.6096	4.9376%	67657	12522	5.4	2	0	0	5.2633E-04
31	14.362		0.0000	0.0000%	10430	2301	4.5	2			1.0000E-09
32	14.496		0.0000	0.0000%	7486	1337	5.6	2			1.0000E-09
33	14.729	Endrin	6.1200	0.8486%	5845	952	6.1	2	0	-.2262	1.0470E-03
34	14.896		0.0000	0.0000%	3666	978	3.7	2			1.0000E-09
35	15.063		0.0000	0.0000%	7313	1475	5.0	1			1.0000E-09
36	15.481		0.0000	0.0000%	11685	2413	4.8	2			1.0000E-09
37	15.748		0.0001	0.0000%	104430	25880	4.0	2			1.0000E-09

SDR 6/27/95

806010

40	17.067	4,4 DDT	4.5105	0.6254%	5248	807	6.5 1	0	.3929	8.5939E-04
41	17.351		0.0000	0.0000%	2146	500	4.3 1			1.0000E-09
42	17.502		0.0000	0.0000%	3116	788	4.0 1			1.0000E-09
43	18.253		0.0000	0.0000%	2610	541	4.8 1			1.0000E-09
44	19.088	Methoxychl	2.0748	0.2877%	1338	376	3.6 1	0	-1.038	1.5511E-03
45	23.296	DCB	128.0582	17.7566%	279111	55038	5.1 1	0	-.1431	4.5881E-04

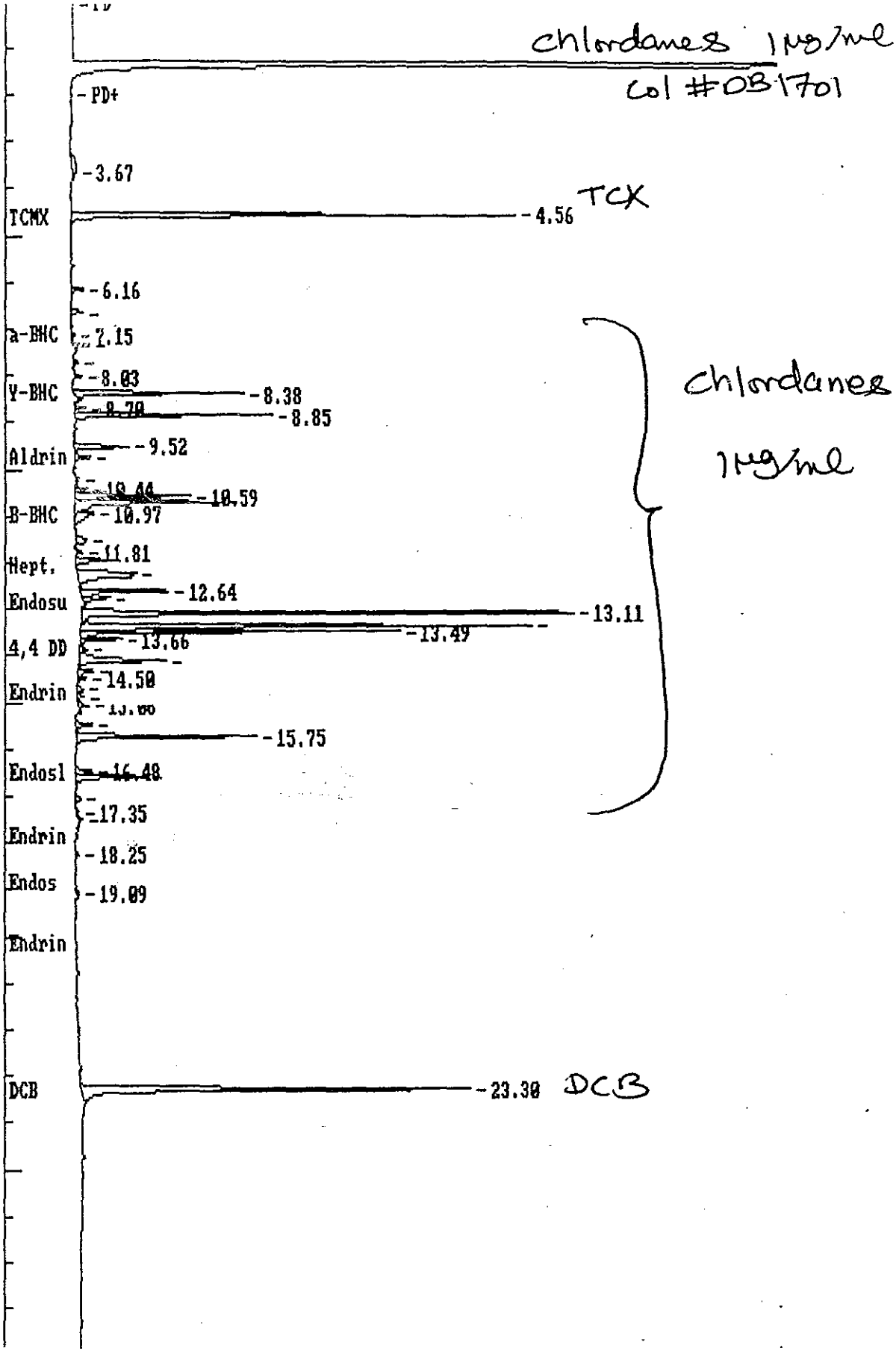
000225

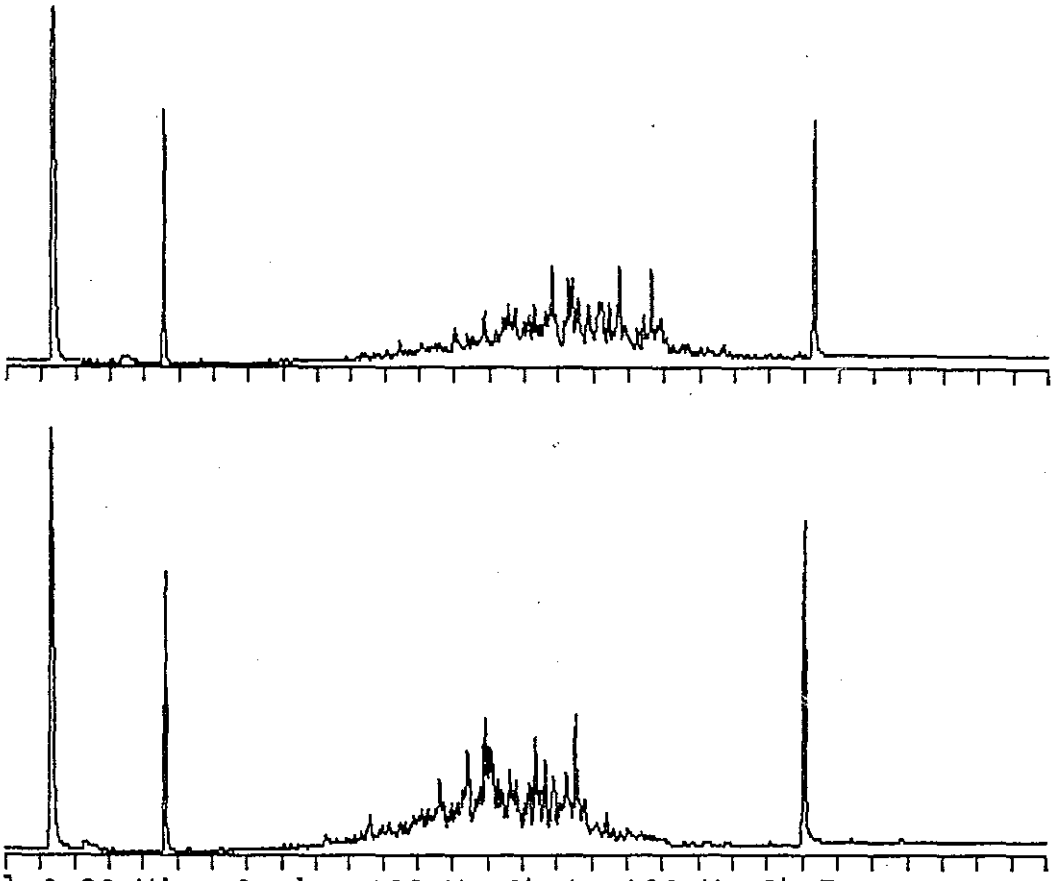
TOTAL AMOUNT = 721.1857

GROUP NUMBER GROUP AMOUNT GROUP PERCENT

000226

Areas, times, and heights stored in: E:KU06E5.ATB
Data File = E:KU06E5.PTS Printed on 06-06-1995 at 19:46:03
Start time: 0.00 min. Stop time: 30.00 min. Offset: 1 mv.
Full Range: 100 millivolts





[Interface 1] 0-30 Min Scale: 100 Mv Ch.A, 100 Mv Ch.B
TOXAPHENE Processed: 06-06-1995 20:18:20, segment 6, cycle 6
RAW DATA SAVED IN FILE E:JU06E6.PTS Second Channel Stored in E:KU06E6.PTS

***** EXTERNAL STANDARD TABLE *****

******************** 06-06-1995 20:18:25 Version 5.1.5 *********************

* Sample Name: TOXAPHENE 2.5PPM Data File: E:JU06E6 *
* Date: 06-06-1995 19:48:07 Method: M:APES-G 03-08-1995 15:02:41 # 359 *
* Interface: 1 Cycle#: 6 Operator SDR Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 10 Area Threshold: 1000 *

* Instrument Type: Perkin-Elmer 8500 Column Type: RTx-5 30m,.35mm *
* Solvent Description: 1.0u df *
* Conditions: 180 for 4.0min then 4.0deg/min to 240, hold 30min *
* Detector 0: Detector 1: ECD *
* Misc. Information: *

Starting Delay: 0.00 Ending retention time: 30.00
Area reject: 1000 One sample per 1.002 sec.
Amount injected: 1.00 Dilution factor: 1.00
Sample Weight: 1.00000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	2.338		0.0000	0.0000%	9950	1226	8.1	1			1.0000E-09
2	4.659	TCMX	113.5546	22.0265%	217693	57105	3.8	1	0	-.3571	5.2163E-04
3	9.319	Aldrin	5.4475	1.0567%	12155	1439	8.4	1	0	-1.760	4.4816E-04

6	10.655	Hept. epox.	12.4223	2.4096%	27966	4371	6.4	1	0	-1.065	4.4420E-04
7	10.922		0.0000	0.0000%	2764	752	3.7	1			1.0000E-09
8	11.206		0.0000	0.0000%	9539	1899	5.0	1			1.0000E-09
9	11.556		0.0000	0.0000%	13000	1986	6.5	2			1.0000E-09
10	11.673	Y-Chlordane	3.0300	0.5877%	7884	2042	3.9	2	0	.4310	3.8431E-04
11	11.941	Endosulfan I	9.3567	1.8149%	21593	2722	7.9	2	0	.2805	4.3333E-04
12	12.158	a-Chlordane	11.3046	2.1928%	29649	3999	7.4	2	0	.8310	3.8129E-04
13	12.325		0.0000	0.0000%	13829	2887	4.8	1			1.0000E-09
14	12.642	Dieldrin	27.7269	5.3783%	69551	8305	8.4	1	0	-.9162	3.9866E-04
15	12.993	4,4-DDE	9.4137	1.8260%	23965	4125	5.8	2	0	.6468	3.9281E-04
16	13.160		0.0000	0.0000%	26977	4096	6.6	2			1.0000E-09
17	13.293		0.0000	0.0000%	35275	6359	5.5	2			1.0000E-09
18	13.443	Endrin	43.7471	8.4858%	90159	14675	6.1	2	0	0	4.8522E-04
19	13.677		0.0000	0.0000%	25016	4321	5.8	2			1.0000E-09
20	13.777	Endosulf II	15.1122	2.9314%	35673	6832	5.2	2	0	.1213	4.2364E-04
21	13.945		0.0001	0.0000%	117711	20579	5.7	2			1.0000E-09
22	14.095		0.0001	0.0000%	125457	13998	9.0	2			1.0000E-09
23	14.312	4'4-DDD	19.7542	3.8318%	33278	7204	4.6	2	0	.2339	5.9361E-04
24	14.429	Endrin ald	11.8835	2.3051%	23896	5419	4.4	2	0	.1739	4.9730E-04
25	14.646		0.0001	0.0000%	56076	9363	6.0	2			1.0000E-09
26	14.813		0.0001	0.0000%	54971	8273	6.6	2			1.0000E-09
27	15.080		0.0000	0.0000%	20980	4830	4.3	2			1.0000E-09
28	15.214	Endos sulf	30.5080	5.9177%	55003	9144	6.0	2	0	-.4371	5.5466E-04
29	15.397		0.0001	0.0000%	88574	18335	4.8	2			1.0000E-09
30	15.514	DDT	23.8396	4.6242%	40298	7739	5.2	2	0	0	5.9158E-04
31	15.681		0.0001	0.0000%	74653	14338	5.2	2			1.0000E-09
32	15.915		0.0001	0.0000%	82629	11045	7.5	2			1.0000E-09
33	16.115		0.0000	0.0000%	43438	6042	7.2	2			1.0000E-09
34	16.299		0.0001	0.0000%	116250	11741	9.9	2			1.0000E-09
35	16.550	Endrin ket.	66.8567	12.9684%	158183	24533	6.4	2	0	-.6018	4.2265E-04
36	16.834		0.0001	0.0000%	59231	7274	8.1	2			1.0000E-09
37	17.034		0.0000	0.0000%	8119	1696	4.8	2			1.0000E-09
38	17.168		0.0000	0.0000%	24551	2862	8.6	2			1.0000E-09
39	17.451		0.0000	0.0000%	26283	5013	5.2	2			1.0000E-09
40	17.635	Methoxychlor	10.4635	2.0296%	10209	1720	5.9	2	0	.3802	1.0249E-03
41	17.819		0.0000	0.0000%	7566	1115	6.8	1			1.0000E-09
42	18.053		0.0000	0.0000%	12706	1987	6.4	1			1.0000E-09
43	18.437		0.0000	0.0000%	2783	904	3.1	1			1.0000E-09
44	18.788		0.0000	0.0000%	4177	778	5.4	1			1.0000E-09
45	23.063	DCB	101.1131	19.6132%	345268	66496	5.2	1	0	-.1446	2.9285E-04

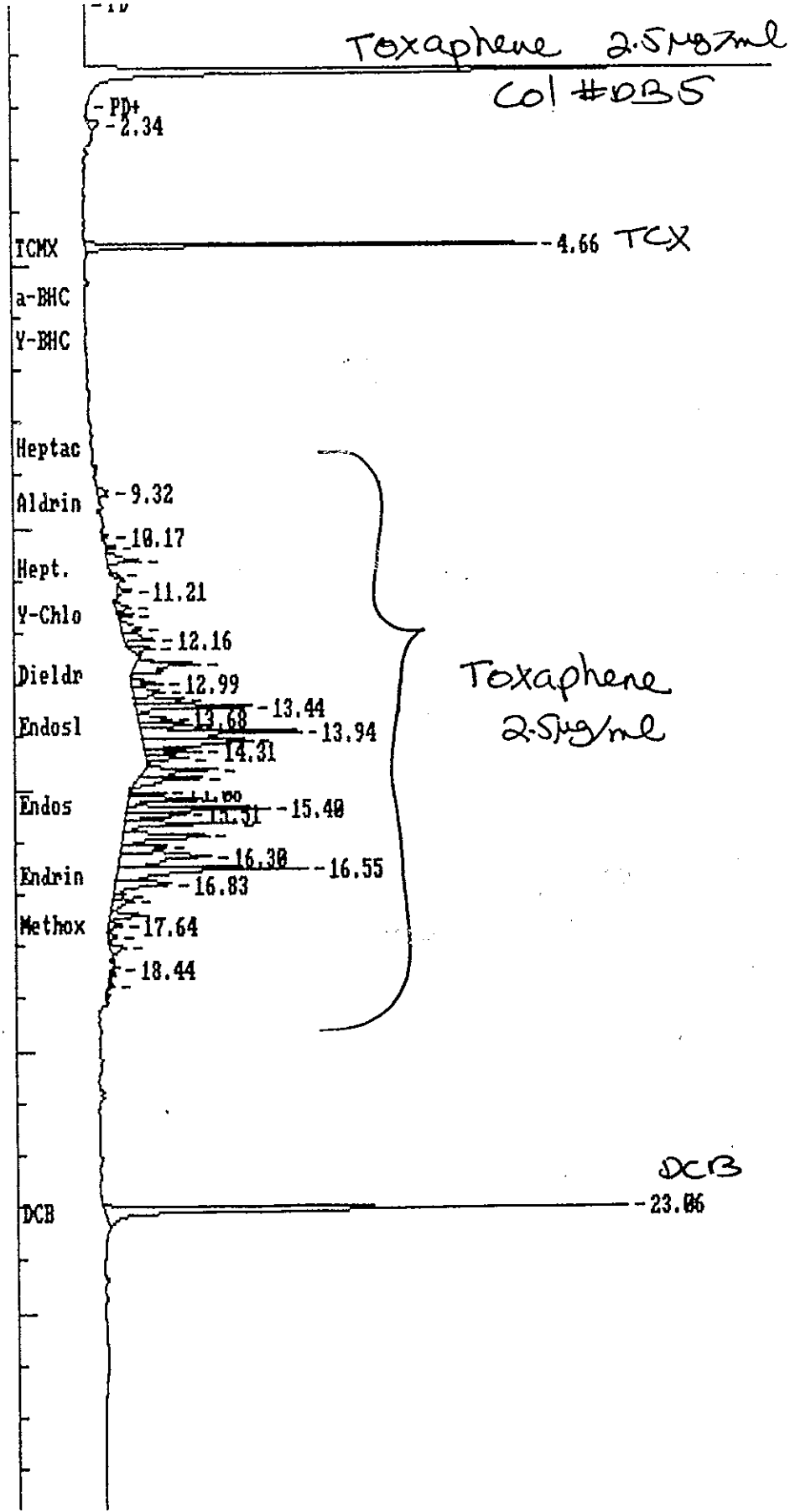
TOTAL AMOUNT = 515.5354

GROUP NUMBER GROUP AMOUNT GROUP PERCENT

000228

S00
4-27-98

Areas, times, and heights stored in: E:JU06E6.ATB
Data File = E:JU06E6.PTS Printed on 06-06-1995 at 20:18:35
Start time: 0.00 min. Stop time: 30.00 min. Offset: 1 mv.
Full Range: 100 millivolts



***** EXTERNAL STANDARD TABLE *****

********** 06-06-1995 20:19:19 Version 5.1.5 **********

* Sample Name: TOXAPHENE 2.5PPM Data File: E:KU06E6 *

* Date: 06-06-1995 19:48:07 Method: M:BPES-G 03-31-1995 14:31:59 # 358 *

* Interface: 1 Cycle#: 6 Operator SDR Channel#: 1 Vial#: N.A. *

* Starting Peak Width: 10 Threshold: 10 Area Threshold: 500 *

* Instrument Type: Perkin-Elmer 8500 Column Type: RTx-5 30m,.35mm *

* Solvent Description: 1.0u df *

* Conditions: 180 for 4.0min then 4.0deg/min to 240, hold 30min *

* Detector 0: Detector 1: ECD *

* Misc. Information: *

Starting Delay: 0.00 Ending retention time: 30.00

Area reject: 500 One sample per 1.002 sec.

Amount injected: 1.00 Dilution factor: 1.00

Sample Weight: 1.00000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	3.056		0.0000	0.0000%	2773	640	4.3	1			1.0000E-09
2	3.373		0.0000	0.0000%	5961	874	6.8	1			1.0000E-09
3	4.576	TCMX	106.0998	19.3623%	190455	52819	3.6	1	0	-.3636	5.5709E-04
4	8.784	Heptachlor	1.2750	0.2327%	2426	479	5.1	1	0	-1.127	5.2560E-04
5	10.204		0.0000	0.0000%	2576	494	5.2	2			1.0000E-09
6	10.354		0.0000	0.0000%	6614	1451	4.6	2			1.0000E-09
7	10.471		0.0000	0.0000%	7034	1370	5.1	2			1.0000E-09
8	10.705		0.0000	0.0000%	2953	595	5.0	2			1.0000E-09
9	10.822		0.0000	0.0000%	4037	622	6.5	2			1.0000E-09
10	11.122	B-BHC	5.8797	1.0730%	7302	1062	6.9	1	0	1.369	8.0526E-04
11	11.473		0.0000	0.0000%	10420	2603	4.0	1			1.0000E-09
12	11.640	d-BHC	2.8900	0.5274%	3273	760	4.3	2	0	.1436	8.8288E-04
13	11.773		0.0000	0.0000%	2725	679	4.0	2			1.0000E-09
14	11.957		0.0000	0.0000%	1888	386	4.9	2			1.0000E-09
15	12.074	Hept. epox.	4.6766	0.8534%	9008	1549	5.8	2	0	.1385	5.1916E-04
16	12.375		0.0000	0.0000%	5036	1199	4.2	2			1.0000E-09
17	12.492		0.0000	0.0000%	5914	1257	4.7	2			1.0000E-09
18	12.609		0.0000	0.0000%	7688	1723	4.5	2			1.0000E-09
19	13.043	Y-Chlordane	19.2288	3.5091%	40580	4629	8.8	2	0	-.7623	4.7386E-04
20	13.393	a-Chlordane	7.6080	1.3884%	16144	2933	5.5	2	0	-.1245	4.7127E-04
21	13.544		0.0000	0.0000%	17157	2847	6.0	2			1.0000E-09
22	13.878	4,4 DDE	36.3064	6.6256%	69853	7706	9.1	2	0	.5444	5.1975E-04
23	14.228	Dieldrin	12.1727	2.2214%	23128	3780	6.1	2	0	.8283	5.2633E-04
24	14.429		0.0000	0.0000%	42903	6433	6.7	2			1.0000E-09
25	14.546		0.0001	0.0000%	71319	8884	8.0	2			1.0000E-09
26	14.763	Endrin	62.5218	11.4097%	59718	8397	7.1	2	0	0	1.0470E-03
27	15.013		0.0000	0.0000%	39544	5507	7.2	2			1.0000E-09
28	15.164		0.0000	0.0000%	41273	6961	5.9	2			1.0000E-09
29	15.314		0.0001	0.0000%	56526	8479	6.7	2			1.0000E-09
30	15.498		0.0000	0.0000%	19911	4240	4.7	2			1.0000E-09
31	15.648		0.0001	0.0000%	69386	7199	9.6	2			1.0000E-09
32	15.815		0.0001	0.0000%	127677	16764	7.6	2			1.0000E-09
33	16.216		0.0000	0.0000%	18656	4875	3.8	2			1.0000E-09
34	16.299		0.0001	0.0000%	59292	13286	4.5	2			1.0000E-09
35	16.399	EndosulfII	33.8417	6.1758%	62837	13256	4.7	2	0	-.4561	5.3856E-04
36	16.566	4'4-DDD	51.2536	9.3534%	68750	9368	7.3	2	0	.4024	7.4551E-04
37	16.867	4,4 DDT	45.0033	8.2127%	52367	7256	7.2	1	0	-.7858	8.5939E-04

SDD 6/27/95

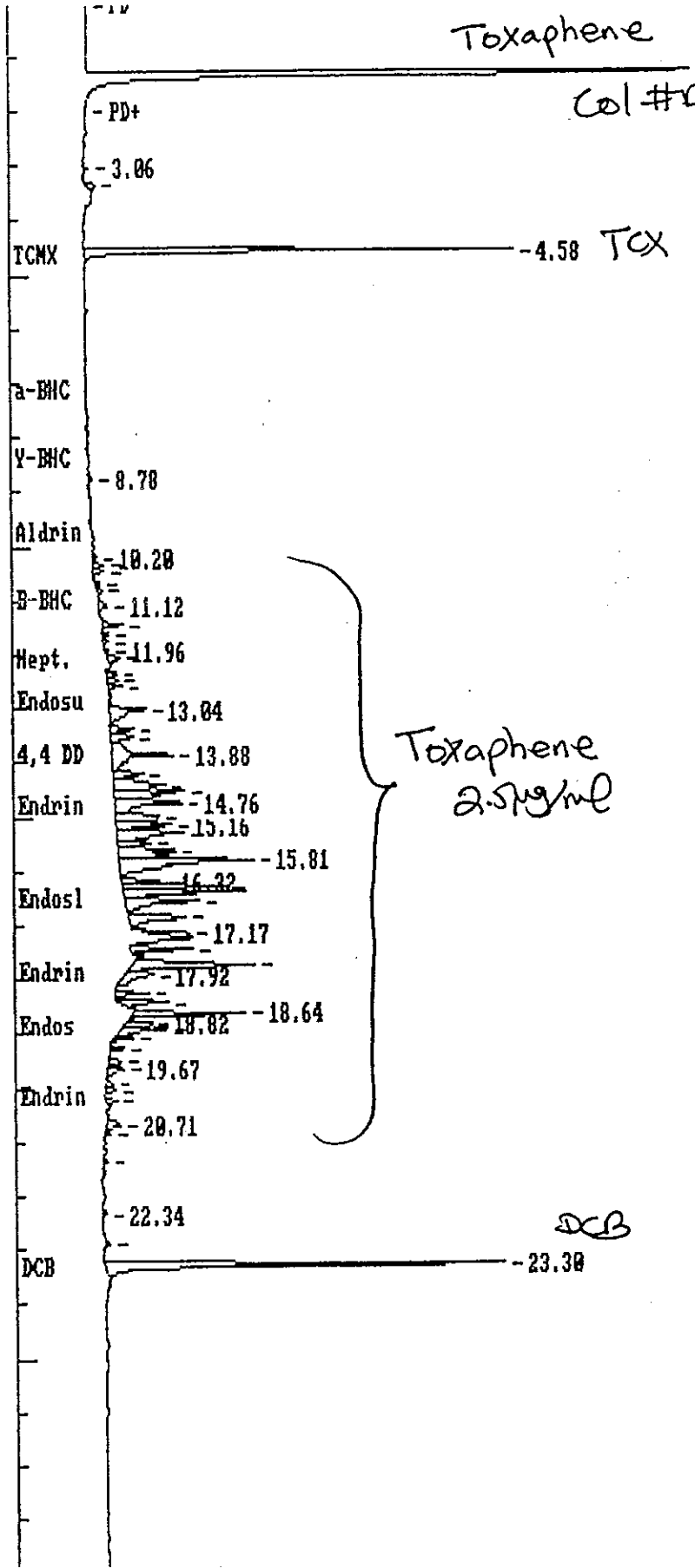
40	17.752		0.0001	0.0000%	87437	15254	5.7	2		1.0000E-09
41	17.919	Endrin ald	21.6675	3.9541%	30803	3518	8.8	2	0	.3272	7.0343E-04
42	18.270		0.0000	0.0000%	18980	4225	4.5	1			1.0000E-09
43	18.437		0.0000	0.0000%	23686	5530	4.3	1			1.0000E-09
44	18.637		0.0001	0.0000%	53293	14043	3.8	2			1.0000E-09
45	18.821	Endos sulf	9.8178	1.7917%	14614	3372	4.3	2	0	0	6.7183E-04
46	18.921		0.0000	0.0000%	39957	5839	6.8	2			1.0000E-09
47	19.088		0.0000	0.0000%	9583	2494	3.8	2			1.0000E-09
48	19.288	Methoxychl	12.7411	2.3251%	8214	1897	4.3	2	0	0	1.5511E-03
49	19.522		0.0000	0.0000%	10730	1741	6.2	2			1.0000E-09
50	19.673		0.0000	0.0000%	12697	2096	6.1	2			1.0000E-09
51	19.940		0.0000	0.0000%	4776	879	5.4	2			1.0000E-09
52	20.057	Endrin ket	4.3914	0.8014%	6725	1400	4.8	2	0	-.2491	6.5298E-04
53	20.257		0.0000	0.0000%	5496	1180	4.7	1			1.0000E-09
54	20.708		0.0000	0.0000%	12002	1725	7.0	2			1.0000E-09
55	20.858		0.0000	0.0000%	2780	714	3.9	2			1.0000E-09
56	21.393		0.0000	0.0000%	2405	570	4.2	1			1.0000E-09
57	22.345		0.0000	0.0000%	2472	498	5.0	1			1.0000E-09
58	22.896		0.0000	0.0000%	2972	695	4.3	1			1.0000E-09
59	23.296	DCB	110.5948	20.1826%	241049	49114	4.9	1	0	-.1431	4.5881E-04

TOTAL AMOUNT = 547.9710

GROUP NUMBER	GROUP AMOUNT	GROUP PERCENT

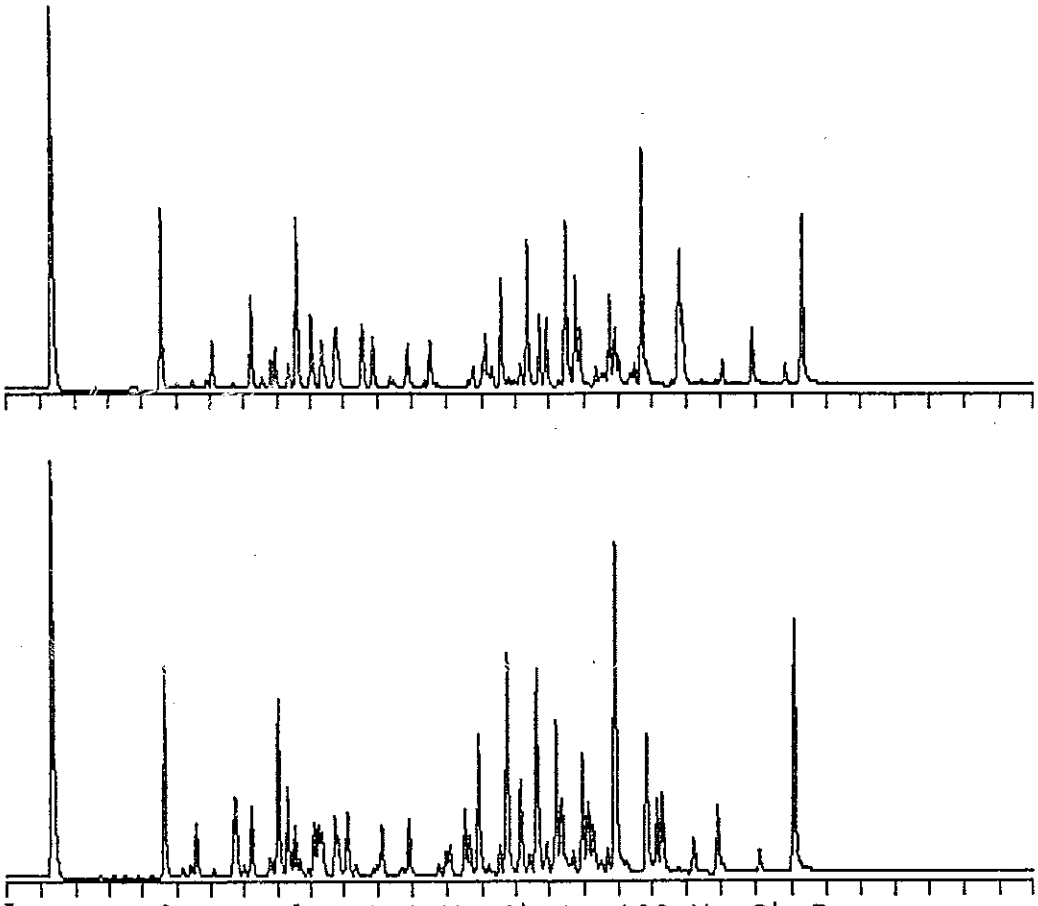
000232

Areas, times, and heights stored in: E:KU06E6.ATB
Data File = E:KU06E6.PTS Printed on 06-06-1995 at 20:20:27
Start time: 0.00 min. Stop time: 30.00 min. Offset: 1 mv.
Full Range: 100 millivolts



PD-

000233



[Interface 1] 0-30 Min Scale: 100 Mv Ch.A, 100 Mv Ch.B
A1660 1PPM Processed: 06-09-1995 01:26:22, segment 10, cycle 68
RAW DATA SAVED IN FILE E:JU06E68.PTS Second Channel Stored in E:KU06E68.PTS

***** EXTERNAL STANDARD TABLE *****

********** 06-09-1995 01:26:32 Version 5.1.5 **********

* Sample Name: A1660 1PPM Data File: E:JU06E68 *
* Date: 06-09-1995 00:56:04 Method: M:APES-G 03-08-1995 15:02:41 # 359 *
* Interface: 1 Cycle#: 68 Operator JJK Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 10 Area Threshold: 1000 *

* Instrument Type: Perkin-Elmer 8500 Column Type: RTx-5 30m,.35mm *
* Solvent Description: 1.0u df *
* Conditions: 180 for 4.0min then 4.0deg/min to 240, hold 30min *
* Detector 0: Detector 1: ECD *
* Misc. Information: *

Starting Delay: 0.00 Ending retention time: 30.00
Area reject: 1000 One sample per 1.002 sec.
Amount injected: 1.00 Dilution factor: 1.00
Sample Weight: 1.00000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	AREA/ HEIGHT	HEIGHT BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	4.659	TCMX	99.9442	24.1804%	191600	42959	4.5 1	0	-.3571	5.2163E-04
2	5.194		0.0000	0.0000%	7734	1467	5.3 2			1.0000E-09

5	6.095		0.0000	0.0000%	6923	1268	5.5	1			1.0000E-09
6	6.713		0.0001	0.0000%	119030	16269	7.3	2			1.0000E-09
7	6.997	d-BHC	7.9393	1.9208%	9756	1903	5.1	2	0		8.1376E-04
8	7.231		0.0001	0.0000%	69775	14103	4.9	1			1.0000E-09
9	7.766		0.0000	0.0000%	28403	3605	7.9	2			1.0000E-09
10	8.016		0.0002	0.0001%	211885	36211	5.9	2			1.0000E-09
11	8.317		0.0001	0.0000%	94875	18307	5.2	2			1.0000E-09
12	8.534	Heptachlor	23.7923	5.7563%	54274	10263	5.3	2	0	.7889	4.3837E-04
13	8.701		0.0000	0.0000%	18484	3317	5.6	2			1.0000E-09
14	8.934		0.0000	0.0000%	5362	1079	5.0	2			1.0000E-09
15	9.101		0.0001	0.0000%	50062	10426	4.8	2			1.0000E-09
16	9.235		0.0001	0.0000%	51173	9994	5.1	2			1.0000E-09
17	9.335	Aldrin	21.2142	5.1325%	47336	8495	5.6	2	0	-1.584	4.4816E-04
18	9.736		0.0001	0.0000%	101415	12250	8.3	2			1.0000E-09
19	10.103		0.0001	0.0000%	69602	12525	5.6	2			1.0000E-09
20	10.354		0.0000	0.0000%	12085	2233	5.4	2			1.0000E-09
21	10.872	Hept. epox.	2.3388	0.5659%	5265	1065	4.9	2	0	.9302	4.4420E-04
22	11.005		0.0000	0.0000%	9746	1931	5.0	2			1.0000E-09
23	11.139		0.0001	0.0000%	52138	9753	5.3	2			1.0000E-09
24	11.723	Y-Chlordane	2.6511	0.6414%	6898	1102	6.3	2	0	.8620	3.8431E-04
25	11.907	Endosulfan I	24.4480	5.9149%	56419	11119	5.1	2	0	0	4.3333E-04
26	12.759	Dieldrin	3.7113	0.8979%	9310	1816	5.1	2	0	0	3.9866E-04
27	12.976	4,4-DDE	9.2281	2.2326%	23493	4739	5.0	2	0	.5174	3.9281E-04
28	13.076		0.0000	0.0000%	31987	5855	5.5	2			1.0000E-09
29	13.510	Endrin	32.4430	7.8492%	66862	13364	5.0	2	0	.5593	4.8522E-04
30	13.644	Endosulf II	17.9830	4.3508%	42449	7811	5.4	2	0	-.8495	4.2364E-04
31	13.894		0.0002	0.0000%	155804	28348	5.5	2			1.0000E-09
32	14.228	4'4-DDD	2.8699	0.6943%	4835	1178	4.1	1	0	-.3508	5.9361E-04
33	14.546	Endrin ald	15.1309	3.6608%	30426	5991	5.1	2	0	.9855	4.9730E-04
34	14.746		0.0003	0.0001%	268463	45624	5.9	2			1.0000E-09
35	15.147		0.0001	0.0000%	114931	19295	6.0	2			1.0000E-09
36	15.414	DDT	13.1296	3.1766%	22194	3620	6.1	2	0	-.6458	5.9158E-04
37	15.615		0.0002	0.0001%	248072	41931	5.9	2			1.0000E-09
38	15.932		0.0000	0.0000%	35938	6075	5.9	2			1.0000E-09
39	16.199		0.0002	0.0000%	157066	30943	5.1	2			1.0000E-09
40	16.366		0.0001	0.0000%	100576	15300	6.6	2			1.0000E-09
41	16.700	Endrin ket.	10.2808	2.4873%	24324	4380	5.6	2	0	.3009	4.2265E-04
42	16.950		0.0001	0.0000%	119405	24426	4.9	2			1.0000E-09
43	17.117		0.0001	0.0000%	73182	14524	5.0	2			1.0000E-09
44	17.268		0.0001	0.0000%	65484	9796	6.7	3			1.0000E-09
45	17.502	Methoxychlor	11.3791	2.7530%	11102	1822	6.1	4	0	-.3802	1.0249E-03
46	17.685		0.0000	0.0000%	26086	4694	5.6	2			1.0000E-09
47	17.886		0.0004	0.0001%	383419	67999	5.6	3			1.0000E-09
48	18.253		0.0000	0.0000%	10122	1897	5.3	4			1.0000E-09
49	18.821		0.0002	0.0000%	167954	28068	6.0	2			1.0000E-09
50	19.138		0.0001	0.0000%	74351	14824	5.0	2			1.0000E-09
51	19.305		0.0001	0.0000%	89650	16236	5.5	2			1.0000E-09
52	19.789		0.0000	0.0000%	3901	680	5.7	1			1.0000E-09
53	20.240		0.0000	0.0000%	37098	6953	5.3	1			1.0000E-09
54	20.925		0.0001	0.0000%	78888	13542	5.8	1			1.0000E-09
55	22.111		0.0000	0.0000%	24466	4384	5.6	1			1.0000E-09
56	23.063	DCB	80.1737	19.3971%	273766	51528	5.3	1	0	-.1446	2.9285E-04

TOTAL AMOUNT = 413.3276

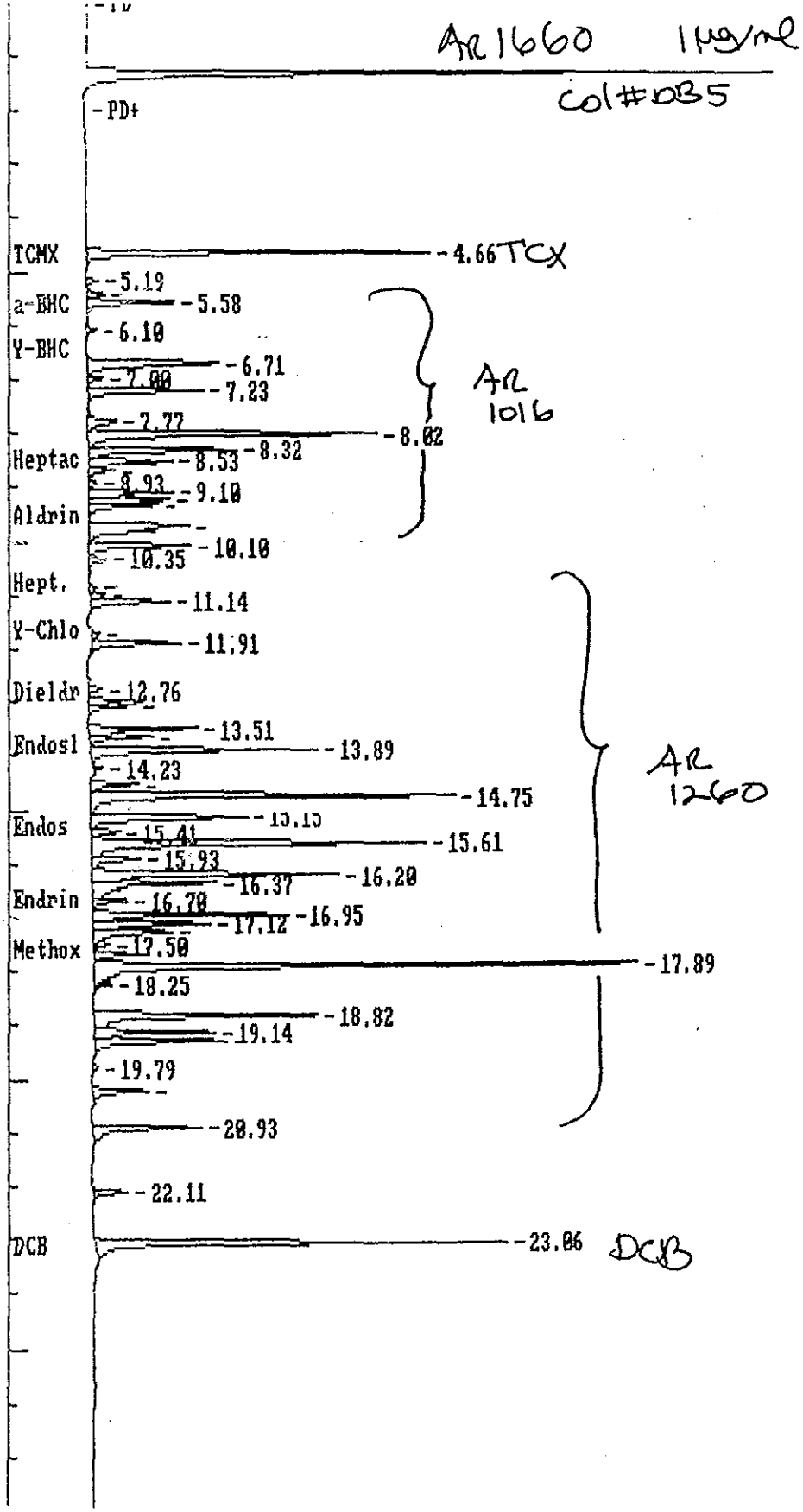
GROUP NUMBER GROUP AMOUNT GROUP PERCENT

000234

SDM 6/27/98

1224000

Areas, times, and heights stored in: E:JU06E68.ATB
Data File = E:JU06E68.PTS Printed on 06-09-1995 at 01:26:50
Start time: 0.00 min. Stop time: 30.00 min. Offset: 1 mv.
Full Range: 100 millivolts



L PD-

000236

***** EXTERNAL STANDARD TABLE *****

********** 06-09-1995 01:28:04 Version 5.1.5 **********

* Sample Name: A1660 1PPM Data File: E:KU06E68 *
* Date: 06-09-1995 00:56:04 Method: M:BPES-G 03-31-1995 14:31:59 # 358 *
* Interface: 1 Cycle#: 68 Operator JJK Channel#: 1 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 10 Area Threshold: 500 *

* Instrument Type: Perkin-Elmer 8500 Column Type: RTx-5 30m,.35mm *
* Solvent Description: 1.0u df *
* Conditions: 180 for 4.0min then 4.0deg/min to 240, hold 30min *
* Detector 0: Detector 1: ECD *
* Misc. Information: *

Starting Delay: 0.00 Ending retention time: 30.00
Area reject: 500 One sample per 1.002 sec.
Amount injected: 1.00 Dilution factor: 1.00
Sample Weight: 1.00000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	4.576	TCMX	89.6351	9.2517%	160900	37914	4.2	1	0	-.3636	5.5709E-04
2	5.060		0.0000	0.0000%	4540	907	5.0	1			1.0000E-09
3	5.511		0.0000	0.0000%	6628	1324	5.0	1			1.0000E-09
4	5.928		0.0000	0.0000%	9820	1986	4.9	2			1.0000E-09
5	6.062		0.0000	0.0000%	48614	9634	5.0	2			1.0000E-09
6	6.697		0.0000	0.0000%	5803	1136	5.1	1			1.0000E-09
7	7.231		0.0001	0.0000%	88267	19333	4.6	2			1.0000E-09
8	7.582		0.0000	0.0000%	14540	1959	7.4	2			1.0000E-09
9	7.832		0.0000	0.0000%	25672	5455	4.7	2			1.0000E-09
10	7.966		0.0000	0.0000%	39473	8327	4.7	2			1.0000E-09
11	8.367	Y-BHC	14.6404	1.5111%	25333	4780	5.3	2	0	.4008	5.7793E-04
12	8.600		0.0002	0.0000%	166386	35664	4.7	2			1.0000E-09
13	9.035	Heptachlor	40.6430	4.1950%	77326	14571	5.3	2	0	1.691	5.2560E-04
14	9.352		0.0001	0.0000%	54855	9366	5.9	2			1.0000E-09
15	9.786	Aldrin	62.5959	6.4608%	116680	12650	9.2	1	0	1.034	5.3647E-04
16	10.554		0.0001	0.0000%	75398	13154	5.7	2			1.0000E-09
17	10.888	B-BHC	48.9463	5.0520%	60783	10373	5.9	2	0	-.7610	8.0526E-04
18	11.389		0.0000	0.0000%	7374	1831	4.0	1			1.0000E-09
19	11.907	Hept. epox.	26.5359	2.7389%	51114	9070	5.6	1	0	-1.246	5.1916E-04
20	12.375		0.0000	0.0000%	4976	1084	4.6	2	830000		1.0000E-09
21	12.542		0.0000	0.0000%	43758	9214	4.7	2			1.0000E-09
22	13.644	a-Chlordane	3.6822	0.3801%	7813	1697	4.6	2	0	1.743	4.7127E-04
23	13.777	4,4 DDE	10.7984	1.1146%	20776	3897	5.3	2	0	-.1814	5.1975E-04
24	14.028		0.0000	0.0000%	23396	4970	4.7	2			1.0000E-09
25	14.128	Dieldrin	34.1173	3.5214%	64821	11039	5.9	2	0	.1183	5.2633E-04
26	14.345		0.0000	0.0000%	21487	4349	4.9	2			1.0000E-09
27	14.596		0.0001	0.0000%	-106958	22561	4.7	2			1.0000E-09
28	14.830	Endrin	11.4030	1.1770%	10892	1879	5.8	2	0	.4524	1.0470E-03
29	15.013		0.0000	0.0000%	8787	1566	5.6	2			1.0000E-09
30	15.180		0.0000	0.0000%	25752	4923	5.2	2			1.0000E-09
31	15.364		0.0001	0.0000%	-148994	30436	4.9	2			1.0000E-09
32	15.715		0.0001	0.0000%	69897	14602	4.8	2			1.0000E-09
33	15.932		0.0001	0.0000%	67463	13942	4.8	2			1.0000E-09
34	16.299		0.0000	0.0000%	4370	919	4.8	2			1.0000E-09
35	16.483	Endosulfan II	107.4536	11.0908%	-199519	34683	5.8	2	0	0	5.3856E-04

BM 6/27/95

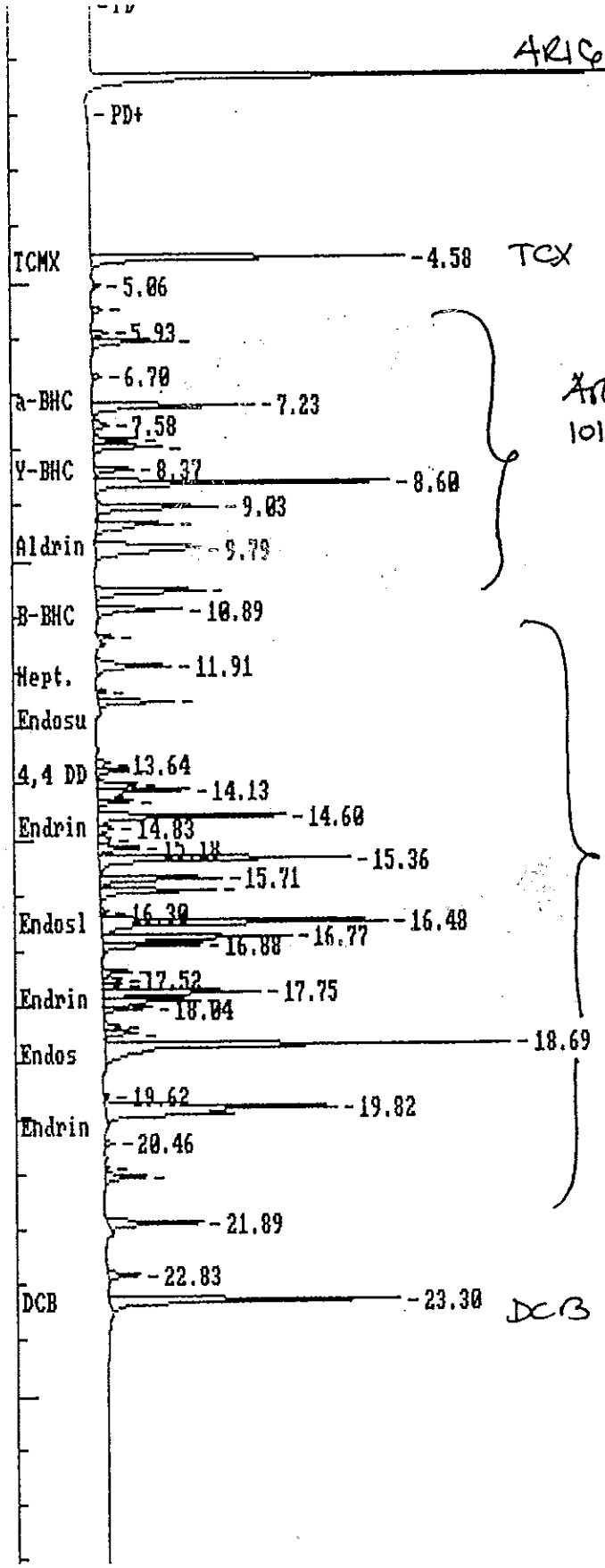
39	17.518		0.0000	0.0000%	12740	2399	5.3	2		1.0000E-09
40	17.618		0.0000	0.0000%	11284	2369	4.8	2		1.0000E-09
41	17.752		0.0001	0.0000%	93216	18884	4.9	2		1.0000E-09
42	17.902	Endrin ald	38.6146	3.9856%	54895	11566	4.7	2	0 .2337	7.0343E-04
43	18.036		0.0000	0.0000%	31435	5888	5.3	2		1.0000E-09
44	18.370		0.0000	0.0000%	12121	2073	5.8	2		1.0000E-09
45	18.487		0.0000	0.0000%	20412	4124	4.9	2		1.0000E-09
46	18.687	Endos sulf	180.4645	18.6266%	268617	48960	5.5	2	0 -.7978	6.7183E-04
47	19.622	Methoxychl	5.0252	0.5187%	3240	711	4.6	2	0 1.731	1.5511E-03
48	19.823	Endrin ket	158.9603	16.4071%	243440	28130	8.7	2	0 -1.411	6.5298E-04
49	20.457		0.0000	0.0000%	6105	1204	5.1	1		1.0000E-09
50	20.892		0.0000	0.0000%	3136	616	5.1	2		1.0000E-09
51	21.059		0.0000	0.0000%	26110	5019	5.2	2		1.0000E-09
52	21.894		0.0001	0.0000%	55834	11330	4.9	1		1.0000E-09
53	22.829		0.0000	0.0000%	20661	3963	5.2	1		1.0000E-09
54	23.296	DCB	82.5840	8.5239%	179997	35179	5.1	1	0 -.1431	4.5881E-04

000237

TOTAL AMOUNT = 968.8519

GROUP NUMBER	GROUP AMOUNT	GROUP PERCENT

Areas, times, and heights stored in: E:KU06E68.ATB
Data File = E:KU06E68.PTS Printed on 06-09-1995 at 01:28:46
Start time: 0.00 min. Stop time: 30.00 min. Offset: 1 mv.
Full Range: 100 millivolts



PESTICIDE/PCB STANDARDS SUMMARY

000239

Lab Name: EMSL Analytical Contract: _____

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

Instrument ID: HP5890/SIP GC Column ID: DB1701

DATE(S) OF ANALYSIS FROM: 6-6-95 TO: 6-6-95
TIME(S) OF ANALYSIS FROM: 17:31 TO: 23:22
DATE OF ANALYSIS 6-8-95
TIME OF ANALYSIS 17:25
EPA SAMPLE NO. (STANDARD) 1194242 1194243

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR	RT	CALIBRATION FACTOR	QNT Y/N	%D
alpha-BHC	7:05	7:00	7:10	1503	7:06	1540.	Y	2
beta-BHC	10:94	10:89	10:99	1217	10:94	1340	Y	10
delta-BHC	11:57	11:52	11:62	1374	11:57	1524	Y	11
gamma-BHC	8:28	8:23	8:33	1597	8:30	1640	Y	3
Heptaclor	8:85	8:80	8:90	2058	8:87	2169	Y	5
Aldrin	9:65	9:60	9:70	1797	9:65	2040	Y	14
Hept. epoxide	12:02	11:97	12:07	1994	12:02	2374	N	19
Endosulfan I	12:83	12:76	12:90	2018	12:83	2108	Y	4
Dieldrin	14:08	14:01	14:15	1759	14:08	1866	Y	6
4,4'-DDE	13:76	13:69	13:83	1789	13:76	2053	Y	15
Endrin	14:71	14:64	14:78	1619	14:73	1645	Y	2
Endosulfan II	16:43	16:36	16:50	1852	16:43	2057	Y	11
4,4'-DDD	16:45	16:38	16:52	1222	16:45	1293	Y	6
Endo.sulfate	18:90	18:83	18:97	1723	18:90	1915	Y	11
4,4'-DDT	16:97	16:90	17:04	1040	16:97	1083	Y	4
Methoxychlor	19:24	19:17	19:31	683	19:24	783	Y	15
Endrin ketone	20:06	19:99	20:13	1883	20:06	2154	Y	14
a. Chlordane	13:38	13:31	13:45	2094	13:38	2352	Y	12.
g. Chlordane	13:11	13:04	13:18	2117	13:11	2404	Y	14
Toxaphene	15:81	15:74	15:88	81071				
Aroclor-1016	8:62	8:55	8:69	170510				
Aroclor-1221	6:06	5:99	6:13	60505				
Aroclor-1232	8:60	8:53	8:67	69990				
Aroclor-1242	8:60	8:53	8:67	127556				
Aroclor-1248	8:60	8:53	8:67	111017				
Aroclor-1254	14:03	13:96	14:10	149338				
Aroclor-1260	18:70	18:63	18:77	272141				
Endrin Aldehyde	17:80	17:73	17:87	1478	17:82	1613	Y	9

Under QNT Y/N: enter Y if quantitation was performed, N if not performed. %D must be less than or equal to 15.0% for quantitation, and less than or equal to 20.0% for confirmation.

Note: Determining that no compounds were found above the CRQL is a form of quantitation, and therefore at least one column must meet the 15.0% criteria.

For multicomponent analytes, the single largest peak that is characteristic of the component should be used to establish retention time and %D. Identification of such analytes is based primarily on pattern recognition.

PESTICIDE/PCB STANDARDS SUMMARY

000240

Lab Name: EMSL Analytical Contract:

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

Instrument ID: HP5890/SIIP GC Column ID: DB5

DATE(S) OF ANALYSIS FROM: 6-6-95 TO: 6-6-95
TIME(S) OF ANALYSIS FROM: 17:31 TO: 23:22

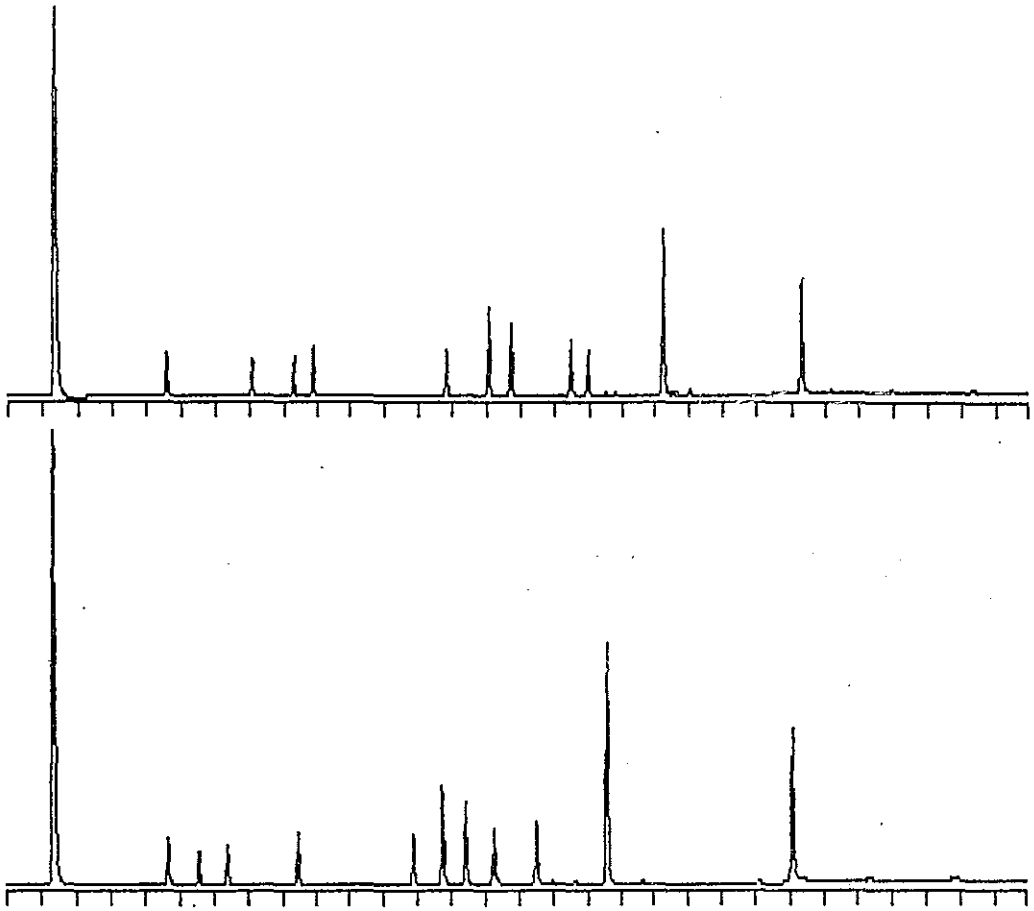
DATE OF ANALYSIS 6-8-95
TIME OF ANALYSIS 17:25
EPA SAMPLE NO. (STANDARD) 1194242 / 1194243

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR	RT	CALIBRATION FACTOR	QNT Y/N	%D
alpha-BHC	5:56	5:51	5:61	1499	5:56	1546	Y	3
beta-BHC	6:23	6:18	6:28	1177	6:25	1311	Y	11
delta-BHC	7:03	6:98	7:08	1325	7:05	1506	Y	14
gamma-BHC	6:40	6:35	6:45	1636	6:40	1697	Y	4
Heptaclor	8:43	8:38	8:48	2248	8:45	2461	Y	9
Aldrin	9:47	9:42	9:52	1904	9:47	2280	N	20
Hept. epoxide	10:75	10:70	10:80	2052	10:75	2439	Y	8
Endosulfan I	11:87	11:80	11:94	2102	11:89	2250	Y	7
Dieldrin	12:74	12:67	12:81	1919	12:74	2125	Y	11
4,4'-DDE	12:89	12:82	12:96	2038	12:89	2421	N	18
Endrin	13:41	13:34	13:48	1783	13:41	1807	Y	1
Endosulfan II	13:73	13:66	13:80	2000	13:73	2336	N	17
4,4'-DDD	14:26	14:19	14:33	1353	14:26	1490	Y	10
Endo.sulfate	15:18	15:11	15:25	1858	15:18	2172	N	18
4,4'-DDT	15:50	15:43	15:57	1435	15:50	1528	Y	6
Methoxychlor	17:55	17:48	17:62	908	17:55	1163	N	28
Endrin ketone	16:63	16:56	16:70	2221	16:63	2663	N	20
a. Chlordane	12:02	11:95	12:09	2253	12:02	2658	N	18
g. Chlordane	11:52	11:45	11:59	2277	11:52	2699	N	19
Toxaphene	13:94	13:87	14:03	47084				
Aroclor-1016	8:02	7:95	8:09	211337				
Aroclor-1221	5:58	5:51	5:65	71616				
Aroclor-1232	8:02	7:95	8:09	83251				
Aroclor-1242	8:02	7:95	8:09	159006				
Aroclor-1248	8:02	7:95	8:09	137047				
Aroclor-1254	13:08	13:01	13:15	148622				
Aroclor-1260	17:89	17:82	17:96	364791				
Endrin Aldehyde	14:38	14:31	14:45	1903	14:38	2208	N	16

Under QNT Y/N: enter Y if quantitation was performed, N if not performed.
%D must be less than or equal to 15.0% for quantitation, and less than or equal to 20.0% for confirmation.

Note: Determining that no compounds were found above the CRQL is a form of quantitation, and therefore at least one column must meet the 15.0% criteria.

For multicomponent analytes, the single largest peak that is characteristic of the component should be used to establish retention time and %D. Identification of such analytes is based primarily on pattern recognition.



[Interface 1] 0-30 Min Scale: 100 Mv Ch.A, 100 Mv Ch.B
INDA Processed: 06-08-1995 17:55:51, segment 4, cycle 56
RAW DATA SAVED IN FILE E:JU06E56.PTS Second Channel Stored in E:KU06E56.PTS

***** EXTERNAL STANDARD TABLE *****

********** 06-08-1995 17:56:01 Version 5.1.5 **********
* Sample Name: INDA Data File: E:JU06E56 *
* Date: 06-08-1995 17:25:34 Method: M:APES-G 03-08-1995 15:02:41 # 359 *
* Interface: 1 Cycle#: 56 Operator JJK Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 10 Area Threshold: 1000 *
****
* Instrument Type: Perkin-Elmer 8500 Column Type: RTx-5 30m,.35mm *
* Solvent Description: 1.0u df *
* Conditions: 180 for 4.0min then 4.0deg/min to 240, hold 30min *
* Detector 0: Detector 1: ECD *
* Misc. Information: *
****

Starting Delay: 0.00 Ending retention time: 30.00
Area reject: 1000 One sample per 1.002 sec.
Amount injected: 1.00 Dilution factor: 1.00
Sample Weight: 1.00000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	4.659	TCMX	22.2888	4.2052%	42729	9488	4.5	1	0	-.3571	5.2163E-04
2	5.561	a-BHC	18.8342	3.5535%	30915	7256	4.3	1	0	-.2994	6.0923E-04

5	11.690 Endosulfan I	17.5056	3.3078%	43607	10179	4.4	1	0	-.1492	7.5656E-04
6	12.742 Dieldrin	33.8911	6.3943%	85013	20035	4.2	1	0	-.1308	3.9866E-04
7	13.410 Endrin	36.2355	6.8366%	74678	17004	4.4	1	0	-.1864	4.8522E-04
8	14.262 4'4-DDD	35.3823	6.6756%	59605	11197	5.3	1	0	-.1169	5.9361E-04
9	15.498 DDT	36.1521	6.8208%	61111	13004	4.7	1	0	-.1076	5.9158E-04
10	16.633 Endrin ket.	2.2505	0.4246%	5325	987	5.4	1	0	-.1003	4.2265E-04
11	17.552 Methoxychlor	238.3445	44.9686%	232544	49646	4.7	1	0	0	1.0249E-03
12	23.063 DC8	46.9748	8.8628%	160403	31692	5.1	1	0	-.1446	2.9285E-04

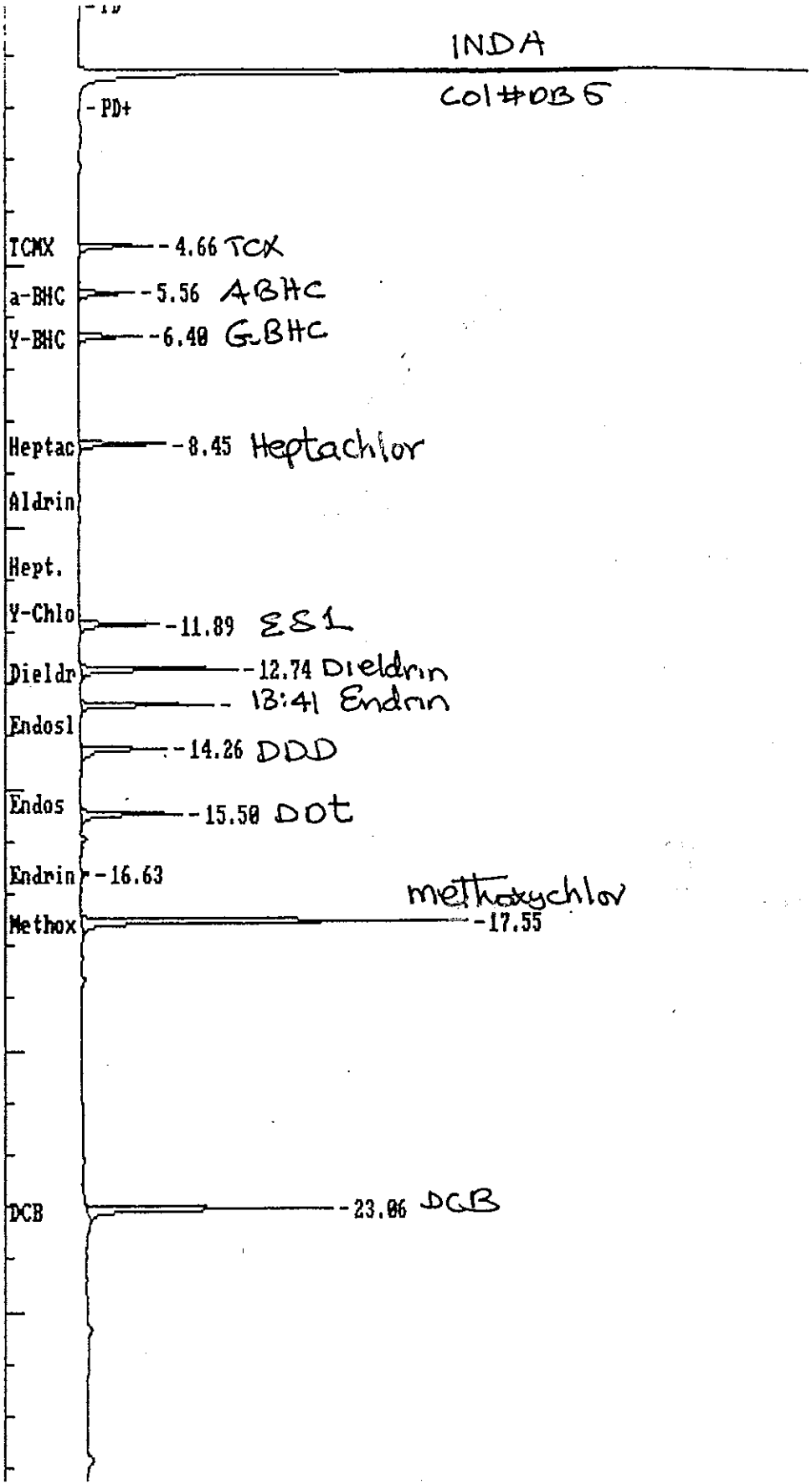
TOTAL AMOUNT = 530.0239

GROUP NUMBER	GROUP AMOUNT	GROUP PERCENT

000242

000243

Areas, times, and heights stored in: E:JU06E56.ATB
Data File = E:JU06E56.PTS Printed on 06-08-1995 at 17:56:10
Start time: 0.00 min. Stop time: 30.00 min. Offset: 1 mv.
Full Range: 100 millivolts



L PD-

000244

EXTERNAL STANDARD TABLE

********** 06-08-1995 17:56:19 Version 5.1.5 **********

* Sample Name: INDA Data File: E:KU06E56 *
* Date: 06-08-1995 17:25:34 Method: M:BPES-G 03-31-1995 14:31:59 # 358 *
* Interface: 1 Cycle#: 56 Operator JJK Channel#: 1 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 10 Area Threshold: 500 *

* Instrument Type: Perkin-Elmer 8500 Column Type: RTx-5 30m, .35mm *
* Solvent Description: 1.0u df *
* Conditions: 180 for 4.0min then 4.0deg/min to 240, hold 30min *
* Detector 0: Detector 1: ECD *
* Misc. Information: *

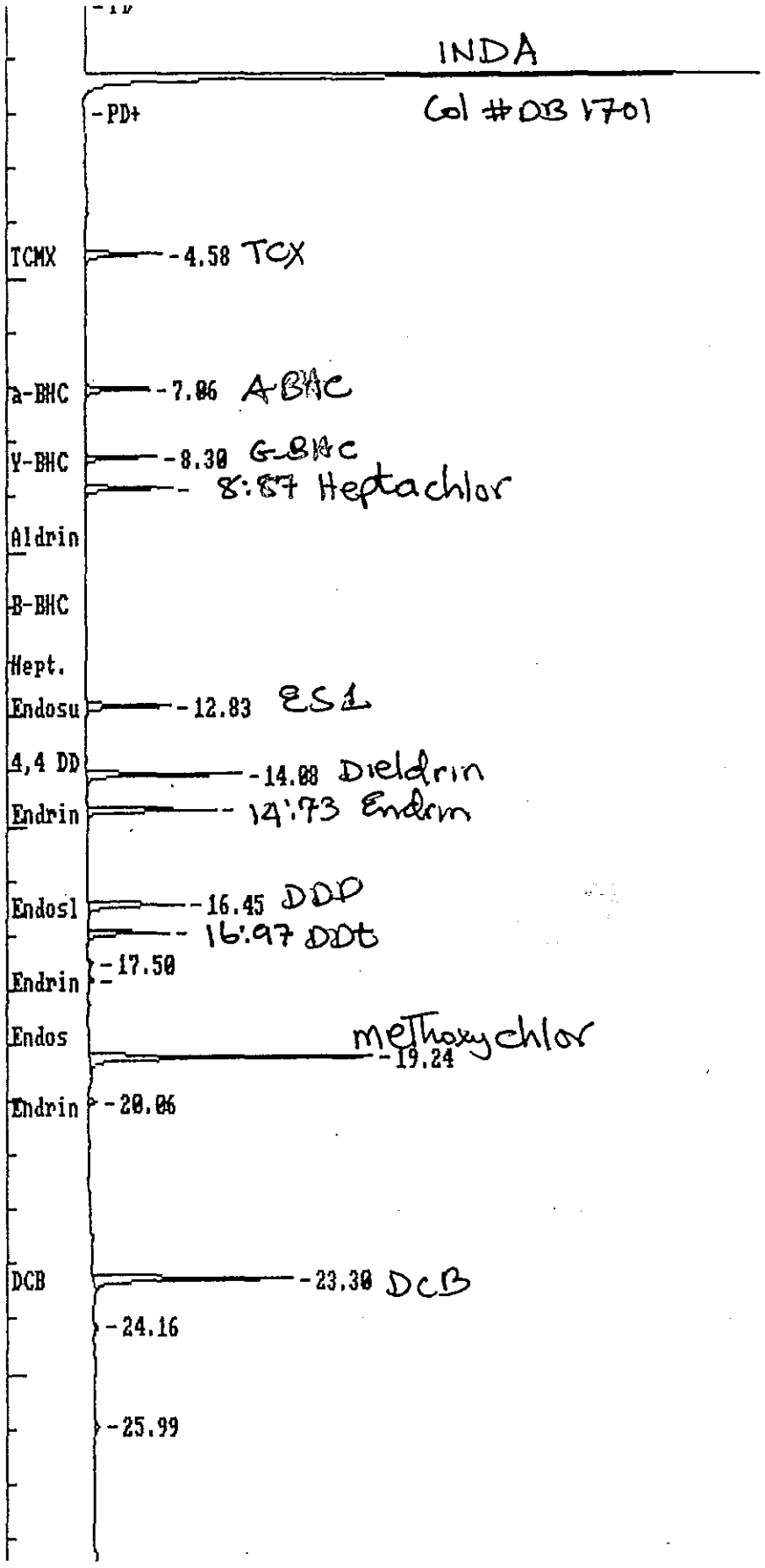
Starting Delay: 0.00 Ending retention time: 30.00
Area reject: 500 One sample per 1.002 sec.
Amount injected: 1.00 Dilution factor: 1.00
Sample Weight: 1.00000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	4.576	TCMX	22.2769	3.8411%	39988	9084	4.4	1	0	-.3636	5.5709E-04
2	7.064	a-BHC	19.3647	3.3390%	30802	7537	4.1	1	0	-.2358	6.2867E-04
3	8.300	Y-BHC	18.9592	3.2690%	32805	8457	3.9	1	0	-.4008	5.7793E-04
4	8.868	Heptachlor	22.7994	3.9312%	43378	10247	4.2	1	0	-.1879	5.2560E-04
5	12.826	Endosulf I	21.4873	3.7049%	42150	9974	4.2	1	0	-.2597	5.0978E-04
6	14.078	Dieldrin	39.2573	6.7689%	74587	18402	4.1	1	0	-.2366	5.2633E-04
7	14.729	Endrin	68.8692	11.8748%	65780	15239	4.3	1	0	-.2262	1.0470E-03
8	16.449	~~EndoslfII~~ DDD	27.8562	4.8031%	51723	11380	4.5	1	0	-.1520	5.3856E-04
9	16.967	4,4 DDT	37.2318	6.4197%	43323	9653	4.5	1	0	-.1964	8.5939E-04
10	17.502		0.0000	0.0000%	2610	553	4.7	1			1.0000E-09
11	17.819	Endrin ald	2.2104	0.3811%	3142	632	5.0	1	0	-.2337	7.0343E-04
12	19.238	Methoxychl	242.9283	41.8869%	156620	34232	4.6	1	0	-.2597	1.5511E-03
13	20.057	Endrin ket	3.1059	0.5355%	4756	967	4.9	1	0	-.2491	6.5298E-04
14	23.296	DCB	53.6159	9.2447%	116859	23874	4.9	1	0	-.1431	4.5881E-04
15	24.165		0.0000	0.0000%	3019	487	6.2	1			1.0000E-09
16	25.985		0.0000	0.0000%	3560	481	7.4	1			1.0000E-09

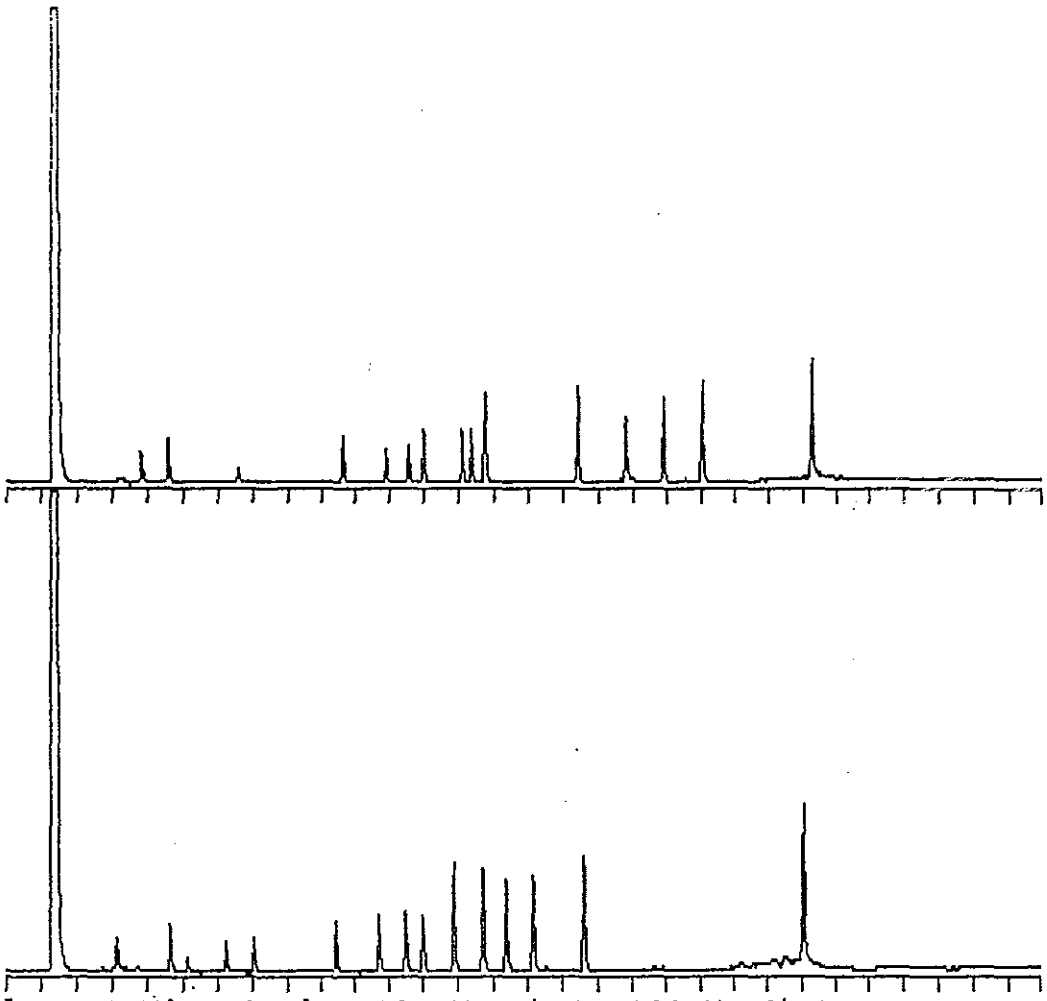
TOTAL AMOUNT = 579.9623

GROUP NUMBER GROUP AMOUNT GROUP PERCENT

Areas, times, and heights stored in: E:KU06E56.ATB
Data File = E:KU06E56.PTS Printed on 06-08-1995 at 17:56:29
Start time: 0.00 min. Stop time: 30.00 min. Offset: 1 mv.
Full Range: 100 millivolts



000246



[Interface 1] 0-30 Min Scale: 100 Mv Ch.A, 100 Mv Ch.B
INDB Processed: 06-08-1995 18:34:01, segment 5, cycle 57
End of sequence file reached at cycle 57
RAW DATA SAVED IN FILE E:JU06E57.PTS Second Channel Stored in E:KU06E57.PTS

***** EXTERNAL STANDARD TABLE *****

********** 06-08-1995 18:34:11 Version 5.1.5 **********
* Sample Name: INDB Data File: E:JU06E57 *
* Date: 06-08-1995 17:59:42 Method: M:APES-G 03-08-1995 15:02:41 # 359 *
* Interface: 1 Cycle#: 57 Operator JJK Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 10 Area Threshold: 1000 *
****
* Instrument Type: Perkin-Elmer 8500 Column Type: RTx-5 30m,.35mm *
* Solvent Description: 1.0u df *
* Conditions: 180 for 4.0min then 4.0deg/min to 240, hold 30min *
* Detector 0: Detector 1: ECD *
* Misc. Information: *
****

Starting Delay: 0.00 Ending retention time: 30.00
Area reject: 1000 One sample per 1.002 sec.
Amount injected: 1.00 Dilution factor: 1.00
Sample Weight: 1.00000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	2.739		0.0000	0.0000%	3322	670	5.0 1			1.0000E-09

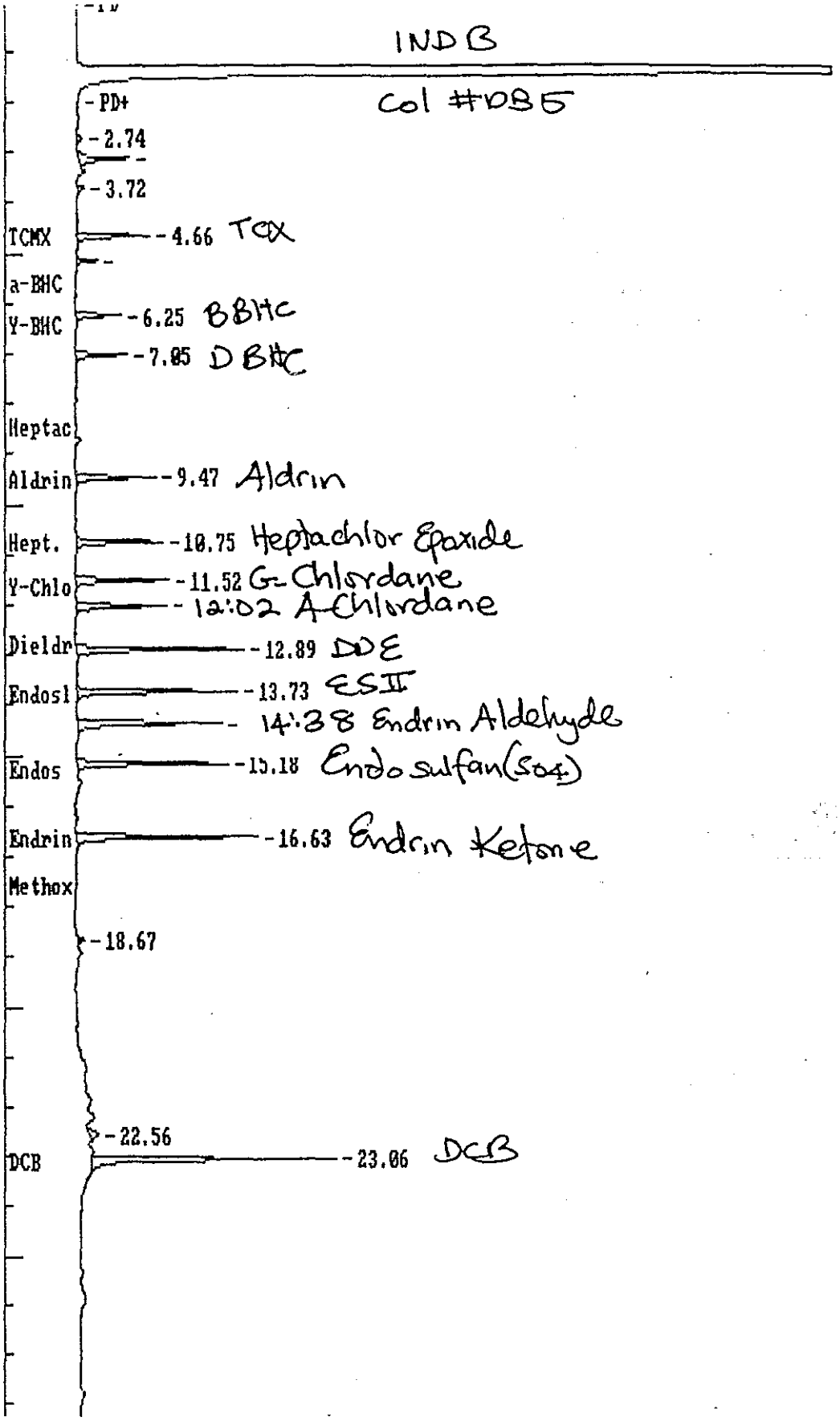
4	4.659	TCMX	22.5010	[illegible]	[illegible]					
5	5.160		0.0000	0.0000%	13450	2724	4.9 1			1.0000E-09
6	6.246	B-BHC	21.2176	5.1389%	26218	5972	4.4 1	0		8.0926E-04
7	7.047	d-BHC	24.5032	5.9347%	30111	6866	4.4 1	0		8.1376E-04
8	9.469	Aldrin	20.4396	4.9505%	45608	10474	4.4 1	0	-.1760	4.4816E-04
9	10.755	Hept. epox.	21.6674	5.2479%	48779	11378	4.3 1	0	-.1550	4.4420E-04
10	11.523	Y-Chlordane	20.7482	5.0252%	53988	12253	4.4 1	0	-.8620	3.8431E-04
11	12.024	a-Chlordane	20.2727	4.9101%	53169	11868	4.5 1	0	-.2770	3.8129E-04
12	12.892	4,4-DDE	38.0376	9.2127%	96835	22069	4.4 1	0	-.1293	3.9281E-04
13	13.727	Endoslf II	39.5873	9.5881%	93447	21149	4.4 1	0	-.2427	4.2364E-04
14	14.379	Endrin ald	43.9289	10.6396%	88335	18862	4.7 1	0	-.1739	4.9730E-04
15	15.180	Endos sulf	48.1804	11.6693%	86865	19870	4.4 1	0	-.6557	5.5466E-04
16	16.633	Endrin ket.	45.0239	10.9048%	106527	23946	4.4 1	0	-.1003	4.2265E-04
17	18.671		0.0000	0.0000%	5394	857	6.3 1			1.0000E-09
18	22.562		0.0000	0.0000%	10290	1127	9.1 1			1.0000E-09
19	23.063	DCB	46.7723	11.3283%	159712	32178	5.0 1	0	-.1446	2.9285E-04

000247

TOTAL AMOUNT = 412.8802

GROUP NUMBER GROUP AMOUNT GROUP PERCENT

Areas, times, and heights stored in: E:JU06E57.ATB
Data File = E:JU06E57.PTS Printed on 06-08-1995 at 18:34:21
Start time: 0.00 min. Stop time: 30.00 min. Offset: 1 mv.
Full Range: 100 millivolts



PD-

000249

EXTERNAL STANDARD TABLE

********** 06-08-1995 18:34:40 Version 5.1.5 **********

* Sample Name: INDB Data File: E:KU06E57 *
* Date: 06-08-1995 17:59:42 Method: M:BPES-G 03-31-1995 14:31:59 # 358 *
* Interface: 1 Cycle#: 57 Operator JJK Channel#: 1 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 10 Area Threshold: 500 *

* Instrument Type: Perkin-Elmer 8500 Column Type: RTx-5 30m,.35mm *
* Solvent Description: 1.0u df *
* Conditions: 180 for 4.0min then 4.0deg/min to 240, hold 30min *
* Detector 0: Detector 1: ECD *
* Misc. Information: *

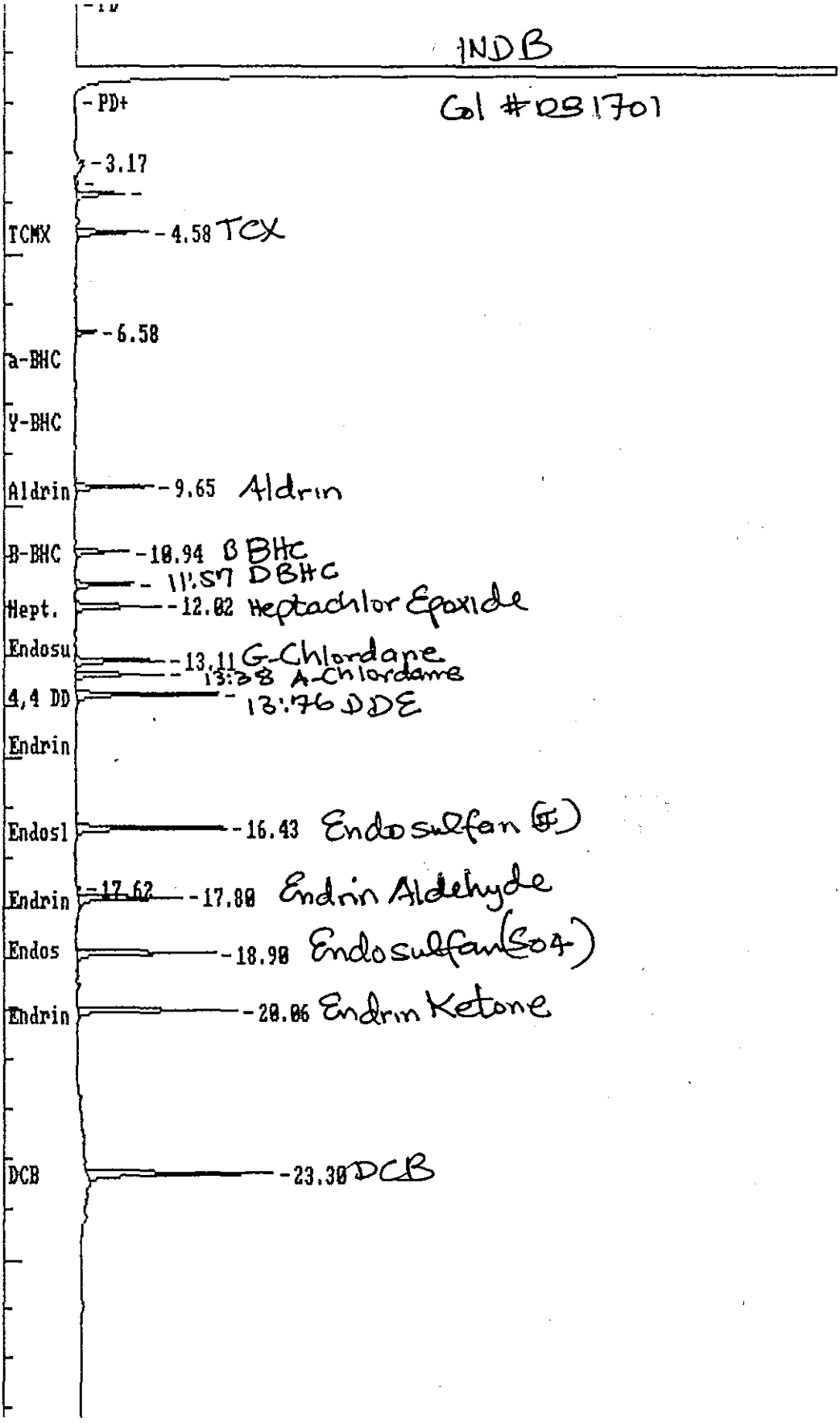
Starting Delay: 0.00 Ending retention time: 30.00
Area reject: 500 One sample per 1.002 sec.
Amount injected: 1.00 Dilution factor: 1.00
Sample Weight: 1.00000

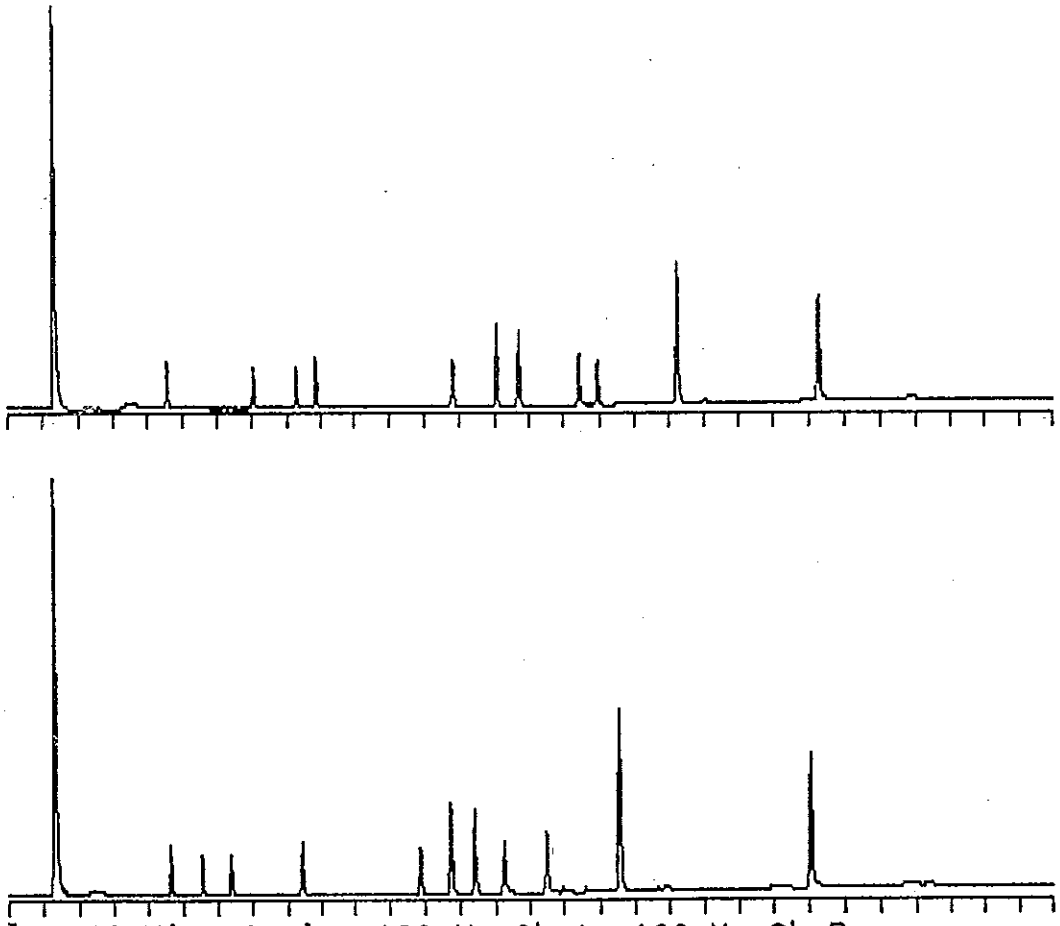
PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	3.173		0.0000	0.0000%	2024	552	3.7	1			1.0000E-09
2	3.590		0.0000	0.0000%	3965	423	9.4	2			1.0000E-09
3	3.824		0.0000	0.0000%	30071	6295	4.8	2			1.0000E-09
4	4.576	TCMX	23.1379	5.0614%	41534	9317	4.5	1	0	-.3636	5.5709E-04
5	6.580		0.0000	0.0000%	11448	2569	4.5	1			1.0000E-09
6	9.653	Aldrin	21.8886	4.7881%	40801	9980	4.1	1	0	-.3448	5.3647E-04
7	10.939	B-BHC	21.5806	4.7207%	26799	6916	3.9	1	0	-.3044	8.0526E-04
8	11.573	d-BHC	26.8546	5.8744%	30417	7481	4.1	1	0	-.4310	8.8288E-04
9	12.024	Hept. epox.	24.6510	5.3924%	47483	11019	4.3	1	0	-.2770	5.1916E-04
10	13.109	Y-Chlordane	22.7806	4.9832%	48075	11351	4.2	2	0	-.2541	4.7386E-04
11	13.377	a-Chlordane	22.1692	4.8495%	47041	11372	4.1	2	0	-.2490	4.7127E-04
12	13.761	4,4 DDE	42.6760	9.3353%	82108	18580	4.4	1	0	-.3024	5.1975E-04
13	16.433	EndoslfII	44.3163	9.6941%	82286	19531	4.2	1	0	-.2534	5.3856E-04
14	17.618		0.0000	0.0000%	2355	469	5.0	1			1.0000E-09
15	17.802	Endrin ald	45.3985	9.9309%	64539	13437	4.8	1	0	-.3272	7.0343E-04
16	18.904	Endos sulf	51.4586	11.2565%	76595	18062	4.2	1	0	.3546	6.7183E-04
17	20.057	Endrin ket	56.2675	12.3084%	86171	20869	4.1	1	0	-.2491	6.5298E-04
18	23.296	DCB	53.9662	11.8050%	117623	24332	4.8	1	0	-.1431	4.5881E-04

TOTAL AMOUNT = 457.1458

GROUP NUMBER GROUP AMOUNT GROUP PERCENT

Areas, times, and heights stored in: E:KU06E57.ATB
Data File = E:KU06E57.PTS Printed on 06-08-1995 at 18:35:08
Start time: 0.00 min. Stop time: 30.00 min. Offset: 1 mv.
Full Range: 100 millivolts





[Interface 1] 0-30 Min Scale: 100 Mv Ch.A, 100 Mv Ch.B
IND A Processed: 06-06-1995 18:35:52, segment 3, cycle 3
RAW DATA SAVED IN FILE E:JU06E3.PTS Second Channel Stored in E:KU06E3.PTS

***** EXTERNAL STANDARD TABLE *****

********** 06-06-1995 18:35:57 Version 5.1.5 **********
* Sample Name: IND A Data File: E:JU06E3 *
* Date: 06-06-1995 18:05:40 Method: M:APES-G 03-08-1995 15:02:41 # 359 *
* Interface: 1 Cycle#: 3 Operator SDR Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 10 Area Threshold: 1000 *
****
* Instrument Type: Perkin-Elmer 8500 Column Type: RTx-5 30m,.35mm *
* Solvent Description: 1.0u df *
* Conditions: 180 for 4.0min then 4.0deg/min to 240, hold 30min *
* Detector 0: Detector 1: ECD *
* Misc. Information: *
****

Starting Delay: 0.00 Ending retention time: 30.00
Area reject: 1000 One sample per 1.002 sec.
Amount injected: 1.00 Dilution factor: 1.00
Sample Weight: 1.00000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	4.659	TCMX	21.3292	4.6877%	40890	10326	4.0	1	0	-.3571	5.2163E-04
2	5.561	a-BHC	18.2698	4.0153%	29988	8230	3.6	1	0	-.2994	6.0923E-04
3	6.396	Y-BHC	17.9202	3.9385%	32722	8405	3.9	1	0	-.2604	5.4764E-04

6	12.742 Dieldrin	30.5976	6.7251%	76757	18418	4.2	1	0	-.1308	3.9866E-04
7	13.410 Endrin	34.5965	7.6035%	71300	17130	4.2	1	0	-.1864	4.8522E-04
8	14.262 4'4-DDD	32.1163	7.0584%	54103	10261	5.3	1	0	-.1169	5.9361E-04
9	15.498 DDT	33.9521	7.4619%	57393	12089	4.7	1	0	-.1076	5.9158E-04
10	15.982	0.0000	0.0000%	3185	682	4.7	1			1.0000E-09
11	16.633 Endrin ket.	1.6231	0.3567%	3840	760	5.1	1	0	-.1003	4.2265E-04
12	17.552 Methoxychlor	186.0634	40.8925%	181535	37620	4.8	1	0	0	1.0249E-03
13	23.063 DCB	40.6092	8.9250%	138667	27513	5.0	1	0	-.1446	2.9285E-04

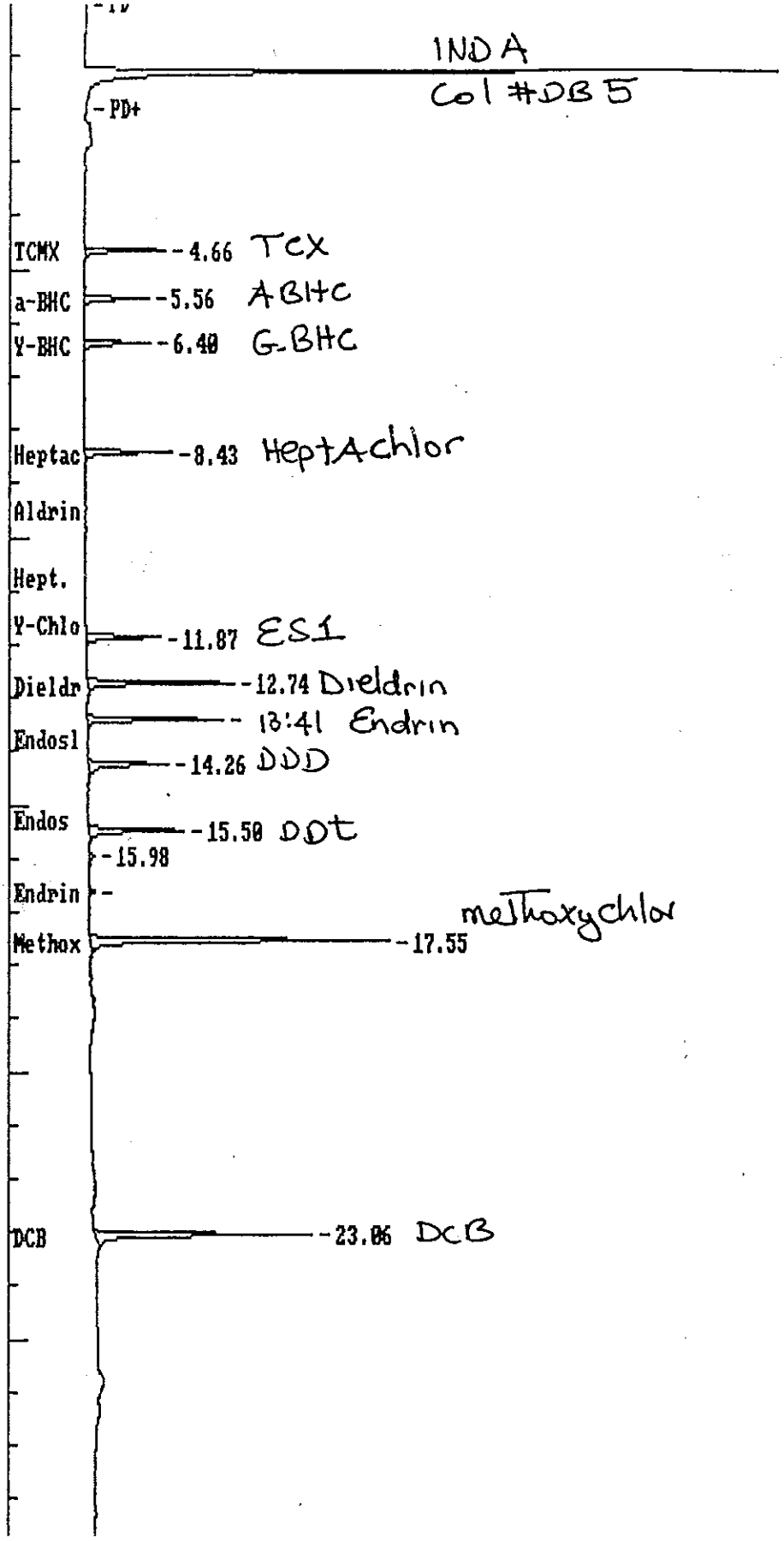
TOTAL AMOUNT = 455.0057

000252

GROUP NUMBER GROUP AMOUNT GROUP PERCENT

000253

Areas, times, and heights stored in: E:JU06E3.ATB
Data File = E:JU06E3.PTS Printed on 06-06-1995 at 18:36:03
Start time: 0.00 min. Stop time: 30.00 min. Offset: 1 mv.
)Full Range: 100 millivolts



***** EXTERNAL STANDARD TABLE *****

********** 06-06-1995 18:36:12 Version 5.1.5 **********

* Sample Name: IND A Data File: E:KU06E3 *
* Date: 06-06-1995 18:05:40 Method: M:BPES-G 03-31-1995 14:31:59 # 358 *
* Interface: 1 Cycle#: 3 Operator SDR Channel#: 1 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 10 Area Threshold: 500 *

* Instrument Type: Perkin-Elmer 8500 Column Type: RTx-5 30m,.35mm *
* Solvent Description: 1.0u df *
* Conditions: 180 for 4.0min then 4.0deg/min to 240, hold 30min *
* Detector 0: Detector 1: ECD *
* Misc. Information: *

Starting Delay: 0.00 Ending retention time: 30.00
Area reject: 500 One sample per 1.002 sec.
Amount injected: 1.00 Dilution factor: 1.00
Sample Weight: 1.00000

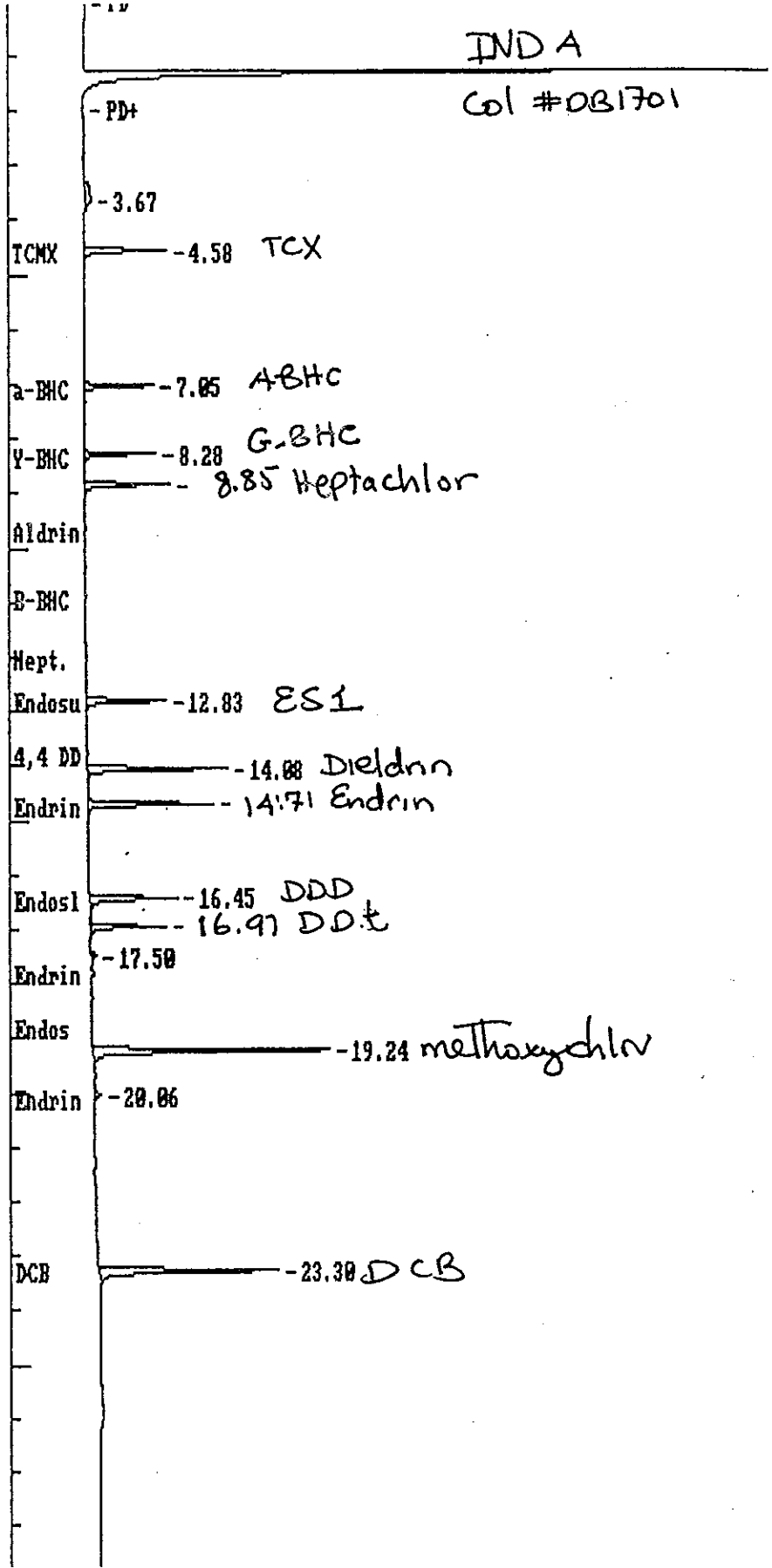
PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	3.674		0.0000	0.0000%	16407	684	24.0	1			1.0000E-09
2	4.576	TCMX	21.6813	4.0692%	38919	10150	3.8	1	0	-.3636	5.5709E-04
3	7.047	a-BHC	18.8923	3.5457%	30051	8551	3.5	1	0	-.4716	6.2867E-04
4	8.283	Y-BHC	18.4554	3.4637%	31934	8791	3.6	1	0	-.6012	5.7793E-04
5	8.851	Heptachlor	21.6339	4.0603%	41160	10472	3.9	1	0	-.3759	5.2560E-04
6	12.826	Endosulf I	20.5781	3.8621%	40367	9744	4.1	1	0	-.2597	5.0978E-04
7	14.078	Dieldrin	37.0421	6.9521%	70378	17179	4.1	1	0	-.2366	5.2633E-04
8	14.713	Endrin	67.8170	12.7280%	64775	15432	4.2	1	0	-.3393	1.0470E-03
9	16.449	~~Endosulfii~~ DDD	26.3145	4.9388%	48861	10748	4.5	1	0	-.1520	5.3856E-04
10	16.967	4,4 DDT	35.7662	6.7127%	41618	9313	4.5	1	0	-.1964	8.5939E-04
11	17.502		0.0000	0.0000%	2440	557	4.4	1			1.0000E-09
12	19.238	Methoxychl	212.0151	39.7914%	136690	29551	4.6	1	0	-.2597	1.5511E-03
13	20.057	Endrin ket	2.4614	0.4620%	3770	799	4.7	1	0	-.2491	6.5298E-04
14	23.296	DCB	50.1587	9.4139%	109324	22161	4.9	1	0	-.1431	4.5881E-04

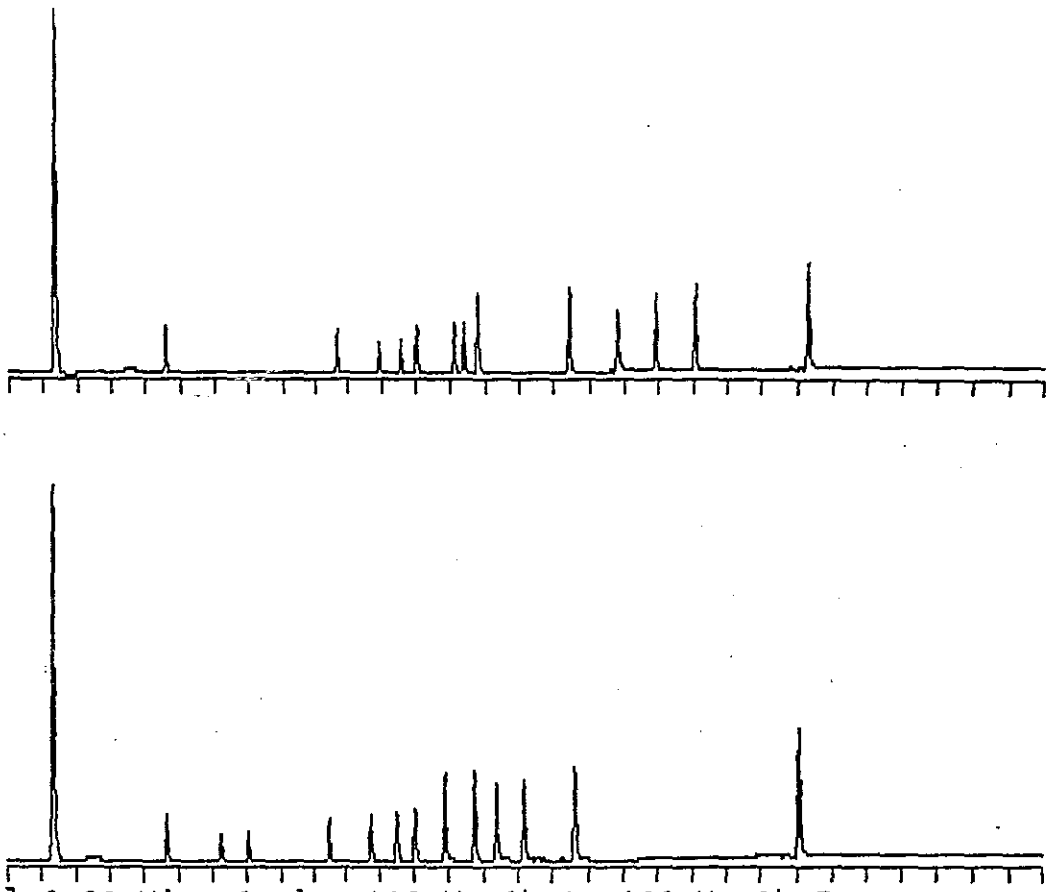
TOTAL AMOUNT = 532.8159

GROUP NUMBER GROUP AMOUNT GROUP PERCENT

000255

Areas, times, and heights stored in: E:KU06E3.ATB
Data File = E:KU06E3.PTS Printed on 06-06-1995 at 18:36:25
Start time: 0.00 min. Stop time: 30.00 min. Offset: 1 mv.
Full Range: 100 millivolts





[Interface 1] 0-30 Min Scale: 100 Mv Ch.A, 100 Mv Ch.B
IND B Processed: 06-06-1995 19:09:59, segment 4, cycle 4
RAW DATA SAVED IN FILE E:JU06E4.PTS Second Channel Stored in E:KU06E4.PTS

****** EXTERNAL STANDARD TABLE ******

********** 06-06-1995 19:10:04 Version 5.1.5 **********
* Sample Name: IND B Data File: E:JU06E4 *
* Date: 06-06-1995 18:39:48 Method: M:APES-G 03-08-1995 15:02:41 # 359 *
* Interface: 1 Cycle#: 4 Operator SDR Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 10 Area Threshold: 1000 *
****
* Instrument Type: Perkin-Elmer 8500 Column Type: RTx-5 30m,.35mm *
* Solvent Description: 1.0u df *
* Conditions: 180 for 4.0min then 4.0deg/min to 240, hold 30min *
* Detector 0: Detector 1: ECD *
* Misc. Information: *
****

Starting Delay: 0.00 Ending retention time: 30.00
Area reject: 1000 One sample per 1.002 sec.
Amount injected: 1.00 Dilution factor: 1.00
Sample Weight: 1.00000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	4.659	TCMX	20.1155	5.6921%	38563	9647	4.0	1	0	-.3571	5.2163E-04
2	6.229	B-BHC	19.0460	5.3895%	23535	5415	4.3	1	0	-.2673	8.0926E-04
3	7.021	d-BHC	21.5593	6.1006%	26493	6409	4.1	1	0	-.2369	8.1376E-04

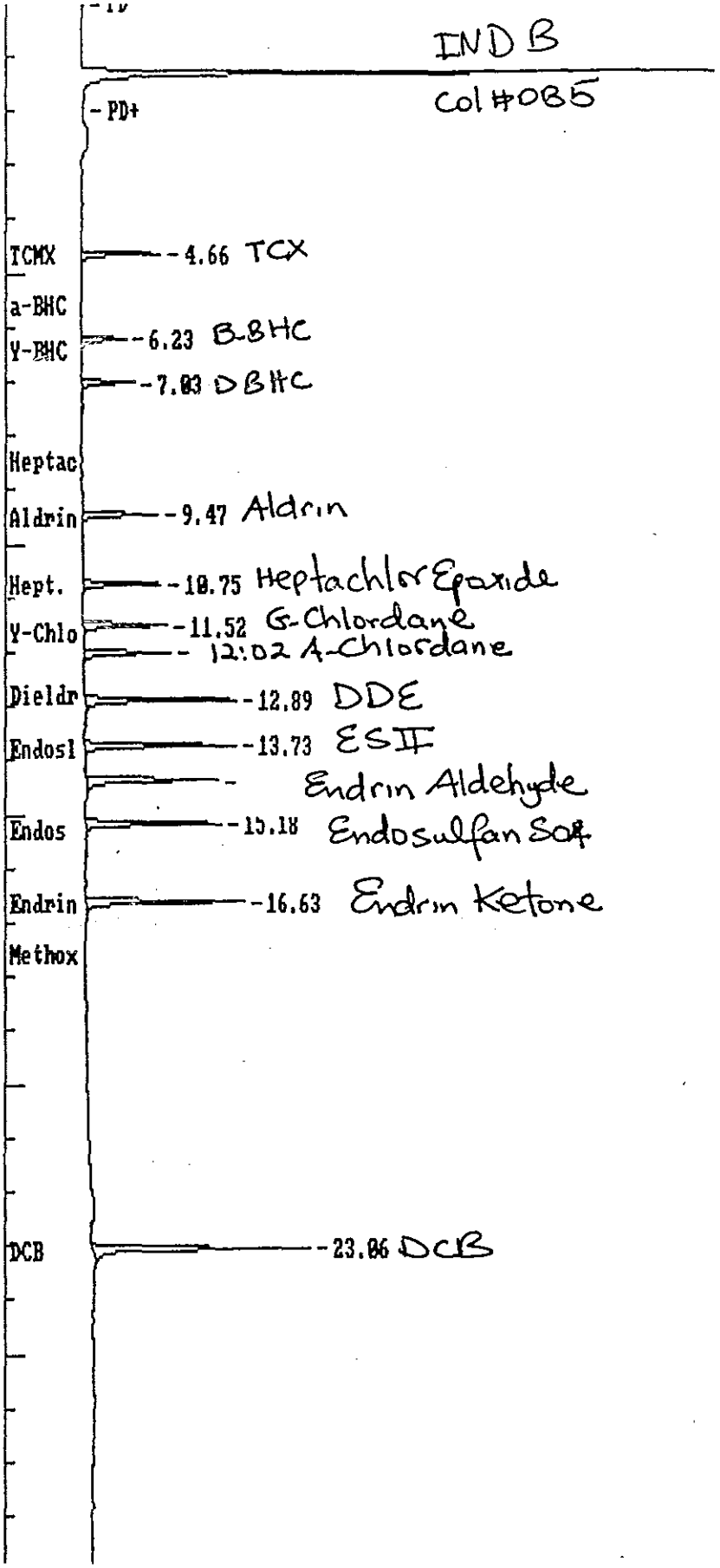
7	12.024	a-Chlordane	17.1815	4.8619%	45062	10485	4.3	1	0	-.2770	3.8129E-04
8	12.892	4,4-DDE	32.3329	9.1493%	82312	18249	4.5	1	0	-.1293	3.9281E-04
9	13.727	Endoslf II	33.8958	9.5915%	80012	18275	4.4	1	0	-.2427	4.2364E-04
10	14.379	Endrin ald	37.8482	10.7099%	76108	15901	4.8	1	0	-.1739	4.9730E-04
11	15.180	Endos sulf	41.2200	11.6640%	74316	16398	4.5	1	0	-.6557	5.5466E-04
12	16.633	Endrin ket.	37.5561	10.6273%	88858	19153	4.6	1	0	-.1003	4.2265E-04
13	23.063	DCB	39.8471	11.2756%	136065	26607	5.1	1	0	-.1446	2.9285E-04

TOTAL AMOUNT = 353.3937

GROUP NUMBER GROUP AMOUNT GROUP PERCENT

000258

Areas, times, and heights stored in: E:JU06E4.ATB
Data File = E:JU06E4.PTS Printed on 06-06-1995 at 19:10:10
Start time: 0.00 min. Stop time: 30.00 min. Offset: 1 mv.
Full Range: 100 millivolts



***** EXTERNAL STANDARD TABLE *****

********** 06-06-1995 19:10:18 Version 5.1.5 **********

* Sample Name: IND B Data File: E:KU06E4 *
* Date: 06-06-1995 18:39:48 Method: M:BPES-G 03-31-1995 14:31:59 # 358 *
* Interface: 1 Cycle#: 4 Operator SDR Channel#: 1 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 10 Area Threshold: 500 *

* Instrument Type: Perkin-Elmer 8500 Column Type: RTx-5 30m,.35mm *
* Solvent Description: 1.0u df *
* Conditions: 180 for 4.0min then 4.0deg/min to 240, hold 30min *
* Detector 0: Detector 1: ECD *
* Misc. Information: *

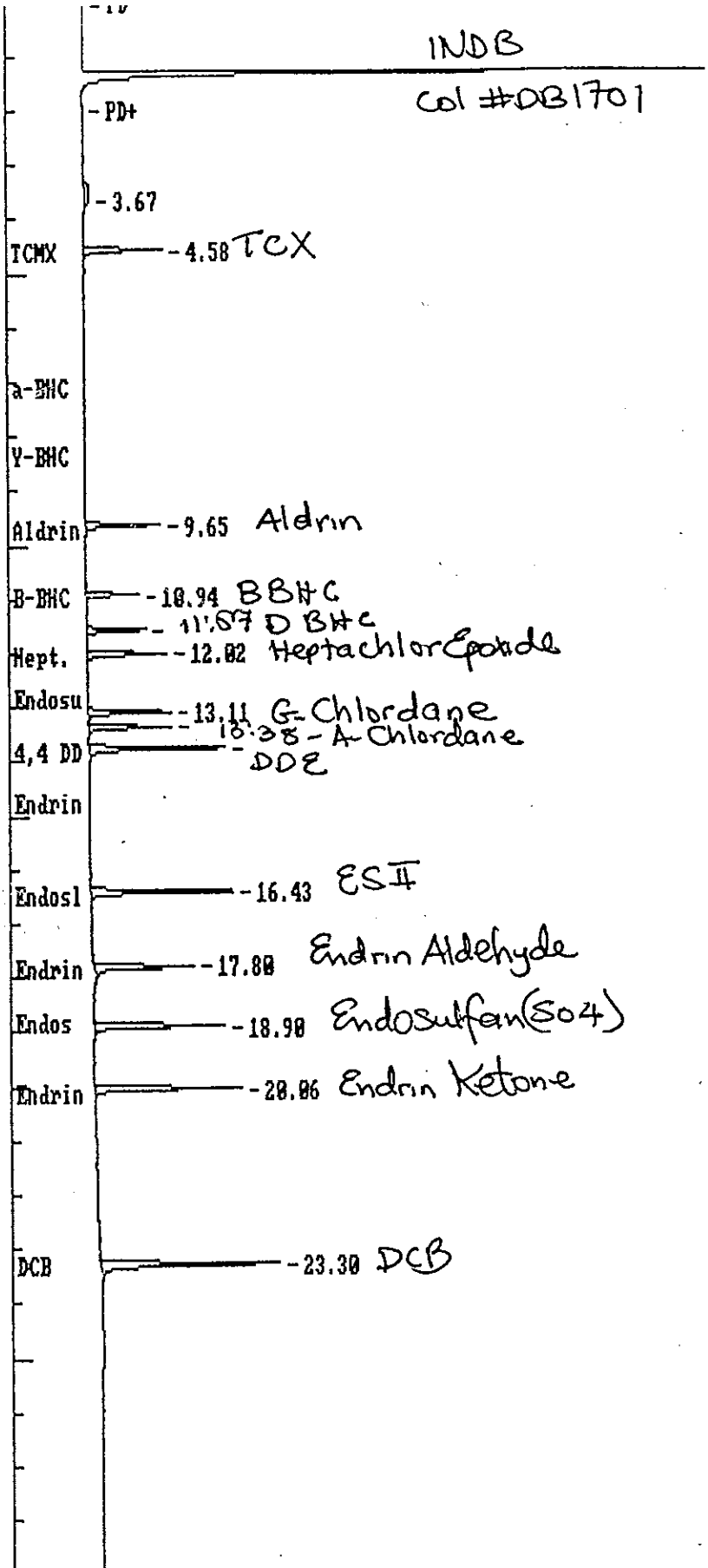
Starting Delay: 0.00 Ending retention time: 30.00
Area reject: 500 One sample per 1.002 sec.
Amount injected: 1.00 Dilution factor: 1.00
Sample Weight: 1.00000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	3.674		0.0000	0.0000%	14652	606	24.2	1			1.0000E-09
2	4.576	TCMX	20.5057	5.0330%	36809	9548	3.9	1	0	-.3636	5.5709E-04
3	9.653	Aldrin	19.2769	4.7314%	35933	9094	4.0	1	0	-.3448	5.3647E-04
4	10.939	B-BHC	19.5961	4.8097%	24335	6370	3.8	1	0	-.3044	8.0526E-04
5	11.573	d-BHC	24.2578	5.9539%	27476	7186	3.8	1	0	-.4310	8.8288E-04
6	12.024	Hept. epox.	20.6991	5.0804%	39871	9662	4.1	1	0	-.2770	5.1916E-04
7	13.109	Y-Chlordane	20.0623	4.9241%	42339	10084	4.2	2	0	-.2541	4.7386E-04
8	13.377	a-Chlordane	19.7338	4.8435%	41874	10071	4.2	2	0	-.2490	4.7127E-04
9	13.761	4,4 DDE	37.1944	9.1291%	71562	16501	4.3	1	0	-.3024	5.1975E-04
10	16.433	EndoslfII	39.8910	9.7909%	74069	17290	4.3	1	0	-.2534	5.3856E-04
11	17.802	Endrin ald	41.5994	10.2102%	59138	12178	4.9	1	0	-.3272	7.0343E-04
12	18.904	Endos sulf	46.2907	11.3617%	68903	15940	4.3	1	0	.3546	6.7183E-04
13	20.057	Endrin ket	49.1712	12.0687%	75303	17865	4.2	1	0	-.2491	6.5298E-04
14	23.296	DCB	49.1501	12.0635%	107126	21757	4.9	1	0	-.1431	4.5881E-04

TOTAL AMOUNT = 407.4286

GROUP NUMBER GROUP AMOUNT GROUP PERCENT

Areas, times, and heights stored in: E:KU06E4.ATB
Data File = E:KU06E4.PTS Printed on 06-06-1995 at 19:10:29
Start time: 0.00 min. Stop time: 30.00 min. Offset: 1 mv.
Full Range: 100 millivolts



PESTICIDE/PCB STANDARDS SUMMARY

000261

Lab Name: EMSL Analytical Contract: _____

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

Instrument ID: HP5890/SIP GC Column ID: DB5

DATE(S) OF ANALYSIS	FROM: 6-6-95	DATE OF ANALYSIS	6-9-95
	TO: 6-6-95	TIME OF ANALYSIS	14:26
TIME(S) OF ANALYSIS	FROM: 17:31	EPA SAMPLE NO. (STANDARD)	1194261
	TO: 23:22		

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR	RT	CALIBRATION FACTOR	QNT Y/N	%D
alpha-BHC	5:56	5:51	5:61	1499				
beta-BHC	6:23	6:18	6:28	1177				
delta-BHC	7:03	6:98	7:08	1325				
gamma-BHC	6:40	6:35	6:45	1636				
Heptaclor	8:43	8:38	8:48	2248				
Aldrin	9:47	9:42	9:52	1904				
Hept. epoxide	10:75	10:70	10:80	2052				
Endosulfan I	11:87	11:80	11:94	2102				
Dieldrin	12:74	12:67	12:81	1919				
4,4'-DDE	12:89	12:82	12:96	2058				
Endrin	13:41	13:34	13:48	1783				
Endosulfan II	13:73	13:66	13:80	2000				
4,4'-DDD	14:26	14:19	14:33	1353				
Endo.sulfate	15:18	15:11	15:25	1858				
4,4'-DDT	15:50	15:43	15:57	1435				
Methoxychlor	17:55	17:48	17:62	908				
Endrin ketone	16:63	16:56	16:70	2221				
a. Chlordane	12:02	11:95	12:09	2253				
g. Chlordane	11:52	11:45	11:59	2277				
Toxaphene	13:94	13:87	14:03	47084				
Aroclor-1016	8:02	7:95	8:09	211337	8:02	204765	Y	3
Aroclor-1221	5:58	5:51	5:65	71616				
Aroclor-1232	8:02	7:95	8:09	83251				
Aroclor-1242	8:02	7:95	8:09	159006				
Aroclor-1248	8:02	7:95	8:09	137047				
Aroclor-1254	13:08	13:01	13:15	148622				
Aroclor-1260	17:89	17:82	17:96	364791	17:89	363387	Y	0.4
Endrin Aldehyde	14:38	14:31	14:45	1903				

Under QNT Y/N: enter Y if quantitation was performed, N if not performed. %D must be less than or equal to 15.0% for quantitation, and less than or equal to 20.0% for confirmation.

Note: Determining that no compounds were found above the CRQL is a form of quantitation, and therefore at least one column must meet the 15.0% criteria.

For multicomponent analytes, the single largest peak that is characteristic of the component should be used to establish retention time and %D. Identification of such analytes is based primarily on pattern recognition

000262

PESTICIDE/PCB STANDARDS SUMMARY

Lab Name: EMSL ANALYTICAL Contract: _____

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

Instrument ID: HP5890/SIP GC Column ID: DB1701

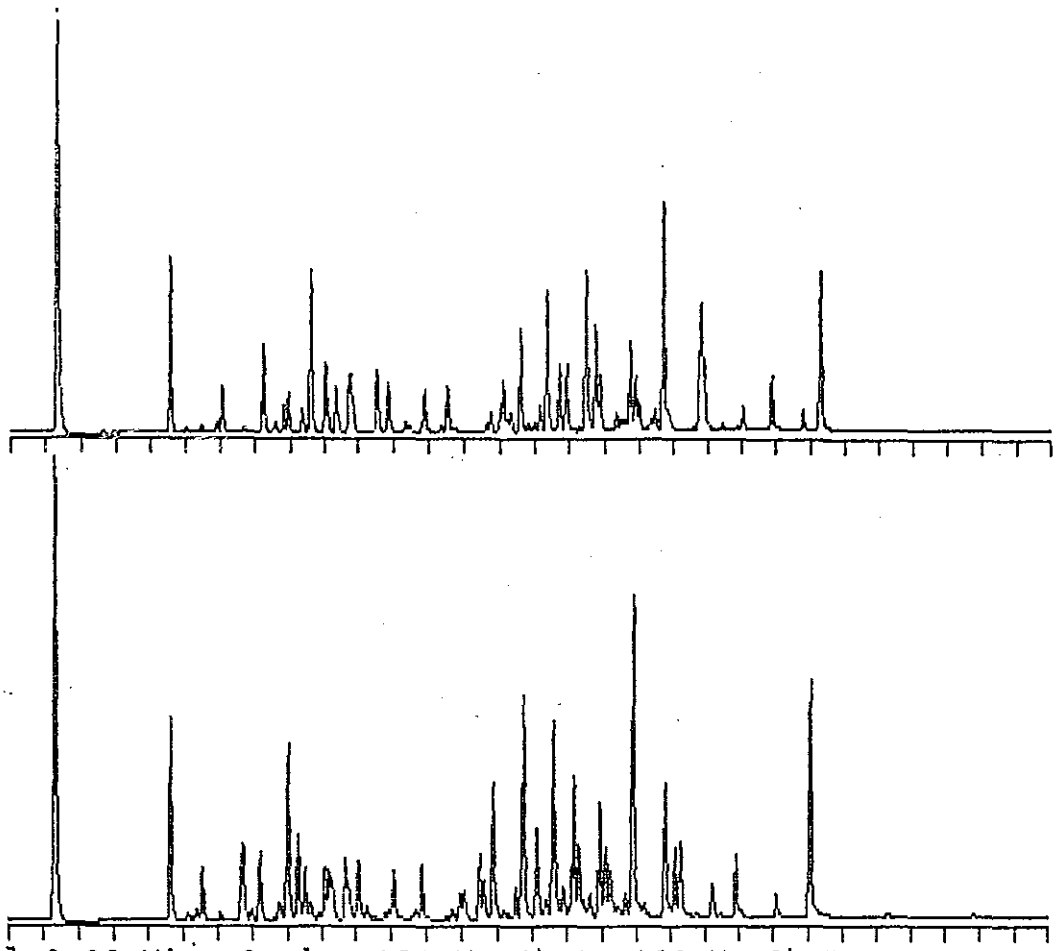
DATE(S) OF ANALYSIS FROM: 6-6-95 TO: 6-6-95
TIME(S) OF ANALYSIS FROM: 17:31 TO: 23:22
DATE OF ANALYSIS 6-9-95
TIME OF ANALYSIS 14:26
EPA SAMPLE NO. (STANDARD) 1194261

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR	RT	CALIBRATION FACTOR	QNT Y/N	%D
alpha-BHC	7:05	7:00	7:10	1503				
beta-BHC	10:94	10:89	10:99	1217				
delta-BHC	11:57	11:52	11:62	1374				
gamma-BHC	8:28	8:23	8:33	1597				
Heptaclor	8:85	8:80	8:90	2058				
Aldrin	9:65	9:60	9:70	1797				
Hept. epoxide	12:02	11:97	12:07	1994				
Endosulfan I	12:83	12:76	12:90	2018				
Dieldrin	14:08	14:01	14:15	1759				
4,4'-DDE	13:76	13:69	13:83	1789				
Endrin	14:71	14:64	14:78	1619				
Endosulfan II	16:43	16:36	16:50	1852				
4,4'-DDD	16:45	16:38	16:52	1222				
Endo.sulfate	18:90	18:83	18:97	1723				
4,4'-DDT	16:97	16:90	17:04	1040				
Methoxychlor	19:24	19:17	19:31	683				
Endrin ketone	20:06	19:99	20:13	1883				
a. Chlordane	13:38	13:31	13:45	2094				
g. Chlordane	13:11	13:04	13:18	2117				
Toxaphene	15:81	15:74	15:88	51071				
Aroclor-1016	8:62	8:55	8:69	170510	8:60	160655	Y	6
Aroclor-1221	6:06	5:99	6:13	60505				
Aroclor-1232	8:60	8:53	8:67	69990				
Aroclor-1242	8:60	8:53	8:67	127556				
Aroclor-1248	8:60	8:53	8:67	111017				
Aroclor-1254	14:03	13:96	14:10	149338				
Aroclor-1260	18:70	18:63	18:77	272141	18:69	255488	Y	6
Endrin Aldehyde	17:80	17:73	17:87	1478				

Under QNT Y/N: enter Y if quantitation was performed, N if not performed. %D must be less than or equal to 15.0% for quantitation, and less than or equal to 20.0% for confirmation.

Note: Determining that no compounds were found above the CRQL is a form of quantitation, and therefore at least one column must meet the 15.0% criteria.

For multicomponent analytes, the single largest peak that is characteristic of the component should be used to establish retention time and %D. Identification of such analytes is based primarily on pattern recognition



[Interface 1] 0-30 Min Scale: 100 Mv Ch.A, 100 Mv Ch.B
A1660 1PPM Processed: 06-09-1995 14:56:55, segment 1, cycle 75
RAW DATA SAVED IN FILE E:JU06E75.PTS Second Channel Stored in E:KU06E75.PTS

***** EXTERNAL STANDARD TABLE *****

********** 06-09-1995 14:57:05 Version 5.1.5 **********

* Sample Name: A1660 1PPM Data File: E:JU06E75 *
* Date: 06-09-1995 14:26:37 Method: M:APES-G 03-08-1995 15:02:41 # 359 *
* Interface: 1 Cycle#: 75 Operator JJK Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 10 Area Threshold: 1000 *

* Instrument Type: Perkin-Elmer 8500 Column Type: RTx-5 30m,.35mm *
* Solvent Description: 1.0u df *
* Conditions: 180 for 4.0min then 4.0deg/min to 240, hold 30min *
* Detector 0: Detector 1: ECD *
* Misc. Information: *

Starting Delay: 0.00 Ending retention time: 30.00
Area reject: 1000 One sample per 1.002 sec.
Amount injected: 1.00 Dilution factor: 1.00
Sample Weight: 1.00000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	4.643	TCMX	97.3267	24.3568%	186582	41699	4.5	1	0	-.7142	5.2163E-04
2	5.177		0.0000	0.0000%	7773	1542	5.0	2			1.0000E-09

5	6.379		0.0003	0.0000%	3832	696	5.5 2				
6	6.713		0.0001	0.0000%	115079	15673	7.3 2				1.0000E-09
7	6.981	d-BHC	7.8261	1.9585%	9617	1951	4.9 2	0		-.9478	8.1376E-04
8	7.214		0.0001	0.0000%	67977	14200	4.8 1				1.0000E-09
9	7.749		0.0000	0.0000%	27850	3579	7.8 2				1.0000E-09
10	8.016		0.0002	0.0001%	204765	35862	5.7 2				1.0000E-09
11	8.317		0.0001	0.0000%	92717	17279	5.4 2				1.0000E-09
12	8.534	Heptachlor	23.0217	5.7614%	52516	10376	5.1 2	0		.7889	4.3837E-04
13	8.684		0.0000	0.0000%	16503	3304	5.0 2				1.0000E-09
14	8.934		0.0000	0.0000%	5294	1119	4.7 2				1.0000E-09
15	9.101		0.0001	0.0000%	51369	10146	5.1 2				1.0000E-09
16	9.218		0.0000	0.0000%	44675	9510	4.7 2				1.0000E-09
17	9.319	Aldrin	20.9505	5.2430%	46747	8242	5.7 2	0		-1.760	4.4816E-04
18	9.719		0.0001	0.0000%	56300	12249	4.6 2				1.0000E-09
19	9.820		0.0000	0.0000%	41657	7747	5.4 2				1.0000E-09
20	10.087		0.0001	0.0000%	67121	11947	5.6 2				1.0000E-09
21	10.354		0.0000	0.0000%	11937	2280	5.2 2				1.0000E-09
22	10.872	Hept. epox.	2.3406	0.5858%	5269	1152	4.6 2	0		.9302	4.4420E-04
23	10.989		0.0000	0.0000%	9476	1972	4.8 2				1.0000E-09
24	11.122		0.0001	0.0000%	51015	9829	5.2 2				1.0000E-09
25	11.723	Y-Chlordane	2.5300	0.6332%	6583	1097	6.0 2	0		.8620	3.8431E-04
26	11.907	Endosulfan I	22.9596	5.7458%	52984	10554	5.0 2	0		0	4.3333E-04
27	12.742	Dieldrin	3.5679	0.8929%	8950	1810	4.9 2	0		-.1308	3.9866E-04
28	12.959	4,4-DDE	8.7385	2.1869%	22246	4787	4.6 2	0		.3880	3.9281E-04
29	13.076		0.0000	0.0000%	31108	5879	5.3 2				1.0000E-09
30	13.494	Endrin	31.1083	7.7851%	64111	13093	4.9 2	0		.4350	4.8522E-04
31	13.644	Endosulfan II	17.6006	4.4047%	41546	7776	5.3 2	0		-.8495	4.2364E-04
32	13.894		0.0002	0.0000%	151413	27574	5.5 2				1.0000E-09
33	14.212	4'4-DDD	3.1718	0.7938%	5343	1294	4.1 1	0		-.4678	5.9361E-04
34	14.529	Endrin ald	14.5753	3.6476%	29309	5968	4.9 2	0		.8695	4.9730E-04
35	14.729		0.0003	0.0001%	259526	45593	5.7 2				1.0000E-09
36	15.147		0.0001	0.0000%	111600	18265	6.1 2				1.0000E-09
37	15.414	DDT	13.2405	3.3136%	22382	3683	6.1 2	0		-.6458	5.9158E-04
38	15.615		0.0002	0.0001%	239444	40412	5.9 2				1.0000E-09
39	15.915		0.0000	0.0000%	34657	5931	5.8 2				1.0000E-09
40	16.199		0.0001	0.0000%	149209	29118	5.1 2				1.0000E-09
41	16.349		0.0001	0.0000%	98687	14478	6.8 2				1.0000E-09
42	16.683	Endrin ket.	9.5963	2.4015%	22705	4368	5.2 2	0		.2005	4.2265E-04
43	16.950		0.0001	0.0000%	115285	23081	5.0 2				1.0000E-09
44	17.117		0.0001	0.0000%	70107	14102	5.0 2				1.0000E-09
45	17.268		0.0001	0.0000%	62346	9424	6.6 2				1.0000E-09
46	17.502	Methoxychlor	13.3833	3.3493%	13058	2012	6.5 2	0		-.3802	1.0249E-03
47	17.669		0.0000	0.0000%	24805	4477	5.5 2				1.0000E-09
48	17.886		0.0004	0.0001%	363387	65970	5.5 3				1.0000E-09
49	18.236		0.0000	0.0000%	9817	1895	5.2 4				1.0000E-09
50	18.821		0.0002	0.0000%	156113	27378	5.7 2				1.0000E-09
51	19.121		0.0001	0.0000%	70787	13950	5.1 2				1.0000E-09
52	19.305		0.0001	0.0000%	81916	14939	5.5 2				1.0000E-09
53	20.224		0.0000	0.0000%	35626	6658	5.4 1				1.0000E-09
54	20.925		0.0001	0.0000%	61367	12418	4.9 1				1.0000E-09
55	22.111		0.0000	0.0000%	23460	4410	5.3 1				1.0000E-09
56	23.063	DCB	74.3818	18.6147%	253989	48904	5.2 1	0		-.1446	2.9285E-04

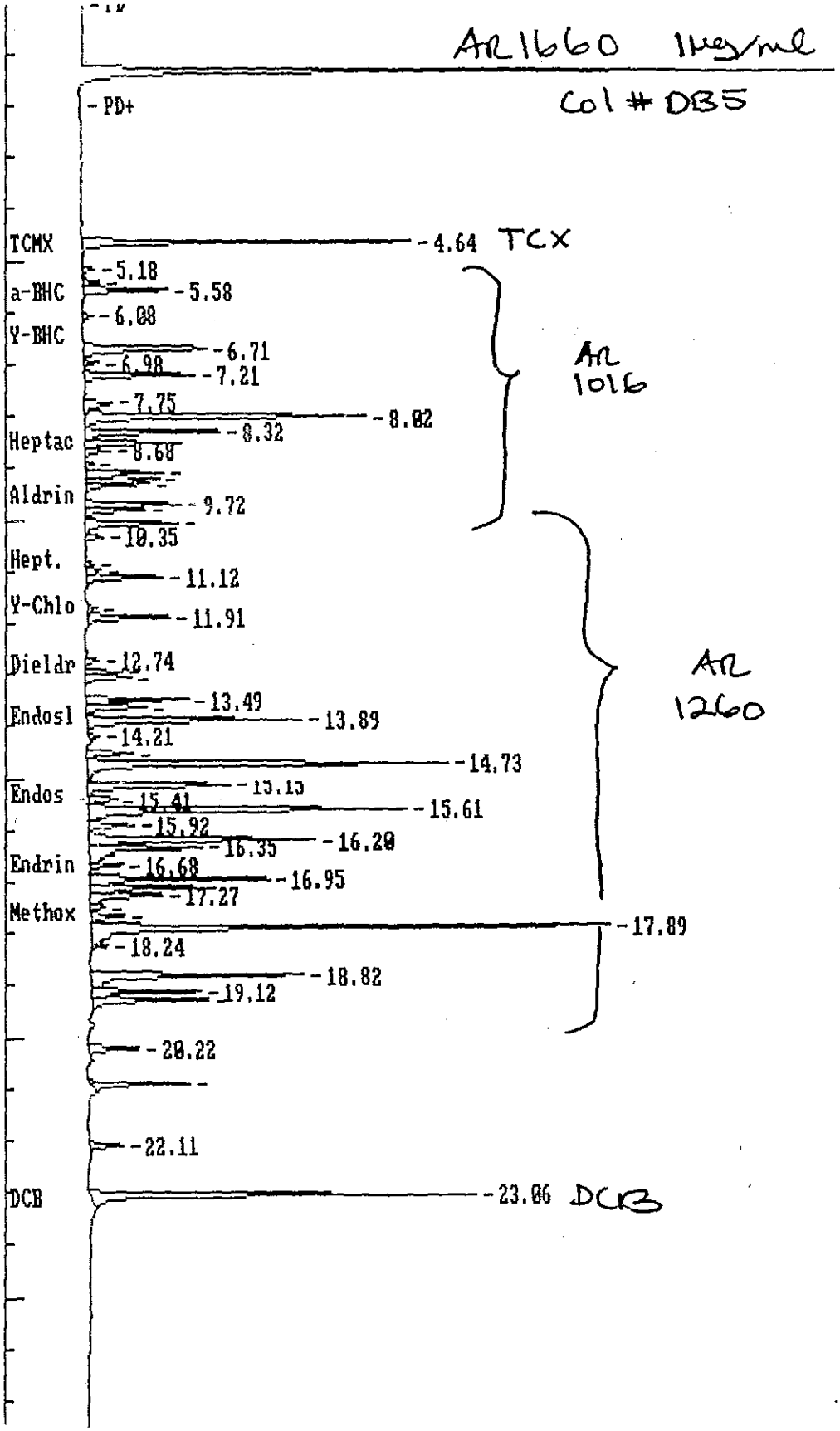
000264

Scott 6/20/95

TOTAL AMOUNT = 399.5867

GROUP NUMBER GROUP AMOUNT GROUP PERCENT

Areas, times, and heights stored in: E:JU06E75.AT8
Data File = E:JU06E75.PTS Printed on 06-09-1995 at 14:57:23
Start time: 0.00 min. Stop time: 30.00 min. Offset: 1 mv.
Full Range: 100 millivolts



PD-

000266

***** EXTERNAL STANDARD TABLE *****

********** 06-09-1995 14:58:35 Version 5.1.5 **********

* Sample Name: A1660 1PPM Data File: E:KU06E75 *
* Date: 06-09-1995 14:26:37 Method: M:BPES-G 03-31-1995 14:31:59 # 358 *
* Interface: 1 Cycle#: 75 Operator JJK Channel#: 1 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 10 Area Threshold: 500 *

* Instrument Type: Perkin-Elmer 8500 Column Type: RTx-5 30m,.35mm *
* Solvent Description: 1.0u df *
* Conditions: 180 for 4.0min then 4.0deg/min to 240, hold 30min *
* Detector 0: Detector 1: ECD *
* Misc. Information: *

Starting Delay: 0.00 Ending retention time: 30.00
Area reject: 500 One sample per 1.002 sec.
Amount injected: 1.00 Dilution factor: 1.00
Sample Weight: 1.00000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	4.576	TCMX	86.6259	9.3042%	155498	37289	4.2	1	0	-.3636	5.5709E-04
2	5.060		0.0000	0.0000%	4450	946	4.7	1			1.0000E-09
3	5.511		0.0000	0.0000%	6744	1406	4.8	1			1.0000E-09
4	5.928		0.0000	0.0000%	9796	2074	4.7	2			1.0000E-09
5	6.079		0.0000	0.0000%	46701	9620	4.9	2			1.0000E-09
6	6.697		0.0000	0.0000%	5781	1198	4.8	1			1.0000E-09
7	7.231		0.0001	0.0000%	85654	18723	4.6	2			1.0000E-09
8	7.598		0.0000	0.0000%	14193	1958	7.2	2			1.0000E-09
9	7.832		0.0000	0.0000%	25123	5516	4.6	2			1.0000E-09
10	7.966		0.0000	0.0000%	38147	8374	4.6	2			1.0000E-09
11	8.367	Y-BHC	14.0817	1.5125%	24366	4740	5.1	2	0	.4008	5.7793E-04
12	8.600		0.0002	0.0000%	160655	33896	4.7	2			1.0000E-09
13	9.035	Heptachlor	39.2971	4.2208%	74766	14052	5.3	1	0	1.691	5.2560E-04
14	9.352		0.0001	0.0000%	53058	9246	5.7	1			1.0000E-09
15	9.786	Aldrin	60.2869	6.4752%	112376	12256	9.2	1	0	1.034	5.3647E-04
16	10.554		0.0001	0.0000%	72761	12912	5.6	1			1.0000E-09
17	10.888	B-BHC	46.9495	5.0427%	58303	10173	5.7	1	0	-.7610	8.0526E-04
18	11.389		0.0000	0.0000%	10156	2254	4.5	2			1.0000E-09
19	11.506	d-BHC	4.9183	0.5283%	5571	1127	4.9	2	0	-1.005	8.8288E-04
20	11.907	Hept. epox.	25.7824	2.7692%	49662	8927	5.6	1	0	-1.246	5.1916E-04
21	12.375		0.0000	0.0000%	5019	1121	4.5	1			1.0000E-09
22	12.542		0.0000	0.0000%	42726	9080	4.7	1			1.0000E-09
23	13.644	a-Chlordane	3.7698	0.4049%	7999	1770	4.5	2	0	1.743	4.7127E-04
24	13.761	4,4 DDE	10.2659	1.1026%	19752	3907	5.1	2	0	-.3024	5.1975E-04
25	14.028		0.0000	0.0000%	23503	5039	4.7	2			1.0000E-09
26	14.128	Dieldrin	32.7257	3.5149%	62177	10801	5.8	2	0	.1183	5.2633E-04
27	14.345		0.0000	0.0000%	20106	4311	4.7	2			1.0000E-09
28	14.596		0.0001	0.0000%	103795	21940	4.7	2			1.0000E-09
29	14.830	Endrin	10.6650	1.1455%	10187	1940	5.3	2	0	.4524	1.0470E-03
30	15.013		0.0000	0.0000%	8998	1573	5.7	2			1.0000E-09
31	15.164		0.0000	0.0000%	24383	4895	5.0	2			1.0000E-09
32	15.364		0.0001	0.0000%	143729	29639	4.8	2			1.0000E-09
33	15.715		0.0001	0.0000%	67876	14314	4.7	2			1.0000E-09
34	15.932		0.0001	0.0000%	64883	13742	4.7	2			1.0000E-09
			0.0000	0.0000%	4465	993	4.5	2			1.0000E-09

SOC 6/20/95

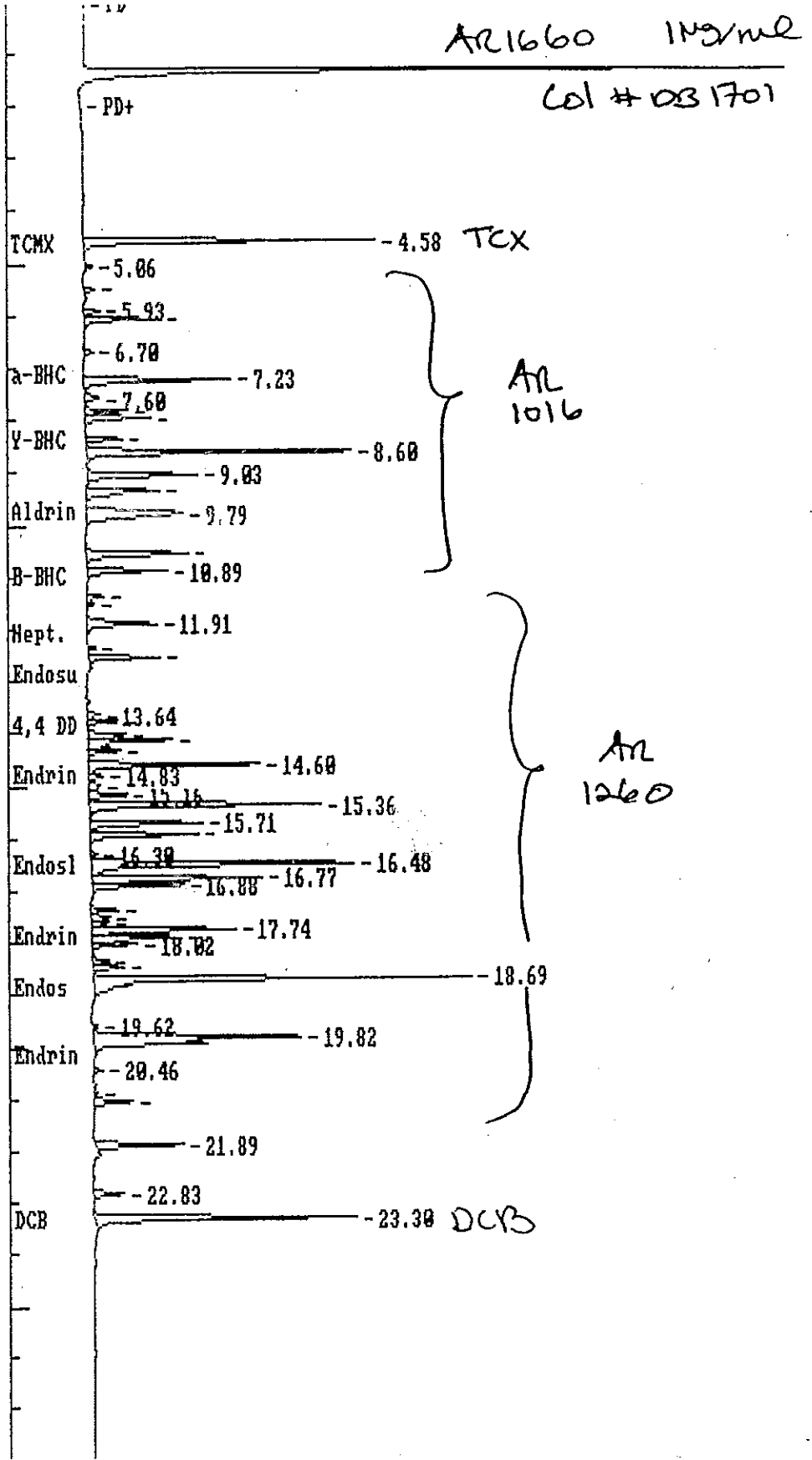
37	15.782									
38	16.384	4,4 DDT	49.1804	5.2823%	57227	11606	4.9 2	0	-.6876	8.5939E-04
39	17.368		0.0000	0.0000%	16424	3578	4.6 2			1.0000E-09
40	17.518		0.0000	0.0000%	13220	2401	5.5 2			1.0000E-09
41	17.618		0.0000	0.0000%	11010	2371	4.6 2			1.0000E-09
42	17.735		0.0001	0.0000%	90619	18426	4.9 2			1.0000E-09
43	17.902	Endrin ald	37.3546	4.0121%	53104	11333	4.7 2	0	.2337	7.0343E-04
44	18.019		0.0000	0.0000%	29407	5906	5.0 2			1.0000E-09
45	18.370		0.0000	0.0000%	12689	2100	6.0 2			1.0000E-09
46	18.470		0.0000	0.0000%	19184	4065	4.7 2			1.0000E-09
47	18.687	Endos sulf	171.6440	18.4357%	255488	47882	5.3 2	0	-.7978	6.7183E-04
48	19.622	Methoxychl	5.0350	0.5408%	3246	722	4.5 2	0	1.731	1.5511E-03
49	19.823	Endrin ket	150.5837	16.1736%	230612	26549	8.7 2	0	-1.411	6.5298E-04
50	20.457		0.0000	0.0000%	5916	1238	4.8 1			1.0000E-09
51	20.892		0.0000	0.0000%	3072	634	4.8 2			1.0000E-09
52	21.059		0.0000	0.0000%	24555	4992	4.9 2			1.0000E-09
53	21.894		0.0001	0.0000%	52781	11077	4.8 1			1.0000E-09
54	22.829		0.0000	0.0000%	19592	3911	5.0 1			1.0000E-09
55	23.296	DCB	78.0571	8.3838%	170131	33372	5.1 1	0	-.1431	4.5881E-04

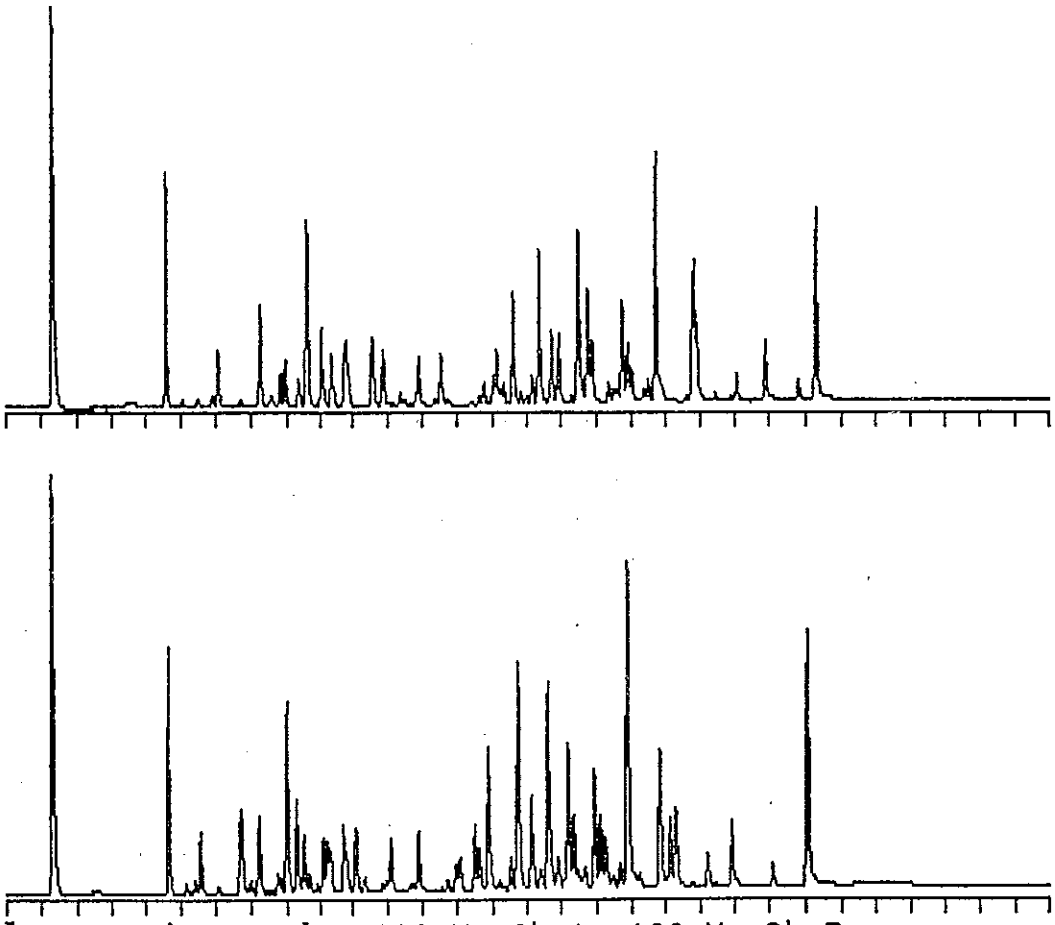
000267

TOTAL AMOUNT = 931.0435

GROUP NUMBER GROUP AMOUNT GROUP PERCENT

Areas, times, and heights stored in: E:KU06E75.ATB
Data File = E:KU06E75.PTS Printed on 06-09-1995 at 14:59:19
Start time: 0.00 min. Stop time: 30.00 min. Offset: 1 mv.
Full Range: 100 millivolts





[Interface 1] 0-30 Min Scale: 100 Mv Ch.A, 100 Mv Ch.B
AR1660 1PP Processed: 06-06-1995 21:02:10, segment 7, cycle 7
RAW DATA SAVED IN FILE E:JU06E7.PTS Second Channel Stored in E:KU06E7.PTS

****** EXTERNAL STANDARD TABLE ******
********** 06-06-1995 21:02:15 Version 5.1.5 **********
* Sample Name: AR1660 1PPM Data File: E:JU06E7 *
* Date: 06-06-1995 20:31:57 Method: M:APES-G 03-08-1995 15:02:41 # 359 *
* Interface: 1 Cycle#: 7 Operator SDR Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 10 Area Threshold: 1000 *
****
* Instrument Type: Perkin-Elmer 8500 Column Type: RTx-5 30m,.35mm *
* Solvent Description: 1.0u df *
* Conditions: 180 for 4.0min then 4.0deg/min to 240, hold 30min *
* Detector 0: Detector 1: ECD *
* Misc. Information: *
****

Starting Delay: 0.00 Ending retention time: 30.00
Area reject: 1000 One sample per 1.002 sec.
Amount injected: 1.00 Dilution factor: 1.00
Sample Weight: 1.00000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	4.643	TCMX	103.9186	24.8843%	199220	51387	3.9	1	0	-.7142	5.2163E-04
2	5.177		0.0000	0.0000%	8136	1772	4.6	2			1.0000E-09
3	5.427		0.0000	0.0000%	12800	2596	4.9	2			1.0000E-09

7	6.981	d-BHC	8.0921	1.9377%	9944	2169	4.6	2	0	-.9478	8.1376E-04
8	7.214		0.0001	0.0000%	70452	16137	4.4	1			1.0000E-09
9	7.749		0.0000	0.0000%	29214	3983	7.3	2			1.0000E-09
10	8.016		0.0002	0.0001%	211337	39063	5.4	2			1.0000E-09
11	8.317		0.0001	0.0000%	94392	19151	4.9	2			1.0000E-09
12	8.534	Heptachlor	24.4615	5.8575%	55801	11750	4.7	2	0	.7889	4.3837E-04
13	8.684		0.0000	0.0000%	17169	3582	4.8	2			1.0000E-09
14	8.934		0.0000	0.0000%	5773	1239	4.7	2			1.0000E-09
15	9.101		0.0001	0.0000%	52351	11145	4.7	2			1.0000E-09
16	9.218		0.0000	0.0000%	46021	10223	4.5	2			1.0000E-09
17	9.319	Aldrin	21.4529	5.1371%	47868	8693	5.5	2	0	-1.760	4.4816E-04
18	9.719		0.0001	0.0000%	64938	13410	4.8	2			1.0000E-09
19	9.820		0.0000	0.0000%	36132	8322	4.3	2			1.0000E-09
20	10.103		0.0001	0.0000%	69331	12934	5.4	2			1.0000E-09
21	10.354		0.0000	0.0000%	12451	2531	4.9	2			1.0000E-09
22	10.872	Hept. epox.	2.4985	0.5983%	5625	1286	4.4	2	0	.9302	4.4420E-04
23	10.989		0.0000	0.0000%	10087	2175	4.6	2			1.0000E-09
24	11.122		0.0001	0.0000%	53070	10674	5.0	2			1.0000E-09
25	11.723	Y-Chlordane	2.5582	0.6126%	6657	1180	5.6	2	0	.8620	3.8431E-04
26	11.907	Endosulfan I	23.4351	5.6118%	54082	11495	4.7	2	0	0	4.3333E-04
27	12.759	Dieldrin	4.0213	0.9629%	10087	2082	4.8	2	0	0	3.9866E-04
28	12.959	4,4-DDE	9.9018	2.3711%	25208	5020	5.0	2	0	.3880	3.9281E-04
29	13.076		0.0000	0.0000%	31089	6575	4.7	2			1.0000E-09
30	13.494	Endrin	31.6463	7.5780%	65220	13580	4.8	2	0	.4350	4.8522E-04
31	13.644	Endoslf II	18.1779	4.3529%	42909	8294	5.2	2	0	-.8495	4.2364E-04
32	13.894		0.0002	0.0000%	156393	29351	5.3	2			1.0000E-09
33	14.212	4'4-DDD	3.3731	0.8077%	5682	1371	4.1	1	0	-.4678	5.9361E-04
34	14.529	Endrin ald	14.8852	3.5644%	29932	6223	4.8	2	0	.8695	4.9730E-04
35	14.729		0.0003	0.0001%	264440	46820	5.6	2			1.0000E-09
36	15.147		0.0001	0.0000%	113560	19146	5.9	2			1.0000E-09
37	15.414	DDT	13.7770	3.2990%	23289	3870	6.0	2	0	-.6458	5.9158E-04
38	15.615		0.0002	0.0001%	247280	42394	5.8	2			1.0000E-09
39	15.915		0.0000	0.0000%	35205	6040	5.8	2			1.0000E-09
40	16.199		0.0002	0.0000%	151997	29930	5.1	2			1.0000E-09
41	16.366		0.0001	0.0000%	97698	15137	6.5	2			1.0000E-09
42	16.683	Endrin ket.	9.8779	2.3654%	23371	4465	5.2	2	0	.2005	4.2265E-04
43	16.950		0.0001	0.0000%	120333	24411	4.9	2			1.0000E-09
44	17.117		0.0001	0.0000%	71904	14619	4.9	2			1.0000E-09
45	17.268		0.0001	0.0000%	61444	9840	6.2	3			1.0000E-09
46	17.502	Methoxychlor	11.7278	2.8083%	11442	1936	5.9	4	0	-.3802	1.0249E-03
47	17.685		0.0000	0.0000%	24857	4684	5.3	2			1.0000E-09
48	17.886		0.0004	0.0001%	364791	67045	5.4	3			1.0000E-09
49	18.236		0.0000	0.0000%	9986	1902	5.3	4			1.0000E-09
50	18.821		0.0002	0.0000%	156606	28223	5.5	2			1.0000E-09
51	19.138		0.0001	0.0000%	70254	14023	5.0	2			1.0000E-09
52	19.305		0.0001	0.0000%	83056	15659	5.3	2			1.0000E-09
53	19.789		0.0000	0.0000%	3946	758	5.2	1			1.0000E-09
54	20.240		0.0000	0.0000%	36329	6858	5.3	1			1.0000E-09
55	20.925		0.0001	0.0000%	64307	13297	4.8	1			1.0000E-09
56	22.111		0.0000	0.0000%	24014	4626	5.2	1			1.0000E-09
57	23.063	DCB	79.2725	18.9825%	270689	52953	5.1	1	0	-.1446	2.9285E-04

000270

SOP 6/20/95

1185000

Aldrin ket 5ph

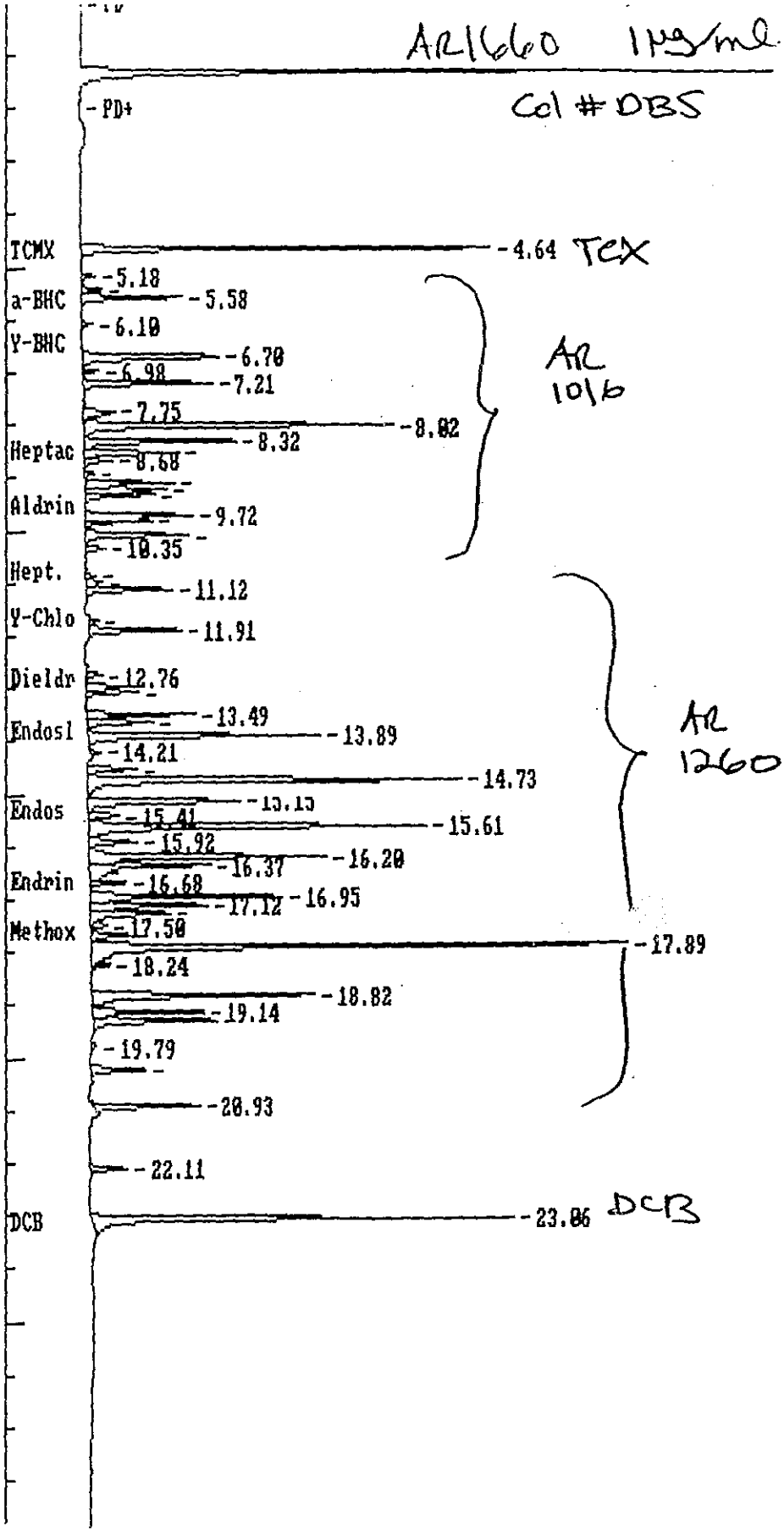
1054000

TOTAL AMOUNT = 417.6074

GROUP NUMBER GROUP AMOUNT GROUP PERCENT

000271

Areas, times, and heights stored in: E:JU06E7.ATB
Data File = E:JU06E7.PTS Printed on 06-06-1995 at 21:02:29
Start time: 0.00 min. Stop time: 30.00 min. Offset: 1 mv.
Full Range: 100 millivolts



***** EXTERNAL STANDARD TABLE *****

********** 06-06-1995 21:03:55 Version 5.1.5 **********

* Sample Name: AR1660 1PPM Data File: E:KU06E7 *
* Date: 06-06-1995 20:31:57 Method: M:BPES-G 03-31-1995 14:31:59 # 358 *
* Interface: 1 Cycle#: 7 Operator SDR Channel#: 1 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 10 Area Threshold: 500 *

* Instrument Type: Perkin-Elmer 8500 Column Type: RTx-5 30m,.35mm *
* Solvent Description: 1.0u df *
* Conditions: 180 for 4.0min then 4.0deg/min to 240, hold 30min *
* Detector 0: Detector 1: ECD *
* Misc. Information: *

Starting Delay: 0.00 Ending retention time: 30.00
Area reject: 500 One sample per 1.002 sec.
Amount injected: 1.00 Dilution factor: 1.00
Sample Weight: 1.00000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	4.576	TCMX	94.6743	9.4666%	169946	49422	3.4	1	0	-.3636	5.5709E-04
2	5.077		0.0000	0.0000%	4793	1122	4.3	1			1.0000E-09
3	5.511		0.0000	0.0000%	7395	1685	4.4	1			1.0000E-09
4	5.928		0.0000	0.0000%	10791	2468	4.4	2			1.0000E-09
5	6.079		0.0000	0.0000%	48910	11500	4.3	2			1.0000E-09
6	6.713		0.0000	0.0000%	6225	1391	4.5	1			1.0000E-09
7	7.231		0.0001	0.0000%	89406	20874	4.3	2			1.0000E-09
8	7.598		0.0000	0.0000%	14798	2177	6.8	2			1.0000E-09
9	7.832		0.0000	0.0000%	26543	6506	4.1	2			1.0000E-09
10	7.966		0.0000	0.0000%	40197	9614	4.2	2			1.0000E-09
11	8.367	Y-BHC	15.0949	1.5094%	26119	5314	4.9	2	0	.4008	5.7793E-04
12	8.617		0.0002	0.0000%	170510	38476	4.4	2			1.0000E-09
13	9.051	Heptachlor	41.8974	4.1894%	79713	15844	5.0	1	0	1.879	5.2560E-04
14	9.352		0.0001	0.0000%	57027	10424	5.5	1			1.0000E-09
15	9.803	Aldrin	64.4937	6.4488%	120218	13233	9.1	1	0	1.206	5.3647E-04
16	10.554		0.0001	0.0000%	78056	14074	5.5	1			1.0000E-09
17	10.888	B-BHC	50.2823	5.0278%	62442	11529	5.4	1	0	-.7610	8.0526E-04
18	11.389		0.0000	0.0000%	11394	2520	4.5	2			1.0000E-09
19	11.523	d-BHC	4.9965	0.4996%	5659	1298	4.4	2	0	-.8620	8.8288E-04
20	11.907	Hept. epox.	27.8392	2.7837%	53624	9981	5.4	1	0	-1.246	5.1916E-04
21	12.375		0.0000	0.0000%	5630	1325	4.3	1			1.0000E-09
22	12.542		0.0000	0.0000%	46600	10220	4.6	1			1.0000E-09
23	13.393	a-Chlordane	0.9284	0.0928%	1970	446	4.4	1	0	-.1245	4.7127E-04
24	13.644		0.0000	0.0000%	9556	2049	4.7	2			1.0000E-09
25	13.777	4,4 DDE	10.8148	1.0814%	20808	4438	4.7	2	0	-.1814	5.1975E-04
26	14.045		0.0000	0.0000%	24699	5643	4.4	2			1.0000E-09
27	14.128	Dieldrin	35.4016	3.5399%	67262	11423	5.9	2	0	.1183	5.2633E-04
28	14.345		0.0000	0.0000%	22229	4671	4.8	2			1.0000E-09
29	14.613		0.0001	0.0000%	110797	23616	4.7	2			1.0000E-09
30	14.830	Endrin	12.5520	1.2551%	11989	2250	5.3	2	0	.4524	1.0470E-03
31	15.013		0.0000	0.0000%	9563	1752	5.5	2			1.0000E-09
32	15.180		0.0000	0.0000%	26013	5478	4.7	2			1.0000E-09
33	15.364		0.0002	0.0000%	152117	31987	4.8	2			1.0000E-09
34	15.731		0.0001	0.0000%	72258	15244	4.7	2			1.0000E-09
35	15.932		0.0001	0.0000%	69895	14371	4.9	2			1.0000E-09
36	16.316		0.0000	0.0000%	4959	1109	4.5	2			1.0000E-09
37	16.483	EndosulfII	111.4994	11.1490%	207031	35923	5.8	2	0	0	5.3856E-04

SDR 6/20/95

536000 (3pk) no 16.483 pk

743000 (4pk)

40	17.368		0.0000	0.0000%	17665	3852	4.6	2			1.0000E-09
41	17.518		0.0000	0.0000%	13116	2514	5.2	2			1.0000E-09
42	17.618		0.0000	0.0000%	12785	2791	4.6	2			1.0000E-09
43	17.752		0.0001	0.0000%	96924	20682	4.7	2			1.0000E-09
44	17.902	Endrin ald	41.7404	4.1737%	59338	11753	5.0	2	0	.2337	7.0343E-04
45	18.036		0.0000	0.0000%	29634	6438	4.6	2			1.0000E-09
46	18.370		0.0000	0.0000%	13271	2436	5.4	2			1.0000E-09
47	18.487		0.0000	0.0000%	20895	4504	4.6	2			1.0000E-09
48	18.704	Endos sulf	182.8324	18.2817%	272141	51568	5.3	2	0	-.7092	6.7183E-04
49	19.622	Methoxychl	5.1895	0.5189%	3346	769	4.4	2	0	1.731	1.5511E-03
50	19.823	Endrin ket	161.5845	16.1571%	247459	29149	8.5	2	0	-1.411	6.5298E-04
51	20.474		0.0000	0.0000%	6355	1307	4.9	1			1.0000E-09
52	20.725		0.0000	0.0000%	1912	434	4.4	2			1.0000E-09
53	20.892		0.0000	0.0000%	3551	726	4.9	2			1.0000E-09
54	21.075		0.0000	0.0000%	26874	5397	5.0	2			1.0000E-09
55	21.894		0.0001	0.0000%	58424	11971	4.9	1			1.0000E-09
56	22.829		0.0000	0.0000%	21700	4285	5.1	1			1.0000E-09
57	23.296	DCB	89.3402	8.9333%	194723	39645	4.9	1	0	-.1431	4.5881E-04

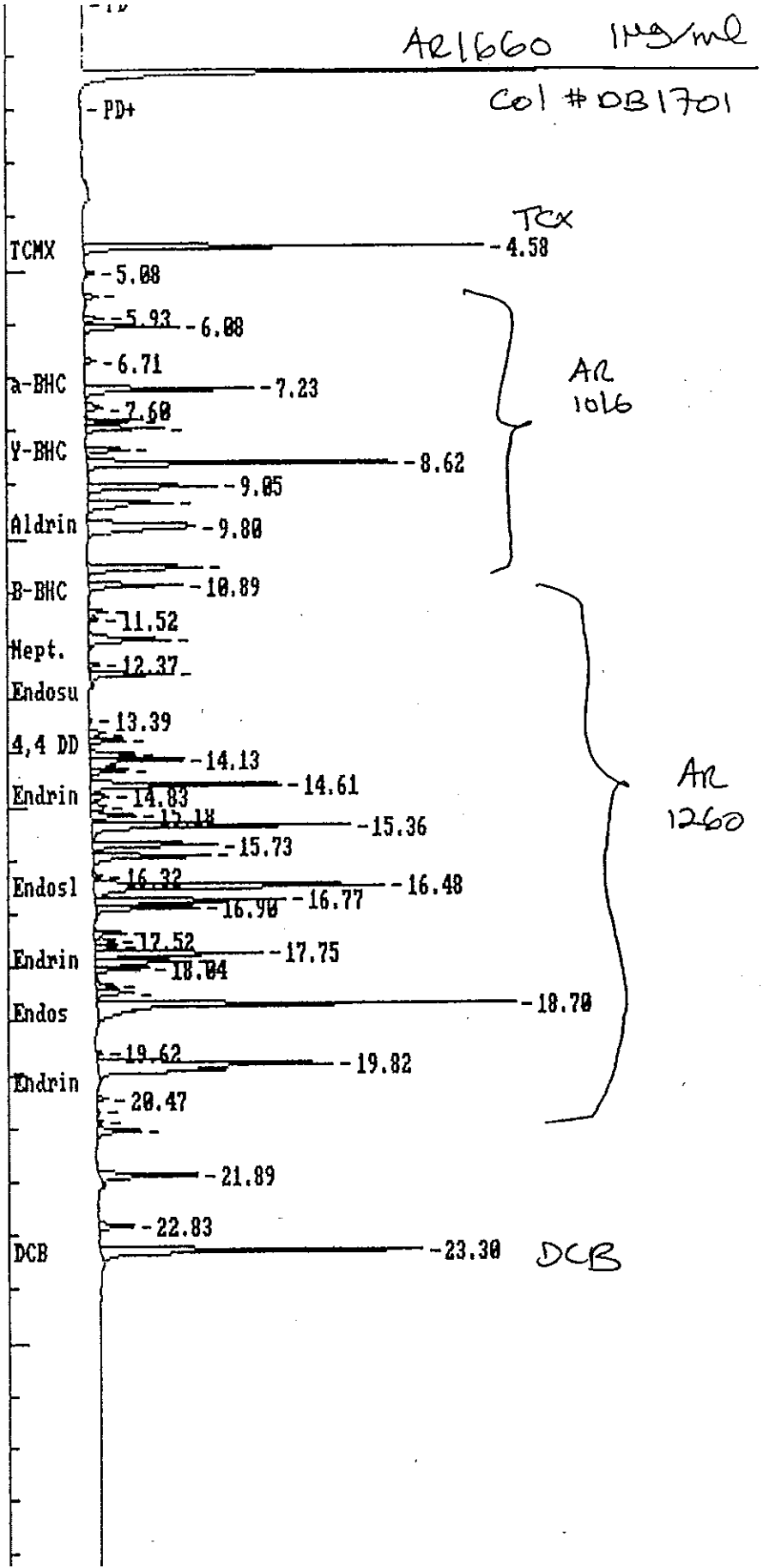
000273

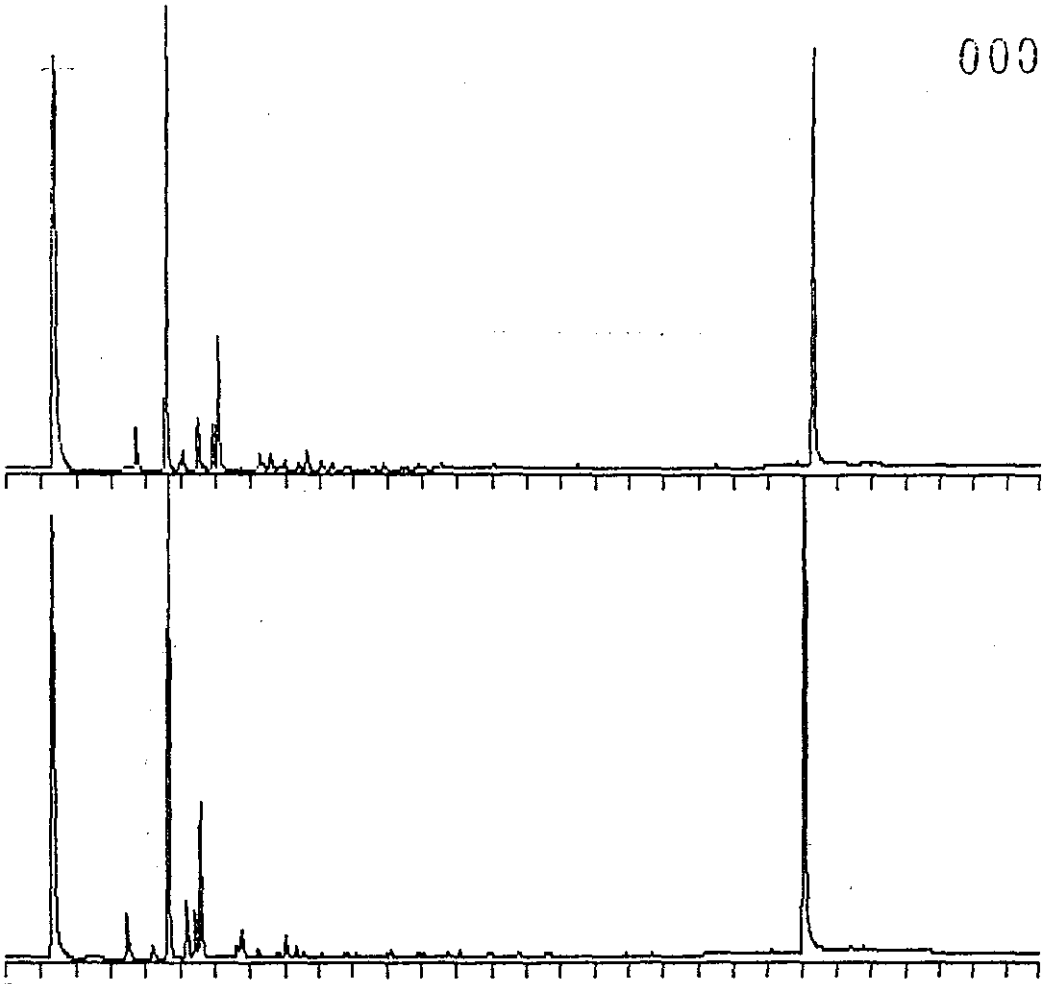
TOTAL AMOUNT = 1000.0820

GROUP NUMBER	GROUP AMOUNT	GROUP PERCENT

000274

Areas, times, and heights stored in: E:KU06E7.ATB
Data File = E:KU06E7.PTS Printed on 06-06-1995 at 21:04:37
Start time: 0.00 min. Stop time: 30.00 min. Offset: 1 mv.
Full Range: 100 millivolts





[Interface 1] 0-30 Min Scale: 100 Mv Ch.A, 100 Mv Ch.B
AR1221 2PP Processed: 06-06-1995 21:36:25, segment 8, cycle 8
RAW DATA SAVED IN FILE E:JU06E8.PTS Second Channel Stored in E:KU06E8.PTS

***** EXTERNAL STANDARD TABLE *****

********** 06-06-1995 21:36:31 Version 5.1.5 **********
* Sample Name: AR1221 2PPM Data File: E:JU06E8 *
* Date: 06-06-1995 21:06:08 Method: M:APES-G 03-08-1995 15:02:41 # 359 *
* Interface: 1 Cycle#: 8 Operator SDR Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 10 Area Threshold: 1000 *
****
* Instrument Type: Perkin-Elmer 8500 Column Type: RTx-5 30m,.35mm *
* Solvent Description: 1.0u df *
* Conditions: 180 for 4.0min then 4.0deg/min to 240, hold 30min *
* Detector 0: Detector 1: ECD *
* Misc. Information: *
****

Starting Delay: 0.00 Ending retention time: 30.00
Area reject: 1000 One sample per 1.002 sec.
Amount injected: 1.00 Dilution factor: 1.00
Sample Weight: 1.00000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	2.371		0.0000	0.0000%	5397	487	11.1	1			1.0000E-09
2	3.457		0.0000	0.0000%	44105	9224	4.8	1			1.0000E-09
3	4.192		0.0000	0.0000%	13751	2575	5.3	1			1.0000E-09
4	4.643	TCMX	235.2618	45.1799%	451014	109902	4.1	1	0	-.7142	5.2163E-04
5	5.177		0.0001	0.0000%	52040	11667	4.5	2			1.0000E-09
6	5.427		0.0000	0.0000%	45551	9412	4.8	2			1.0000E-09
7	5.578	--BHC	97.2414	16.7578%	142222	21727	6.5	2	0	0	6.8375E-04

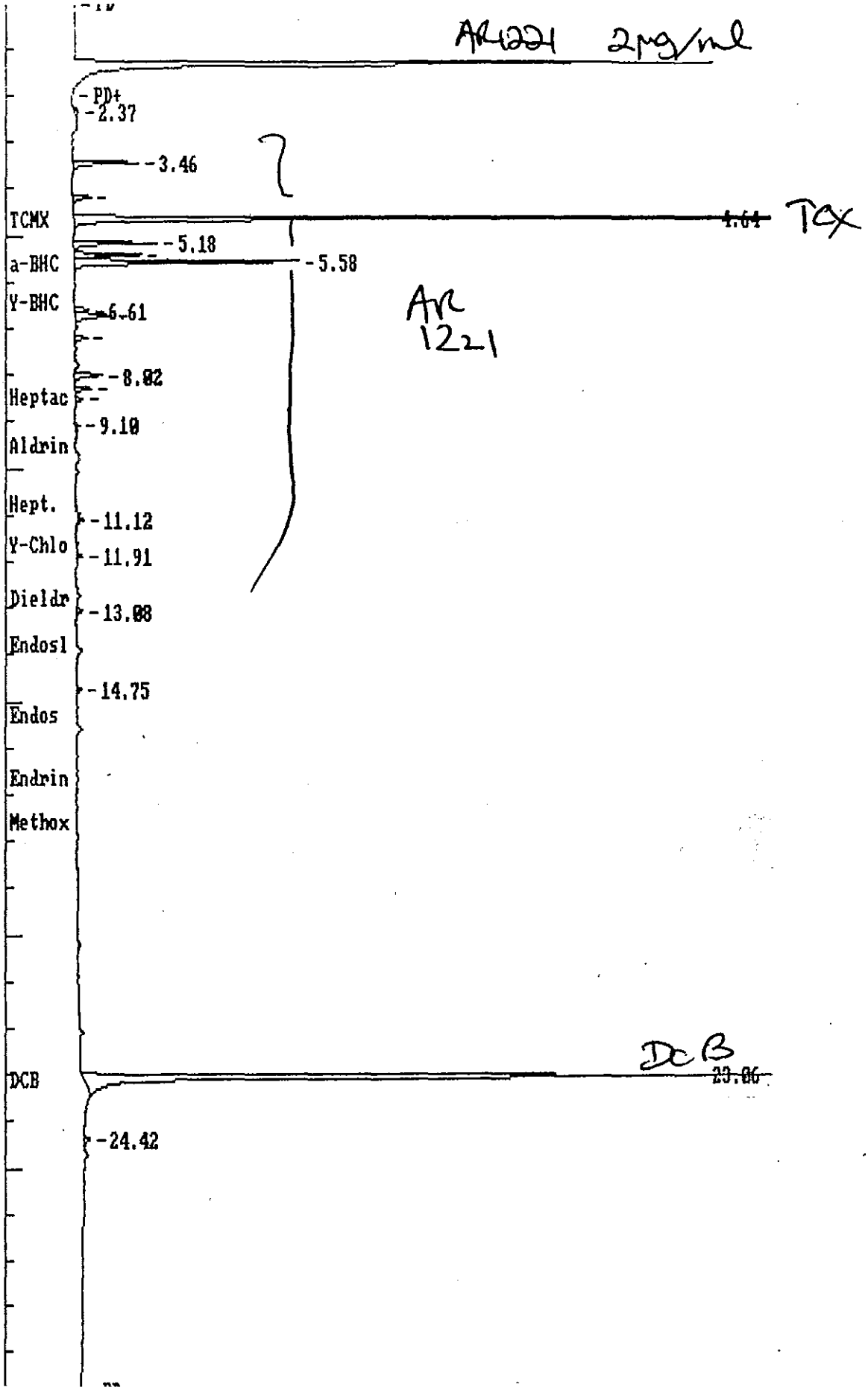
9	5.747		0.0000	0.0000%	34755	5514	6.3 2			1.0000E-09
10	7.214		0.0000	0.0000%	8635	1848	4.7 1			1.0000E-09
11	8.016		0.0000	0.0000%	21413	3904	5.5 1			1.0000E-09
12	8.317		0.0000	0.0000%	11338	2385	4.8 2			1.0000E-09
13	8.534	Heptachlor	2.2381	0.4298%	5106	1130	4.5 2	0	.7889	4.3837E-04
14	9.101		0.0000	0.0000%	2813	671	4.2 1			1.0000E-09
15	11.122		0.0000	0.0000%	4085	910	4.5 1			1.0000E-09
16	11.907	Endosulfan I	1.5918	0.3057%	3673	861	4.3 1	0	0	4.3333E-04
17	13.076	4,4-DDE	1.8554	0.3563%	4723	969	4.9 1	0	1.293	3.9281E-04
18	14.746		0.0000	0.0000%	4431	659	6.7 1			1.0000E-09
19	23.063	DCB	192.5137	36.9705%	657370	123939	5.3 1	0	-.1446	2.9285E-04
20	24.415		0.0000	0.0000%	4104	787	5.2 1			1.0000E-09

TOTAL AMOUNT = 520.7224

GROUP NUMBER	GROUP AMOUNT	GROUP PERCENT

000277

Areas, times, and heights stored in: E:JU06E8.ATB
Data File = E:JU06E8.PTS Printed on 06-06-1995 at 21:36:38
Start time: 0.00 min. Stop time: 30.00 min. Offset: 1 mv.
Full Range: 100 millivolts



***** EXTERNAL STANDARD TABLE *****

********** 06-06-1995 21:37:00 Version 5.1.5 **********

* Sample Name: AR1221 2PPM Data File: E:KU06E8 *
* Date: 06-06-1995 21:06:08 Method: M:BPES-G 03-31-1995 14:31:59 # 358 *
* Interface: 1 Cycle#: 8 Operator SDR Channel#: 1 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 10 Area Threshold: 500 *

* Instrument Type: Perkin-Elmer 8500 Column Type: RTx-5 30m,.35mm *
* Solvent Description: 1.0u df *
* Conditions: 180 for 4.0min then 4.0deg/min to 240, hold 30min *
* Detector 0: Detector 1: ECD *
* Misc. Information: *

Starting Delay: 0.00 Ending retention time: 30.00
Area reject: 500 One sample per 1.002 sec.
Amount injected: 1.00 Dilution factor: 1.00
Sample Weight: 1.00000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	3.691		0.0001	0.0000%	55003	8876	6.2	1			1.0000E-09
2	4.559	TCMX	200.6255	47.5171%	360134	96781	3.7	2	0	-.7272	5.5709E-04
3	4.977		0.0000	0.0000%	6465	1741	3.7	2			1.0000E-09
4	5.060		0.0000	0.0000%	16246	3626	4.5	2			1.0000E-09
5	5.494		0.0000	0.0000%	46683	11061	4.2	3			1.0000E-09
6	5.661		0.0000	0.0000%	3343	806	4.1	4			1.0000E-09
7	5.912		0.0000	0.0000%	36479	9176	4.0	2			1.0000E-09
8	6.062		0.0001	0.0000%	121010	27631	4.4	2			1.0000E-09
9	7.248		0.0000	0.0000%	21098	3202	6.6	2			1.0000E-09
10	7.548		0.0000	0.0000%	18344	3502	5.2	2			1.0000E-09
11	7.816		0.0000	0.0000%	2864	669	4.3	2			1.0000E-09
12	7.966		0.0000	0.0000%	6881	1494	4.6	2			1.0000E-09
13	8.367	Y-BHC	2.8688	0.6795%	4964	979	5.1	1	0	.4008	5.7793E-04
14	8.600		0.0000	0.0000%	19245	4082	4.7	1			1.0000E-09
15	9.035	Heptachlor	5.0295	1.1912%	9569	1803	5.3	1	0	1.691	5.2560E-04
16	9.352		0.0000	0.0000%	5016	1130	4.4	1			1.0000E-09
17	9.753	Aldrin	2.4738	0.5859%	4611	698	6.6	1	0	.6896	5.3647E-04
18	10.554		0.0000	0.0000%	3387	612	5.5	1			1.0000E-09
19	10.888	B-BHC	3.2029	0.7586%	3977	731	5.4	1	0	-.7610	8.0526E-04
20	11.907	Hept. epox.	3.7870	0.8969%	7295	1132	6.4	1	0	-1.246	5.1916E-04
21	12.542		0.0000	0.0000%	3135	675	4.6	1			1.0000E-09
22	14.028	Dieldrin	2.1042	0.4984%	3998	857	4.7	1	0	-.5917	5.2633E-04
23	14.830	Endrin	2.5922	0.6140%	2476	512	4.8	1	0	.4524	1.0470E-03
24	15.364		0.0000	0.0000%	2076	420	4.9	1			1.0000E-09
25	16.500	4'4-DDD	2.2559	0.5343%	3026	563	5.4	1	0	0	7.4551E-04
26	22.829		0.0000	0.0000%	2379	495	4.8	1			1.0000E-09
27	23.296	DCB	197.2776	46.7241%	429979	87146	4.9	1	0	-.1431	4.5881E-04
28	24.749		0.0000	0.0000%	3496	676	5.2	1			1.0000E-09

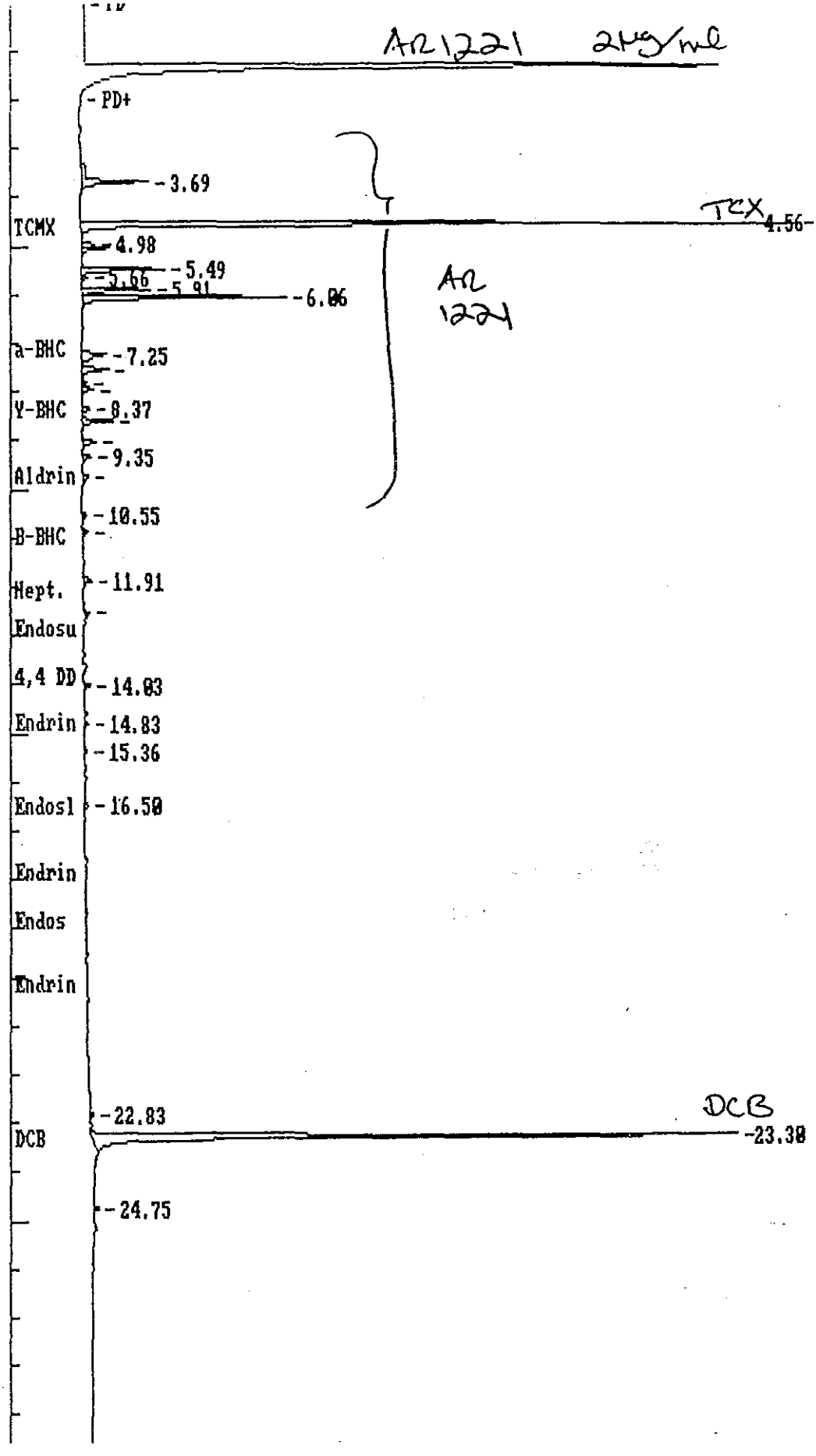
SDR 6/20/95

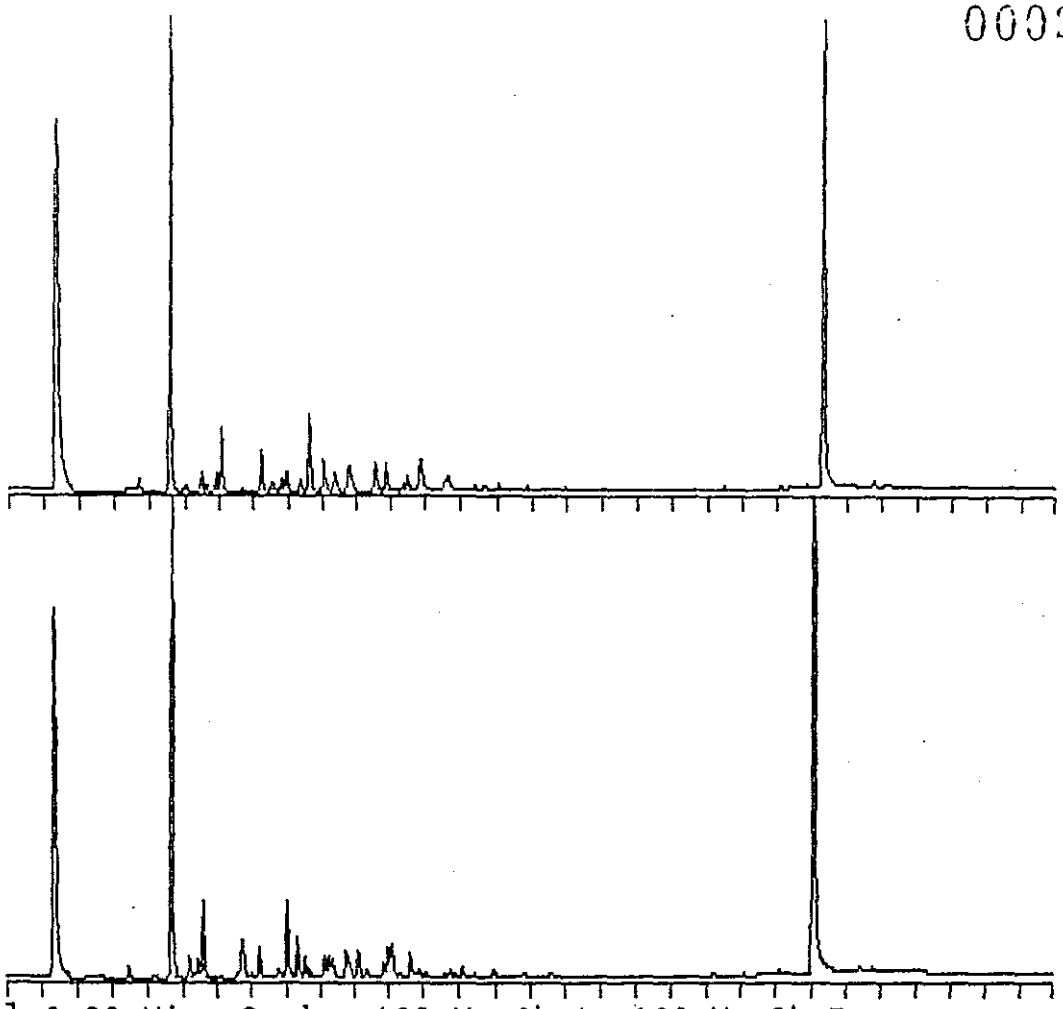
TOTAL AMOUNT = 422.2178

GROUP NUMBER GROUP AMOUNT GROUP PERCENT

000279

Areas, times, and heights stored in: E:KU06E8.ATB
Data File = E:KU06E8.PTS Printed on 06-06-1995 at 21:37:45
Start time: 0.00 min. Stop time: 30.00 min. Offset: 1 mv.
Full Range: 100 millivolts





[Interface 1] 0-30 Min Scale: 100 Mv Ch.A, 100 Mv Ch.B
AR1232 1PP Processed: 06-06-1995 22:10:30, segment 9, cycle 9
RAW DATA SAVED IN FILE E:JU06E9.PTS Second Channel Stored in E:KU06E9.PTS

****** EXTERNAL STANDARD TABLE ******

********** 06-06-1995 22:10:36 Version 5.1.5 **********
* Sample Name: AR1232 1PPM Data File: E:JU06E9 *
* Date: 06-06-1995 21:40:12 Method: M:APES-G 03-08-1995 15:02:41 # 359 *
* Interface: 1 Cycle#: 9 Operator SDR Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 10 Area Threshold: 1000 *
****
* Instrument Type: Perkin-Elmer 8500 Column Type: RTx-5 30m,.35mm *
* Solvent Description: 1.0u df *
* Conditions: 180 for 4.0min then 4.0deg/min to 240, hold 30min *
* Detector 0: Detector 1: ECD *
* Misc. Information: *
****

Starting Delay: 0.00 Ending retention time: 30.00
Area reject: 1000 One sample per 1.002 sec.
Amount injected: 1.00 Dilution factor: 1.00
Sample Weight: 1.00000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	2.371		0.0000	0.0000%	6352	507	12.5	1			1.0000E-09
2	3.457		0.0000	0.0000%	11552	2287	5.1	1			1.0000E-09
3	4.192		0.0000	0.0000%	3885	762	5.1	1			1.0000E-09
4	4.659	TCMX	265.6416	47.1497%	509254	127051	4.0	1	0	-.3571	5.2163E-04
			0.0000	0.0000%	19848	4104	4.6	2			1.0000E-09

8	6.730		0.0001	0.0000%	62721	7617	6.2 2			
9	6.997	d-aHC	3.5084	0.6227%	4311	879	4.9 2	0	-.7109	8.1376E-04
10	7.214		0.0000	0.0000%	28514	6152	4.6 1			1.0000E-09
11	7.766		0.0000	0.0000%	11620	1578	7.4 2			1.0000E-09
12	8.016		0.0001	0.0000%	83251	15520	5.4 2			1.0000E-09
13	8.317		0.0000	0.0000%	35865	7696	4.7 2			1.0000E-09
14	8.534	Heptachlor	7.6218	1.3528%	17386	4030	4.3 2	0	.7889	4.3837E-04
15	9.101		0.0000	0.0000%	14834	3775	3.9 1			1.0000E-09
16	9.235		0.0000	0.0000%	7297	2126	3.4 1			1.0000E-09
17	9.719		0.0000	0.0000%	45749	5275	8.7 2			1.0000E-09
18	10.103		0.0000	0.0000%	30910	5740	5.4 2			1.0000E-09
19	10.354		0.0000	0.0000%	6973	1428	4.9 2			1.0000E-09
20	10.872	Hept. epox.	6.0463	1.0732%	13612	2885	4.7 2	0	.9302	4.4420E-04
21	11.005		0.0000	0.0000%	27946	5648	4.9 2			1.0000E-09
22	11.105		0.0000	0.0000%	32641	6468	5.0 2			1.0000E-09
23	11.640	Y-Chlordane	8.0810	1.4343%	21027	4423	4.8 1	0	.1436	3.8431E-04
24	11.907	Endosulfan I	1.8000	0.3195%	4154	1043	4.0 1	0	0	4.3333E-04
25	12.592		0.0000	0.0000%	3155	688	4.6 1			1.0000E-09
26	12.759	Dieldrin	1.4532	0.2579%	3645	862	4.2 1	0	0	3.9866E-04
27	13.076		0.0000	0.0000%	9537	1854	5.1 1			1.0000E-09
28	13.961	Endosulf II	2.6144	0.4640%	6171	1154	5.3 1	0	1.456	4.2364E-04
29	23.063	DCB	224.0632	39.7698%	765101	141589	5.4 1	0	-.1446	2.9285E-04
30	24.415		0.0000	0.0000%	4660	895	5.2 1			1.0000E-09

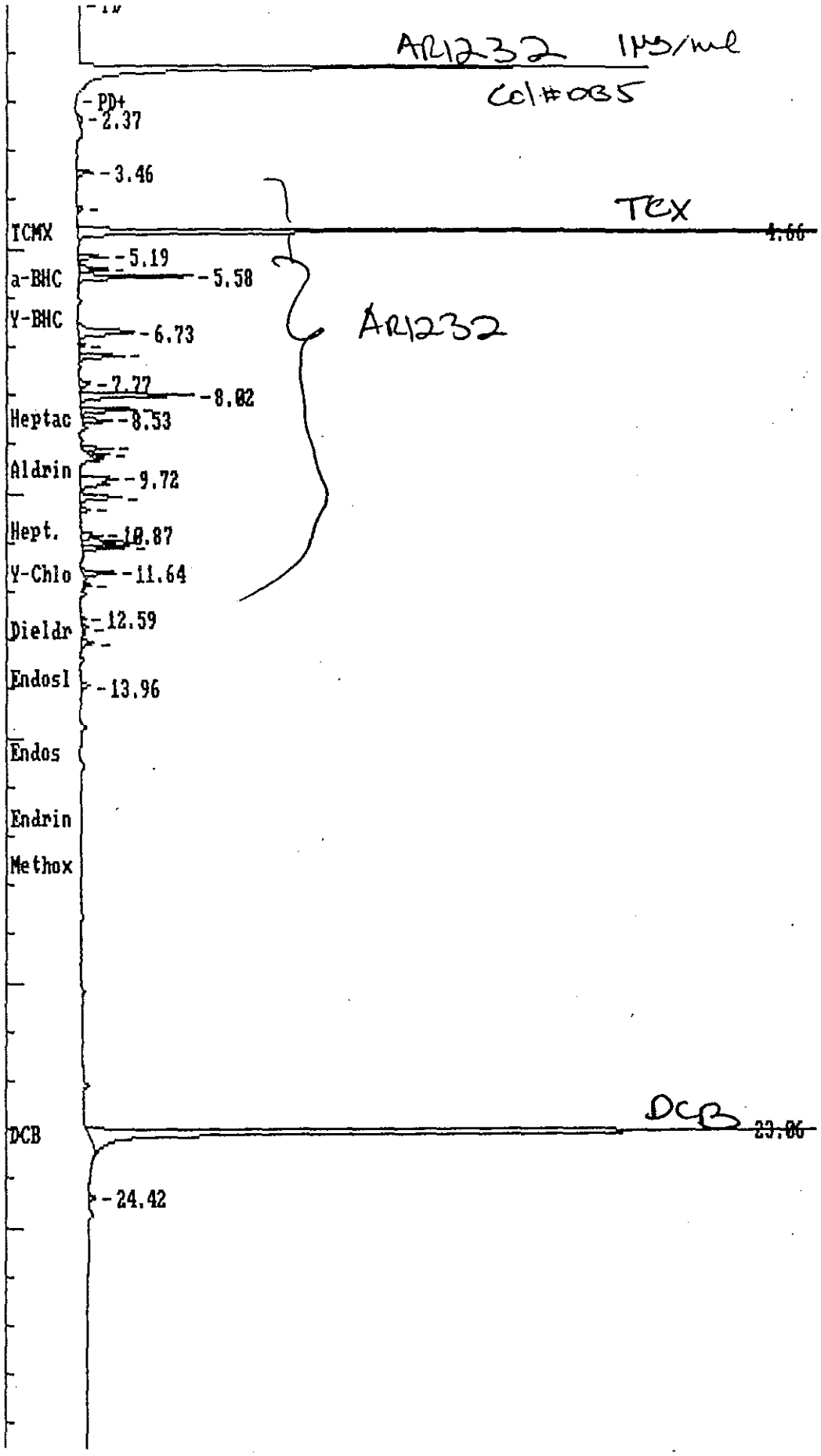
TOTAL AMOUNT = 563.4009

GROUP NUMBER GROUP AMOUNT GROUP PERCENT

000291

SDM 6/20/95

Areas, times, and heights stored in: E:JU06E9.ATB 000282
Data File = E:JU06E9.PTS Printed on 06-06-1995 at 22:10:46
Start time: 0.00 min. Stop time: 30.00 min. Offset: 1 mv.
Full Range: 100 millivolts



000293

***** EXTERNAL STANDARD TABLE *****

********** 06-06-1995 22:11:12 Version 5.1.5 **********

* Sample Name: AR1232 1PPM Data File: E:KU06E9 *
* Date: 06-06-1995 21:40:12 Method: M:BPES-G 03-31-1995 14:31:59 # 358 *
* Interface: 1 Cycle#: 9 Operator SDR Channel#: 1 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 10 Area Threshold: 500 *
* Instrument Type: Perkin-Elmer 8500 Column Type: RTx-5 30m,.35mm *
* Solvent Description: 1.0u df *
* Conditions: 180 for 4.0min then 4.0deg/min to 240, hold 30min *
* Detector 0: Detector 1: ECD *
* Misc. Information: *

Starting Delay: 0.00 Ending retention time: 30.00
Area reject: 500 One sample per 1.002 sec.
Amount injected: 1.00 Dilution factor: 1.00
Sample Weight: 1.00000

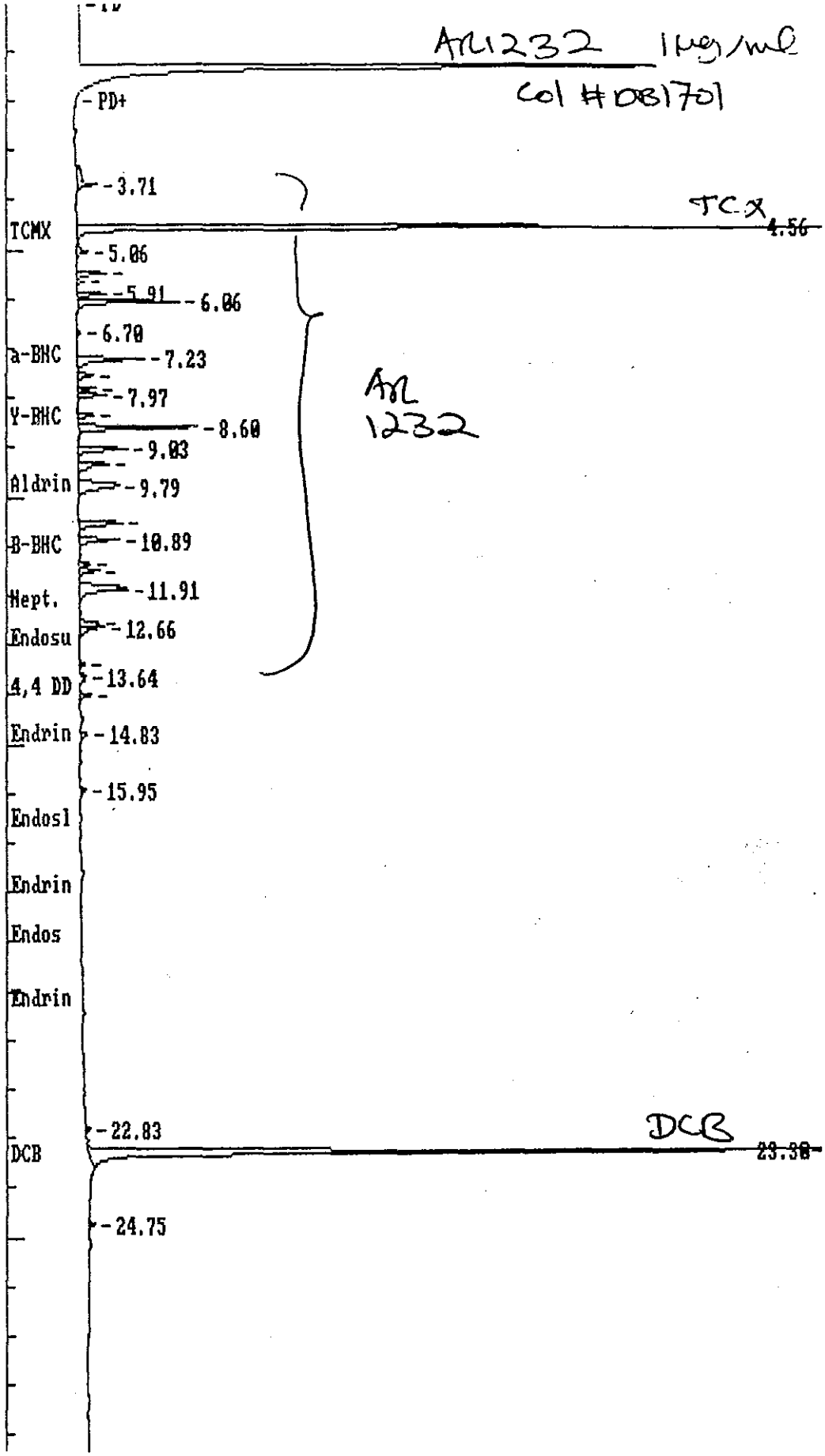
PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	3.707		0.0000	0.0000%	25474	2656	9.6	1			1.0000E-09
2	4.559	TCMX	235.6481	39.4919%	423002	114239	3.7	2	0	-.7272	5.5709E-04
3	5.060		0.0000	0.0000%	8999	1470	6.1	2			1.0000E-09
4	5.494		0.0000	0.0000%	17366	3927	4.4	2			1.0000E-09
5	5.661		0.0000	0.0000%	4068	946	4.3	2			1.0000E-09
6	5.912		0.0000	0.0000%	16208	3909	4.1	2			1.0000E-09
7	6.062		0.0001	0.0000%	60076	13588	4.4	2			1.0000E-09
8	6.697		0.0000	0.0000%	2185	509	4.3	1			1.0000E-09
9	7.231		0.0000	0.0000%	41339	8990	4.6	2			1.0000E-09
10	7.565		0.0000	0.0000%	13286	2129	6.2	2			1.0000E-09
11	7.816		0.0000	0.0000%	10797	2451	4.4	2			1.0000E-09
12	7.966		0.0000	0.0000%	17517	3918	4.5	2			1.0000E-09
13	8.367	Y-BHC	6.2836	1.0531%	10873	2190	5.0	1	0	.4008	5.7793E-04
14	8.600		0.0001	0.0000%	69990	15840	4.4	1			1.0000E-09
15	9.035	Heptachlor	17.4178	2.9190%	33139	6556	5.1	1	0	1.691	5.2560E-04
16	9.352		0.0000	0.0000%	22236	4097	5.4	1			1.0000E-09
17	9.786	Aldrin	25.9318	4.3459%	48337	5410	8.9	1	0	1.034	5.3647E-04
18	10.554		0.0000	0.0000%	32914	5910	5.6	1			1.0000E-09
19	10.888	B-BHC	25.1607	4.2166%	31245	5461	5.7	1	0	-.7610	8.0526E-04
20	11.389		0.0000	0.0000%	6480	1520	4.3	2			1.0000E-09
21	11.506	d-BHC	11.1440	1.8676%	12622	2671	4.7	2	0	-1.005	8.8288E-04
22	11.907	Hept. epox.	27.6499	4.6338%	53259	6488	8.2	1	0	-1.246	5.1916E-04
23	12.575		0.0000	0.0000%	13097	2531	5.2	2			1.0000E-09
24	12.659	Endosulf I	10.1007	1.6928%	19814	3268	6.1	2	0	-1.558	5.0978E-04
25	13.393	a-Chlordane	1.5994	0.2680%	3394	736	4.6	1	0	-.1245	4.7127E-04
26	13.644	4,4 DDE	0.8968	0.1503%	1725	447	3.9	1	0	-1.149	5.1975E-04
27	14.028	Dieldrin	3.8203	0.6402%	7258	1496	4.9	1	0	-.5917	5.2633E-04
28	14.830	Endrin	5.5705	0.9335%	5321	1041	5.1	1	0	.4524	1.0470E-03
29	15.948		0.0000	0.0000%	3926	727	5.4	1			1.0000E-09
30	22.829		0.0000	0.0000%	2922	575	5.1	1			1.0000E-09
31	23.296	DCB	225.4757	37.7871%	491439	98477	5.0	1	0	-.1431	4.5881E-04
32	24.749		0.0000	0.0000%	4180	780	5.4	1			1.0000E-09

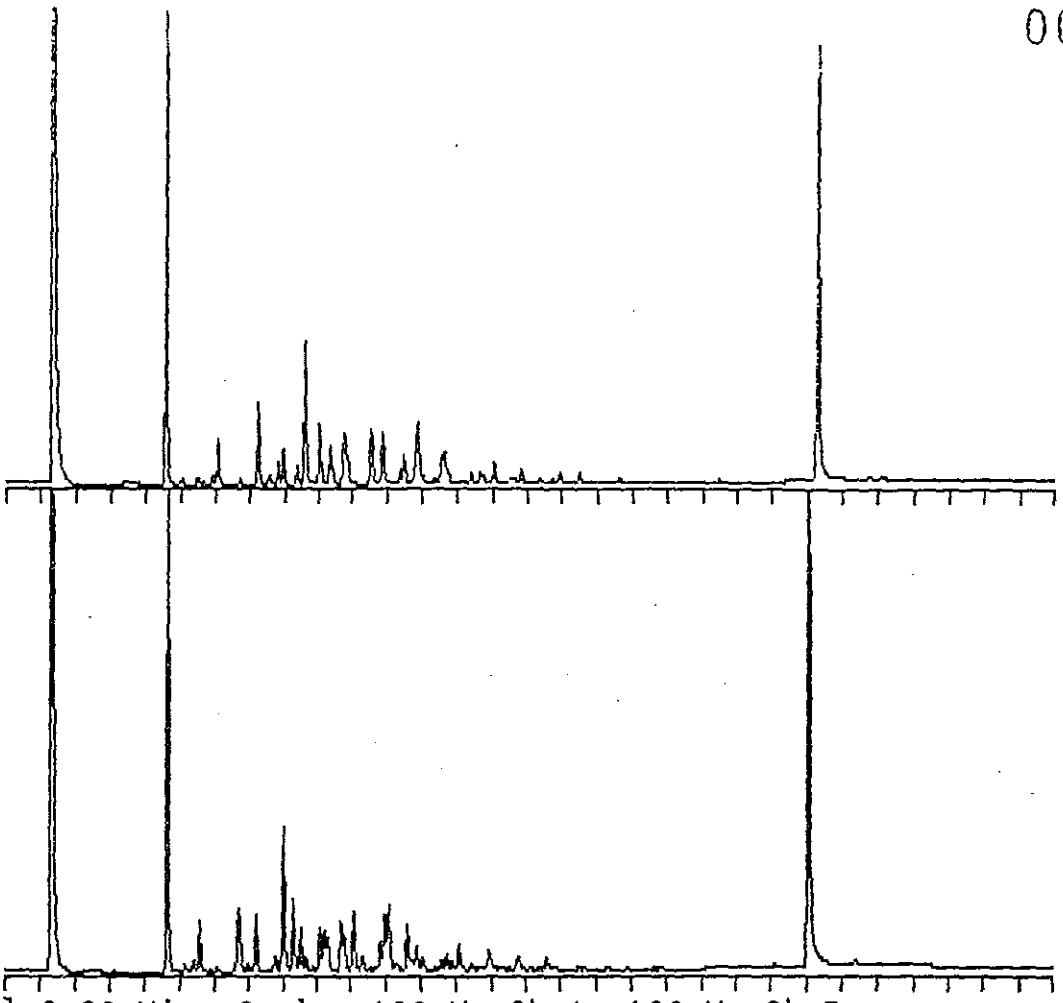
TOTAL AMOUNT = 596.6996

GROUP NUMBER GROUP AMOUNT GROUP PERCENT

Areas, times, and heights stored in: E:KU06E9.ATB
Data File = E:KU06E9.PTS Printed on 06-06-1995 at 22:12:08
Start time: 0.00 min. Stop time: 30.00 min. Offset: 1 mv.
Full Range: 100 millivolts

000284





[Interface 1] 0-30 Min Scale: 100 Mv Ch.A, 100 Mv Ch.B
AR1242 1PP Processed: 06-06-1995 22:44:38, segment 10, cycle 10
RAW DATA SAVED IN FILE E:JU06E10.PTS Second Channel Stored in E:KU06E10.PTS

****** EXTERNAL STANDARD TABLE ******

********** 06-06-1995 22:44:44 Version 5.1.5 **********
* Sample Name: AR1242 1PPM Data File: E:JU06E10 *
* Date: 06-06-1995 22:14:20 Method: M:APES-G 03-08-1995 15:02:41 # 359 *
* Interface: 1 Cycle#: 10 Operator SDR Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 10 Area Threshold: 1000 *
****
* Instrument Type: Perkin-Elmer 8500 Column Type: RTx-5 30m,.35mm *
* Solvent Description: 1.0u df *
* Conditions: 180 for 4.0min then 4.0deg/min to 240, hold 30min *
* Detector 0: Detector 1: ECD *
* Misc. Information: *
****

Starting Delay: 0.00 Ending retention time: 30.00
Area reject: 1000 One sample per 1.002 sec.
Amount injected: 1.00 Dilution factor: 1.00
Sample Weight: 1.00000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	2.689		0.0000	0.0000%	22285	741	30.1	1			1.0000E-09
2	4.659	TCMX	238.8348	41.8612%	457864	115230	4.0	1	0	-.3571	5.2163E-04
3	5.194		0.0000	0.0000%	6685	1428	4.7	2			1.0000E-09
4	5.444		0.0000	0.0000%	12980	2128	6.1	2			1.0000E-09
				4.87775	45679	10105	4.5	2	0	0	6.0923E-04

8	6.997	d-BHC	6.2184	1.0899%	7642	1578	4.8	2	0	-.7109	8.1376E-04
9	7.214		0.0001	0.0000%	53493	11943	4.5	1			1.0000E-09
10	7.766		0.0000	0.0000%	21971	2991	7.3	2			1.0000E-09
11	8.016		0.0002	0.0000%	159006	29412	5.4	2			1.0000E-09
12	8.317		0.0001	0.0000%	71937	14808	4.9	2			1.0000E-09
13	8.534	Heptachlor	17.9029	3.1379%	40839	8566	4.8	2	0	.7889	4.3837E-04
14	8.701		0.0000	0.0000%	13259	2588	5.1	2			1.0000E-09
15	8.934		0.0000	0.0000%	4062	907	4.5	2			1.0000E-09
16	9.101		0.0000	0.0000%	40357	8831	4.6	2			1.0000E-09
17	9.235		0.0000	0.0000%	39850	8005	5.0	2			1.0000E-09
18	9.335	Aldrin	15.0595	2.6395%	33603	6538	5.1	2	0	-1.584	4.4816E-04
19	9.719		0.0001	0.0000%	86301	10248	8.4	2			1.0000E-09
20	10.103		0.0001	0.0000%	61644	11753	5.2	2			1.0000E-09
21	10.354		0.0000	0.0000%	13267	2700	4.9	2			1.0000E-09
22	10.872	Hept. epox.	11.8149	2.0708%	26598	5750	4.6	2	0	.9302	4.4420E-04
23	10.989		0.0001	0.0000%	51972	10672	4.9	2			1.0000E-09
24	11.105		0.0001	0.0000%	63668	12585	5.1	2			1.0000E-09
25	11.640	Y-Chlordane	14.8576	2.6041%	38660	8364	4.6	1	0	.1436	3.8431E-04
26	11.907	Endosulfan I	5.6584	0.9918%	13058	3235	4.0	1	0	0	4.3333E-04
27	12.074	a-Chlordane	3.3548	0.5880%	8799	2029	4.3	1	0	.1385	3.8129E-04
28	12.592		0.0000	0.0000%	7938	1758	4.5	1			1.0000E-09
29	12.759	Dieldrin	4.0872	0.7164%	10252	2477	4.1	1	0	0	3.9866E-04
30	13.076		0.0000	0.0000%	25250	5031	5.0	1			1.0000E-09
31	13.427	Endrin	3.1413	0.5506%	6474	1136	5.7	1	0	0	4.8522E-04
32	13.961	Endoslf II	9.6158	1.6854%	22698	3712	6.1	1	0	1.456	4.2364E-04
33	14.796		0.0000	0.0000%	20500	2599	7.9	1			1.0000E-09
34	15.615	DDT	8.0322	1.4078%	13578	2050	6.6	1	0	.6458	5.9158E-04
35	23.063	DCB	204.1326	35.7788%	697045	128942	5.4	1	0	-.1446	2.9285E-04
36	24.415		0.0000	0.0000%	4265	822	5.2	1			1.0000E-09

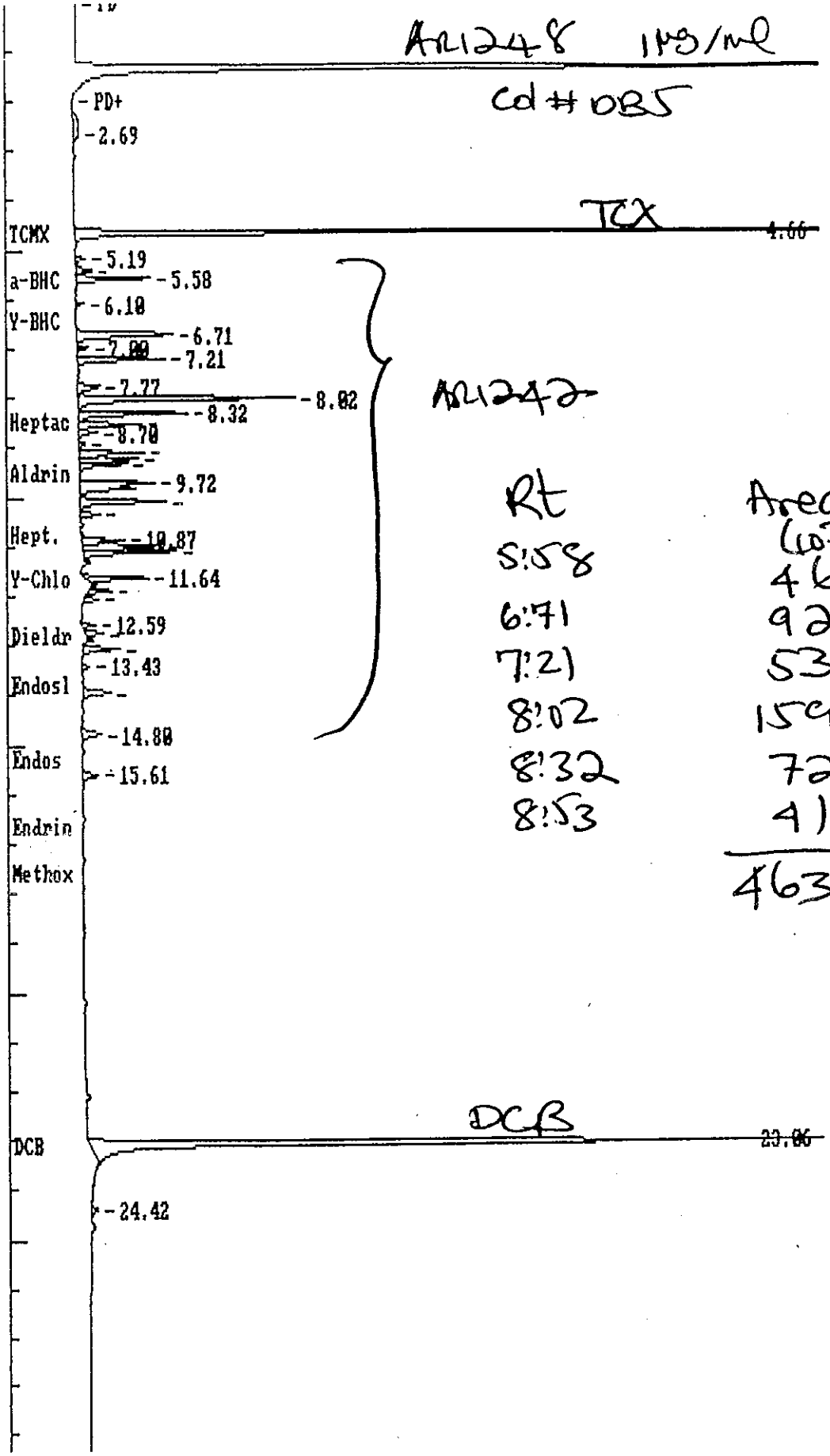
TOTAL AMOUNT = 570.5403

GROUP NUMBER	GROUP AMOUNT	GROUP PERCENT

000296

000237

Areas, times, and heights stored in: E:JU06E10.ATB
Data File = E:JU06E10.PTS Printed on 06-06-1995 at 22:44:56
Start time: 0.00 min. Stop time: 30.00 min. Offset: 1 mv.
Full Range: 100 millivolts



Rt	Area (103)
5:58	46
6:71	92
7:21	53
8:02	159
8:32	72
8:53	41
	463

***** EXTERNAL STANDARD TABLE *****

********** 06-06-1995 22:45:35 Version 5.1.5 **********

* Sample Name: AR1242 1PPM Data File: E:KU06E10 *
* Date: 06-06-1995 22:14:20 Method: M:BPES-G 03-31-1995 14:31:59 # 358 *
* Interface: 1 Cycle#: 10 Operator SDR Channel#: 1 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 10 Area Threshold: 500 *

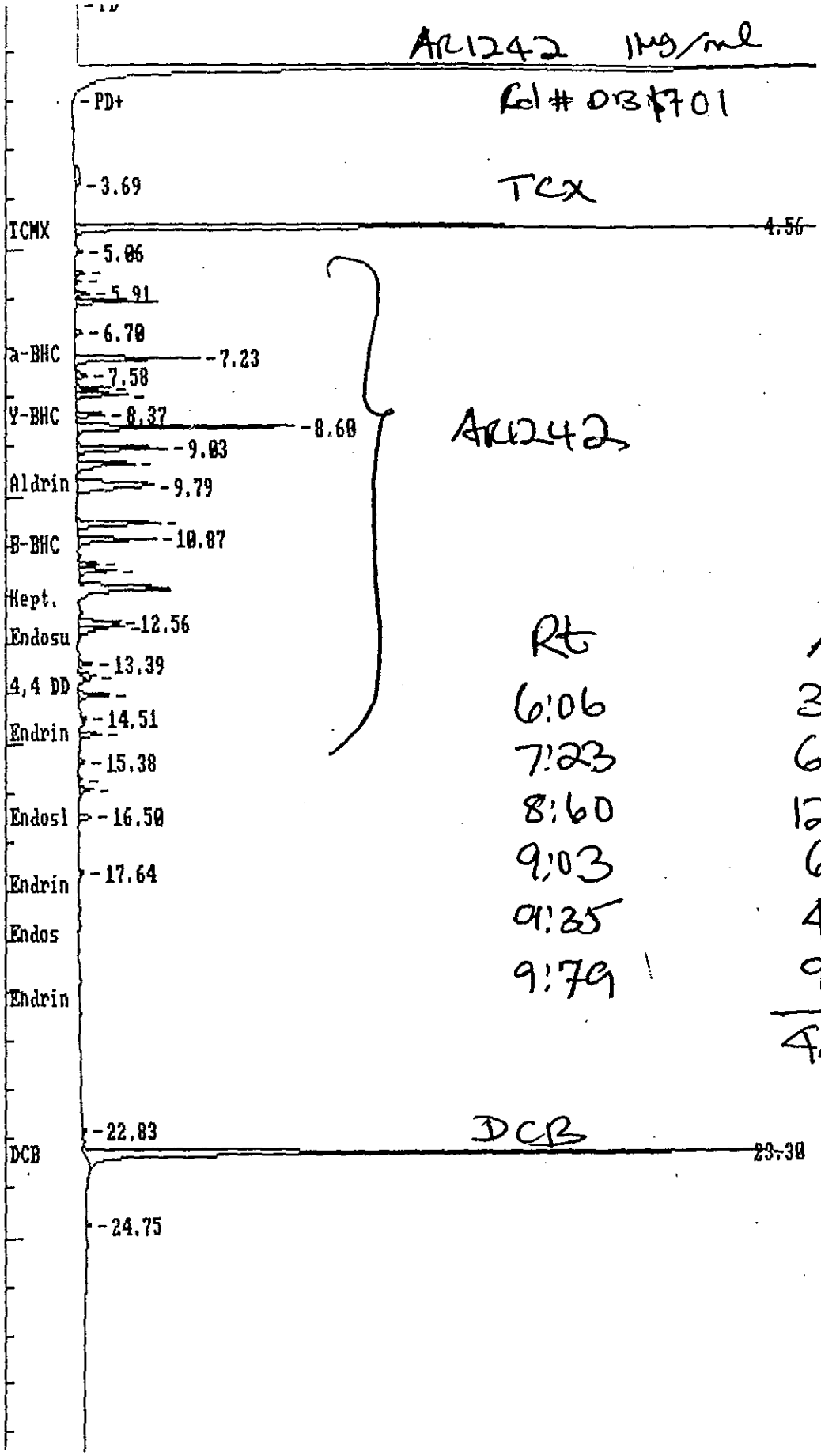
* Instrument Type: Perkin-Elmer 8500 Column Type: RTx-5 30m,.35mm *
* Solvent Description: 1.0u df *
* Conditions: 180 for 4.0min then 4.0deg/min to 240, hold 30min *
* Detector 0: Detector 1: ECD *
* Misc. Information: *

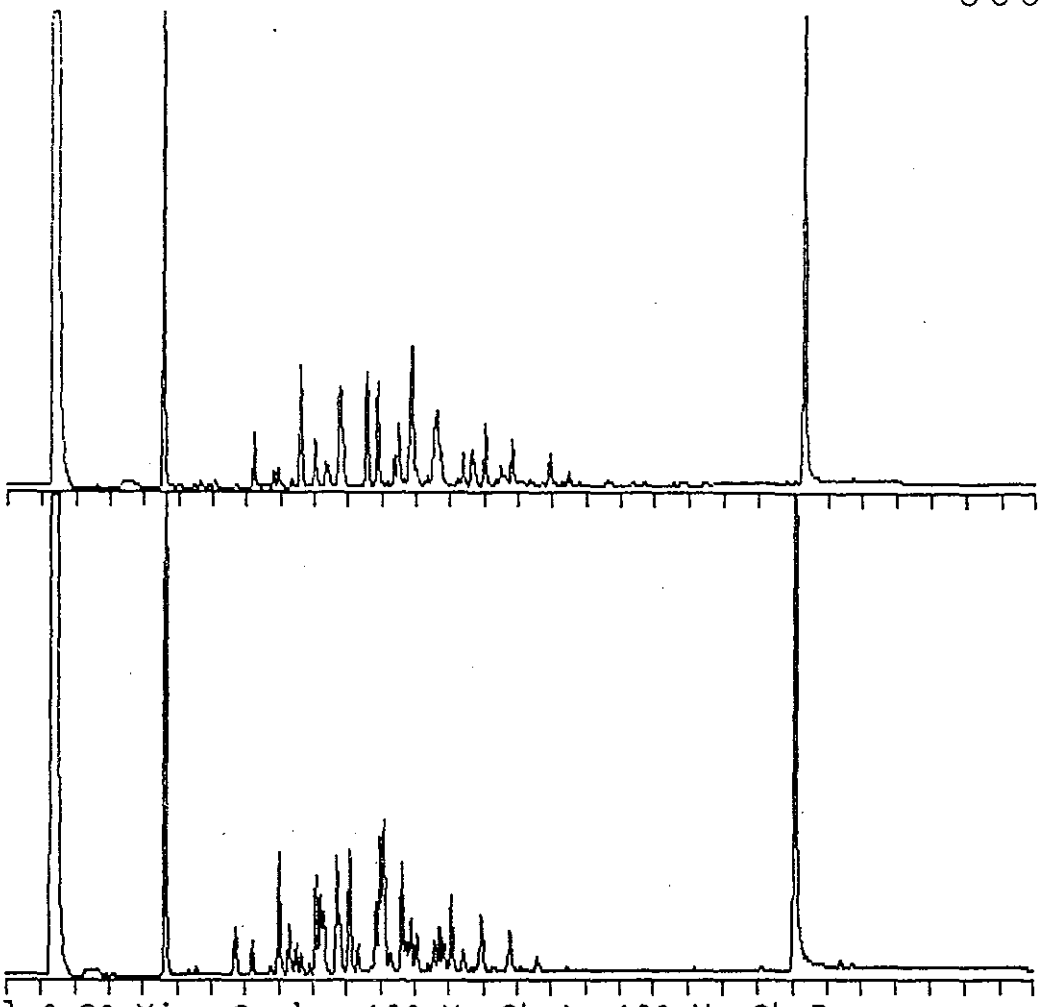
Starting Delay: 0.00 Ending retention time: 30.00
Area reject: 500 One sample per 1.002 sec.
Amount injected: 1.00 Dilution factor: 1.00
Sample Weight: 1.00000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	3.691		0.0000	0.0000%	16040	693	23.2	1			1.0000E-09
2	4.559	TCMX	214.6199	33.1213%	385255	106797	3.6	1	0	-.7272	5.5709E-04
3	5.060		0.0000	0.0000%	3711	915	4.1	1			1.0000E-09
4	5.494		0.0000	0.0000%	6413	1377	4.7	2			1.0000E-09
5	5.661		0.0000	0.0000%	3586	844	4.2	2			1.0000E-09
6	5.912		0.0000	0.0000%	8744	2067	4.2	2			1.0000E-09
7	6.062		0.0000	0.0000%	39307	9155	4.3	2			1.0000E-09
8	6.697		0.0000	0.0000%	4709	1058	4.5	1			1.0000E-09
9	7.231		0.0001	0.0000%	69232	16972	4.1	2			1.0000E-09
10	7.582		0.0000	0.0000%	11540	1649	7.0	2			1.0000E-09
11	7.816		0.0000	0.0000%	20202	4744	4.3	2			1.0000E-09
12	7.966		0.0000	0.0000%	31186	7088	4.4	2			1.0000E-09
13	8.367	Y-BHC	11.2432	1.7351%	19454	3988	4.9	2	0	.4008	5.7793E-04
14	8.600		0.0001	0.0000%	127556	29450	4.3	2			1.0000E-09
15	9.035	Heptachlor	31.6614	4.8862%	60238	12278	4.9	1	0	1.691	5.2560E-04
16	9.352		0.0000	0.0000%	42275	7777	5.4	1			1.0000E-09
17	9.786	Aldrin	50.2084	7.7484%	93590	10367	9.0	1	0	1.034	5.3647E-04
18	10.554		0.0001	0.0000%	62377	11400	5.5	1			1.0000E-09
19	10.872	B-BHC	47.1472	7.2760%	58549	10575	5.5	1	0	-.9132	8.0526E-04
20	11.389		0.0000	0.0000%	12057	2855	4.2	2			1.0000E-09
21	11.506	d-BHC	21.3271	3.2913%	24156	5216	4.6	2	0	-1.005	8.8288E-04
23	12.558		0.0000	0.0000%	30536	5534	5.5	2			1.0000E-09
24	12.659	Endosulf I	19.8297	3.0602%	38899	6166	6.3	2	0	-1.558	5.0978E-04
25	13.393	a-Chlordane	4.3505	0.6714%	9231	1974	4.7	1	0	-.1245	4.7127E-04
26	13.644	4,4 DDE	2.9938	0.4620%	5760	1467	3.9	1	0	-1.149	5.1975E-04
27	14.028	Dieldrin	11.2290	1.7329%	21335	4258	5.0	1	0	-.5917	5.2633E-04
28	14.512		0.0000	0.0000%	2308	607	3.8	1			1.0000E-09
29	14.830	Endrin	16.0274	2.4734%	15309	3049	5.0	1	0	.4524	1.0470E-03
30	15.381		0.0000	0.0000%	5206	998	5.2	1			1.0000E-09
31	15.731		0.0000	0.0000%	2857	610	4.7	1			1.0000E-09
32	15.948		0.0000	0.0000%	10349	1964	5.3	1			1.0000E-09
33	16.500	4'4-DDD	7.6530	1.1811%	10265	1793	5.7	1	0	0	7.4551E-04
34	17.635	Endrin ald	2.2030	0.3400%	3132	609	5.1	1	0	-1.262	7.0343E-04
35	22.829		0.0000	0.0000%	2540	506	5.0	1			1.0000E-09
36	23.296	DCB	207.4876	32.0206%	452233	91057	5.0	1	0	-.1431	4.5881E-04
37	24.749		0.0000	0.0000%	3821	702	5.4	1			1.0000E-09

TOTAL AMOUNT = 647.9816

Areas, times, and heights stored in: E:KU06E10.ATB 000299
Data File = E:KU06E10.PTS Printed on 06-06-1995 at 22:46:28
Start time: 0.00 min. Stop time: 30.00 min. Offset: 1 mv.
Full Range: 100 millivolts





[Interface 1] 0-30 Min Scale: 100 Mv Ch.A, 100 Mv Ch.B
AR1248 1PP Processed: 06-06-1995 23:18:44, segment 11, cycle 11
RAW DATA SAVED IN FILE E:JU06E11.PTS Second Channel Stored in E:KU06E11.PTS

***** EXTERNAL STANDARD TABLE *****

********** 06-06-1995 23:18:50 Version 5.1.5 **********
* Sample Name: AR1248 1PPM Data File: E:JU06E11 *
* Date: 06-06-1995 22:48:25 Method: M:APES-G 03-08-1995 15:02:41 # 359 *
* Interface: 1 Cycle#: 11 Operator SDR Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 10 Area Threshold: 1000 *
* Instrument Type: Perkin-Elmer 8500 Column Type: RTx-5 30m,.35mm *
* Solvent Description: 1.0u df *
* Conditions: 180 for 4.0min then 4.0deg/min to 240, hold 30min *
* Detector 0: Detector 1: ECD *
* Misc. Information: *

Starting Delay: 0.00 Ending retention time: 30.00
Area reject: 1000 One sample per 1.002 sec.
Amount injected: 1.00 Dilution factor: 1.00
Sample Weight: 1.00000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	2.622		0.0000	0.0000%	32122	1075	29.9	1			1.0000E-09
2	4.643	TCMX	328.4448	41.1545%	629653	158058	4.0	1	0	-.7142	5.2163E-04
3	5.361		0.0000	0.0000%	6134	1171	5.2	2			1.0000E-09
4	5.578	a-BHC	3.8378	0.4809%	6299	1327	4.7	2	0	0	6.0923E-04

8	8.016		0.0001	0.0000%	13/047	25011	5.3	2			
9	8.317		0.0001	0.0000%	53676	10032	5.4	2			1.0000E-09
10	8.534	Heptachlor	14.1459	1.7725%	32269	5989	5.4	2	0	.7889	4.3837E-04
11	8.701		0.0000	0.0000%	20757	4251	4.9	2			1.0000E-09
12	8.934		0.0000	0.0000%	7723	1696	4.6	2			1.0000E-09
13	9.101		0.0001	0.0000%	90846	19971	4.5	2			1.0000E-09
14	9.235		0.0001	0.0000%	146680	16203	9.1	2			1.0000E-09
15	9.719		0.0002	0.0000%	164633	23734	6.9	2			1.0000E-09
16	10.103		0.0001	0.0000%	130857	25139	5.2	2			1.0000E-09
17	10.354		0.0000	0.0000%	28224	5837	4.8	2			1.0000E-09
18	10.755	Hept. epox.	2.3373	0.2929%	5262	1052	5.0	2	0	-.1550	4.4420E-04
19	10.872		0.0001	0.0000%	61850	14391	4.3	2			1.0000E-09
20	10.989		0.0001	0.0000%	140723	28051	5.0	2			1.0000E-09
21	11.105		0.0002	0.0000%	167926	31257	5.4	3			1.0000E-09
22	11.339		0.0000	0.0000%	17834	3220	5.5	4			1.0000E-09
23	11.640	Y-Chlordane	44.3468	5.5567%	115392	22304	5.2	2	0	.1436	3.8431E-04
24	11.790		0.0000	0.0000%	29582	6194	4.8	2			1.0000E-09
25	11.907	Endosulfan I	24.2026	3.0326%	55853	10835	5.2	2	0	0	4.3333E-04
26	12.074	a-Chlordane	13.3536	1.6732%	35023	7243	4.8	2	0	.1385	3.8129E-04
27	12.425		0.0000	0.0000%	4211	1008	4.2	1			1.0000E-09
28	12.592		0.0000	0.0000%	29819	6108	4.9	2			1.0000E-09
29	12.759	Dieldrin	17.7359	2.2223%	44489	9020	4.9	2	0	0	3.9866E-04
30	12.892	4,4-DDE	11.1257	1.3941%	28324	5466	5.2	2	0	-.1293	3.9281E-04
31	13.076		0.0001	0.0000%	78260	15508	5.0	2			1.0000E-09
32	13.427	Endrin	10.4186	1.3055%	21472	4228	5.1	1	0	0	4.8522E-04
33	13.961	Endslf II	28.0507	3.5148%	66214	10898	6.1	1	0	1.456	4.2364E-04
34	14.796		0.0001	0.0000%	52097	7791	6.7	1			1.0000E-09
35	15.615	DDT	10.6525	1.3348%	18007	2706	6.7	1	0	.6458	5.9158E-04
36	22.111		0.0000	0.0000%	4001	770	5.2	1			1.0000E-09
37	23.063	DCB	289.4228	36.2650%	988283	180368	5.5	1	0	-.1446	2.9285E-04
38	24.415		0.0000	0.0000%	6040	1143	5.3	1			1.0000E-09

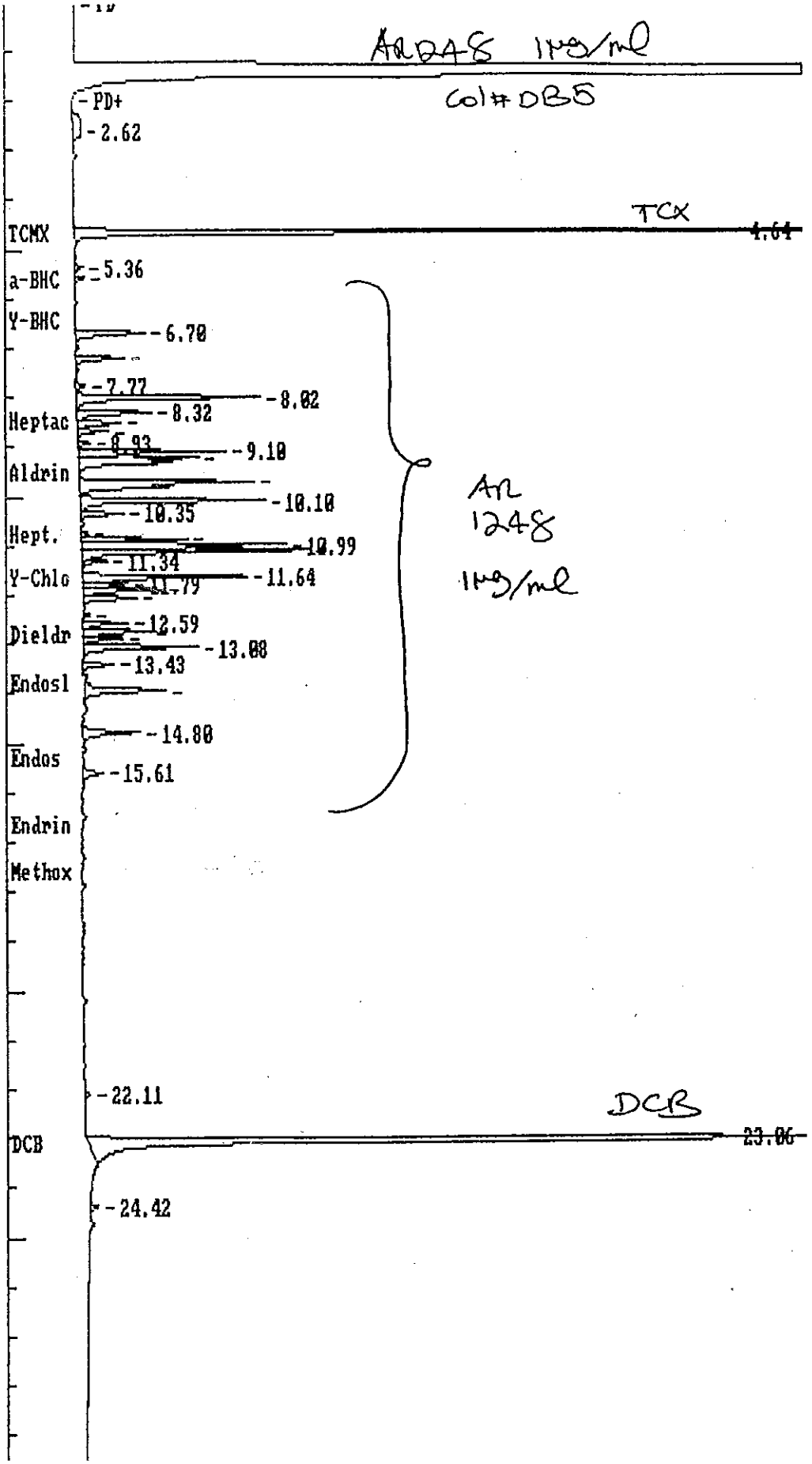
TOTAL AMOUNT = 798.0767

GROUP NUMBER GROUP AMOUNT GROUP PERCENT

000291

6/20/95

Areas, times, and heights stored in: E:JU06E11.ATB
Data File = E:JU06E11.PTS Printed on 06-06-1995 at 23:19:04
Start time: 0.00 min. Stop time: 30.00 min. Offset: 1 mv.
Full Range: 100 millivolts



EXTERNAL STANDARD TABLE

********** 06-06-1995 23:19:53 Version 5.1.5 **********

* Sample Name: AR1248 1PPM Data File: E:KU06E11
* Date: 06-06-1995 22:48:25 Method: M:BPES-G 03-31-1995 14:31:59 # 358
* Interface: 1 Cycle#: 11 Operator SDR Channel#: 1 Vial#: N.A.
* Starting Peak Width: 10 Threshold: 10 Area Threshold: 500

* Instrument Type: Perkin-Elmer 8500 Column Type: RTx-5 30m,.35mm
* Solvent Description: 1.0u df
* Conditions: 180 for 4.0min then 4.0deg/min to 240, hold 30min
* Detector 0: Detector 1: ECD
* Misc. Information:

Starting Delay: 0.00 Ending retention time: 30.00
Area reject: 500 One sample per 1.002 sec.
Amount injected: 1.00 Dilution factor: 1.00
Sample Weight: 1.00000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	2.622		0.0000	0.0000%	1910	444	4.3	1			1.0000E-09
2	3.674		0.0000	0.0000%	22804	907	25.1	1			1.0000E-09
3	4.559	TCMX	295.6347	25.3737%	530681	147915	3.6	1	0	-.7272	5.5709E-04
4	5.661		0.0000	0.0000%	4958	1154	4.3	1			1.0000E-09
5	6.062		0.0000	0.0000%	5625	1239	4.5	1			1.0000E-09
6	6.697		0.0000	0.0000%	1845	411	4.5	1			1.0000E-09
7	7.231		0.0000	0.0000%	45735	11059	4.1	1			1.0000E-09
8	7.816		0.0000	0.0000%	13770	3151	4.4	2			1.0000E-09
9	7.966		0.0000	0.0000%	16973	3685	4.6	2			1.0000E-09
10	8.367	Y-BHC	4.5713	0.3923%	7910	1615	4.9	1	0	.4008	5.7793E-04
11	8.600		0.0001	0.0000%	111017	25486	4.4	1			1.0000E-09
12	9.035	Heptachlor	25.4337	2.1829%	48390	9480	5.1	1	0	1.691	5.2560E-04
13	9.352		0.0000	0.0000%	9381	3029	3.1	1			1.0000E-09
14	9.786	Aldrin	99.7102	8.5579%	185862	20540	9.0	1	0	1.034	5.3647E-04
15	10.554		0.0001	0.0000%	127768	24250	5.3	2			1.0000E-09
16	10.872	B-BHC	93.0688	7.9879%	115576	22080	5.2	2	0	-.9132	8.0526E-04
17	11.206		0.0000	0.0000%	2461	546	4.5	2			1.0000E-09
18	11.389		0.0000	0.0000%	25105	6064	4.1	2			1.0000E-09
19	11.506	d-BHC	47.0297	4.0365%	53269	12239	4.4	2	0	-1.005	8.8288E-04
20	11.890	Hept. epox.	122.8653	10.5453%	236663	28982	8.2	1	0	-1.385	5.1916E-04
21	12.358		0.0000	0.0000%	6443	1491	4.3	2			1.0000E-09
22	12.558		0.0001	0.0000%	78942	13753	5.7	2			1.0000E-09
23	12.659	Endosulf I	52.3608	4.4940%	102713	15367	6.7	2	0	-1.558	5.0978E-04
24	13.226	Y-Chlordane	2.5197	0.2163%	5318	1058	5.0	2	0	.6353	4.7386E-04
25	13.393	a-Chlordane	14.8972	1.2786%	31611	6394	4.9	2	0	-.1245	4.7127E-04
26	13.644	4,4 DDE	29.6497	2.5448%	57046	7217	7.9	2	0	-1.149	5.1975E-04
27	14.028	Dieldrin	31.5468	2.7076%	59938	12906	4.6	1	0	-.5917	5.2633E-04
28	14.379		0.0000	0.0000%	2107	510	4.1	1			1.0000E-09
29	14.512		0.0000	0.0000%	13406	3063	4.4	1			1.0000E-09
30	14.830	Endrin	48.3823	4.1525%	46212	9070	5.1	2	0	.4524	1.0470E-03
31	15.130		0.0000	0.0000%	4591	756	6.1	2			1.0000E-09
32	15.381		0.0000	0.0000%	7257	1311	5.5	1			1.0000E-09
33	15.731		0.0000	0.0000%	4320	912	4.7	1			1.0000E-09
34	15.932		0.0000	0.0000%	37801	6701	5.6	1			1.0000E-09
35	16.500	4'4-DDD	9.6696	0.8299%	12970	2305	5.6	1	0	0	7.4551E-04
36	17.618	Endrin ald	3.4047	0.2922%	4840	945	5.1	1	0	-1.355	7.0343E-04
37	20.457	Endrin ket	1.3491	0.1158%	2066	415	5.0	1	0	1.744	6.5298E-04
					2623	723	5.0	1			1.0000E-09

601
6/26/95

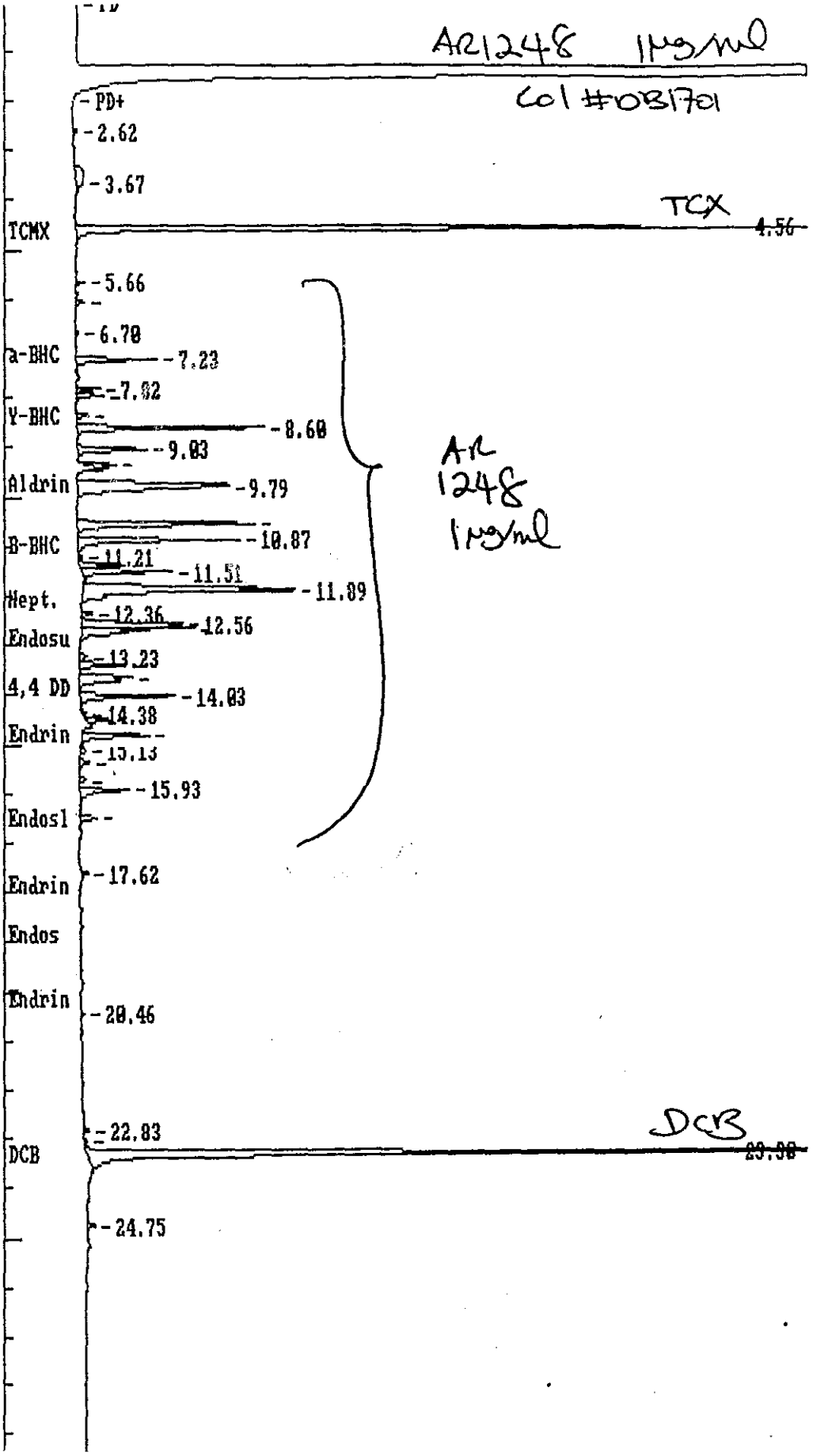
TOTAL AMOUNT = 1165.1235

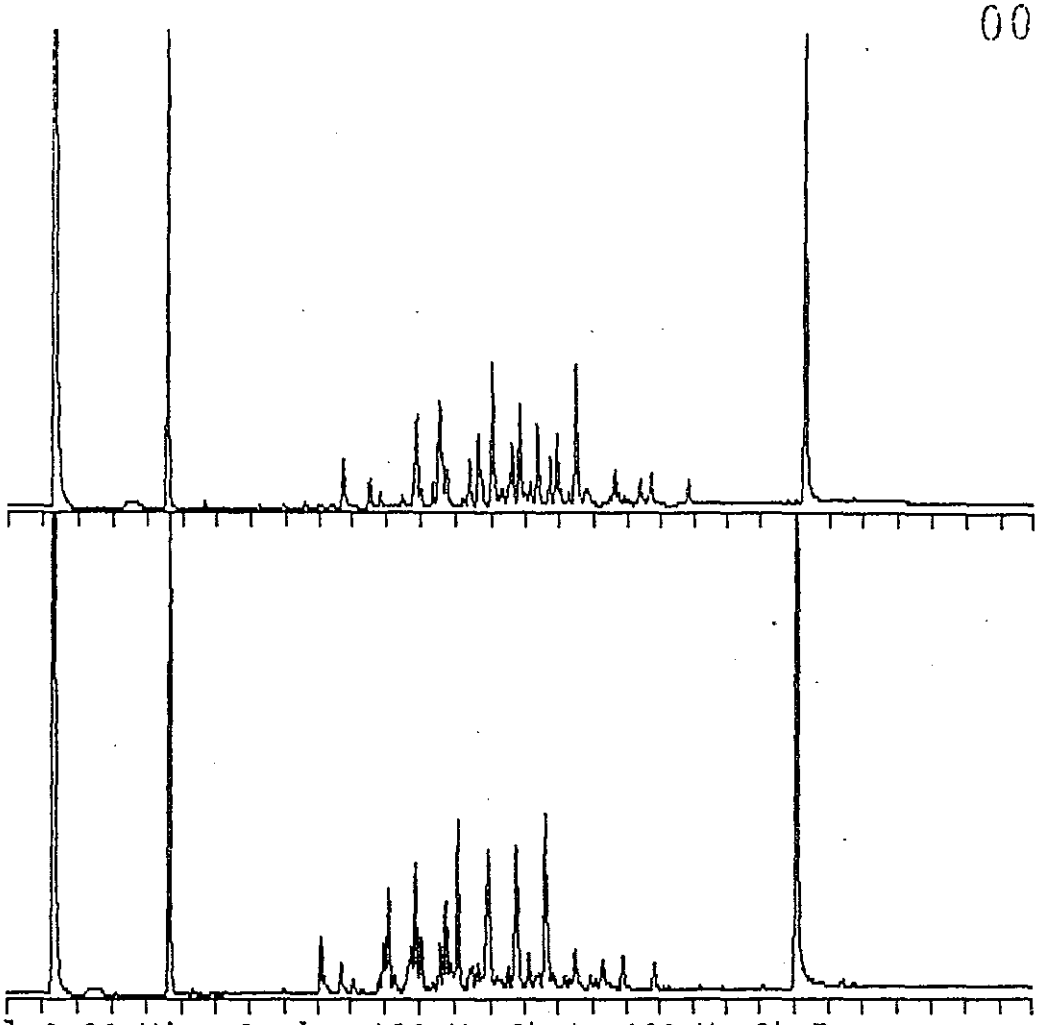
GROUP NUMBER	GROUP AMOUNT	GROUP PERCENT

000294

000295

Areas, times, and heights stored in: E:KU06E11.ATB
Data File = E:KU06E11.PTS Printed on 06-06-1995 at 23:20:42
Start time: 0.00 min. Stop time: 30.00 min. Offset: 1 mv.
Full Range: 100 millivolts





[Interface 1] 0-30 Min Scale: 100 Mv Ch.A, 100 Mv Ch.B
AR1254 1PP Processed: 06-06-1995 23:52:52, segment 12, cycle 12
RAW DATA SAVED IN FILE E:JU06E12.PTS Second Channel Stored in E:KU06E12.PTS

***** EXTERNAL STANDARD TABLE *****

********** 06-06-1995 23:52:58 Version 5.1.5 **********
* Sample Name: AR1254 1PPM Data File: E:JU06E12 *
* Date: 06-06-1995 23:22:33 Method: M:APES-G 03-08-1995 15:02:41 # 359 *
* Interface: 1 Cycle#: 12 Operator SDR Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 10 Area Threshold: 1000 *
* Instrument Type: Perkin-Elmer 8500 Column Type: RTx-5 30m,.35mm *
* Solvent Description: 1.0u df *
* Conditions: 180 for 4.0min then 4.0deg/min to 240, hold 30min *
* Detector 0: Detector 1: ECD *
* Misc. Information: *

Starting Delay: 0.00 Ending retention time: 30.00
Area reject: 1000 One sample per 1.002 sec.
Amount injected: 1.00 Dilution factor: 1.00
Sample Weight: 1.00000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	2.388		0.0000	0.0000%	32073	1135	28.2	1			1.0000E-09
2	4.659	TCMX	280.6282	37.3520%	537985	136550	3.9	1	0	-.3571	5.2163E-04
3	5.361		0.0000	0.0000%	4518	990	4.6	1			1.0000E-09
4	8.016		0.0000	0.0000%	4205	770	5.5	1			1.0000E-09

8	10.103	0.0000	0.0000%	13342	2587	5.2	1			1.0000E-09
9	10.872 Hept. epox.	4.8175	0.6412%	10845	2441	4.4	2	0	.9302	4.4420E-04
10	11.005	0.0000	0.0000%	47150	9620	4.9	2			1.0000E-09
11	11.122	0.0001	0.0000%	109713	21054	5.2	2			1.0000E-09
12	11.339	0.0000	0.0000%	16775	3287	5.1	2			1.0000E-09
13	11.790 Y-Chlordane	26.7359	3.5586%	69568	8673	8.0	2	0	1.436	3.8431E-04
14	11.907 Endosulfan I	55.7771	7.4240%	128718	26168	4.9	2	0	0	4.3333E-04
15	12.074 a-Chlordane	19.8352	2.6401%	52022	10633	4.9	2	0	.1385	3.8129E-04
16	12.425	0.0000	0.0000%	6066	1435	4.2	1			1.0000E-09
17	12.592	0.0000	0.0000%	36362	8317	4.4	1			1.0000E-09
18	12.759 Dieldrin	26.5234	3.5303%	66532	15811	4.2	1	0	0	3.9866E-04
19	13.076	0.0001	0.0000%	148622	32767	4.5	1			1.0000E-09
20	13.427 Endrin	2.7382	0.3645%	5643	1549	3.6	1	0	0	4.8522E-04
21	13.661 Endoslf II	7.3758	0.9817%	17411	3795	4.6	1	0	-.7281	4.2364E-04
22	13.945	0.0002	0.0000%	187075	27241	6.9	1			1.0000E-09
23	14.228 4'4-DDD	2.5960	0.3455%	4373	1129	3.9	1	0	-.3508	5.9361E-04
24	14.546 Endrin ald	9.0121	1.1995%	18122	3919	4.6	2	0	.9855	4.9730E-04
25	14.746	0.0002	0.0000%	214914	28834	7.5	2			1.0000E-09
26	15.130	0.0000	0.0000%	34778	6777	5.1	2			1.0000E-09
27	15.431 DDT	14.1876	1.8884%	23983	2813	8.5	2	0	-.5382	5.9158E-04
28	15.615	0.0002	0.0000%	217167	35946	6.0	3			1.0000E-09
29	15.865	0.0000	0.0000%	14247	2472	5.8	4			1.0000E-09
30	16.199	0.0000	0.0000%	8769	2038	4.3	1			1.0000E-09
31	16.366	0.0000	0.0000%	7028	1608	4.4	2			1.0000E-09
32	16.500 Endrin ket.	22.2824	2.9658%	52720	7627	6.9	2	0	-.9027	4.2265E-04
33	16.950	0.0000	0.0000%	12554	2584	4.9	2			1.0000E-09
34	17.117	0.0000	0.0000%	6296	1451	4.3	2			1.0000E-09
35	17.301 Methoxychlor	29.9440	3.9856%	29215	5349	5.5	1	0	-1.520	1.0249E-03
36	17.902	0.0000	0.0000%	33839	6267	5.4	1			1.0000E-09
37	18.838	0.0000	0.0000%	29431	5124	5.7	1			1.0000E-09
38	23.063 DCB	248.8530	33.1226%	849750	156566	5.4	1	0	-.1446	2.9285E-04
39	24.415	0.0000	0.0000%	5247	1003	5.2	1			1.0000E-09

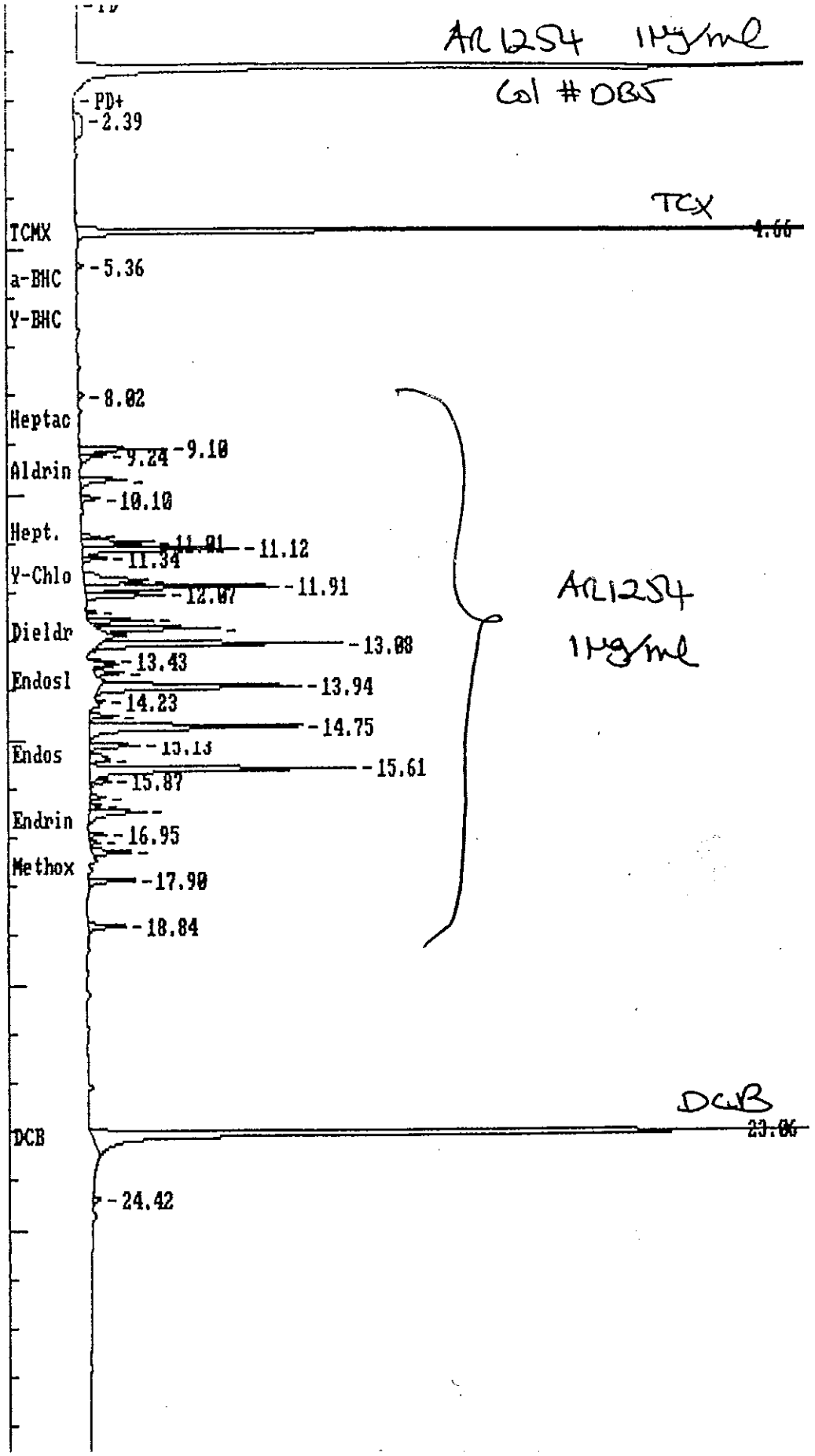
000297

TOTAL AMOUNT = 751.3077

GROUP NUMBER	GROUP AMOUNT	GROUP PERCENT

000293

Areas, times, and heights stored in: E:JU06E12.ATB
Data File = E:JU06E12.PTS Printed on 06-06-1995 at 23:53:11
Start time: 0.00 min. Stop time: 30.00 min. Offset: 1 mv.
Full Range: 100 millivolts



***** EXTERNAL STANDARD TABLE *****

********** 06-06-1995 23:54:07 Version 5.1.5 **********

* Sample Name: AR1254 1PPM Data File: E:KU06E12 *
* Date: 06-06-1995 23:22:33 Method: M:BPES-G 03-31-1995 14:31:59 # 358 *
* Interface: 1 Cycle#: 12 Operator SDR Channel#: 1 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 10 Area Threshold: 500 *

* Instrument Type: Perkin-Elmer 8500 Column Type: RTx-5 30m,.35mm *
* Solvent Description: 1.0u df *
* Conditions: 180 for 4.0min then 4.0deg/min to 240, hold 30min *
* Detector 0: Detector 1: ECD *
* Misc. Information: *

Starting Delay: 0.00 Ending retention time: 30.00
Area reject: 500 One sample per 1.002 sec.
Amount injected: 1.00 Dilution factor: 1.00
Sample Weight: 1.00000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	3.674		0.0000	0.0000%	22992	899	25.6	1			1.0000E-09
2	4.576	TCMX	253.6922	23.9984%	455392	124776	3.6	1	0	-.3636	5.5709E-04
3	5.678		0.0000	0.0000%	4270	962	4.4	1			1.0000E-09
4	8.600		0.0000	0.0000%	3828	805	4.8	1			1.0000E-09
5	9.736	Aldrin	32.4154	3.0664%	60423	10173	5.9	1	0	.5172	5.3647E-04
6	10.554		0.0000	0.0000%	28331	6019	4.7	1			1.0000E-09
7	10.872	B-BHC	10.0520	0.9509%	12483	2586	4.8	1	0	-.9132	8.0526E-04
8	11.523	d-BHC	7.7601	0.7341%	8790	1991	4.4	1	0	-.8620	8.8288E-04
9	11.907	Hept. epox.	52.9922	5.0129%	102074	17878	5.7	1	0	-1.246	5.1916E-04
10	12.358		0.0000	0.0000%	21981	4618	4.8	2			1.0000E-09
11	12.542		0.0001	0.0000%	146432	21516	6.8	2			1.0000E-09
12	12.759	Endosulf I	18.3229	1.7333%	35943	7462	4.8	2	0	-.7792	5.0978E-04
13	13.226	Y-Chlordane	3.4117	0.3227%	7200	1517	4.7	2	0	.6353	4.7386E-04
14	13.393	a-Chlordane	21.3695	2.0215%	45344	9565	4.7	2	0	-.1245	4.7127E-04
15	13.644	4,4 DDE	51.9204	4.9115%	99895	14629	6.8	2	0	-1.149	5.1975E-04
16	14.028	Dieldrin	78.6004	7.4353%	149338	29628	5.0	3	0	-.5917	5.2633E-04
17	14.345		0.0000	0.0000%	20184	3172	6.4	4			1.0000E-09
18	14.596		0.0001	0.0000%	90430	12964	7.0	2			1.0000E-09
19	14.830	Endrin	116.0092	10.9741%	110806	21189	5.2	3	0	.4524	1.0470E-03
20	15.013		0.0000	0.0000%	11819	2202	5.4	4			1.0000E-09
21	15.164		0.0000	0.0000%	26702	4379	6.1	2			1.0000E-09
22	15.364		0.0001	0.0000%	84281	17002	5.0	2			1.0000E-09
23	15.731		0.0000	0.0000%	47685	9877	4.8	2			1.0000E-09
24	15.932		0.0001	0.0000%	88729	14802	6.0	2			1.0000E-09
25	16.299		0.0000	0.0000%	11563	2296	5.0	2			1.0000E-09
26	16.483	EndoslfII	90.9326	8.6019%	168843	29205	5.8	2	0	0	5.3856E-04
27	16.817	4,4 DDT	27.3043	2.5829%	31772	3347	9.5	2	0	-1.080	8.5939E-04
28	17.502		0.0000	0.0000%	8089	1675	4.8	2			1.0000E-09
29	17.618		0.0000	0.0000%	36510	7314	5.0	2			1.0000E-09
30	17.752		0.0000	0.0000%	12926	2661	4.9	2			1.0000E-09
31	17.919	Endrin ald	5.9435	0.5622%	8449	1576	5.4	2	0	.3272	7.0343E-04
32	18.036		0.0000	0.0000%	5803	1220	4.8	2			1.0000E-09
33	18.370		0.0000	0.0000%	27835	4732	5.9	2			1.0000E-09
34	18.704	Endos sulf	20.7512	1.9630%	30888	5840	5.3	2	0	-.7092	6.7183E-04
35	19.840	Endrin ket	19.1397	1.8105%	29312	5118	5.7	1	0	-1.328	6.5298E-04
36	22.846		0.0000	0.0000%	3288	632	5.2	2			1.0000E-09
37	23.063		0.0000	0.0000%	2188	466	4.7	2			1.0000E-09
			244.5021	23.3183%	537269	109142	4.9	1	0	-.1431	4.5881E-04

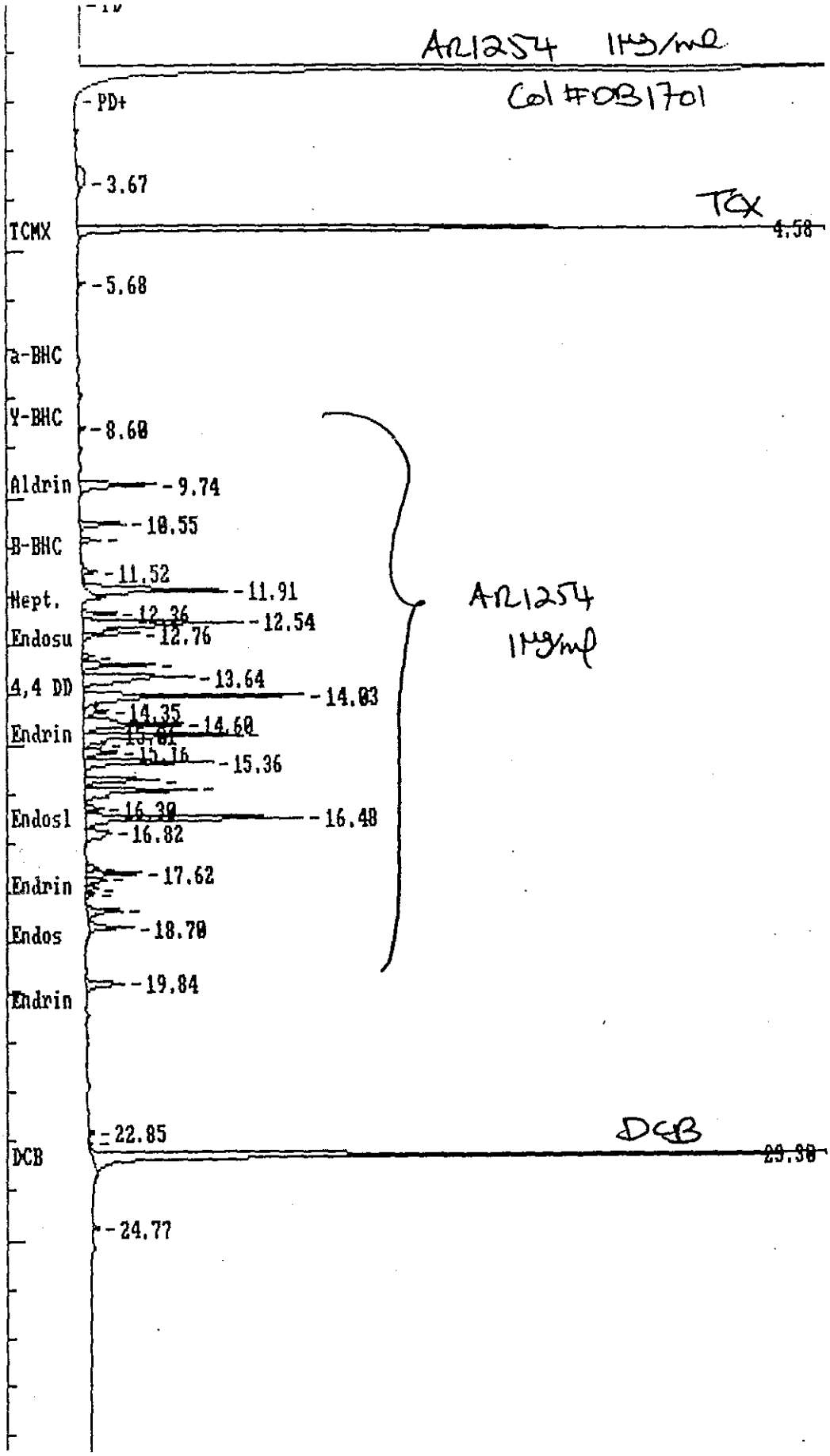
6/20/95

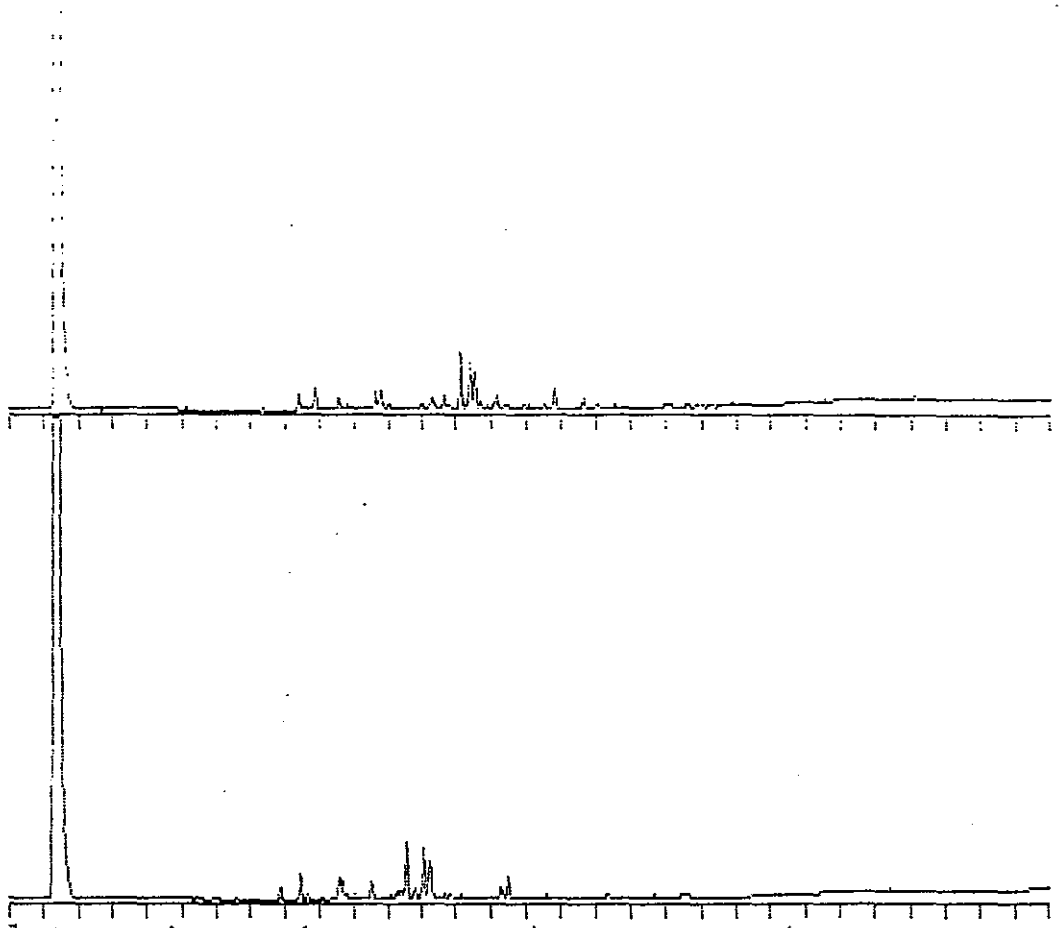
TOTAL AMOUNT = 1057.1209

GROUP NUMBER	GROUP AMOUNT	GROUP PERCENT

000301

Areas, times, and heights stored in: E:KU06E12.ATB
Data File = E:KU06E12.PTS Printed on 06-06-1995 at 23:54:53
Start time: 0.00 min. Stop time: 30.00 min. Offset: 1 mv.
Full Range: 100 millivolts





erface 2] 0-30 Min Scale: 100 Mv Ch.A, 100 Mv Ch.B
LORDANE Processed: 11-08-1994 18:27:54, segment 3, cycle 3
DATA SAVED IN FILE F:NV09F3.PTS Second Channel Stored in F:0V09F3.PTS

EXTERNAL STANDARD TABLE

********** 11-08-1994 18:28:40 Version 5.1.5 **********
ample Name: CHLORDANE 0.25 UG/ML Data File: F:NV09F3 *
ate: 11-08-1994 17:57:28 Method: M:APES-G 11-08-1994 12:17:09 # 345 *
Interface: 2 Cycle#: 3 Operator JJK Channel#: 0 Vial#: N.A. *
arting Peak Width: 10 Threshold: 10 Area Threshold: 1000 *
****

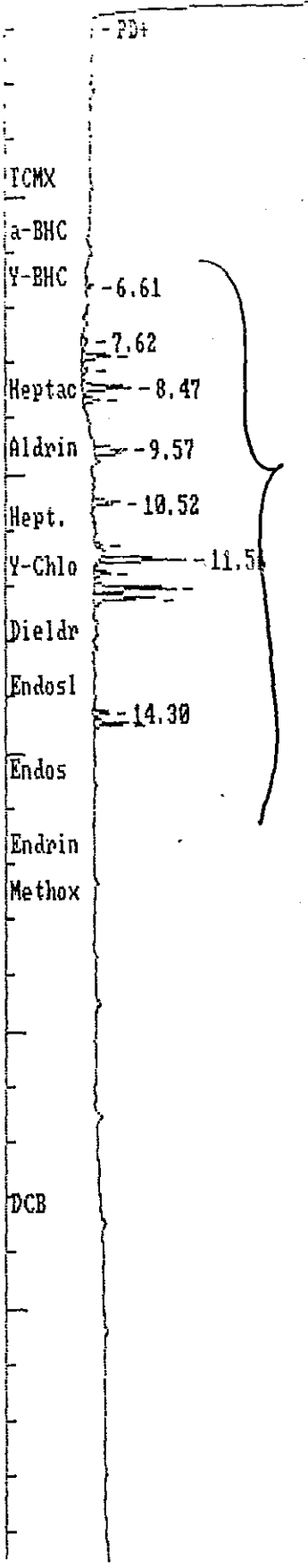
arting Delay: 0.00 Ending retention time: 30.00
a reject: 1000 One sample per 1.002 sec.
unt injected: 1.00 Dilution factor: 1.00
ample Weight: 1.00000

RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
6.613		0.0000	0.0000%	3742	898	4.2	1			1.0000E-09
7.615		0.0000	0.0000%	5676	724	7.8	2			1.0000E-09
7.899		0.0000	0.0000%	18416	3333	5.5	2			1.0000E-09
8.150		0.0000	0.0000%	4330	696	6.2	2			1.0000E-09
9.467	Heptachlor	16.4235	18.4703%	30939	5786	5.3	2	0	0	5.3084E-04
584		0.0000	0.0000%	10288	1913	5.4	2			1.0000E-09
9.569	Aldrin	13.2145	14.8613%	27987	3891	7.2	1	0	.7029	4.7217E-04
10.521		0.0000	0.0000%	16436	3230	5.1	1			1.0000E-09
11.289		0.0000	0.0000%	2901	623	4.7	1			1.0000E-09
11.556	Y-Chlordane	18.4647	20.7658%	43399	10625	4.1	1	0	-.6460	4.2546E-04
[illegible]	[illegible]	4.7896	5.3867%	9958	2027	4.9	2	0	-.9803	4.8189E-04

000303

Chlordanes

Col #DB5



Chlordanes
0.25ng/ml

EXTERNAL STANDARD REPORT

Data File: CHLORDANE 2 ug/ml Cal File: P1000E3

Ending Delay: 0.00 Ending retention time: 30.000

% reject: 500 One sample per: 1.000 sec.

Amount injected: 1.00 Dilution factor: 1.00

Sample Weight: 1.00000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	7.398		0.0000	0.0000%	5407	1285	4.2	1			1.0000E-09
2	8.083		0.0000	0.0000%	3657	629	5.8	1			1.0000E-09
3	8.433	Y-BHC	9.0173	10.1085%	14924	3408	4.4	1	0	1.202	6.0420E-04
4	8.901	Heptachlor	13.1602	14.7527%	24262	5595	4.3	1	0	0	5.4241E-04
5	9.569	Aldrin	5.6921	6.3809%	11293	2396	4.7	2	0	-1.206	5.0405E-04
6	9.803		0.0000	0.0000%	2510	528	4.8	2			1.0000E-09
7	10.638		0.0000	0.0000%	15053	3461	4.3	2			1.0000E-09
8	10.755		0.0000	0.0000%	20478	4441	4.6	2			1.0000E-09
9	11.022	B-BHC	1.9603	2.1976%	2579	467	5.5	2	0	.3039	7.6020E-04
10	12.007	Hept. epox.	2.2011	2.4674%	4401	895	4.9	1	0	-.4155	5.0015E-04
11	12.325		0.0000	0.0000%	13951	1826	7.6	1			1.0000E-09
12	12.692	Endosulf I	4.4948	5.0387%	8985	2371	3.8	1	0	-1.298	5.0026E-04
13	13.160	Y-Chlordane	21.3170	23.8967%	47259	11689	4.0	2	0	.1270	4.5107E-04
14	13.427	a-Chlordane	17.9728	20.1478%	39952	9617	4.2	2	0	.1245	4.4986E-04
15	13.544		0.0000	0.0000%	32054	7574	4.2	2			1.0000E-09
16	13.727	4,4 ODE	2.2140	2.4819%	4845	1187	4.1	2	0	-.6045	4.5691E-04
17	14.178	Dieldrin	5.4111	6.0659%	10906	2206	4.9	1	0	.4733	4.9617E-04
18	15.798		0.0000	0.0000%	18190	4085	4.5	1			1.0000E-09
19	15.667	4'4-DDD	5.7642	6.4618%	7366	1728	4.3	1	0	1.009	7.8258E-04
20	20.875		0.0000	0.0000%	2489	451	5.5	1			1.0000E-09

TOTAL AMOUNT = 89.2050

GROUP NUMBER GROUP AMOUNT GROUP PERCENT

000306

millivolts

Chlordanes

0.25ng/ml

Col # DB 1701

PD+

TCMX

a-BHC -7.40

Y-BHC -8.43

Aldrin -9.57

B-BHC -10.64

Hept. -12.01

Endosu -13.16

4,4 DD -13.73

Endrin -15.80

Endosl -16.67

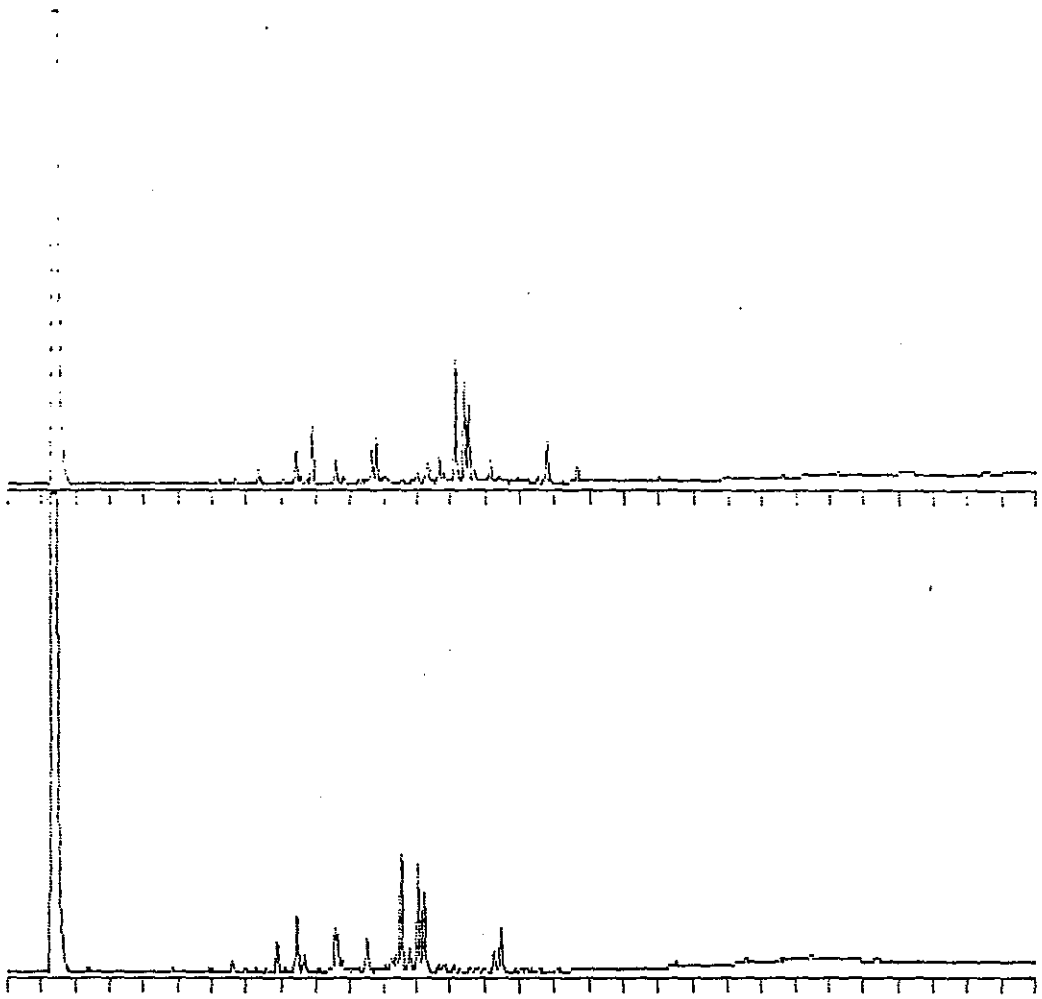
Endrin

Endos

Endrin -20.88

DCB

Chlordanes
0.25ng/ml



[Interface 2] 0-30 Min Scale: 100 Mv Ch.A, 100 Mv Ch.B
CHLORDANE Processed: 11-08-1994 19:02:21, segment 4, cycle 4
RAW DATA SAVED IN FILE F:NV09F4.PTS Second Channel Stored in F:0V09F4.PTS

EXTERNAL STANDARD TABLE

********** 11-08-1994 19:03:07 Version 5.1.5 **********
Sample Name: CHLORDANE 0.5 UG/ML Data File: F:NV09F4
Date: 11-08-1994 18:31:55 Method: M:APES-G 11-08-1994 12:17:09 # 345
Interface: 2 Cycle#: 4 Operator JJK Channel#: 0 Vial#: N.A.
Starting Peak Width: 10 Threshold: 10 Area Threshold: 1000

Starting Delay: 0.00 Ending retention time: 30.00
Area reject: 1000 One sample per 1.002 sec.
Amount injected: 1.00 Dilution factor: 1.00
Sample Weight: 1.00000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	6.630		0.0000	0.0000%	9717	1986	4.9	1			1.0000E-09
2	7.598		0.0000	0.0000%	3312	717	4.6	1			1.0000E-09
3	7.899		0.0000	0.0000%	28208	6351	4.4	1			1.0000E-09
4	8.467	Heptachlor	29.2483	15.0955%	55099	11288	4.9	2	0	0	5.3084E-04
	8.684		0.0000	0.0000%	14613	3023	4.8	2			1.0000E-09
6	9.569	Aldrin	36.4913	18.8337%	77285	8818	8.8	3	0	.7029	4.7217E-04
7	9.786		0.0000	0.0000%	6400	1335	4.8	4			1.0000E-09
8	10.521		0.0000	0.0000%	31151	6496	4.8	1			1.0000E-09
9	11.289		0.0000	0.0000%	10480	1936	5.4	2			1.0000E-09
10	11.389		0.0000	0.0000%	14031	2612	5.4	2			1.0000E-09
					102222	24227	4.3	2	0	-.6460	4.2546E-04

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	1.7879	1.7857%	3832	422	4.2 1	1	0.0001	1.6633E-04
[illegible]		1.0000	1.0000%	3192	748	5.2 1			1.0000E-04
[illegible]	[illegible]	[illegible]	1.9273%	23866	3750	3.3 1	1	0.0001	1.1951E-04
[illegible]	[illegible]	11.8934	11.8092%	36793	8401	4.4 1	1	0.0011	5.2710E-04
[illegible]		1.0000	1.0000%	3645	560	5.3 1			1.0000E-04
[illegible]		1.0000	1.0000%	4402	668	5.3 1			1.0000E-04

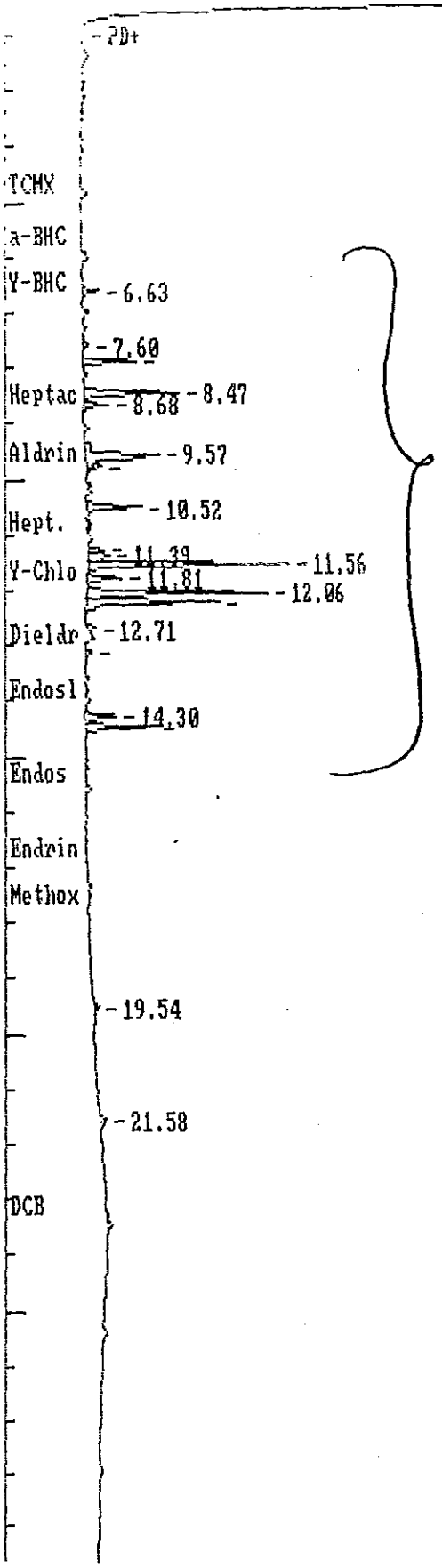
TOTAL AMOUNT = 193.7551

000308

#	NUMBER	GROUP AMOUNT	GROUP PERCENT

Chlordanes 0.5µg/ml

Col #035



Chlordanes
0.5µg/ml

EXTERNAL STANDARD TABLE

Starting Peak Width: [illegible] Threshold: [illegible] Threshold: [illegible]

Starting Delay: 0.00 Ending retention time: [illegible].00
Data reject: 500 One sample per 1.002 sec.
Amount injected: 1.00 Dilution factor: 1.00
Sample Weight: 1.00000

PK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	6.212		0.0000	0.0000%	3108	622	5.0	1			1.0000E-09
2	6.697		0.0000	0.0000%	4369	877	5.0	1			1.0000E-09
3	7.381		0.0000	0.0000%	12222	2665	4.6	1			1.0000E-09
4	8.433	Y-BHC	19.5937	10.9201%	32429	7207	4.5	3	0	1.202	6.0420E-04
5	8.567		0.0000	0.0000%	4537	1006	4.5	4			1.0000E-09
6	8.751		0.0000	0.0000%	3960	909	4.4	2			1.0000E-09
7	8.901	Heptachlor	25.6776	14.3108%	47340	11451	4.1	2	0	0	5.4241E-04
8	9.569	Aldrin	11.4494	6.3811%	22715	4754	4.8	2	0	-1.206	5.0405E-04
9	9.803		0.0000	0.0000%	5921	1075	5.5	2			1.0000E-09
10	10.270		0.0000	0.0000%	1673	457	3.7	1			1.0000E-09
11	10.638		0.0000	0.0000%	27667	6591	4.2	2			1.0000E-09
12	10.755		0.0000	0.0000%	39707	8925	4.4	2			1.0000E-09
13	11.022	B-BHC	5.4707	3.0490%	7196	1048	6.9	2	0	.3039	7.6020E-04
14	11.857		0.0000	0.0000%	2488	485	5.1	2			1.0000E-09
15	12.007	Hept. epox.	4.7014	2.6202%	9400	1704	5.5	2	0	-.4155	5.0015E-04
16	12.325		0.0000	0.0000%	26879	3521	7.6	1			1.0000E-09
17	12.692		0.0000	0.0000%	22781	5349	4.3	2			1.0000E-09
18	12.826	Endosulf I	4.6971	2.6178%	9389	1663	5.6	2	0	-.2597	5.0026E-04
19	13.160	Y-Chlordane	42.9554	23.9401%	95230	24920	3.8	2	0	.1270	4.5107E-04
20	13.427	a-Chlordane	36.2998	20.2308%	80691	20537	3.9	2	0	.1245	4.4986E-04
21	13.544		0.0001	0.0000%	62374	15534	4.0	2			1.0000E-09
22	13.727	4,4 DDE	4.1690	2.3235%	9124	2281	4.0	2	0	-.6045	4.5691E-04
23	14.178	Dieldrin	10.4068	5.8000%	20974	4312	4.9	1	0	.4733	4.9617E-04
24	14.429		0.0000	0.0000%	3370	755	4.5	1			1.0000E-09
25	14.779	Endrin	1.0992	0.6126%	1603	359	4.5	1	0	-.5618	6.8564E-04
26	14.963		0.0000	0.0000%	2163	524	4.1	1			1.0000E-09
27	15.548		0.0000	0.0000%	3948	859	4.6	1			1.0000E-09
28	15.798		0.0000	0.0000%	36228	8572	4.2	1			1.0000E-09
29	16.667	4'4-DDD	11.0451	6.1557%	14114	3308	4.3	1	0	1.009	7.8258E-04
30	19.021	Endos sulf	1.8628	1.0382%	2559	509	5.0	1	0	.9304	7.2807E-04
31	20.875		0.0000	0.0000%	3354	579	5.8	1			1.0000E-09

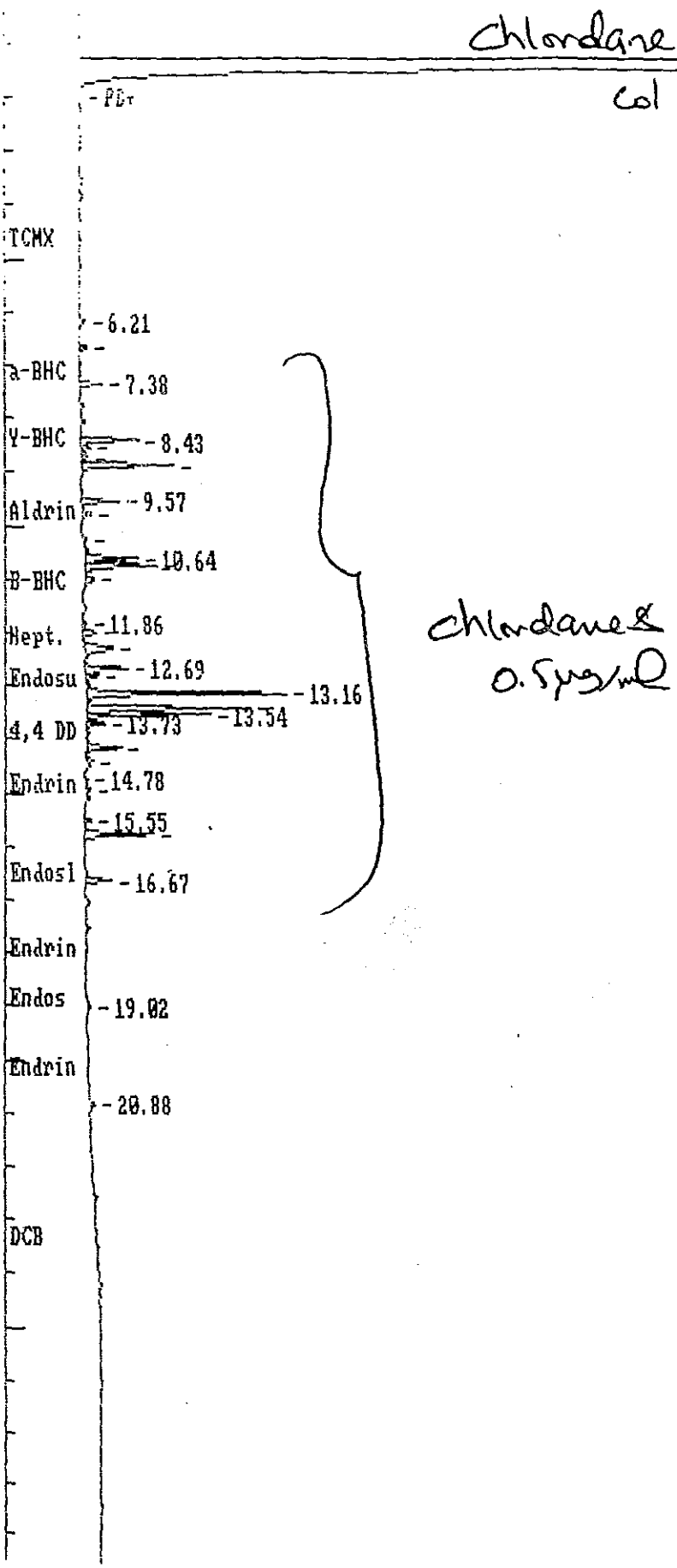
TOTAL AMOUNT = 179.4283

GROUP NUMBER GROUP AMOUNT GROUP PERCENT

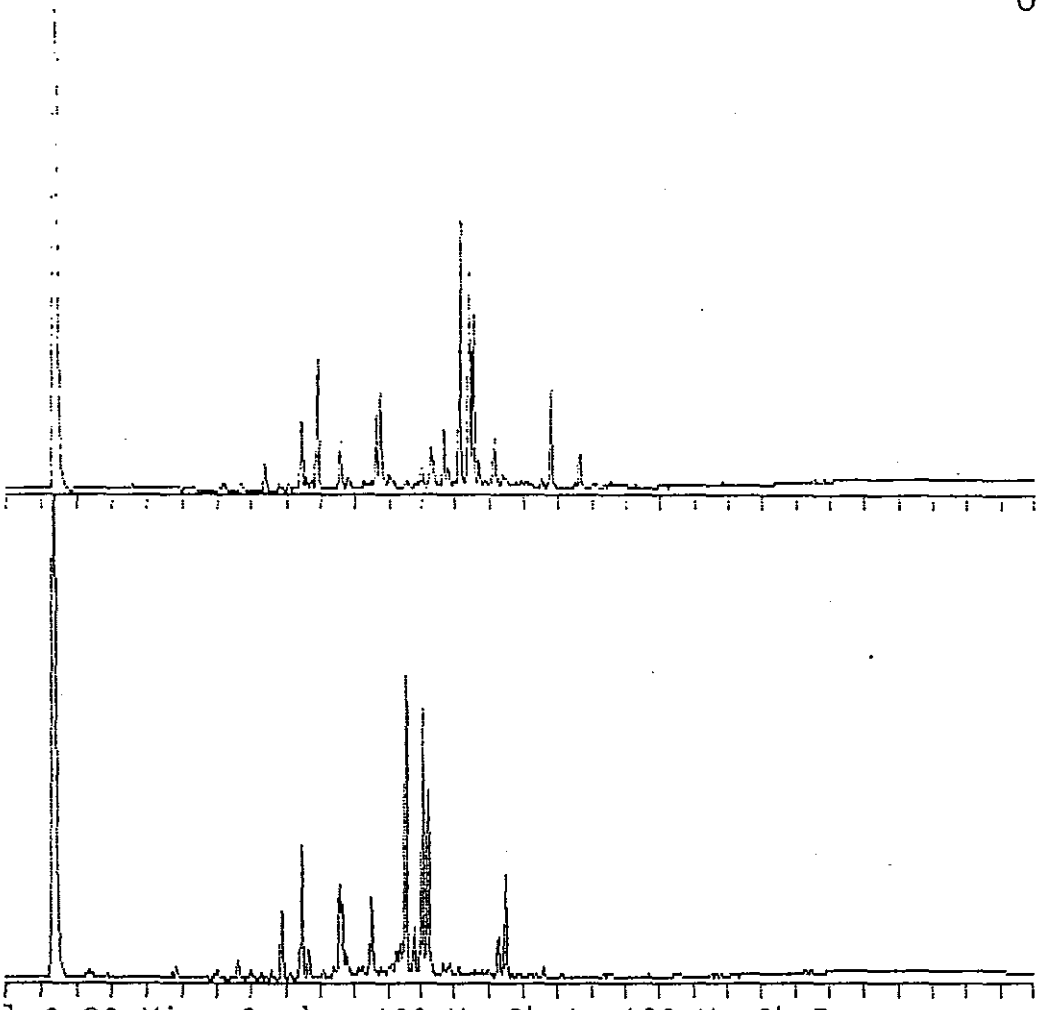
000311

Chlordanes 0.5ng/ml

Col # DB1701



Chlordanes 0.5ng/ml



[nterface 2] 0-30 Min Scale: 100 Mv Ch.A, 100 Mv Ch.B
CHLORDANE Processed: 11-08-1994 19:36:48, segment 5, cycle 5
R W DATA SAVED IN FILE F:NV09F5.PTS Second Channel Stored in F:0V09F5.PTS

EXTERNAL STANDARD TABLE

********** 11-08-1994 19:37:34 Version 5.1.5 **********
* Sample Name: CHLORDANE 1.0 UG/ML Data File: F:NV09F5 *
* Date: 11-08-1994 19:06:21 Method: M:APES-G 11-08-1994 12:17:09 # 345 *
* Interface: 2 Cycle#: 5 Operator JJK Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 10 Area Threshold: 1000 *
****

Starting Delay: 0.00 Ending retention time: 30.00
ea reject: 1000 One sample per 1.002 sec.
ount injected: 1.00 Dilution factor: 1.00
Sample Weight: 1.00000

PK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
	4.843		0.0000	0.0000%	10912	1948	5.6	1			1.0000E-09
2	6.029		0.0000	0.0000%	13206	1551	8.5	1			1.0000E-09
3	6.630		0.0000	0.0000%	17881	3854	4.6	1			1.0000E-09
4	6.997	d-BHC	4.2657	0.9409%	5104	1192	4.3	1	0	-.7109	8.3572E-04
	7.298		0.0000	0.0000%	5624	1135	5.0	1			1.0000E-09
	7.598		0.0000	0.0000%	9681	1652	5.9	1			1.0000E-09
7	7.899		0.0001	0.0000%	61864	14159	4.4	2			1.0000E-09
8	8.150		0.0000	0.0000%	7074	1318	5.4	2			1.0000E-09
9	8.467	Heptachlor	64.8635	14.3069%	122191	26869	4.5	2	0	0	5.3084E-04
10	8.684		0.0000	0.0000%	29003	6002	4.8	2			1.0000E-09
											1.0000E-09

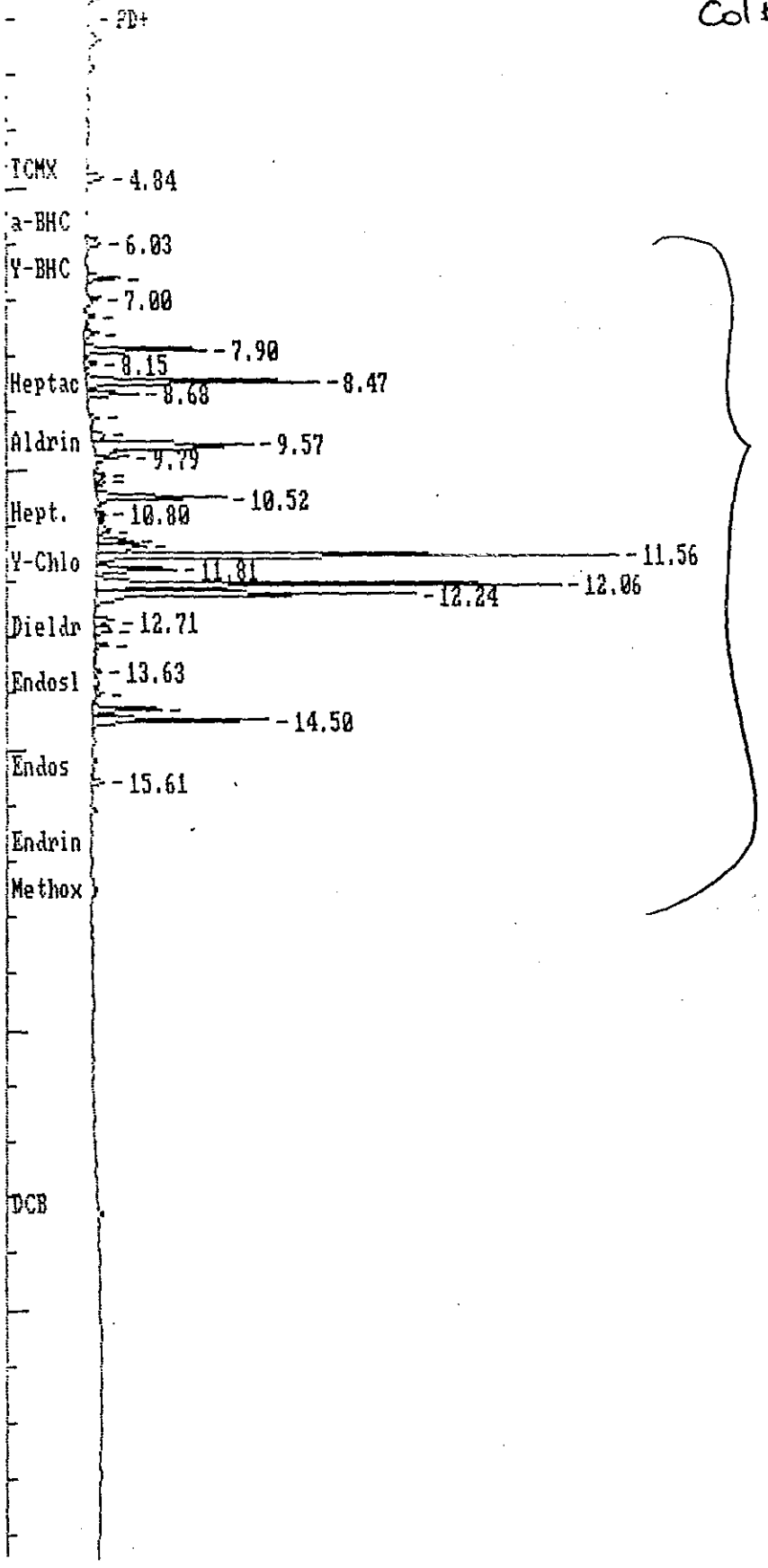
		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]				[illegible]
		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]				[illegible]
		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]				[illegible]
	[illegible]	1.7361	0.3740%	3571	977	3.7	1	1	.8122	8.3222E-04
		1.0000	0.2155%	11443	1601	7.1	2			1.0000E-09
		0.0000	0.0000%	25297	4322	5.8	2			1.0000E-09
		0.0000	0.0000%	31179	5893	5.3	2			1.0000E-09
	[illegible]	[illegible]	[illegible]	252515	61229	4.1	2	0	-.6456	4.2545E-04
	[illegible]	21.3765	4.7150%	44359	9201	4.8	2	1	-.9932	4.8189E-04
		97.4862	21.5025%	230360	54501	4.2	2	0	1	4.2319E-04
		0.0000	0.0000%	[illegible]	[illegible]	[illegible]	2			1.0000E-09
	12.709	Dieldrin	5.4544	1.2031%	11691	2380	4.9	2	0	-.5228	4.6653E-04
	12.892	4,4-DDE	6.1160	1.3494%	15828	2025	7.8	2	0	-.1293	3.8653E-04
	13.160		0.0000	0.0000%	7102	1718	4.1	1			1.0000E-09
	13.627	Endosulf II	1.7179	0.3789%	3871	915	4.2	1	0	-.9708	4.4381E-04
	14.011		0.0000	0.0000%	5163	1130	4.6	1			1.0000E-09
	14.295	4'4-DDD	26.0165	5.7384%	42406	8035	5.3	2	0	.1169	6.1352E-04
	14.496	Endrin ald	44.5444	9.8251%	84508	20416	4.1	2	0	.5793	5.2710E-04
	15.615	DDT	6.0403	1.3323%	7388	1534	4.8	1	0	.6458	8.1755E-04

TOTAL AMOUNT = 453.3723

GROUP NUMBER	GROUP AMOUNT	GROUP PERCENT

000314

chlordane & 1ppm
Col #035



chlordane & 1ppm

EXTERNAL STANDARD TABLE

Version 5.1.5

Data File: F:\VOA\

Ending retention time: 30.00

One sample per 1.002 mL

Dilution factor: 1.00

Amount injected: 1.00

Sample Weight: 1.00000

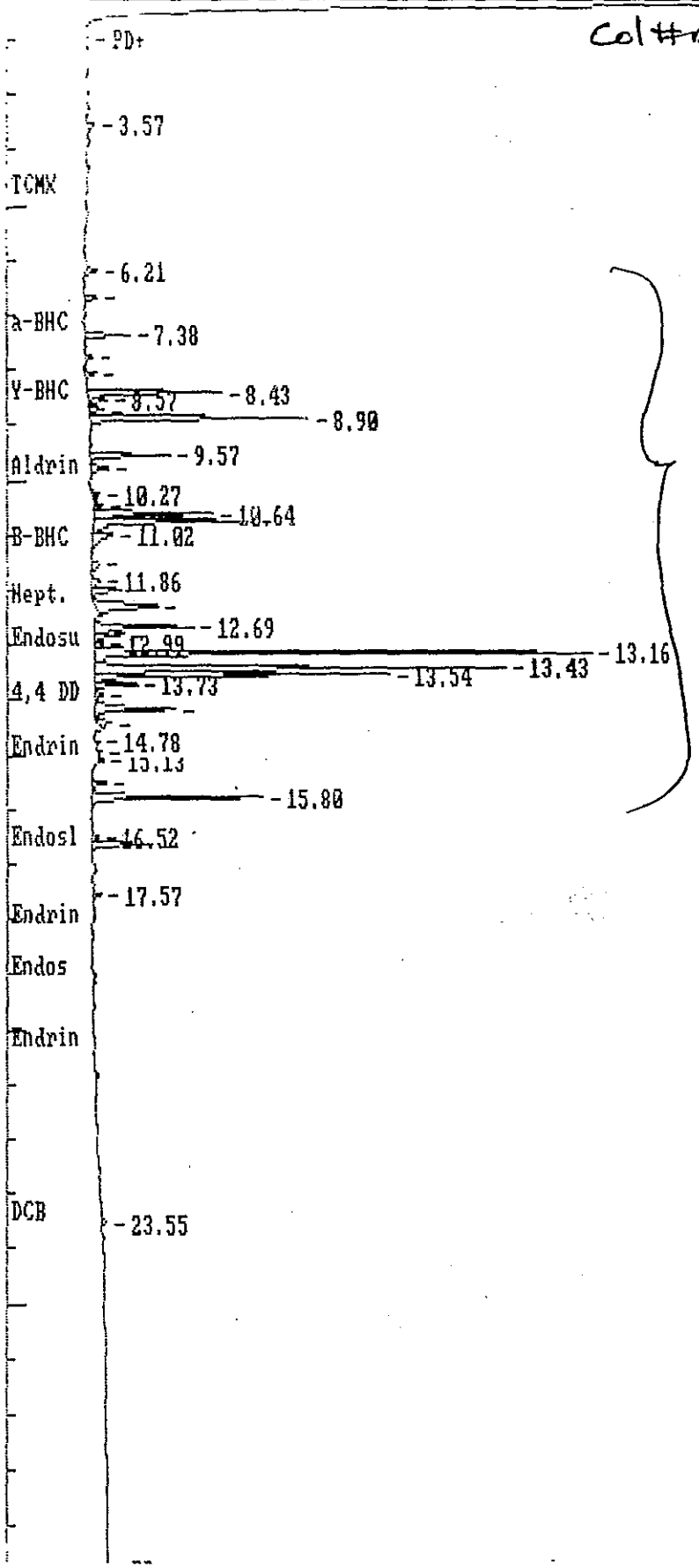
MM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
	3.574		0.0000	0.0000%	4864	819	5.9	1			1.0000E-09
	6.212		0.0000	0.0000%	7020	1317	5.3	1			1.0000E-09
	6.697		0.0000	0.0000%	8531	1601	5.3	1			1.0000E-09
	7.381		0.0000	0.0000%	23458	5406	4.3	1			1.0000E-09
	7.782		0.0000	0.0000%	4493	845	5.3	1			1.0000E-09
	8.083		0.0000	0.0000%	6627	1346	4.9	1			1.0000E-09
	8.433	Y-BHC	41.2987	10.5008%	68353	15910	4.3	3	0	1.202	6.0420E-04
	8.567		0.0000	0.0000%	9196	2078	4.4	4			1.0000E-09
	8.751		0.0000	0.0000%	7964	1813	4.4	2			1.0000E-09
	8.901	Heptachlor	55.6712	14.1553%	102637	26187	3.9	2	0	0	5.4241E-04
	9.569	Aldrin	21.8087	5.5452%	43267	9531	4.5	2	0	-1.206	5.0405E-04
	9.803		0.0000	0.0000%	12145	2219	5.5	2			1.0000E-09
	10.270		0.0000	0.0000%	3612	971	3.7	1			1.0000E-09
	10.488		0.0000	0.0000%	4988	1141	4.4	2			1.0000E-09
	10.638		0.0001	0.0000%	60604	14305	4.2	2			1.0000E-09
	10.755		0.0001	0.0000%	87070	19046	4.6	2			1.0000E-09
	11.022	B-BHC	16.9568	4.3115%	22306	2603	8.6	2	0	.3039	7.6020E-04
	11.556	d-BHC	8.8209	2.2429%	7618	1016	7.5	1	0	-.5747	1.1579E-03
	11.857		0.0000	0.0000%	5734	1055	5.4	2			1.0000E-09
	12.007	Hept. epox.	9.7081	2.4684%	19410	3615	5.4	2	0	-.4155	5.0015E-04
	12.325		0.0001	0.0000%	54905	7259	7.6	1			1.0000E-09
	12.692		0.0000	0.0000%	47696	11793	4.0	2			1.0000E-09
	12.826	Endosulf I	10.5403	2.6800%	21070	3608	5.8	2	0	-.2597	5.0026E-04
	12.993		0.0000	0.0000%	6353	1118	5.7	2			1.0000E-09
	13.160	Y-Chlordane	100.7480	25.6167%	223353	59025	3.8	2	0	.1270	4.5107E-04
	13.427	a-Chlordane	84.6836	21.5321%	188242	49076	3.8	2	0	.1245	4.4986E-04
	13.544		0.0001	0.0000%	137289	35424	3.9	2			1.0000E-09
	13.727	4,4 DDE	9.6266	2.4477%	21069	5059	4.2	2	0	-.6045	4.5691E-04
	13.928		0.0000	0.0000%	5664	1081	5.2	2			1.0000E-09
	14.178	Dieldrin	23.9406	6.0873%	48251	9572	5.0	2	0	.4733	4.9617E-04
	14.429		0.0000	0.0000%	6782	1522	4.5	1			1.0000E-09
	14.779		0.0000	0.0000%	3132	693	4.5	1			1.0000E-09
	14.946	Endrin	1.5465	0.3932%	2256	714	3.2	1	0	.5617	6.8564E-04
	15.130		0.0000	0.0000%	2992	904	3.3	1			1.0000E-09
	15.548		0.0000	0.0000%	8153	1779	4.6	2			1.0000E-09
	15.798		0.0001	0.0000%	83134	20299	4.1	2			1.0000E-09
	16.516	4'4-DDD	3.5480	0.9021%	4534	872	5.2	2	0	0	7.8258E-04
	16.667		0.0000	0.0000%	30989	7224	4.3	2			1.0000E-09
	17.568	Endrin ald	3.2693	0.8313%	4534	975	4.7	1	0	-1.728	7.2114E-04
	23.547	DCB	1.1216	0.2852%	2555	546	4.7	1	0	.9305	4.3897E-04

TOTAL AMOUNT = 393.2895

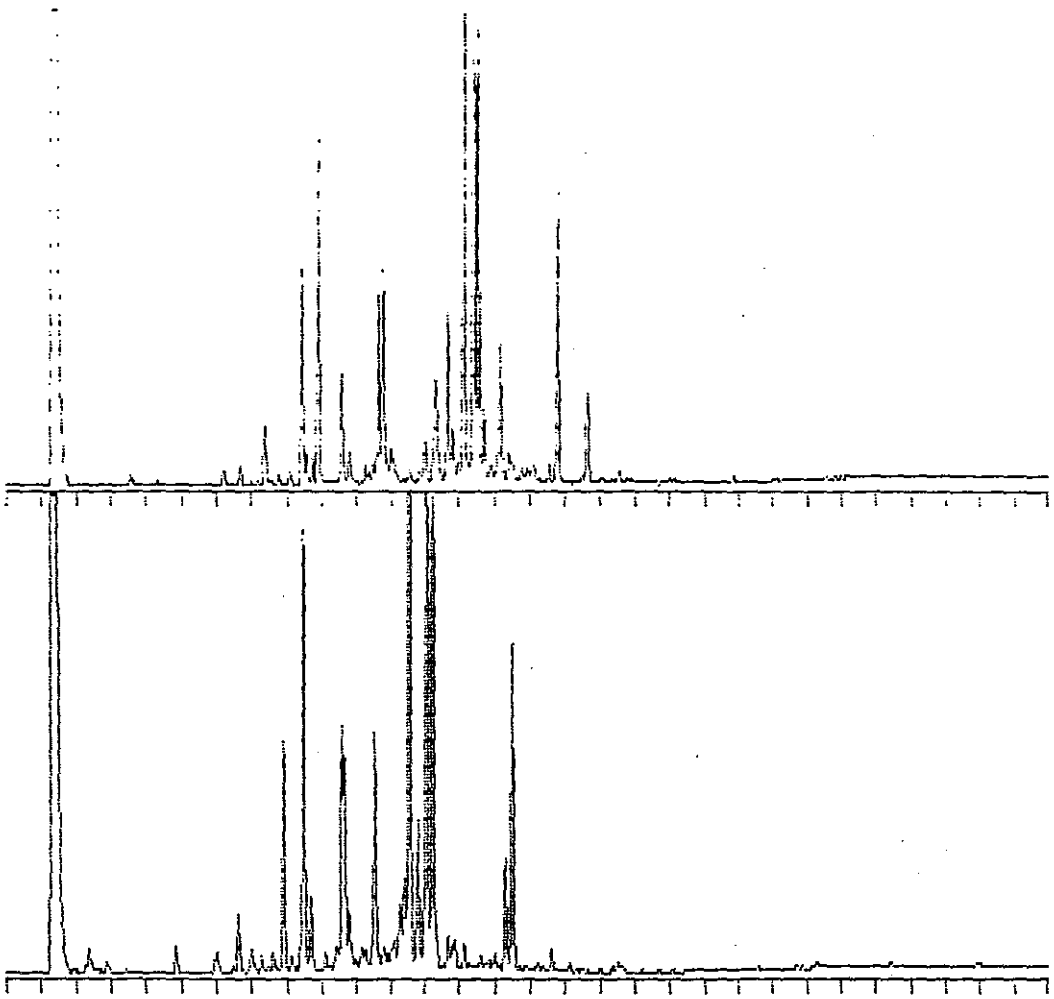
GROUP NUMBER GROUP AMOUNT GROUP PERCENT

Chlordanes 1ng/ml

Col #DB1701



chlordanes 1ng/ml



[Interface 2] 0-30 Min Scale: 100 Mv Ch.A, 100 Mv Ch.B
CHLORDANE Processed: 11-08-1994 20:11:18, segment 6, cycle 6
[ ] DATA SAVED IN FILE F:NV09F6.PTS Second Channel Stored in F:0V09F6.PTS

EXTERNAL STANDARD TABLE

********** 11-08-1994 20:12:04 Version 5.1.5 **********

Sample Name: CHLORDANE 2.5 UG/ML Data File: F:NV09F6

Date: 11-08-1994 19:40:51 Method: M:APES-G 11-08-1994 12:17:09 # 345

Interface: 2 Cycle#: 6 Operator JJK Channel#: 0 Vial#: N.A.

Starting Peak Width: 10 Threshold: 10 Area Threshold: 1000

Starting Delay: 0.00 Ending retention time: 30.00

Area reject: 1000 One sample per 1.002 sec.

Amount injected: 1.00 Dilution factor: 1.00

Sample Weight: 1.00000

PK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	2.388		0.0000	0.0000%	34001	4213	8.1	1			1.0000E-09
2	2.872		0.0000	0.0000%	11817	1992	5.9	1			1.0000E-09
3	4.843		0.0000	0.0000%	31697	5707	5.6	1			1.0000E-09
4	6.029		0.0000	0.0000%	33159	3947	8.4	1			1.0000E-09
5	6.630		0.0001	0.0000%	53182	11537	4.6	1			1.0000E-09
6	6.997	d-BHC	25.3291	1.7952%	30308	4490	6.8	2	0	-.7109	8.3572E-04
7	7.298		0.0000	0.0000%	13178	2793	4.7	2			1.0000E-09
8	7.598		0.0000	0.0000%	18884	3863	4.9	1			1.0000E-09
9	7.899		0.0002	0.0000%	185457	47209	3.9	2			1.0000E-09
10	8.150		0.0000	0.0000%	13429	2716	4.9	2			1.0000E-09
			[illegible]	14.4915%	385182	90322	4.3	2	0	0	5.3084E-04

[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]				[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			[illegible]	[illegible]
[illegible]		3.3031	2.3333%	8377	1938	4.3	2			[illegible]
[illegible]		3.3333	3.3000%	17213	3640	4.7	2			[illegible]
[illegible]		3.3333	3.3333%	14586	3221	4.5	2			[illegible]
[illegible]		3.3333	3.3333%	134313	47432	4.2	1			[illegible]
[illegible]	Heptachlor epox	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]		3.3333	3.3333%	12575	3174	4.0	2	0	[illegible]	[illegible]
[illegible]		3.3333	3.3333%	[illegible]	3221	4.5	2			[illegible]
[illegible]		0.0000	0.0000%	39645	4936	8.0	2			[illegible]
[illegible]		3.3333	3.3333%	66438	11741	5.7	2			[illegible]
[illegible]		3.3333	3.3333%	40875	17922	5.1	2			[illegible]
[illegible]	[illegible]-Chlordane	[illegible]	[illegible]	822461	199030	4.2	2	1	[illegible]	[illegible]
[illegible]	Endosulfan I	63.8825	4.5276%	132566	30108	4.4	2	0	[illegible]	[illegible]
[illegible]	a-Chlordane	307.8582	21.8192%	727469	174037	4.2	2	0	0	[illegible]
[illegible]		0.0005	0.0000%	507467	116154	4.4	2			1.0000E-09
[illegible]	Dieldrin	13.9700	0.9901%	29944	6292	4.8	2	0	-.5228	4.6653E-04
[illegible]	4,4-DDE	15.5163	1.0997%	40143	5235	7.7	2	0	-.1293	3.8653E-04
[illegible]		0.0000	0.0000%	13680	4672	4.0	1			1.0000E-09
[illegible]	Endrin	1.7253	0.1223%	2813	601	4.7	1	0	-.8079	6.1330E-04
33	13.627	0.0000	0.0000%	9832	2334	4.2	1			1.0000E-09
[illegible]	13.861 Endosulf II	6.0804	0.4309%	13700	1756	7.8	2	0	.7281	4.4381E-04
[illegible]	14.011	0.0000	0.0000%	17274	3163	5.5	2			1.0000E-09
36	14.295 4'4-DDD	70.3981	4.9894%	114745	22851	5.0	2	0	.1169	6.1352E-04
[illegible]	14.496 Endrin ald	140.3253	9.9454%	266221	66974	4.0	2	0	.5793	5.2710E-04
[illegible]	14.896	0.0000	0.0000%	5019	827	6.1	1			1.0000E-09
39	15.230 Endos sulf	4.7234	0.3348%	7750	1593	4.9	1	0	-.3278	6.0947E-04
40	15.615 DDT	15.3114	1.0852%	18728	4196	4.5	1	0	.6458	8.1755E-04
[illegible]	16.132	0.0000	0.0000%	6908	1475	4.7	1			1.0000E-09
42	17.385	0.0000	0.0000%	3345	707	4.7	1			1.0000E-09
43	17.519 Methoxychlor	3.3502	0.2374%	3138	873	3.6	1	0	.2868	1.0675E-03
[illegible]	23.313 DCB	2.0471	0.1451%	5803	1226	4.7	1	0	.9399	3.5275E-04

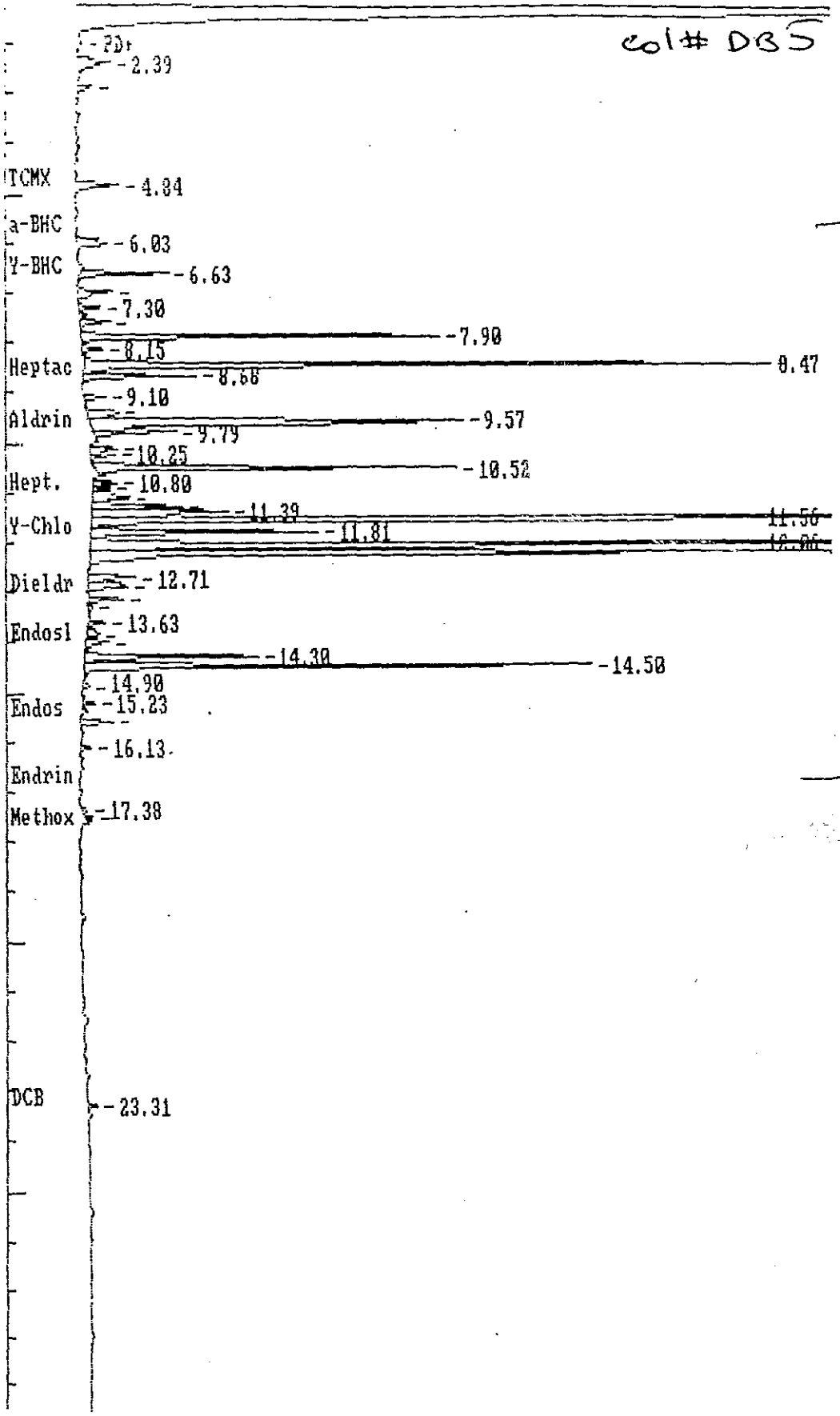
TOTAL AMOUNT = 1410.9526

[illegible]ROUP NUMBER GROUP AMOUNT GROUP PERCENT

000319

Chlordanes 2.5pg/ul

col# DB5



Chlordanes 2-5pg/ul

EXTERNAL STANDARDS TABLE

Data File:

Channel: 1

Ending Delay: 0.00 Ending retention time:

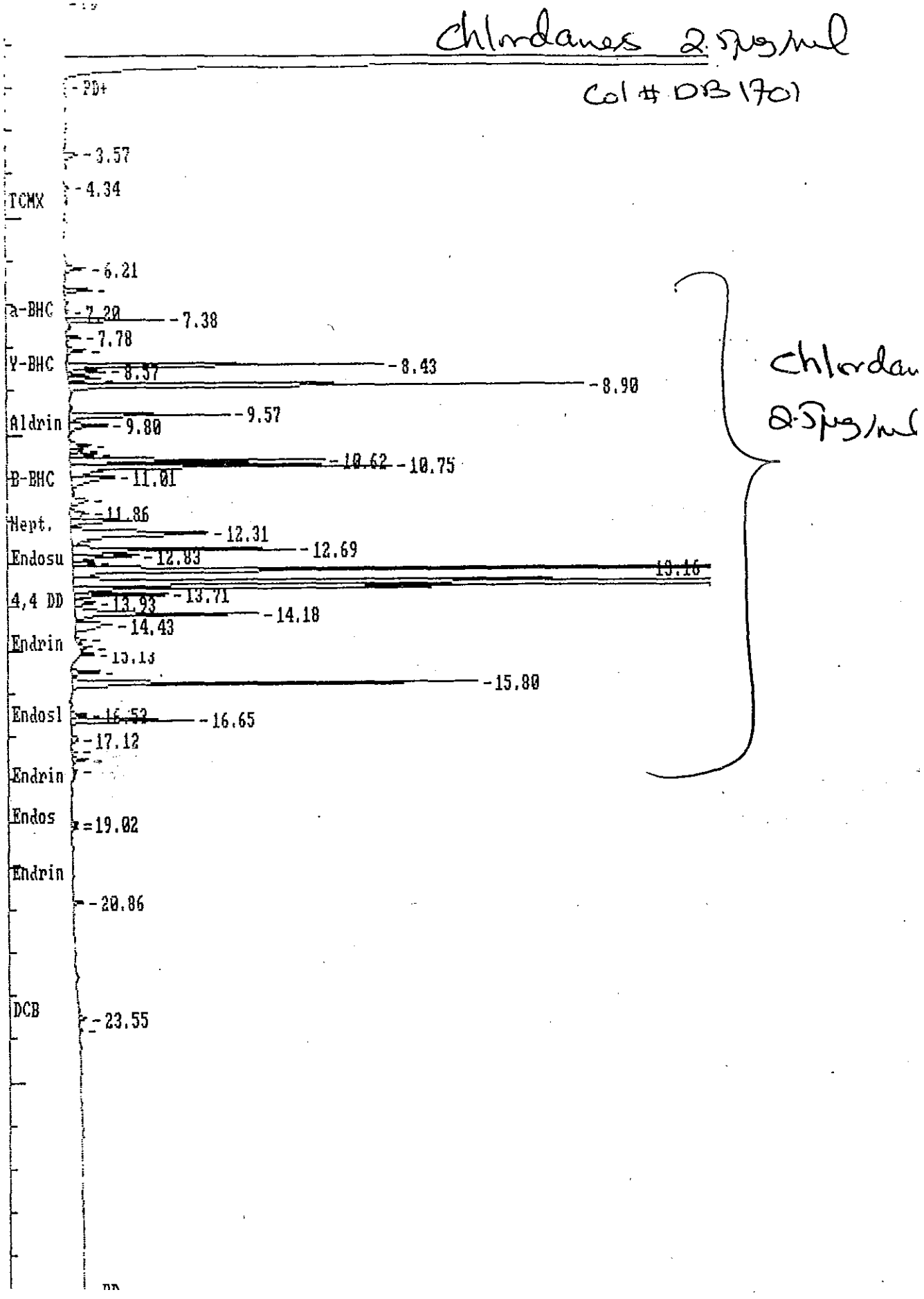
Inject: 500 One sample per 1.000 sec.

Amount injected: 1.00 Dilution factor: 1.00

Sample Weight: 1.00000

#	RET TIME	PEAK NAME	CONCENTRATION in PPB	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	3.574		0.0000	0.0000%	13414	2237	6.0	1			1.0000E-09
2	4.342		0.0000	0.0000%	3904	733	5.3	1			1.0000E-09
3	6.212		0.0000	0.0000%	15827	3253	4.9	1			1.0000E-09
4	6.697		0.0000	0.0000%	21575	4387	4.9	1			1.0000E-09
5	7.198	a-BHC	1.6034	0.1383%	2328	514	4.5	1	0	1.411	6.8884E-04
6	7.381		0.0001	0.0000%	63534	15328	4.1	1			1.0000E-09
7	7.782		0.0000	0.0000%	11473	2332	4.9	1			1.0000E-09
8	8.083		0.0000	0.0000%	13115	2969	4.4	1			1.0000E-09
9	8.433	Y-BHC	117.7391	10.1537%	194868	49450	3.9	3	0	1.202	6.0420E-04
10	8.567		0.0000	0.0000%	24854	5689	4.4	4			1.0000E-09
11	8.751		0.0000	0.0000%	21755	5025	4.3	2			1.0000E-09
12	8.901	Heptachlor	162.8923	14.0477%	300312	79587	3.8	2	0	0	5.4241E-04
13	9.569	Aldrin	55.0895	4.7509%	109293	24945	4.4	2	0	-1.206	5.0405E-04
14	9.803		0.0000	0.0000%	36745	6108	6.0	2			1.0000E-09
15	10.270		0.0000	0.0000%	16021	3417	4.7	2			1.0000E-09
16	10.371		0.0000	0.0000%	10343	2288	4.5	2			1.0000E-09
17	10.488		0.0000	0.0000%	22445	4317	5.2	2			1.0000E-09
18	10.621		0.0002	0.0000%	158360	39865	4.0	2			1.0000E-09
19	10.755		0.0002	0.0000%	231255	50136	4.6	2			1.0000E-09
20	11.005	B-BHC	43.8264	3.7796%	57651	6953	8.3	2	0	.1519	7.6020E-04
21	11.556	d-BHC	22.8447	1.9701%	19730	2714	7.3	1	0	-.5747	1.1579E-03
22	11.857		0.0000	0.0000%	17615	3009	5.9	2			1.0000E-09
23	12.007	Hept. epox.	26.1314	2.2536%	52247	9716	5.4	2	0	-.4155	5.0015E-04
24	12.308		0.0002	0.0000%	179662	21280	8.4	2			1.0000E-09
25	12.692		0.0001	0.0000%	140366	34992	4.0	2			1.0000E-09
26	12.826	Endosulf I	30.9654	2.6704%	61899	10393	6.0	2	0	-.2597	5.0026E-04
27	12.993		0.0000	0.0000%	19163	3558	5.4	2			1.0000E-09
28	13.160	Y-Chlordane	306.8662	26.4639%	680306	181328	3.8	2	0	.1270	4.5107E-04
29	13.427	a-Chlordane	254.9880	21.9900%	566810	149020	3.8	2	0	.1245	4.4986E-04
30	13.544		0.0004	0.0000%	386624	103504	3.7	2			1.0000E-09
31	13.711	4,4 DDE	27.1676	2.3429%	59459	14620	4.1	2	0	-.7255	4.5691E-04
32	13.928		0.0000	0.0000%	20470	3205	6.4	2			1.0000E-09
33	14.178	Dieldrin	69.2142	5.9690%	139498	28671	4.9	2	0	.4733	4.9617E-04
34	14.429		0.0000	0.0000%	42826	5742	7.5	2			1.0000E-09
35	14.779		0.0000	0.0000%	8129	1751	4.6	1			1.0000E-09
36	14.946	Endrin	4.1695	0.3596%	6081	1940	3.1	1	0	.5617	6.8564E-04
37	15.130		0.0000	0.0000%	7591	2212	3.4	1			1.0000E-09
38	15.531		0.0000	0.0000%	20277	4505	4.5	2			1.0000E-09
39	15.798		0.0002	0.0000%	243947	62859	3.9	2			1.0000E-09
40	16.533	4'4-DDD	10.2706	0.8857%	13124	2555	5.1	2	0	.1999	7.8258E-04
41	16.650		0.0001	0.0000%	79717	19107	4.2	2			1.0000E-09
42	17.117	4,4 DDT	10.7755	0.9293%	9168	1124	8.2	1	0	.5394	1.1754E-03
43	17.385		0.0000	0.0000%	4009	979	4.1	2			1.0000E-09
44	17.568		0.0000	0.0000%	12990	2600	5.0	2			1.0000E-09

GROUP AMOUNT GROUP PERCENT


Chlordanes 2.5pg/ml
Col # DB1701
PD+
3.57
4.34
TCMX
6.21
a-BHC
7.20
7.38
7.78
Y-BHC
8.43
8.57
8.90
Aldrin
9.57
9.80
10.62
10.75
B-BHC
11.01
11.86
Hept.
12.31
Endosu
12.69
12.83
13.16
4,4 DD
13.71
13.93
14.18
14.43
Endrin
15.13
15.80
Endosl
16.53
16.65
17.12
Endrin
Endos
19.02
Endrin
20.86
DCB
23.55
Chlordan
2.5pg/ml

000323

1D

EPA SAMPLE NO.

PESTICIDE ORGANICS ANALYSIS DATA SHEET

FMETC # 1850.1
Bldg 697
MRI-2931776

Lab Name: EMSL Contract:

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

Matrix: (soil/water) water Lab Sample ID: 95-24196

Sample wt/vol: 990 (g/mL) mL Lab File ID: E:JU06E64

% Moisture N/A decanted: (Y/N) N Date Received:

Extraction: (SepF/Cont/Sonc) Cont Date Extracted: 06/01/95

Concentrated Extract Volume: 10 (ml) Date Analyzed: 06/08/95

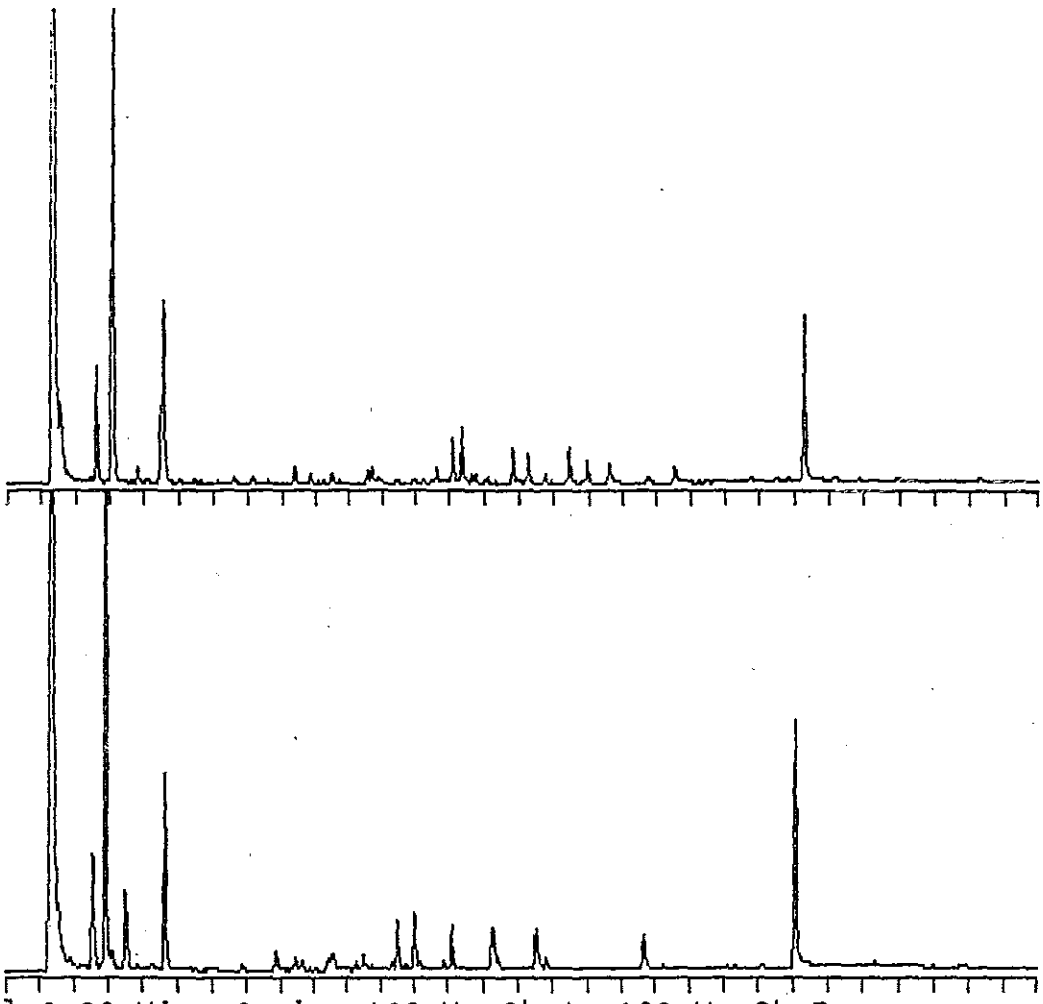
Injection Volume: 1 (uL) Dilution Factor 1

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
319-84-6	alpha-BHC	0.02	U
319-85-7	beta-BHC	0.04	U
319-86-8	delta-BHC	0.02	U
58-89-9	gamma-BHC (Lindane)	0.03	U
76-44-8	Heptachlor	0.02	U
309-00-2	Aldrin	0.04	U
1024-57-3	Heptachlor epoxide	0.04	U
959-98-8	Endosulfan I	0.02	U
60-57-1	Dieldrin	0.03	U
72-55-9	4,4'-DDE	0.04	U
72-20-8	Endrin	0.04	U
33213-65-9	Endosulfan II	0.04	U
72-54-8	4,4'-DDD	0.27	P
1031-07-8	Endosulfan sulfate	0.04	U
50-29-3	4,4'-DDT	0.22	P
7421-36-3	Endrin aldehyde	0.1	U
57-74-9	Chlordane	1.3	
8001-35-2	Toxaphene	1	U
12674-11-2	Aroclor-1016	1	U
11104-28-2	Aroclor-1221	1	U
11141-16-5	Aroclor-1232	1	U
53469-21-9	Aroclor-1242	1	U
12672-29-6	Aroclor-1248	1	U
11097-69-1	Aroclor-1254	1	U
11096-82-5	Aroclor-1260	1	U

PD-

000324



[Interface 1] 0-30 Min Scale: 100 Mv Ch.A, 100 Mv Ch.B
24196 P/P Processed: 06-08-1995 23:09:53, segment 6, cycle 64
RAW DATA SAVED IN FILE E:JU06E64.PTS Second Channel Stored in E:KU06E64.PTS

****** EXTERNAL STANDARD TABLE ******

********** 06-08-1995 23:10:02 Version 5.1.5 **********
* Sample Name: 24196 P/P Data File: E:JU06E64 *
* Date: 06-08-1995 22:39:35 Method: M:APES-G 03-08-1995 15:02:41 # 359 *
* Interface: 1 Cycle#: 64 Operator JJK Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 10 Area Threshold: 1000 *
****
* Instrument Type: Perkin-Elmer 8500 Column Type: RTx-5 30m,.35mm *
* Solvent Description: 1.0u df *
* Conditions: 180 for 4.0min then 4.0deg/min to 240, hold 30min *
* Detector 0: Detector 1: ECD *
* Misc. Information: *
****

Starting Delay: 0.00 Ending retention time: 30.00
Area reject: 1000 One sample per 1.002 sec.
Amount injected: 1.00 Dilution factor: 1.00
Sample Weight: 1.00000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	2.555		0.0001	0.0000%	105300	23536	4.5	1			1.0000E-09
			0.0006	0.0002%	587397	141379	4.2	3			1.0000E-09

5	3.891		0.0000	0.0000%	4411	888	5.0	2			1.0000E-09
6	4.342		0.0000	0.0000%	8506	1095	7.8	1			1.0000E-09
7	4.659	TCMX	90.6386	30.7877%	173761	40334	4.3	1	0	-.3571	5.2163E-04
8	6.897		0.0000	0.0000%	6755	1391	4.9	1			1.0000E-09
9	7.866		0.0000	0.0000%	21549	3773	5.7	1			1.0000E-09
10	8.450	Heptachlor	6.8220	2.3173%	15562	2544	6.1	2	0	-.1972	4.3837E-04
11	8.651		0.0000	0.0000%	11163	1917	5.8	2			1.0000E-09
12	9.436	Aldrin	5.9596	2.0243%	13298	2350	5.7	2	0	-.5281	4.4816E-04
13	9.619		0.0000	0.0000%	26105	2901	9.0	2			1.0000E-09
14	10.270		0.0000	0.0000%	7731	1651	4.7	1			1.0000E-09
15	10.504		0.0000	0.0000%	14455	2977	4.9	1			1.0000E-09
16	11.356		0.0000	0.0000%	6880	1433	4.8	2			1.0000E-09
17	11.523	Y-Chlordane	16.6429	5.6532%	43306	9849	4.4	2	0	-.8620	3.8431E-04
18	12.024	a-Chlordane	18.9552	6.4386%	49714	11383	4.4	1	0	-.2770	3.8129E-04
19	12.892	4,4'-DDE	3.2763	1.1129%	8341	1645	5.1	1	0	-.1293	3.9281E-04
20	13.126		0.0000	0.0000%	40806	8591	4.7	1			1.0000E-09
21	14.329	4'4-DDD	36.9463	12.5497%	62240	7550	8.2	1	0	.3508	5.9361E-04
22	15.514	DDT	38.0151	12.9128%	64261	8086	7.9	2	0	0	5.9158E-04
23	15.832		0.0000	0.0000%	11225	1855	6.1	2			1.0000E-09
24	18.654		0.0000	0.0000%	45107	7012	6.4	1			1.0000E-09
25	19.272		0.0000	0.0000%	4296	799	5.4	1			1.0000E-09
26	23.063	DCB	77.1420	26.2032%	263414	50445	5.2	1	0	-.1446	2.9285E-04

000325

Chlordane

$\frac{140100}{106400} \times \frac{1000 ng}{L} \times \frac{1}{990} \times \frac{10}{990} = 1.33 \frac{ng}{L}$

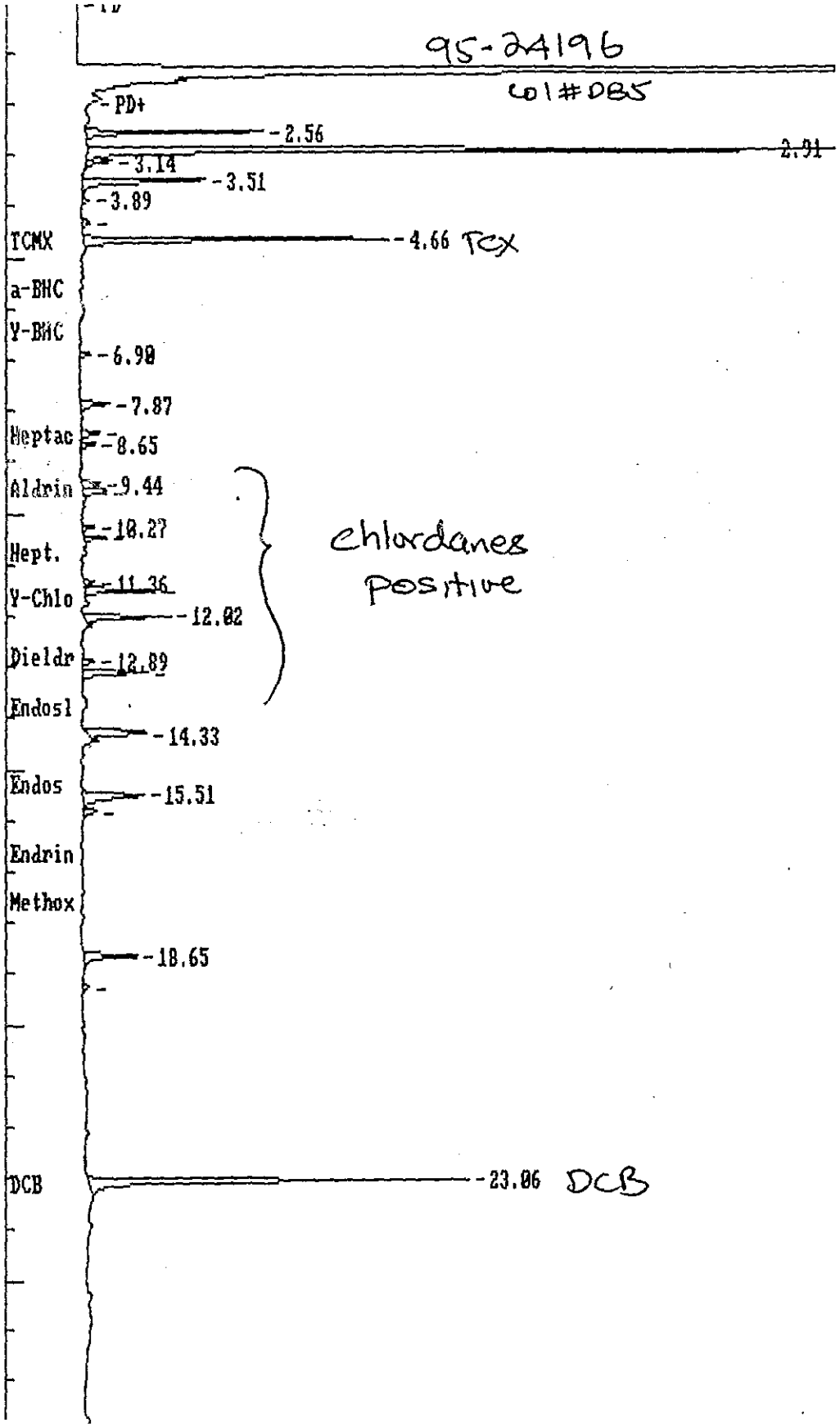
TOTAL AMOUNT = 294.3991

GROUP NUMBER	GROUP AMOUNT	GROUP PERCENT

note - Heptachlor confirms but is considered part of Chlordane

000326

Areas, times, and heights stored in: E:JU06E64.ATB
Data File = E:JU06E64.PTS Printed on 06-08-1995 at 23:10:15
Start time: 0.00 min. Stop time: 30.00 min. Offset: 1 mv.
Full Range: 100 millivolts



PD-

000327

EXTERNAL STANDARD TABLE

06-08-1995 23:10:28 Version 5.1.5

Sample Name: 24196 P/P Data File: E:KU06E64

Date: 06-08-1995 22:39:35 Method: M:BPES-G 03-31-1995 14:31:59 # 358

Interface: 1 Cycle#: 64 Operator JJK Channel#: 1 Vial#: N.A.

Starting Peak Width: 10 Threshold: 10 Area Threshold: 500

Instrument Type: Perkin-Elmer 8500 Column Type: RTx-5 30m,.35mm

Solvent Description: 1.0u df

Conditions: 180 for 4.0min then 4.0deg/min to 240, hold 30min

Detector 0: Detector 1: ECD

Misc. Information:

Starting Delay: 0.00 Ending retention time: 30.00

Area reject: 500 One sample per 1.002 sec.

Amount injected: 1.00 Dilution factor: 1.00

Sample Weight: 1.00000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	2.505		0.0000	0.0000%	4124	812	5.1	2			1.0000E-09
2	2.622		0.0001	0.0000%	106916	24174	4.4	2			1.0000E-09
3	3.073		0.0005	0.0001%	516531	133774	3.9	1			1.0000E-09
4	3.824		0.0000	0.0000%	13943	2915	4.8	1			1.0000E-09
5	4.108		0.0000	0.0000%	2739	493	5.6	1			1.0000E-09
6	4.576	TCMX	124.4715	29.7447%	223433	37902	5.9	1	0	-.3636	5.5709E-04
7	6.647		0.0000	0.0000%	8082	1007	8.0	1			1.0000E-09
8	7.148	a-BHC	4.1878	1.0007%	6661	1269	5.3	1	0	.9433	6.2867E-04
9	8.400	Y-BHC	9.9049	2.3670%	17139	3665	4.7	1	0	.8016	5.7793E-04
10	8.868	Heptachlor	4.4413	1.0613%	8450	1773	4.8	1	0	-.1879	5.2560E-04
11	9.519	Aldrin	5.8146	1.3895%	10839	2154	5.0	1	0	-1.724	5.3647E-04
12	10.588		0.0000	0.0000%	12668	2808	4.5	2			1.0000E-09
13	10.721		0.0000	0.0000%	17891	3156	5.7	2			1.0000E-09
14	10.922	B-BHC	4.7920	1.1451%	5951	1151	5.2	2	0	-.4566	8.0526E-04
15	12.258	Hept. epox.	1.3598	0.3249%	2619	475	5.5	1	0	1.662	5.1916E-04
16	12.642	Endosulf I	6.3574	1.5192%	12471	2792	4.5	1	0	-1.688	5.0978E-04
17	13.109	Y-Chlordane	18.6474	4.4561%	39353	9348	4.2	2	0	-.2541	4.7386E-04
18	13.377	a-Chlordane	24.2765	5.8013%	51513	10997	4.7	2	0	-.2490	4.7127E-04
19	13.661		0.0000	0.0000%	6741	1639	4.1	2	DDD	0.27	1.0000E-09
20	13.777	~~4,4 DDE~~ < PC	3.7941	0.9067%	7300	1446	5.0	2	0	-.1814	5.1975E-04
21	14.128	Dieldrin	2.4568	0.5871%	4668	836	5.6	1	26.80 x 10/990 =	.1183	5.2633E-04
22	14.846	Endrin	36.1724	8.6440%	34550	7500	4.6	1	0	.5656	1.0470E-03
23	15.264		0.0000	0.0000%	28410	5710	5.0	1	PPT 2.4x10/990 = 0.22		1.0000E-09
24	15.748		0.0000	0.0000%	8435	1815	4.6	1			1.0000E-09
25	16.449	~~EndosIFII~~ DDD 26.8	~~18.4524~~	4.4095%	34262	7330	4.7	1	0	-.1520	5.3856E-04
26	16.967	4,4 DDT 21.4 27.1	~~21.3782~~	5.1087%	24876	4689	5.3	1	0	-.1964	8.5939E-04
27	17.618	Endrin ald JJK	17.4408	4.1678%	24794	3994	6.2	1	0	-1.355	7.0343E-04
28	18.771	Endo sulf	5.4130	1.2935%	8057	1370	5.9	1	0	-.3546	6.7183E-04
29	19.556	Methoxychl	29.4500	7.0376%	18987	3170	6.0	1	0	1.385	1.5511E-03
30	21.760		0.0000	0.0000%	3437	604	5.7	1			1.0000E-09
31	23.296	DCB	79.6549	19.0349%	173613	34510	5.0	1	0 Chlordane	-.1431	4.5881E-04

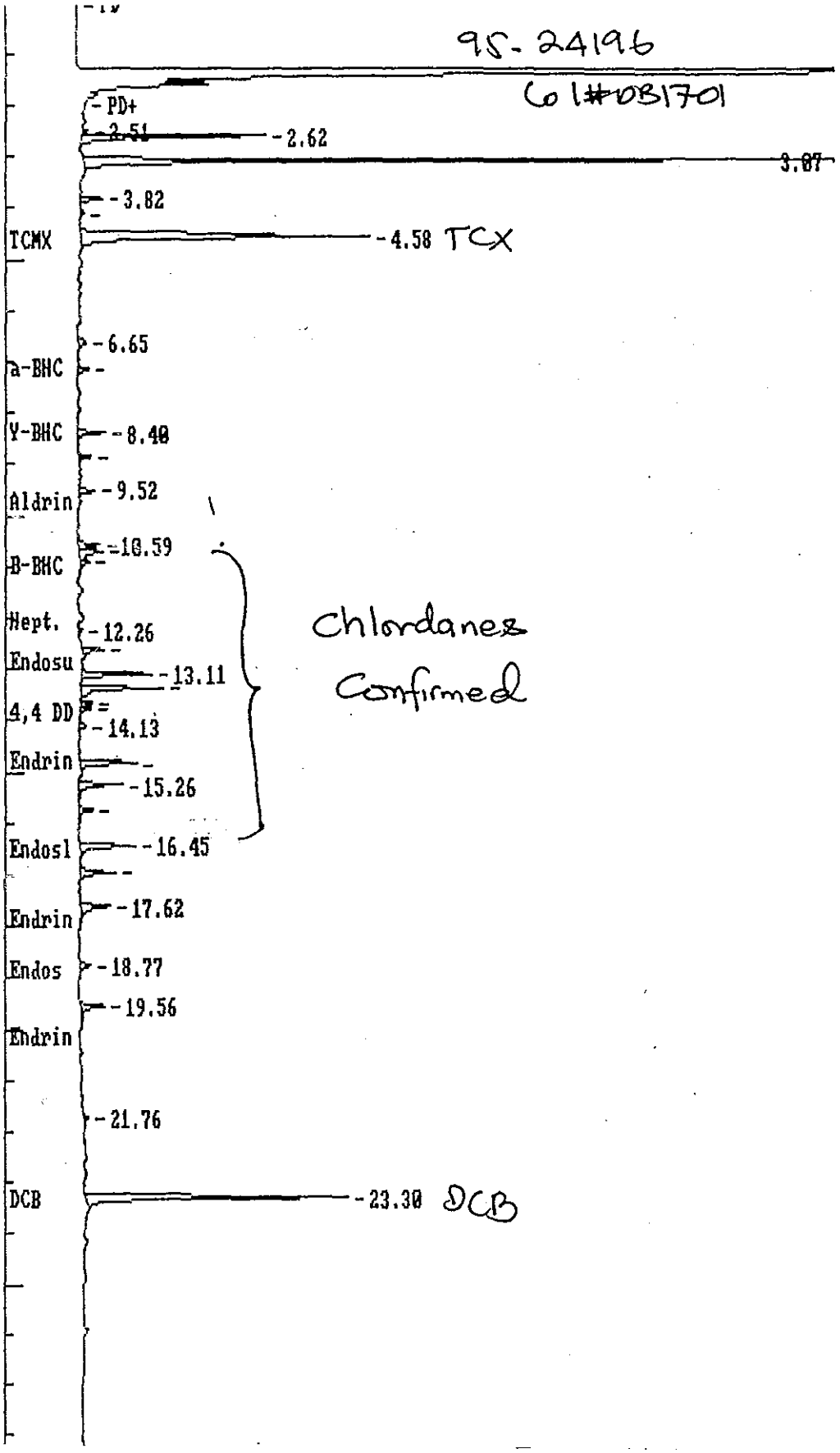
134400/806000 x 1000 x 10/990 = 1.69

TOTAL AMOUNT = 418.4668

GROUP NUMBER GROUP AMOUNT GROUP PERCENT

000328

Areas, times, and heights stored in: E:KU06E64.ATB
Data File = E:KU06E64.PTS Printed on 06-08-1995 at 23:11:21
Start time: 0.00 min. Stop time: 30.00 min. Offset: 1 mv.
Full Range: 100 millivolts



1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

1850.3 Field Blank

Lab Name: EMSL Contract:

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

Matrix: (soil/water) water Lab Sample ID: 95-24198

Sample wt/vol: 1000 (g/mL) mL Lab File ID: E:JU06E63

% Moisture N/A decanted: (Y/N) N Date Received:

Extraction: (SepF/Cont/Sonc) Cont Date Extracted: 06/01/95

Concentrated Extract Volume: 10 (ml) Date Analyzed: 06/08/95

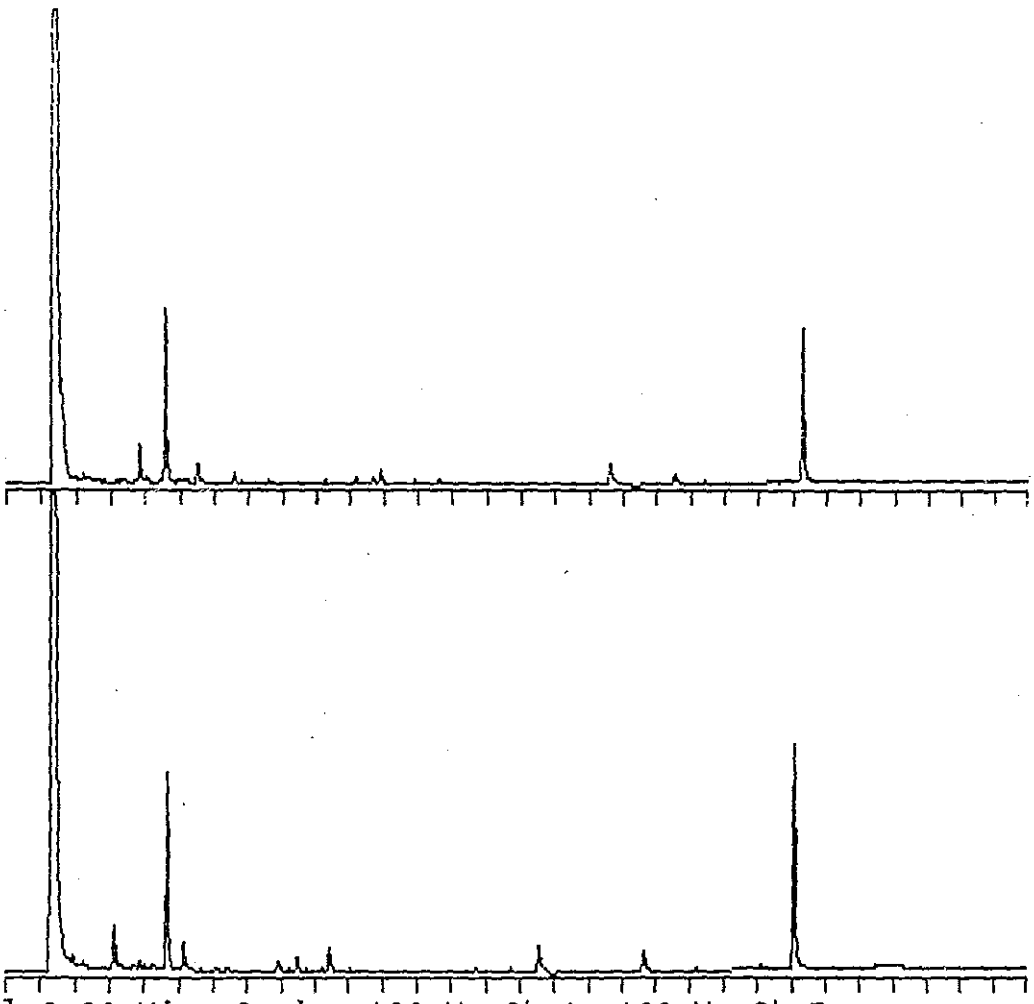
Injection Volume: 1 (uL) Dilution Factor 1

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
319-84-6	alpha-BHC	0.02	U
319-85-7	beta-BHC	0.04	U
319-86-8	delta-BHC	0.02	U
58-89-9	gamma-BHC (Lindane)	0.03	U
76-44-8	Heptachlor	0.02	U
309-00-2	Aldrin	0.04	U
1024-57-3	Heptachlor epoxide	0.04	U
959-98-8	Endosulfan I	0.02	U
60-57-1	Dieldrin	0.03	U
72-55-9	4,4'-DDE	0.04	U
72-20-8	Endrin	0.04	U
33213-65-9	Endosulfan II	0.04	U
72-54-8	4,4'-DDD	0.04	U
1031-07-8	Endosulfan sulfate	0.04	U
50-29-3	4,4'-DDT	0.04	U
7421-36-3	Endrin aldehyde	0.1	U
57-74-9	Chlordane	0.1	U
8001-35-2	Toxaphene	1	U
12674-11-2	Aroclor-1016	1	U
11104-28-2	Aroclor-1221	1	U
11141-16-5	Aroclor-1232	1	U
53469-21-9	Aroclor-1242	1	U
12672-29-6	Aroclor-1248	1	U
11097-69-1	Aroclor-1254	1	U
11096-82-5	Aroclor-1260	1	U

PD-

000330



[Interface 1] 0-30 Min Scale: 100 Mv Ch.A, 100 Mv Ch.B
24198 P/P Processed: 06-08-1995 22:35:42, segment 5, cycle 63
RAW DATA SAVED IN FILE E:JU06E63.PTS Second Channel Stored in E:KU06E63.PTS

***** EXTERNAL STANDARD TABLE *****

********** 06-08-1995 22:35:51 Version 5.1.5 **********
* Sample Name: 24198 P/P Data File: E:JU06E63 *
* Date: 06-08-1995 22:05:25 Method: M:APES-G 03-08-1995 15:02:41 # 359 *
* Interface: 1 Cycle#: 63 Operator JJK Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 10 Area Threshold: 1000 *
****
* Instrument Type: Perkin-Elmer 8500 Column Type: RTx-5 30m,.35mm *
* Solvent Description: 1.0u df *
* Conditions: 180 for 4.0min then 4.0deg/min to 240, hold 30min *
* Detector 0: Detector 1: ECD *
* Misc. Information: *
****

Starting Delay: 0.00 Ending retention time: 30.00
Area reject: 1000 One sample per 1.002 sec.
Amount injected: 1.00 Dilution factor: 1.00
Sample Weight: 1.00000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	2.288		0.0000	0.0000%	3779	721	5.2	1			1.0000E-09
				0.0000%	46308	8773	5.3	1			1.0000E-09

4	3.391									
5	4.659	TCMX	86.4520	43.8202%	165735	40054	4.1	1	0	-.3571	5.2163E-04
6	5.160		0.0000	0.0000%	27521	5555	5.0	1			1.0000E-09
7	7.916		0.0000	0.0000%	13641	1966	6.9	1			1.0000E-09
8	8.484	Heptachlor	5.7832	2.9313%	13192	2429	5.4	1	0	.1972	4.3837E-04
9	9.235		0.0000	0.0000%	4693	964	4.9	2			1.0000E-09
10	9.436	Atrin	12.3872	6.2788%	27640	4735	5.8	2	0	-.5281	4.4816E-04
11	15.548	DDT	21.7575	11.0283%	36779	5458	6.7	1	0	.2152	5.9158E-04
12	18.671		0.0000	0.0000%	23037	3515	6.6	1			1.0000E-09
13	23.063	DCB	70.9079	35.9413%	242127	46602	5.2	1	0	-.1446	2.9285E-04

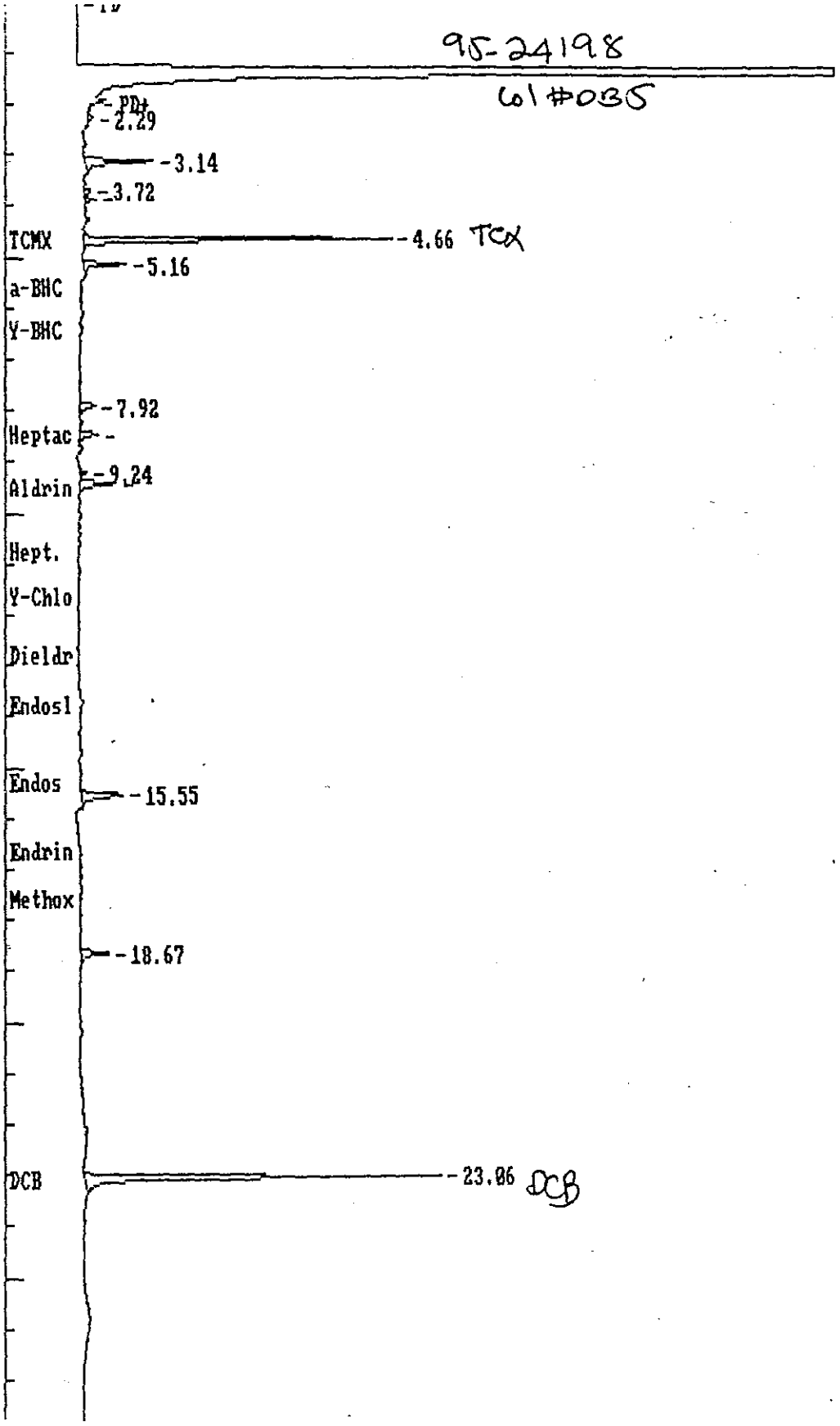
J.K. 6-9-95

TOTAL AMOUNT = 197.2879

GROUP NUMBER GROUP AMOUNT GROUP PERCENT

000331

reas, times, and heights stored in: E:JU06E63.ATB
ata File = E:JU06E63.PTS Printed on 06-08-1995 at 22:36:01
Start time: 0.00 min. Stop time: 30.00 min. Offset: 1 mv.
Full Range: 100 millivolts



PD-

000333

***** EXTERNAL STANDARD TABLE *****

********** 06-08-1995 22:36:11 Version 5.1.5 **********

Sample Name: 24198 P/P Data File: E:KU06E63

Date: 06-08-1995 22:05:25 Method: M:BPES-G 03-31-1995 14:31:59 # 358

Interface: 1 Cycle#: 63 Operator JJK Channel#: 1 Vial#: N.A.

Starting Peak Width: 10 Threshold: 10 Area Threshold: 500

Instrument Type: Perkin-Elmer 8500 Column Type: RTx-5 30m,.35mm

Solvent Description: 1.0u df

Conditions: 180 for 4.0min then 4.0deg/min to 240, hold 30min

Detector 0: Detector 1: ECD

Misc. Information:

Starting Delay: 0.00 Ending retention time: 30.00

Area reject: 500 One sample per 1.002 sec.

Amount injected: 1.00 Dilution factor: 1.00

Sample Weight: 1.00000

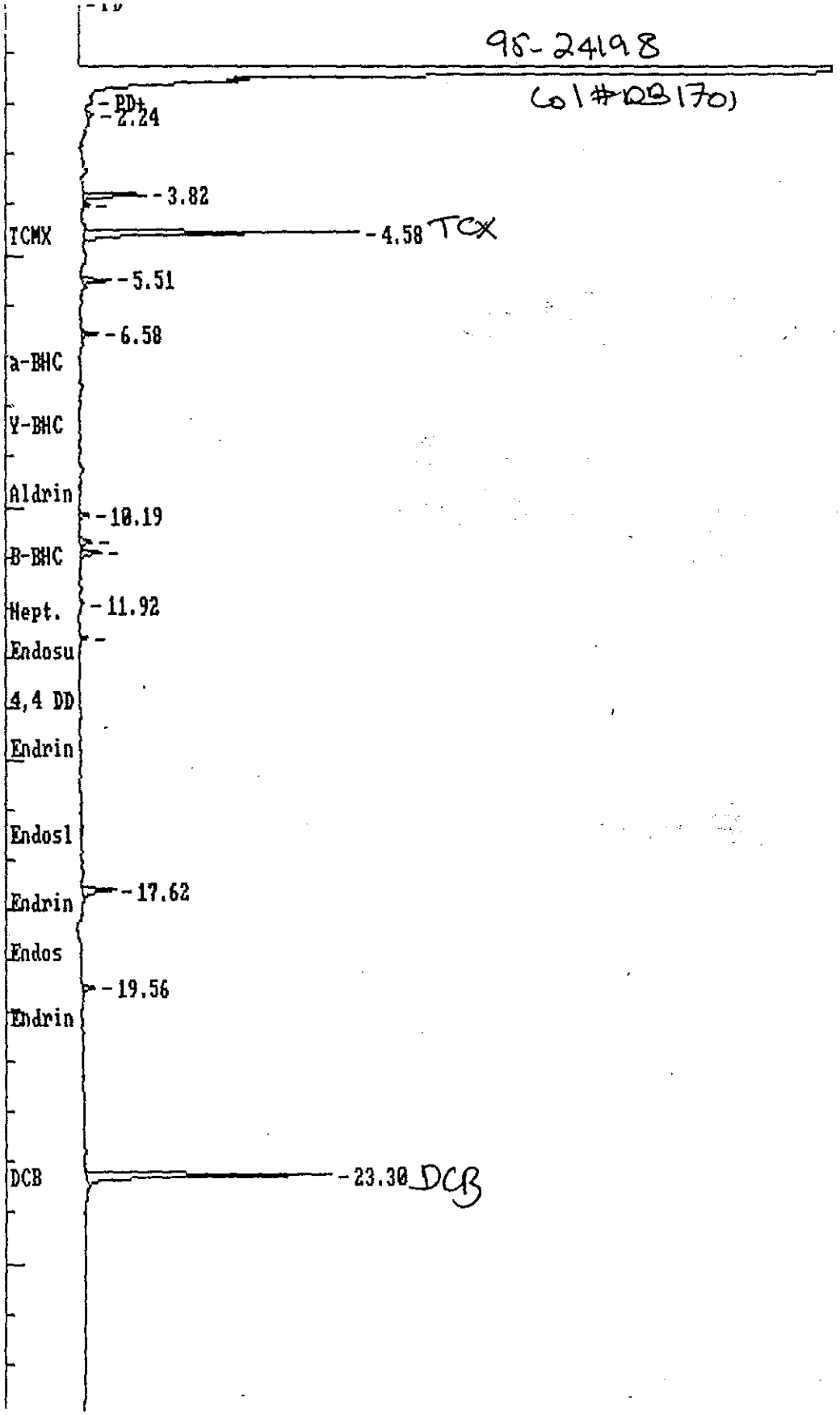
PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	2.238		0.0000	0.0000%	4342	914	4.7	1			1.0000E-09
2	3.824		0.0000	0.0000%	38474	8051	4.8	3			1.0000E-09
3	4.025		0.0000	0.0000%	4101	785	5.2	4			1.0000E-09
4	4.576	TCMX	82.7213	40.3547%	148489	36048	4.1	1	0	-.3636	5.5709E-04
5	5.511		0.0000	0.0000%	16698	3544	4.7	1			1.0000E-09
6	6.580		0.0000	0.0000%	9705	2232	4.3	1			1.0000E-09
7	10.187		0.0000	0.0000%	5357	1128	4.8	1			1.0000E-09
8	10.705		0.0000	0.0000%	8484	1485	5.7	2			1.0000E-09
9	10.922	B-BHC	11.0983	5.4142%	13782	2560	5.4	2	0	-.4566	8.0526E-04
10	11.924	Hept. epox.	1.1137	0.5433%	2145	460	4.7	1	0	-1.108	5.1916E-04
11	12.625	Endosulf I	2.2869	1.1156%	4486	959	4.7	1	0	-1.818	5.0978E-04
12	17.618	Endrin ald	18.0664	8.8135%	25683	4255	6.0	1	0	-1.355	7.0343E-04
13	19.556	Methoxychl	15.1392	7.3855%	9760	1637	6.0	1	0	1.385	1.5511E-03
14	23.296	DCB	74.5595	36.3731%	162507	32353	5.0	1	0	-.1431	4.5881E-04

SOM 6/24/95

TOTAL AMOUNT = 204.9853

GROUP NUMBER	GROUP AMOUNT	GROUP PERCENT

Areas, times, and heights stored in: E:KU06E63.ATB
Data File = E:KU06E63.PTS Printed on 06-08-1995 at 22:36:21
Start time: 0.00 min. Stop time: 30.00 min. Offset: 1 mv.
Full Range: 100 millivolts



2F

SOIL PESTICIDE SURROGATE RECOVERY

000335

Lab Name: EMSL ANALYTICAL Contract: _____

Job Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

GC Column(1): DB5 ID: 0.32 (mm) GC Column(2): DB1701 ID: 0.32 (mm)

	EPA SAMPLE NO.	TCX 1 %REC	#	TCX 2 %REC	#	DCB 1 %REC	#	DCB 2 %REC	#	OTHER (1)	OTHER (2)	TOT OUT
01	MB739-1	83		82		87		73				0
02	95.24198	81		76		70		60				0
03	95-24196	85		114		76		64				0
04	95.24205	79		79		46		42				0
05	95.24205MS	80		81		55		48				0
06	95-24205MSD	79		80		60		51				0
07												
08												
09												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												
25												
26												
27												
28												
29												
30												

	ADVISORY QC LIMITS
TXC = Tetrachloro-m-xylene	(20-150)
DCB = Decachlorobiphenyl	(20-150)

\# Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogate diluted out

4C

METHOD BLANK SUMMARY

EPA SAMPLE NO.

000336

Lab Name: EMSL ANALytical Contract: _____

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

Sample ID: MB 739-1 Lab File ID: E: JU06E62

Matrix: (soil/water) Water Extraction: (SepF/Cont/Sonc) Cont

Sulfur Cleanup: (Y/N) N Date Extracted: 6-1-95

Date Analyzed (1): 6-8-95 Date Analyzed (2): 6-8-95

Time Analyzed (1): 22:01 Time Analyzed (2): 22:01

Instrument ID (1): HP5890/SIFP Instrument ID (2): HP5890/SIFP

GC Column(1): DB5 ID: 0.32 (mm) GC Column(2): DB1701 ID: 0.32 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01		95-24198	6-8-95	6-8-95
02		95-24196	6-8-95	6-8-95
03		95-24205	6-8-95	6-8-95
04		95-24205MS	6-8-95	6-8-95
05		95-24205MSD	6-8-95	6-8-95
06				
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				

COMMENTS: _____

000337

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE ID.

METHOD BLANK

Lab Name: EMSL ANALYTICAL Contract:

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

Matrix: (soil/water water Lab Sample ID: 739-1

Sample wt/vol: 1000 (g/mL) mL Lab File ID: E:JU06E62

% Moisture N/A decanted: (Y/N) N Date Received:

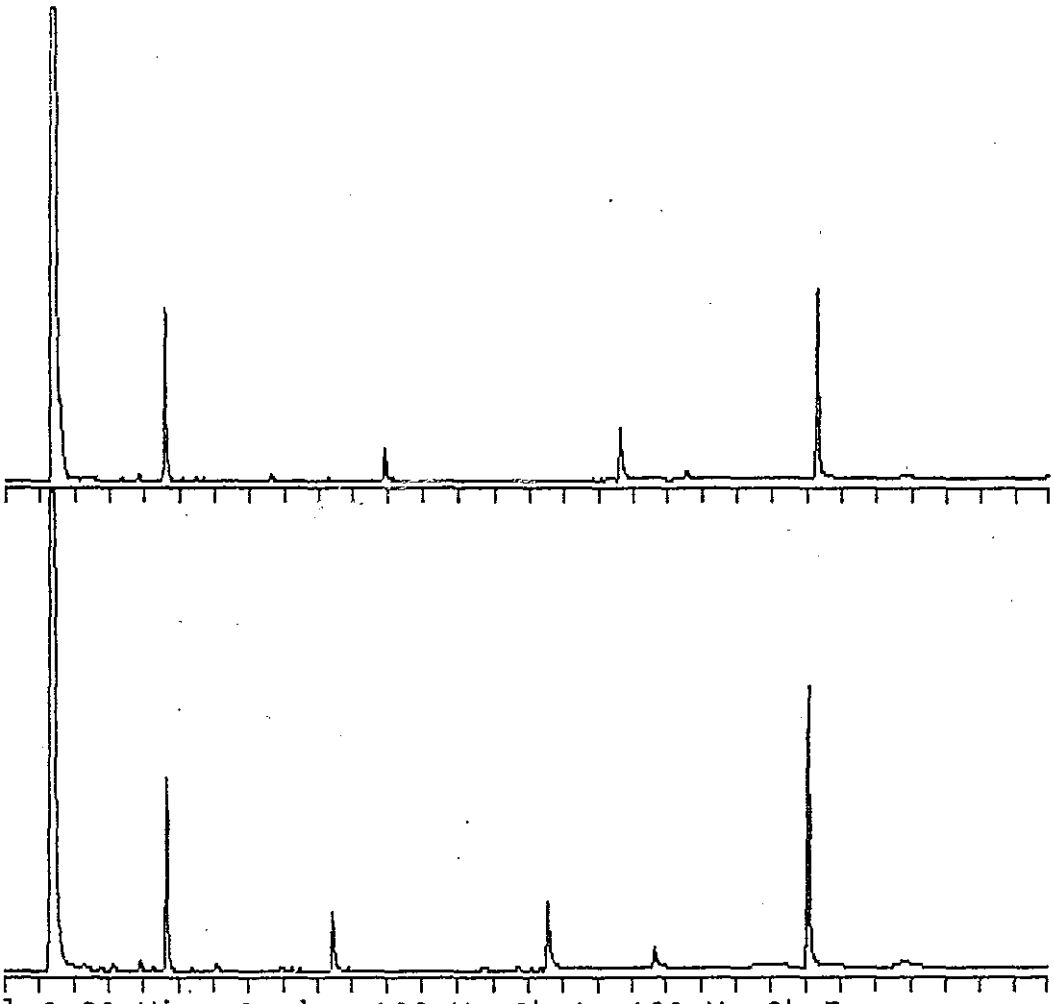
Extraction: (SepF/Cont/Sonc) Cont Date Extracted: 06/01/95

Concentrated Extract Volume: 10 (ml) Date Analyzed: 06/09/95

Injection Volume: 1 (uL) Dilution Factor 1

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
12674-11-2	Aroclor-1016	1	U
11104-28-2	Aroclor-1221	1	U
11141-16-5	Aroclor-1232	1	U
53469-21-9	Aroclor-1242	1	U
12672-29-6	Aroclor-1248	1	U
11097-69-1	Aroclor-1254	1	U
11096-82-5	Aroclor-1260	1	U



[Interface 1] 0-30 Min Scale: 100 Mv Ch.A, 100 Mv Ch.B
MB 739-1 Processed: 06-08-1995 22:01:36, segment 4, cycle 62
RAW DATA SAVED IN FILE E:JU06E62.PTS Second Channel Stored in E:KU06E62.PTS

***** EXTERNAL STANDARD TABLE *****

********** 06-08-1995 22:01:46 Version 5.1.5 **********
* Sample Name: MB 739-1 Data File: E:JU06E62 *
* Date: 06-08-1995 21:31:18 Method: M:APES-G 03-08-1995 15:02:41 # 359 *
* Interface: 1 Cycle#: 62 Operator JJK Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 10 Area Threshold: 1000 *
* Instrument Type: Perkin-Elmer 8500 Column Type: RTx-5 30m,.35mm *
* Solvent Description: 1.0u df *
* Conditions: 180 for 4.0min then 4.0deg/min to 240, hold 30min *
* Detector 0: Detector 1: ECD *
* Misc. Information: *

Starting Delay: 0.00 Ending retention time: 30.00
Area reject: 1000 One sample per 1.002 sec.
Amount injected: 1.00 Dilution factor: 1.00
Sample Weight: 1.00000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	3.140		0.0000	0.0000%	7078	1251	5.7	1			1.0000E-09
2	3.908		0.0000	0.0000%	10300	2002	5.1	1			1.0000E-09

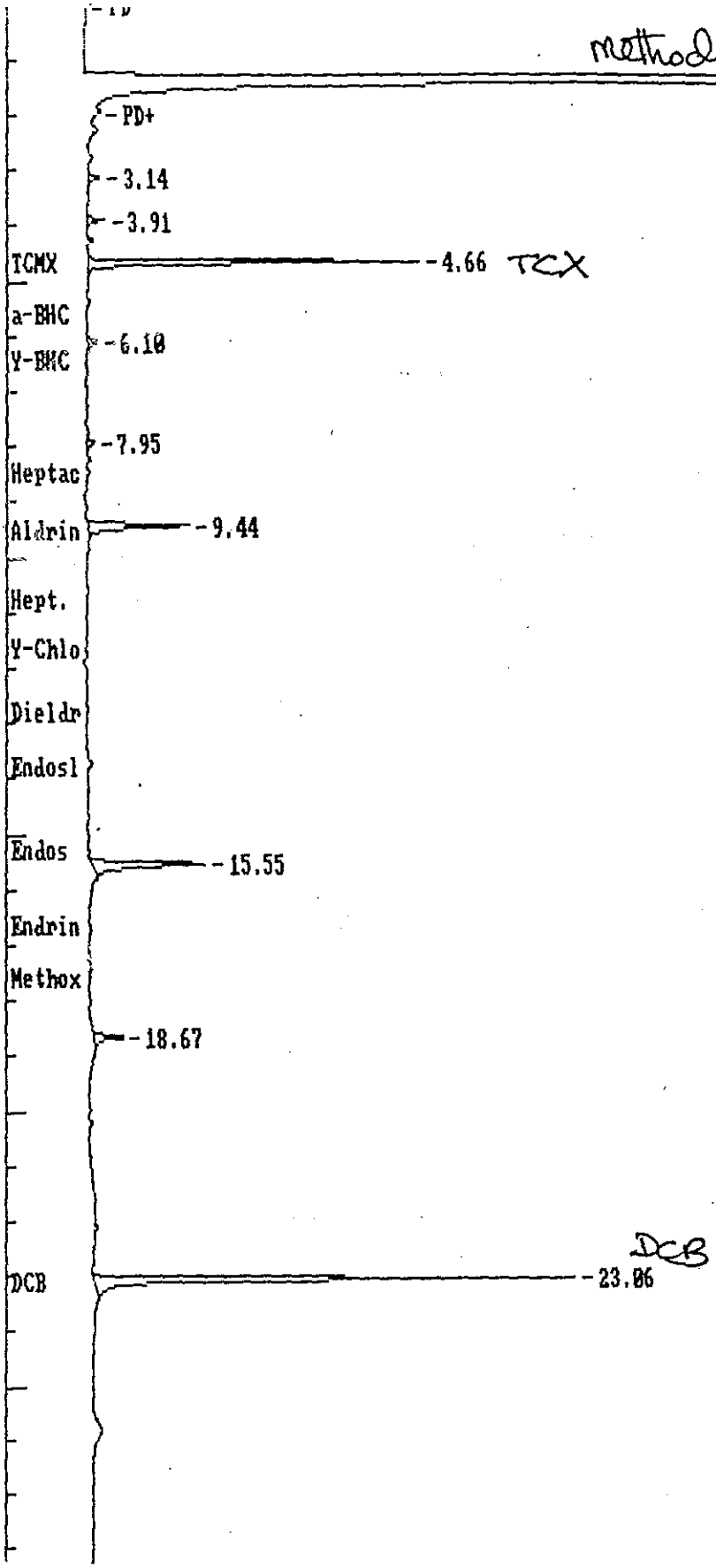
5	7.949	0.0000	0.0000%	5241	788	6.7 1			1.0000E-09
6	9.436 Aldrin	32.3887	12.3040%	72270	12234	5.9 1	0	-.5281	4.4816E-04
7	15.548 DDT	53.2660	20.2350%	90041	13749	6.5 1	0	.2152	5.9158E-04
8	18.671	0.0000	0.0000%	23424	3528	6.6 1			1.0000E-09
9	23.063 DCB	88.8002	33.7340%	303223	57546	5.3 1	0	-.1446	2.9285E-04

TOTAL AMOUNT = 263.2367

000339

GROUP NUMBER GROUP AMOUNT GROUP PERCENT

Areas, times, and heights stored in: E:JU06E62.ATB
Data File = E:JU06E62.PTS Printed on 06-08-1995 at 22:01:54
Start time: 0.00 min. Stop time: 30.00 min. Offset: 1 mv.
Full Range: 100 millivolts



PD-

000341

***** EXTERNAL STANDARD TABLE *****

********** 06-08-1995 22:02:03 Version 5.1.5 **********

* Sample Name: MB 739-1 Data File: E:KU06E62 *

* Date: 06-08-1995 21:31:18 Method: M:BPES-G 03-31-1995 14:31:59 # 358 *

* Interface: 1 Cycle#: 62 Operator JJK Channel#: 1 Vial#: N.A. *

* Starting Peak Width: 10 Threshold: 10 Area Threshold: 500 *

****

* Instrument Type: Perkin-Elmer 8500 Column Type: RTx-5 30m,.35mm *

* Solvent Description: 1.0u df *

* Conditions: 180 for 4.0min then 4.0deg/min to 240, hold 30min *

* Detector 0: Detector 1: ECD *

* Misc. Information: *

****

Starting Delay: 0.00 Ending retention time: 30.00

Area reject: 500 One sample per 1.002 sec.

Amount injected: 1.00 Dilution factor: 1.00

Sample Weight: 1.00000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	3.824		0.0000	0.0000%	5209	1085	4.8	1			1.0000E-09
2	4.576	TCMX	88.7124	33.1530%	159244	36207	4.4	1	0	-.3636	5.5709E-04
3	5.494		0.0000	0.0000%	2523	492	5.1	1			1.0000E-09
4	7.615		0.0000	0.0000%	6421	1144	5.6	1			1.0000E-09
5	10.922	B-BHC	27.3893	10.2358%	34013	6485	5.2	1	0	-.4566	8.0526E-04
6	17.618	Endrin ald	45.8003	17.1162%	65110	10452	6.2	1	0	-1.355	7.0343E-04
7	19.556	Methoxychl	14.7941	5.5288%	9538	1662	5.7	1	0	1.385	1.5511E-03
8	23.296	DCB	90.8885	33.9663%	198097	39173	5.1	1	0	-.1431	4.5881E-04

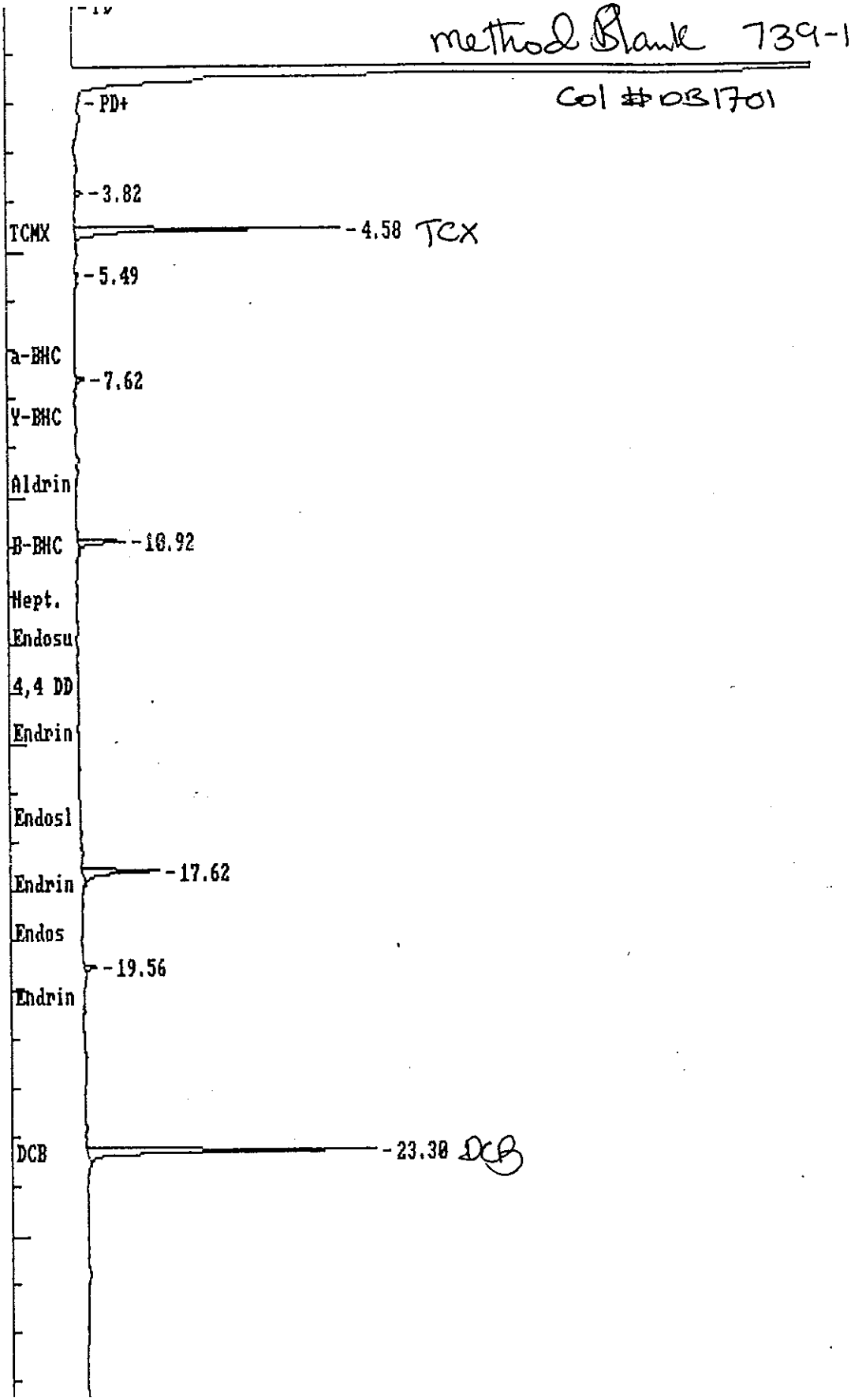
SDM 8/26/95

TOTAL AMOUNT = 267.5846

GROUP NUMBER GROUP AMOUNT GROUP PERCENT

000342

Areas, times, and heights stored in: E:KU06E62.ATB
Data File = E:KU06E62.PTS Printed on 06-08-1995 at 22:02:12
Start time: 0.00 min. Stop time: 30.00 min. Offset: 1 mv.
Full Range: 100 millivolts



3E

Water PESTICIDE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

000343

Lab Name: EMSL Analytical Contract: _____

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

Matrix Spike - EPA Sample No.: 95-24205

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
gamma-BHC(Lindane)	1.5	U	1.7	113	46-127
Heptachlor	1.5	U	1.7	113	35-130
Aldrin	1.5	U	1.4	93	34-132
Dieldrin	3.0	U	3.1	103	31-134
Endrin	3.0	U	3.4	113	42-139
4,4'-DDT	3.0	U	3.4	113	23-134

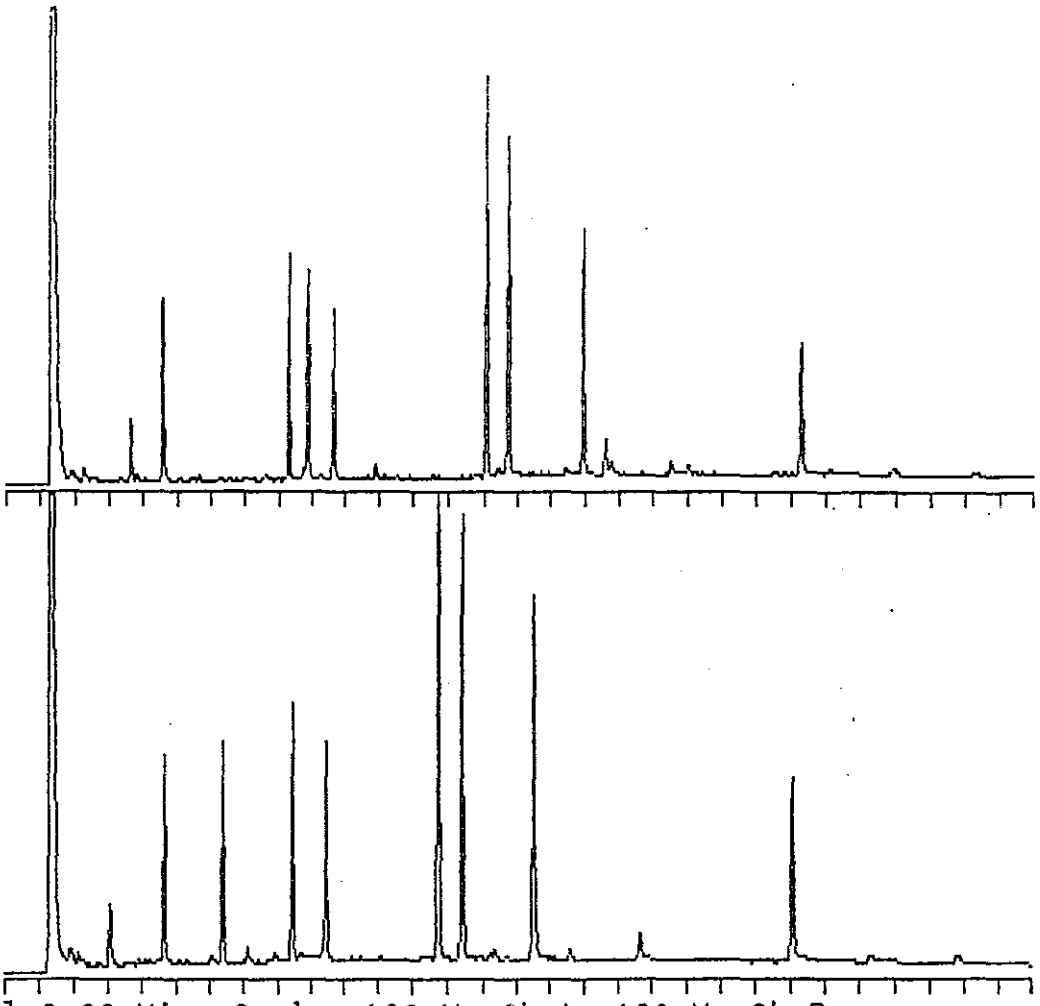
COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
gamma-BHC(Lindane)	1.5	1.6	107	5	50	46-127
Heptachlor	1.5	1.6	107	5	31	35-130
Aldrin	1.5	1.4	93	0	43	34-132
Dieldrin	3.0	3.2	107	4	38	31-134
Endrin	3.0	3.4	113	0	45	42-139
4,4'-DDT	3.0	3.4	113	0	50	23-134

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 6 outside limits
Spike Recovery: 0 out of 12 outside limits

COMMENTS: _____



[Interface 1] 0-30 Min Scale: 100 Mv Ch.A, 100 Mv Ch.B
24205 P/P Processed: 06-08-1995 20:19:11, segment 1, cycle 59
RAW DATA SAVED IN FILE E:JU06E59.PTS Second Channel Stored in E:KU06E59.PTS

****** EXTERNAL STANDARD TABLE ******

******************** 06-08-1995 20:19:21 Version 5.1.5 ********************

* Sample Name: 24205 P/P MS Data File: E:JU06E59 *

* Date: 06-08-1995 19:48:56 Method: M:APES-G 03-08-1995 15:02:41 # 359 *

* Interface: 1 Cycle#: 59 Operator JJK Channel#: 0 Vial#: N.A. *

* Starting Peak Width: 10 Threshold: 10 Area Threshold: 1000 *

* Instrument Type: Perkin-Elmer 8500 Column Type: RTx-5 30m,.35mm *

* Solvent Description: 1.0u df *

* Conditions: 180 for 4.0min then 4.0deg/min to 240, hold 30min *

* Detector 0: Detector 1: ECD *

* Misc. Information: *

Starting Delay: 0.00 Ending retention time: 30.00
Area reject: 1000 One sample per 1.002 sec.
Amount injected: 1.00 Dilution factor: 1.00
Sample Weight: 1.00000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	AREA/ HEIGHT	HEIGHT BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	2.171		0.0000	0.0000%	7489	1937	3.9 1			1.0000E-09
2	3.073		0.0001	0.0000%	62457	12531	5.0 1			1.0000E-09
3	3.999		0.0000	0.0000%	5804	846	6.9 1			1.0000E-09

6	6.396	Y-BHC	86.6769	8.9541%	158272	45832	3.5	2	0	0 or 1.79	-.2604	5.4764E-04
7	7.148	d-BHC	10.4883	1.0835%	12889	2667	4.8	1	0		1.421	8.1376E-04
8	7.932		0.0000	0.0000%	6614	1128	5.9	1				1.0000E-09
9	8.433	Heptachlor	86.4228	8.9279%	197144	52920	3.7	2	0	1.72	-.3944	4.3837E-04
10	8.734		0.0000	0.0000%	9643	800	12.0	2				1.0000E-09
11	9.452	Aldrin	89.1016	9.2046%	198815	44765	4.4	1	0	1.78	-.3521	4.4816E-04
12	10.270		0.0000	0.0000%	2348	562	4.2	1				1.0000E-09
13	12.742	Dieldrin	156.5511	16.1724%	392696	99924	3.9	1	0	3.1	-.1308	3.9866E-04
14	13.410	Endrin	171.0924	17.6746%	352606	91692	3.8	1	0	3.4	-.1864	4.8522E-04
15	14.262	4'4-DDD	3.0057	0.3105%	5063	976	5.2	2	0		-.1169	5.9361E-04
16	14.379	Endrin ald	5.1905	0.5362%	10437	2062	5.1	2	0		-.1739	4.9730E-04
17	15.498	DDT	214.3900	22.1475%	362404	74835	4.8	1	0	4.3	-.1076	5.9158E-04
18	16.633	Endrin ket.	4.3995	0.4545%	10409	2019	5.2	1	0		-.1003	4.2265E-04
19	18.654		0.0000	0.0000%	32987	5357	6.2	1				1.0000E-09
20	23.063	DCB	55.6703	5.7510%	190095	37877	5.0	1	0		-.1446	2.9285E-04
21	25.351		0.0000	0.0000%	8285	1028	8.1	1				1.0000E-09
22	27.839		0.0000	0.0000%	15512	1408	11.0	1				1.0000E-09

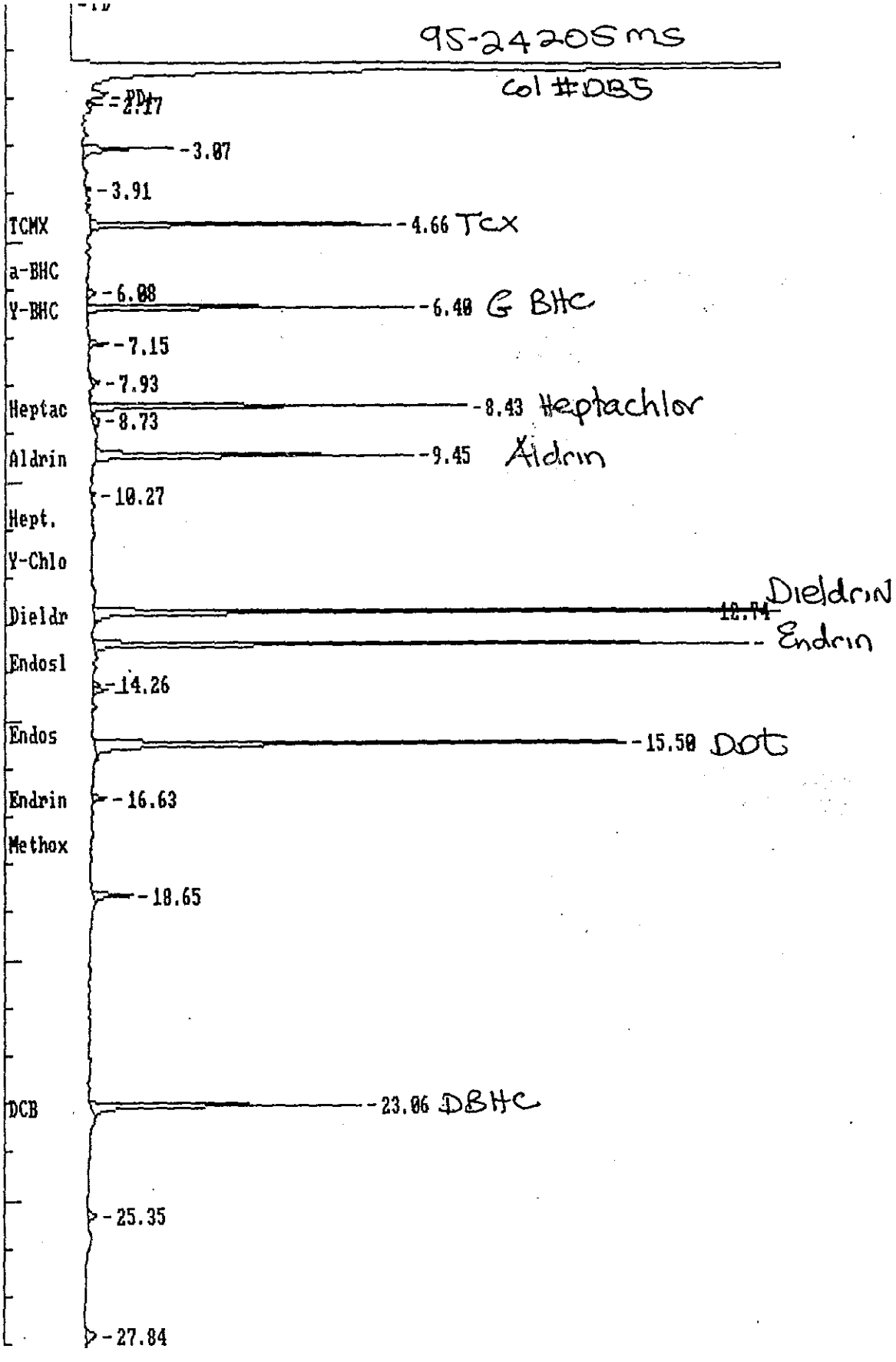
TOTAL AMOUNT = 968.0112

000343

GROUP NUMBER	GROUP AMOUNT	GROUP PERCENT

000346

Areas, times, and heights stored in: E:JU06E59.ATB
Data File = E:JU06E59.PTS Printed on 06-08-1995 at 20:19:32
Start time: 0.00 min. Stop time: 30.00 min. Offset: 1 mv.
Full Range: 100 millivolts



-PD-

000347

***** EXTERNAL STANDARD TABLE *****

********** 06-08-1995 20:20:14 Version 5.1.5 **********

* Sample Name: 24205 P/P MS Data File: E:KU06E59 *

* Date: 06-08-1995 19:48:56 Method: M:BPES-G 03-31-1995 14:31:59 # 358 *

* Interface: 1 Cycle#: 59 Operator JJK Channel#: 1 Vial#: N.A. *

* Starting Peak Width: 10 Threshold: 10 Area Threshold: 500 *

* Instrument Type: Perkin-Elmer 8500 Column Type: RTx-5 30m,.35mm *

* Solvent Description: 1.0u df *

* Conditions: 180 for 4.0min then 4.0deg/min to 240, hold 30min *

* Detector 0: Detector 1: ECD *

* Misc. Information: *

Starting Delay: 0.00 Ending retention time: 30.00

Area reject: 500 One sample per 1.002 sec.

Amount injected: 1.00 Dilution factor: 1.00

Sample Weight: 1.00000

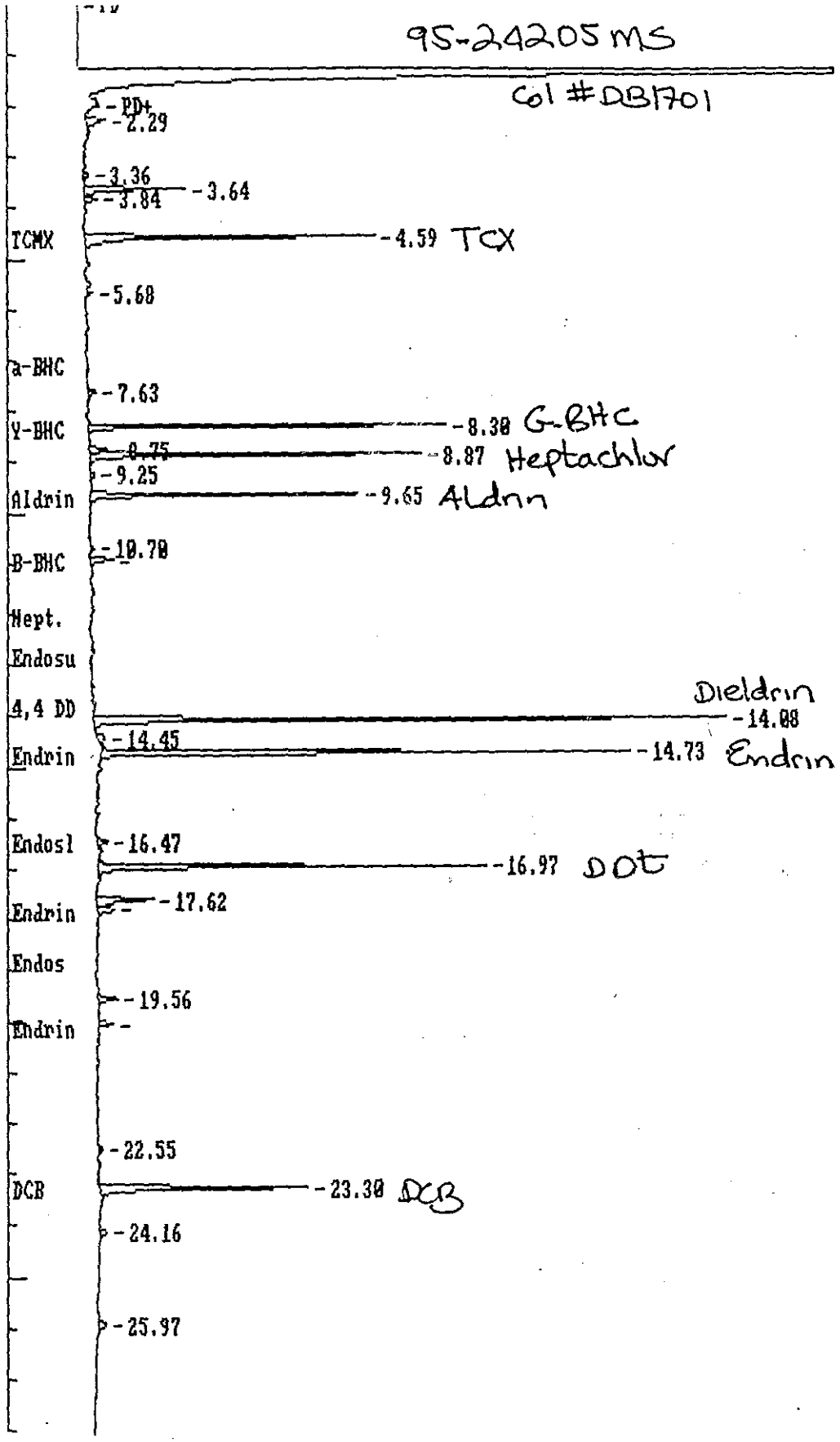
PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK		% DELTA RET TIME	CONC/AREA
1	2.288		0.0000	0.0000%	15694	2510	6.3	1				1.0000E-09
2	3.357		0.0000	0.0000%	4397	590	7.5	2				1.0000E-09
3	3.641		0.0000	0.0000%	49756	13126	3.8	2				1.0000E-09
4	3.841		0.0000	0.0000%	7564	1611	4.7	2				1.0000E-09
5	4.592	TCMX	87.5804	8.3631%	157212	38081	4.1	1	0		0	5.5709E-04
6	5.678		0.0000	0.0000%	3303	788	4.2	1				1.0000E-09
7	7.632		0.0000	0.0000%	4835	969	5.0	1				1.0000E-09
8	8.300	Y-BHC	83.8361	8.0056%	145064	46933	3.1	1	0	1.7	-.4008	5.7793E-04
9	8.751		0.0000	0.0000%	9669	2305	4.2	2				1.0000E-09
10	8.868	Heptachlor	82.5402	7.8818%	157039	43564	3.6	2	0	1.7	-.1879	5.2560E-04
11	9.252		0.0000	0.0000%	3405	582	5.9	1				1.0000E-09
12	9.653	Aldrin	72.4795	6.9211%	135104	35541	3.8	1	0	1.4	-.3448	5.3647E-04
13	10.705		0.0000	0.0000%	2636	543	4.9	1				1.0000E-09
14	10.939	B-BHC	12.3488	1.1792%	15335	3042	5.0	1	0		-.3044	8.0526E-04
15	14.078	Dieldrin	158.9966	15.1827%	302087	83340	3.6	1	0	3.2	-.2366	5.2633E-04
16	14.445		0.0000	0.0000%	6730	902	7.5	1				1.0000E-09
17	14.729	Endrin	274.2421	26.1876%	261942	69851	3.8	1	0	5.5	-.2262	1.0470E-03
18	16.466	EndoslfII	4.0635	0.3880%	7545	1270	5.9	1	0		0	5.3856E-04
19	16.967	4,4 DDT	171.8426	16.4094%	199959	50976	3.9	1	0	3.4	-.1964	8.5939E-04
20	17.618		0.0000	0.0000%	40886	7372	5.5	2				1.0000E-09
21	17.802	Endrin ald	11.1966	1.0692%	15917	2246	7.1	2	0		-.3272	7.0343E-04
22	19.556	Methoxychl	22.4982	2.1484%	14505	2542	5.7	1	0		1.385	1.5511E-03
23	20.057	Endrin ket	5.5074	0.5259%	8434	1937	4.4	1	0		-.2491	6.5298E-04
24	22.545		0.0000	0.0000%	3490	570	6.1	1				1.0000E-09
25	23.296	DCB	60.0892	5.7380%	130968	27614	4.7	1	0		-.1431	4.5881E-04
26	24.165		0.0000	0.0000%	6786	990	6.9	1				1.0000E-09
27	25.969		0.0000	0.0000%	9136	1039	8.8	1				1.0000E-09
28	28.306		0.0000	0.0000%	10011	933	10.7	1				1.0000E-09

TOTAL AMOUNT = 1047.2213

GROUP NUMBER GROUP AMOUNT GROUP PERCENT

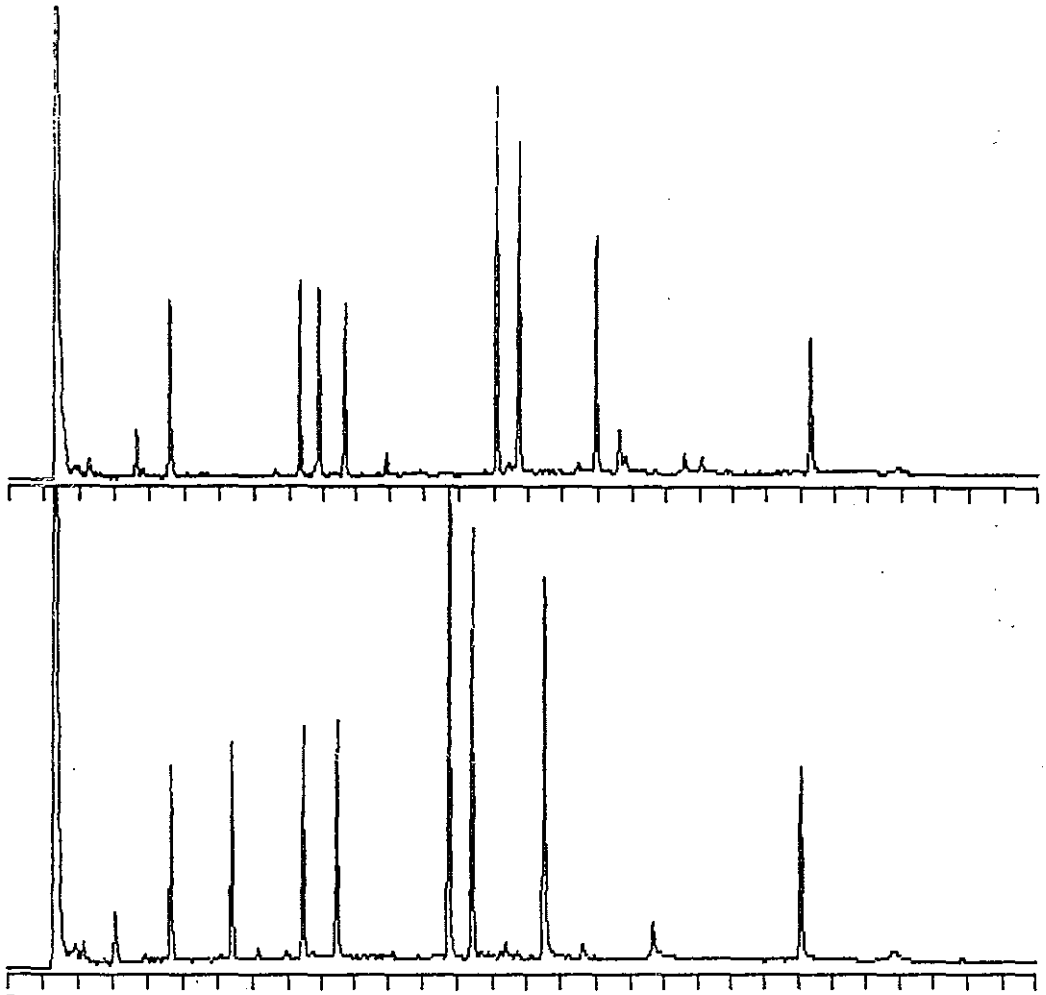
000348

Areas, times, and heights stored in: E:KU06E59.ATB
Data File = E:KU06E59.PTS Printed on 06-08-1995 at 20:20:49
Start time: 0.00 min. Stop time: 30.00 min. Offset: 1 mv.
Full Range: 100 millivolts



PD-

000349



[Interface 1] 0-30 Min Scale: 100 Mv Ch.A, 100 Mv Ch.B
24205 P/P Processed: 06-08-1995 20:53:24, segment 2, cycle 60
RAW DATA SAVED IN FILE E:JU06E60.PTS Second Channel Stored in E:KU06E60.PTS

***** EXTERNAL STANDARD TABLE *****

********** 06-08-1995 20:53:34 Version 5.1.5 **********
* Sample Name: 24205 P/P MSD Data File: E:JU06E6C *
* Date: 06-08-1995 20:23:06 Method: M:APES-G 03-08-1995 15:02:41 # 359 *
* Interface: 1 Cycle#: 60 Operator JJK Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 10 Area Threshold: 1000 *
****
* Instrument Type: Perkin-Elmer 8500 Column Type: RTx-5 30m,.35mm *
* Solvent Description: 1.0u df *
* Conditions: 180 for 4.0min then 4.0deg/min to 240, hold 30min *
* Detector 0: Detector 1: ECD *
* Misc. Information: *
****

Starting Delay: 0.00 Ending retention time: 30.00
Area reject: 1000 One sample per 1.002 sec.
Amount injected: 1.00 Dilution factor: 1.00
Sample Weight: 1.00000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	AREA/ HEIGHT	HEIGHT BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	2.171		0.0000	0.0000%	13841	3187	4.3 1			1.0000E-09
2	3.073		0.0001	0.0000%	55811	10048	5.6 1			1.0000E-09

5	4.659	TCMX	84.0140	8.4620%	161061	39668	4.1	1	0	1.7	-.3571	5.2163E-04
6	6.095		0.0000	0.0000%	8124	1040	7.8	2				1.0000E-09
7	6.396	Y-BHC	84.4732	8.5083%	154248	44319	3.5	2	0	1.7	-.2604	5.4764E-04
8	7.148	d-BHC	9.8189	0.9890%	12066	2367	5.1	1	0		1.421	8.1376E-04
9	7.949		0.0000	0.0000%	7660	1181	6.5	1				1.0000E-09
10	8.433	Heptachlor	85.0667	8.5680%	194051	47515	4.1	1	0	1.7	-.3944	4.3837E-04
11	8.717		0.0000	0.0000%	6230	764	8.2	1				1.0000E-09
12	9.469	Aldrin	96.4832	9.7179%	215286	48241	4.5	1	0	1.9	-.1760	4.4816E-04
13	11.139		0.0000	0.0000%	3412	777	4.4	1				1.0000E-09
14	12.742	Dieldrin	159.7948	16.0948%	400833	104796	3.8	1	0	3.2	-.1308	3.9866E-04
15	13.410	Endrin	172.2401	17.3483%	354972	88430	4.0	1	0	3.4	-.1864	4.8522E-04
16	13.911	Endoslf II	1.4725	0.1483%	3476	687	5.1	1	0		1.092	4.2364E-04
17	14.262	4'4-DDD	3.4685	0.3494%	5843	1189	4.9	2	0		-.1169	5.9361E-04
18	14.395	Endrin ald	7.0018	0.7052%	14080	2684	5.2	2	0		-.0579	4.9730E-04
19	15.498	DDT	222.3513	22.3956%	375862	78063	4.8	1	0	4.4	-.1076	5.9158E-04
20	16.633	Endrin ket.	6.1113	0.6155%	14459	2652	5.5	1	0		-.1003	4.2265E-04
21	18.654		0.0000	0.0000%	42371	6714	6.3	1				1.0000E-09
22	23.063	OCB	60.5399	6.0977%	206724	39701	5.2	1	0		-.1446	2.9285E-04
23	25.835		0.0000	0.0000%	12770	874	14.6	1				1.0000E-09

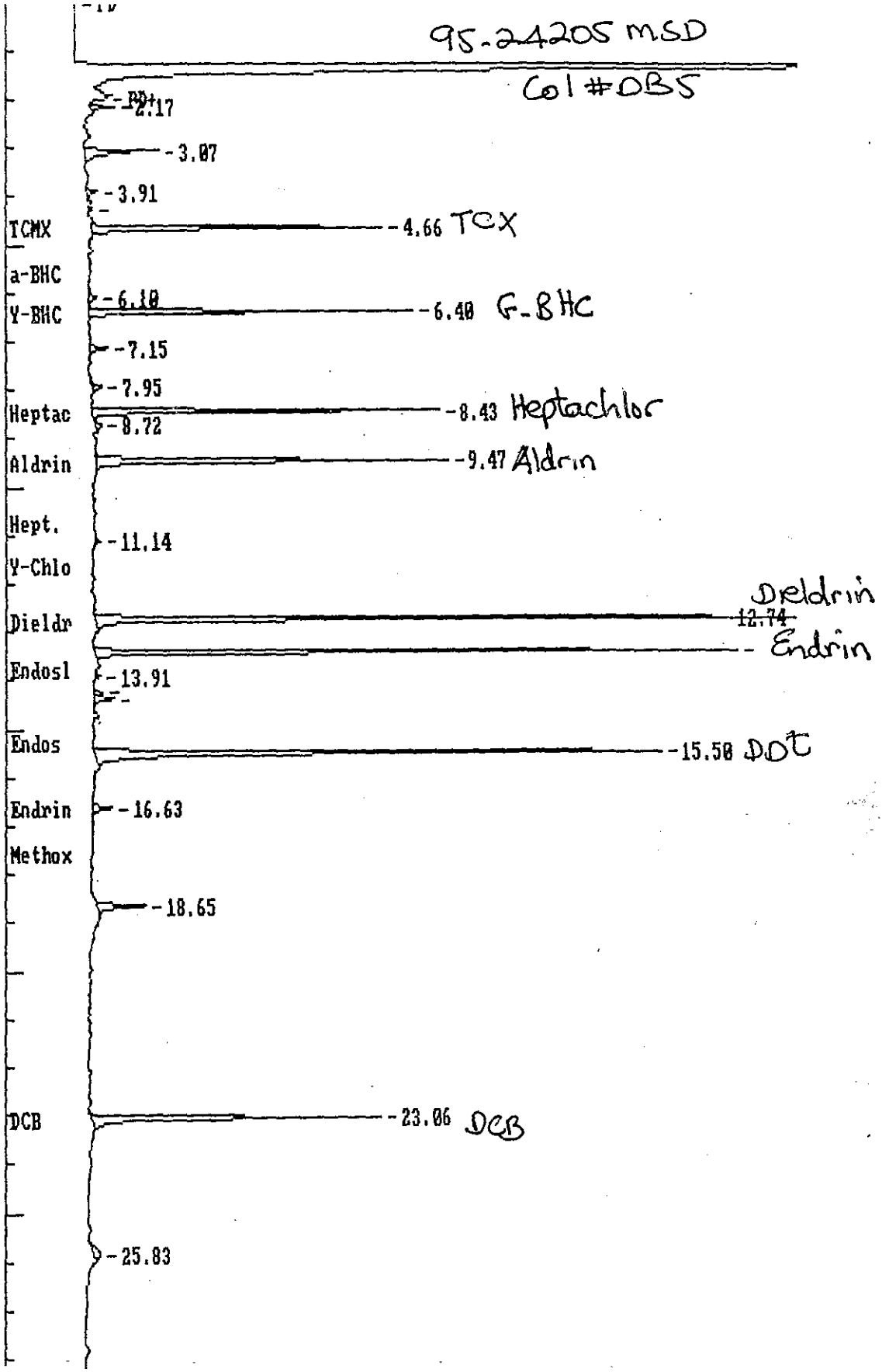
TOTAL AMOUNT = 992.8363

000350

GROUP NUMBER	GROUP AMOUNT	GROUP PERCENT

000351

Areas, times, and heights stored in: E:JU06E60.ATB
Data File = E:JU06E60.PTS Printed on 06-08-1995 at 20:53:46
Start time: 0.00 min. Stop time: 30.00 min. Offset: 1 mv.
Full Range: 100 millivolts



PD-

000352

EXTERNAL STANDARD TABLE

06-08-1995 20:54:24 Version 5.1.5

Sample Name: 24205 P/P MSD Data File: E:KU06E60

Date: 06-08-1995 20:23:06 Method: M:BPES-G 03-31-1995 14:31:59 # 358

Interface: 1 Cycle#: 60 Operator JJK Channel#: 1 Vial#: N.A.

Starting Peak Width: 10 Threshold: 10 Area Threshold: 500

Instrument Type: Perkin-Elmer 8500 Column Type: RTx-5 30m,.35mm

Solvent Description: 1.0u df

Conditions: 180 for 4.0min then 4.0deg/min to 240, hold 30min

Detector 0: Detector 1: ECD

Misc. Information:

Starting Delay: 0.00 Ending retention time: 30.00

Area reject: 500 One sample per 1.002 sec.

Amount injected: 1.00 Dilution factor: 1.00

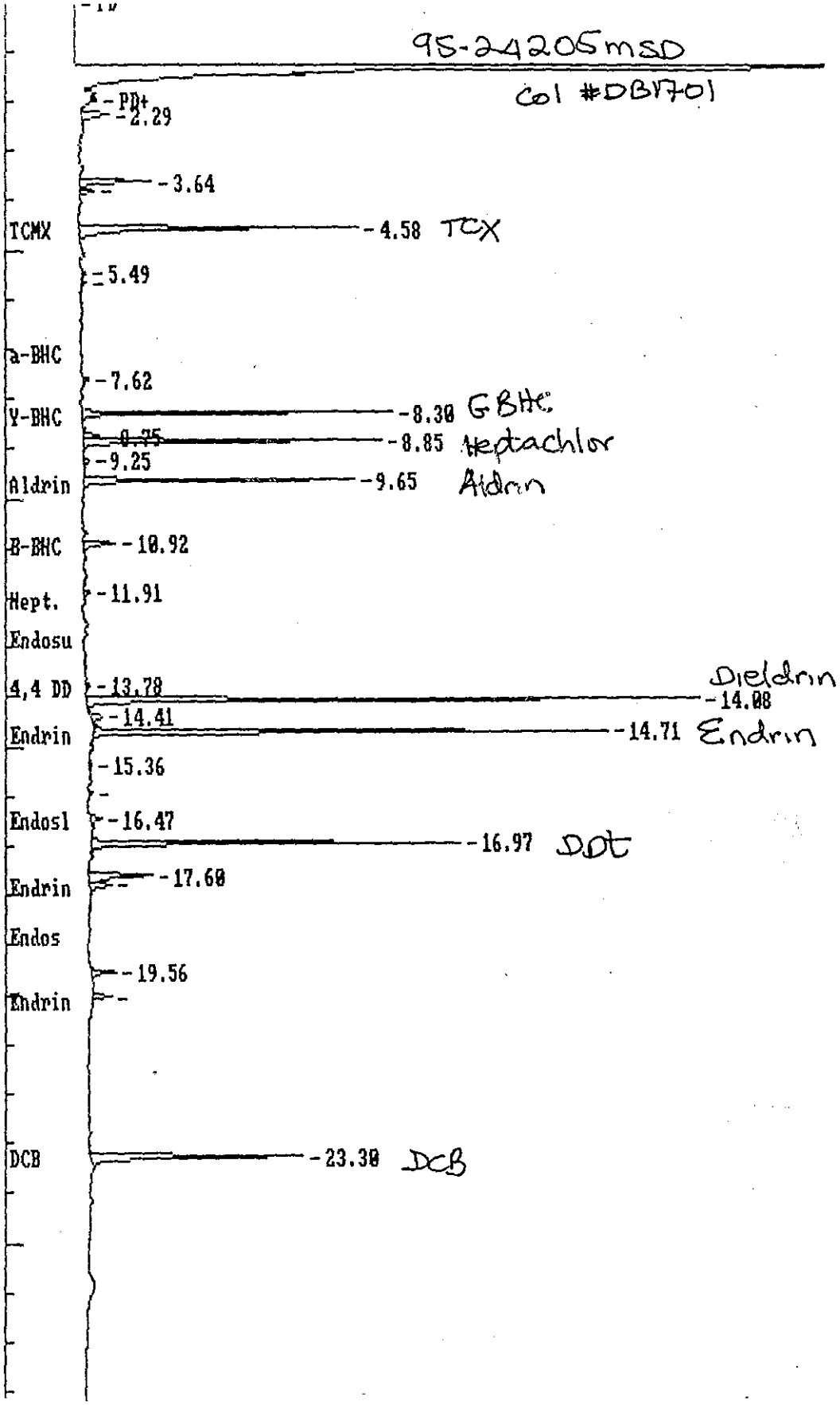
Sample Weight: 1.00000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK		% DELTA RET TIME	CONC/AREA
1	2.288		0.0000	0.0000%	20999	3558	5.9	1				1.0000E-09
2	3.641		0.0000	0.0000%	41449	9551	4.3	2				1.0000E-09
3	3.824		0.0000	0.0000%	8907	1862	4.8	2				1.0000E-09
4	4.576	TCMX	87.0275	8.1194%	156219	36952	4.2	1	0		-.3636	5.5709E-04
5	5.494		0.0000	0.0000%	3084	632	4.9	2				1.0000E-09
6	5.678		0.0000	0.0000%	3022	679	4.5	2				1.0000E-09
7	7.615		0.0000	0.0000%	4344	864	5.0	1				1.0000E-09
8	8.300	Y-BHC	81.2436	7.5798%	140578	40872	3.4	1	0	1.6	-.4008	5.7793E-04
9	8.751		0.0000	0.0000%	7713	2044	3.8	2				1.0000E-09
10	8.851	Heptachlor	81.6222	7.6151%	155293	39298	4.0	2	0	1.6	-.3759	5.2560E-04
11	9.252		0.0000	0.0000%	4174	670	6.2	1				1.0000E-09
12	9.653	Aldrin	72.0097	6.7183%	134228	35924	3.7	1	0	1.4	-.3448	5.3647E-04
13	10.922	B-BHC	17.0876	1.5942%	21220	4185	5.1	1	0		-.4566	8.0526E-04
14	11.907	Hept. epox.	1.7723	0.1654%	3414	756	4.5	1	0		-1.246	5.1916E-04
15	13.777	4,4 DDE	1.3218	0.1233%	2543	550	4.6	1	0		-.1814	5.1975E-04
16	14.078	Dieldrin	162.6316	15.1730%	308994	81232	3.8	1	0	3.2	-.2366	5.2633E-04
17	14.412		0.0000	0.0000%	10288	1549	6.6	1				1.0000E-09
18	14.713	Endrin	274.1393	25.5763%	261844	68325	3.8	1	0	5.4	-.3393	1.0470E-03
19	15.364		0.0000	0.0000%	2035	473	4.3	1				1.0000E-09
20	15.948		0.0000	0.0000%	3040	604	5.0	1				1.0000E-09
21	16.466	EndoslfII	4.9328	0.4602%	9159	1521	6.0	1	0		0	5.3856E-04
22	16.967	4,4 DDT	173.5855	16.1950%	201987	48938	4.1	1	0	3.4	-.1964	8.5939E-04
23	17.602		0.0000	0.0000%	48060	8411	5.7	2				1.0000E-09
24	17.802	Endrin ald	13.9095	1.2977%	19774	2918	6.8	2	0		-.3272	7.0343E-04
25	19.556	Methoxychl	28.7475	2.6820%	18534	3238	5.7	1	0		1.385	1.5511E-03
26	20.057	Endrin ket	7.2213	0.6737%	11059	2514	4.4	1	0		-.2491	6.5298E-04
27	23.296	DCB	64.5955	6.0266%	140790	28346	5.0	1	0		-.1431	4.5881E-04

TOTAL AMOUNT = 1071.8477

GROUP NUMBER GROUP AMOUNT GROUP PERCENT

Areas, times, and heights stored in: E:KU06E60.ATB
Data File = E:KU06E60.PTS Printed on 06-08-1995 at 20:55:01
Start time: 0.00 min. Stop time: 30.00 min. Offset: 1 mv.
Full Range: 100 millivolts





000354

METALS DATA PACKAGE

EMSL

COVER PAGE - METALS ANALYSES DATA PACKAGE

Lab Name: **EMSL ANALYTICAL, INC.** Contract: _____

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

SOW No.: _____

Client Sample ID	Lab Sample ID
Bldg. 697 MW1-2931776	**95-24196**
Field Blank	**95-24198**

Were ICP interelement corrections applied? Yes/No **YES**

Were ICP background corrections applies? Yes/No **YES**

If yes - were raw data generated before application of background correction? Yes/No **NO**

Comments: **ICP was used**

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: Paul Laraia Name: Paul V. Laraia

Date: 06-28-95 Title: Laboratory Manager

Attention: Charles Appleby
U.S. Army - Fort Monmouth
SELFM-PW-EV
Building 173
Fort Monmouth, NJ 07703

Project #: 09508471
Date Received: 05/26/95 07:00

The following results are for Ag-CLP

Lab #	Conc.	Unit	Client Designation
95 0024196	<0.050	mg/l	Bldg.697 MW1-2931776
95 0024198	<0.050	mg/l	Field Blank

The following results are for Aluminum-CLP

Lab #	Conc.	Unit	Client Designation
95 0024196	3.8	mg/l	Bldg.697 MW1-2931776
95 0024198	<0.20	mg/l	Field Blank

The following results are for Arsenic-CLP

Lab #	Conc.	Unit	Client Designation
95 0024196	<0.0050	mg/l	Bldg.697 MW1-2931776
95 0024198	<0.0050	mg/l	Field Blank

The following results are for Barium-CLP

Lab #	Conc.	Unit	Client Designation
95 0024196	0.042	mg/l	Bldg.697 MW1-2931776
95 0024198	<0.020	mg/l	Field Blank

The following results are for Beryllium-CLP

Lab #	Conc.	Unit	Client Designation
95 0024196	<0.0050	mg/l	Bldg.697 MW1-2931776
95 0024198	<0.0050	mg/l	Field Blank

EMSL

Attention: Charles Appleby
U.S. Army - Fort Monmouth
SELFM-PW-EV
Building 173
Fort Monmouth, NJ 07703

Project #: 09508471
Date Received: 05/26/95 07:00

The following results are for Calcium-CLP

Lab #	Conc.	Unit	Client Designation
95 0024196	15	mg/l	Bldg.697 MW1-2931776
95 0024198	<0.40	mg/l	Field Blank

The following results are for Cadmium-CLP

Lab #	Conc.	Unit	Client Designation
95 0024196	<0.010	mg/l	Bldg.697 MW1-2931776
95 0024198	<0.010	mg/l	Field Blank

The following results are for Cobalt-CLP

Lab #	Conc.	Unit	Client Designation
95 0024196	<0.050	mg/l	Bldg.697 MW1-2931776
95 0024198	<0.050	mg/l	Field Blank

The following results are for Chromium-CLP

Lab #	Conc.	Unit	Client Designation
95 0024196	<0.050	mg/l	Bldg.697 MW1-2931776
95 0024198	<0.050	mg/l	Field Blank

The following results are for Copper-CLP

Lab #	Conc.	Unit	Client Designation
95 0024196	<0.050	mg/l	Bldg.697 MW1-2931776
95 0024198	<0.050	mg/l	Field Blank



Attention: Charles Appleby
U.S. Army - Fort Monmouth
SELFM-PW-EV
Building 173
Fort Monmouth, NJ 07703

Project #: 09508471
Date Received: 05/26/95 07:00

The following results are for Iron-CLP

Lab #	Conc.	Unit	Client Designation
95 0024196	19	mg/l	Bldg.697 MW1-2931776
95 0024198	0.10	mg/l	Field Blank

The following results are for Mercury, CLP

Lab #	Conc.	Unit	Client Designation
95 0024196	<0.001	mg/l	Bldg.697 MW1-2931776
95 0024198	<0.001	mg/l	Field Blank

The following results are for Potassium-CLP

Lab #	Conc.	Unit	Client Designation
95 0024196	6.8	mg/l	Bldg.697 MW1-2931776
95 0024198	<3.0	mg/l	Field Blank

The following results are for Magnesium-CLP

Lab #	Conc.	Unit	Client Designation
95 0024196	6.8	mg/l	Bldg.697 MW1-2931776
95 0024198	<0.10	mg/l	Field Blank

The following results are for Manganese-CLP

Lab #	Conc.	Unit	Client Designation
95 0024196	0.031	mg/l	Bldg.697 MW1-2931776
95 0024198	<0.020	mg/l	Field Blank

Attention: Charles Appleby
U.S. Army - Fort Monmouth
SELFM-PW-EV
Building 173
Fort Monmouth, NJ 07703

Project #: 09508471
Date Received: 05/26/95 07:00

The following results are for Sodium-CLP

Lab #	Conc.	Unit	Client Designation
95 0024196	22	mg/l	Bldg.697 MW1-2931776
95 0024198	<0.40	mg/l	Field Blank

The following results are for Nickel-CLP

Lab #	Conc.	Unit	Client Designation
95 0024196	<0.050	mg/l	Bldg.697 MW1-2931776
95 0024198	<0.050	mg/l	Field Blank

The following results are for Lead-CLP

Lab #	Conc.	Unit	Client Designation
95 0024196	<0.0025	mg/l	Bldg.697 MW1-2931776
95 0024198	<0.0025	mg/l	Field Blank

The following results are for Antimony-CLP

Lab #	Conc.	Unit	Client Designation
95 0024196	<0.0050	mg/l	Bldg.697 MW1-2931776
95 0024198	<0.0050	mg/l	Field Blank

The following results are for Selenium-CLP

Lab #	Conc.	Unit	Client Designation
95 0024196	<0.0050	mg/l	Bldg.697 MW1-2931776
95 0024198	<0.0050	mg/l	Field Blank



000360

EMSL

Attention: Charles Appleby
U.S. Army - Fort Monmouth
SELFM-PW-EV
Building 173
Fort Monmouth, NJ 07703

Project #: 09508471
Date Received: 05/26/95 07:00

The following results are for Thallium-CLP

Lab #	Conc.	Unit	Client Designation
95 0024196	<0.0050	mg/l	Bldg.697 MW1-2931776
95 0024198	<0.0050	mg/l	Field Blank

The following results are for Vanadium-CLP

Lab #	Conc.	Unit	Client Designation
95 0024196	<0.050	mg/l	Bldg.697 MW1-2931776
95 0024198	<0.050	mg/l	Field Blank

The following results are for Zinc-CLP

Lab #	Conc.	Unit	Client Designation
95 0024196	0.031	mg/l	Bldg.697 MW1-2931776
95 0024198	<0.020	mg/l	Field Blank

000361

EMSL

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: **EMSL Analytical** Contract: _____

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

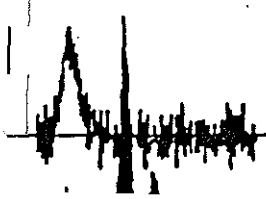
Initial Calibration Source: **Inorganic Ventures**

Continuing Calibration Source: **SPEX**

Concentration Units: **mg/l**

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R (1)	True	Found	%R (1)	Found	%R (1)	
Aluminum-CLP	**2.0**	**2.00**	**100**	**2.0**	**2.01**	**100.5**			**P**
Antimony-CLP	**0.05**	**0.0466**	**93.2**	**0.05**	**0.0456**	**91.2**			**F**
Arsenic-CLP	**0.05**	**0.052**	**104**	**0.05**	**0.04528**	**91**			**F**
Barium-CLP	**2.0**	**2.00**	**100**	**2.0**	**2.02**	**101**			**P**
Beryllium-CLP	**2.0**	**2.00**	**100**	**2.0**	**2.04**	**102**			**P**
Cadmium-CLP	**2.0**	**2.00**	**100**	**2.0**	**2.02**	**101**			**P**
Calcium-CLP	**2.0**	**2.00**	**100**	**2.0**	**1.97**	**98.5**			**P**
Chromium-CLP	**2.0**	**2.00**	**100**	**2.0**	**1.99**	**99.5**			**P**
Cobalt-CLP	**2.0**	**2.00**	**100**	**2.0**	**1.84**	**92**			**P**
Copper-CLP	**2.0**	**2.00**	**100**	**2.0**	**1.96**	**98**			**P**
Iron-CLP	**2.0**	**2.00**	**100**	**2.0**	**1.94**	**97**			**P**
Lead-CLP	**0.025**	**0.02643**	**106**	**0.025**	**0.02536**	**101.4**			**F**
Magnesium-CLP	**2.0**	**2.00**	**100**	**2.0**	**1.92**	**96**			**P**
Manganese-CLP	**2.0**	**2.00**	**100**	**2.0**	**1.97**	**98.5**			**P**
Mercury-CLP	**0.003**	**0.0031**	**103.3**	**0.003**	**0.0029**	**97**			**CV**
Nickel-CLP	**2.0**	**2.00**	**100**	**2.0**	**1.99**	**99.5**			**P**
Potassium-CLP	**2.0**	**2.00**	**100**	**2.0**	**1.90**	**95**			**P**
Selenium-CLP	**0.05**	**0.0508**	**102**	**0.05**	**0.0506**	**101.2**			**F**
Silver-CLP	**2.0**	**2.00**	**100**	**2.0**	**1.99**	**99.5**			**P**
Sodium-CLP	**2.0**	**2.00**	**100**	**2.0**	**1.99**	**99.5**			**P**
Thallium-CLP	**0.05**	**0.04933**	**99**	**0.05**	**0.05394**	**108**			**F**
Vanadium-CLP	**2.0**	**2.00**	**100**	**2.0**	**1.99**	**99.5**			**P**
Zinc-CLP	**2.0**	**2.00**	**100**	**2.0**	**1.95**	**97.5**			**P**
Cyanide									

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



EMSL

BLANKS

Lab Name: **EMSL ANALYTICAL** Contract: _____

Lab Code: _____ Case No.: _____ AS No.: _____ SDG No.: _____

Preparation Blank Matrix (soil/water): **Water**

Preparation Blank Concentration Units (mg/l or mg/kg): **mg/l**

	Inital Calibration Blank		Continuing Calibration Blank (ug/l)						Preparation Blank		
Analyte	(ug/l)	C	1	C	2	C	3	C		C	M
Aluminum-CLP	**5**		**10**						**0.001**		**P**
Antimony-CLP	**0.1**		**1.2**						**0.001**		**F**
Arsenic-CLP	**0.27**		**0.04**						**0.0**		**F**
Barium-CLP	**1**		**1**						**0.001**		**P**
Beryllium-CLP	**1**		**0.0**						**0.0**		**P**
Cadmium-CLP	**1**		**1**						**0.001**		**P**
Calcium-CLP	**2**		**44**						**0.0**		**P**
Chromium-CLP	**1**		**2**						**0.001**		**P**
Cobalt-CLP	**3**		**2**						**0.001**		**P**
Copper-CLP	**1**		**1**						**0.001**		**P**
Iron-CLP	**2**		**22**						**0.001**		**P**
Lead-CLP	**0.38**		**0.33**						**0.0001**		**F**
Magnesium-CLP	**10**		**25**						**0.001**		**P**
Manganese-CLP	**1**		**1**						**0.0**		**P**
Mercury-CLP	**0.1**		**0.0**						**0.0**		**CV**
Nickel-CLP	**2**		**4**						**0.001**		**P**
Potassium-CLP	**816**		**528**						**0.0**		**P**
Selenium-CLP	**1.7**		**1.2**						**0.001**		**F**
Silver-CLP	**1**		**1**						**0.001**		**P**
Sodium-CLP	**3**		**4**						**0.0**		**P**
Thallium-CLP	**0.88**		**0.53**						**0.001**		**F**
Vanadium-CLP	**0.0**		**0.0**						**0.001**		**P**
Zinc-CLP	**2**		**2**						**0.001**		**P**
Cyanide											

000363

SPIKE SAMPLE RECOVERY

Lab Name: **EMSL Analytical** Contract: _____ Lab Sample No.: **95-23979, 95-23959, 95-23482**

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

Matrix (soil/water): **Water** Level (low/med) : **Low**

% Solids for Sample:_____

Concentration Units (mg/l or mg/kg dry weight):__**mg/l**____

	Control Limit	Spiked Sample		Sample Result		Spike Added			
Analyte	%R	Result (SSR)	C	(SR)	C	(SA)	%R	Q	M
Aluminum-CLP	**75-125**	**5.09**		**0.409**		**5**	**94**		**P**
Antimony-CLP	**75-125**	**1**		**0.0**		**1**	**100**		**F**
Arsenic-CLP	**75-125**	**0.98**		**0.0**		**1**	**98**		**F**
Barium-CLP	**75-125**	**5.11**		**0.002**		**5**	**102**		**P**
Beryllium-CLP	**75-125**	**5.22**		**0.001**		**5**	**104**		**P**
Cadmium-CLP	**75-125**	**5.03**		**0.0**		**5**	**101**		**P**
***Calcium-CLP**	**75-125**	**62.9**		**63**		**5**	**1**		**P**
Chromium-CLP	**75-125**	**5.05**		**0.022**		**5**	**101**		**P**
Cobalt-CLP	**75-125**	**4.79**		**0.005**		**5**	**96**		**P**
Copper-CLP	**75-125**	**4.92**		**0.007**		**5**	**98**		**P**
Iron-CLP	**75-125**	**4.95**		**0.127**		**5**	**96**		**P**
Lead-CLP	**75-125**	**1.1**		**0.0**		**1**	**110**		**F**
***Magnesium-CLP**	**75-125**	**25**		**22.8**		**5**	**44**		**P**
Manganese-CLP	**75-125**	**5**		**0.008**		**5**	**100**		**P**
Mercury-CLP	**75-125**	**0.0029**		**0.0001**		**0.003**	**93**		**CV**
Nickel-CLP	**75-125**	**5.09**		**0.,009**		**5**	**102**		**P**
Potassium-CLP	**75-125**	**4.12**		**0.336**		**5**	**76**		**P**
Selenium-CLP	**75-125**	**1**		**0.0**		**1**	**100**		**F**
Silver-CLP	**75-125**	**4.99**		**0.0**		**5**	**100**		**P**
***Sodium-CLP**	**75-125**	**46**		**25.2**		**5**	**416**		**P**
Thallium-CLP	**75-125**	**1.1**		**0.0**		**1**	**110**		**F**
Vanadium-CLP	**75-125**	**4.97**		**0.0**		**5**	**99**		**P**
Zinc-CLP	**75-125**	**4.89**		**0.011**		**5**	**98**		**P**
Cyanide	75-125								

Comments:__***NOTE: Sample >5x's Spike Concentration**_____

EMSL

DUPLICATES

Lab Name: **EMSL ANALYTICAL** Contract: _____ Lab Sample No.: **95-23979, 95-23959, 95-23482**

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

Matrix (soil/water): **Water** :Level (low/med.): **Low**

% Solids for Sample: _____ % Solids for Duplicate: _____

Concentration units (mg/l or mg/kg dry weight): **mg/l**

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum-CLP	**+/-20%**	**0.409**		**0.417**		**21**		**P**
Antimony-CLP	**+/-20%**	**0.001**		**0.001**		**0.0**		**F**
Arsenic-CLP	**+/-20%**	**0.001**		**0.001**		**0.0**		**F**
Barium-CLP	**+/-20%**	**0.002**		**0.002**		**0.0**		**P**
Beryllium-CLP	**+/-20%**	**0.001**		**0.001**		**0.0**		**P**
Cadmium-CLP	**+/-20%**	**0.0**		**0.0**		**0.0**		**P**
Calcium-CLP	**+/-20%**	**62.6**		**63.5**		**1.4**		**P**
Chromium-CLP	**+/-20%**	**0.023**		**0.023**		**9.1**		**P**
Cobalt-CLP	**+/-20%**	**0.005**		**0.005**		**0.0**		**P**
Copper-CLP	**+/-20%**	**0.007**		**0.007**		**0.0**		**P**
Iron-CLP	**+/-20%**	**0.117**		**0.138**		**16.5**		**P**
Lead-CLP	**+/-20%**	**0.0023**		**0.0023**		**0.0**		**F**
Magnesium-CLP	**+/-20%**	**22.7**		**22.9**		**0.9**		**P**
Manganese-CLP	**+/-20%**	**0.008**		**0.008**		**0.0**		**P**
Mercury-CLP	**+/-20%**	**0.0001**		**0.0001**		**0.0**		**CV**
Nickel-CLP	**+/-20%**	**0.009**		**0.009**		**0.0**		**P**
Potassium-CLP	**+/-20%**	**0.325**		**0.347**		**6.5**		**P**
Selenium-CLP	**+/-20%**	**0.001**		**0.001**		**0.0**		**F**
Silver-CLP	**+/-20%**	**0.0**		**0.0**		**0.0**		**P**
Sodium-CLP	**+/-20%**	**25**		**25.4**		**2**		**P**
Thallium-CLP	**+/-20%**	**0.001**		**0.001**		**0.0**		**F**
Vanadium-CLP	**+/-20%**	**0.0**		**0.0**		**0.0**		**P**
Zinc-CLP	**+/-20%**	**0.011**		**0.011**		**0.0**		**P**
Cyanide								

EMSL

LABORATORY CONTROL SAMPLE

Lab Name: **EMSL Analytical** Contract: _____

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

Solid LCS Source: _____

Aqueous LCS Source: **Inorganic Ventures**

Analyte	Aqueous (mg/l) True	Found	% R	Solid (mg/kg) True	Found	C	Limits	% R
Aluminum-CLP	**5.00**	**5.08**	**102**				**80-120%**	
Antimony-CLP	**1.00**	**1.01**	**101**				**80-120%**	
Arsenic-CLP	**1.00**	**1.00**	**100**				**80-120%**	
Barium-CLP	**5.00**	**5.25**	**105**				**80-120%**	
Beryllium-CLP	**5.00**	**5.37**	**107.4**				**80-120%**	
Cadmium-CLP	**5.00**	**5.10**	**102**				**80-120%**	
Calcium-CLP	**5.00**	**5.24**	**105**				**80-120%**	
Chromium-CLP	**5.00**	**5.21**	**104.2**				**80-120%**	
Cobalt-CLP	**5.00**	**5.21**	**104.2**				**80-120%**	
Copper-CLP	**5.00**	**5.10**	**102**				**80-120%**	
Iron -CLP	**5.00**	**5.26**	**105.2**				**80-120%**	
Lead-CLP	**1.00**	**1.10**	**110**				**80-120%**	
Magnesium-CLP	**5.00**	**5.18**	**104**				**80-120%**	
Manganese-CLP	**5.00**	**5.16**	**103.2**				**80-120%**	
Mercury-CLP	**0.003**	**0.003**	**100**				**80-120%**	
Nickel-CLP	**5.00**	**5.20**	**104**				**80-120%**	
Potassium-CLP	**5.00**	**4.31**	**86.2**				**80-120%**	
Selenium-CLP	**1.00**	**1.02**	**102**				**80-120%**	
Silver-CLP	**5.00**	**5.17**	**103.4**				**80-120%**	
Sodium-CLP	**5.00**	**4.01**	**80.2**				**80-120%**	
Thallium-CLP	**1.00**	**1.04**	**104**				**80-120%**	
Vanadium-CLP	**5.00**	**4.85**	**97**				**80-120%**	
Zinc-CLP	**5.00**	**4.97**	**99.4**				**80-120%**	
Cyanide								



U.S. EPA - CLP 000366

11A
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: EMSL Contract: _____

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

ICP ID Number: _____ Date: _____

Analyte	Wavelength (nm)	Interelement Correction Factors for: Al	Ca	Fe	Mg	V
Aluminum	308.20					0.0082
Antimony	206.84				0.0022	-0.0099
Arsenic	193.70	0.0058				0.0120
Barium	493.4					
Beryllium	313.04					0.0019
Cadmium	228.80					
Calcium	317.93					
Chromium	267.72					0.0093
Cobalt	228.62					
Copper	324.75					
Iron	259.94			-0.0017		
Lead	220.30	0.0011				-0.0037
Magnesium	279.08					
Manganese	257.61					
Mercury						
Nickel	231.60					
Potassium	766.					
Selenium	196.03			0.0002		-0.0022
Silver	328.07					
Sodium	588.99			0.0312		
Thallium	190.80					0.0038
Vanadium	292.40					
Zinc	213.86					

Comments:

11B

ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

000367

Lab Name: EMSL Contract: _____

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

ICP ID Number: _____ Date: _____

Analyte	Wavelength (nm)	Interelement Correction Factors for: Mn	Mo	Ni	Cr	Cu
Aluminum			0.0155			
Antimony				0.0038	0.0158	
Arsenic			0.0013	0.0007	0.0016	0.0003
Barium						
Beryllium						
Cadmium						
Calcium						
Chromium				0.0003		
Cobalt						
Copper			0.0005	0.0109		
Iron					0.0037	
Lead		-0.0024	0.0013			-0.0002
Magnesium		-0.003				
Manganese						
Mercury						
Nickel			-0.0018			
Potassium						
Selenium			-0.0168			
Silver		0.001				
Sodium						
Thallium		0.0021				
Vanadium			0.0014			
Zinc				0.0035		0.0035

Comments:

_____

_____

_____

_____

U.S. EPA - CLP

11B

ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

000368

Lab Name: EMSL Contract: _____

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

ICP ID Number: _____ Date: _____

Analyte	Wavelength (nm)	Interelement Correction Factors for: Ba	Pb	Co	_	_
Aluminum				0.0002		
Antimony						
Arsenic						
Barium			0.0025			
Beryllium						
Cadmium						
Calcium						
Chromium						
Cobalt		0.0011				
Copper				0.0021		
Iron						
Lead				0.0010		
Magnesium						
Manganese						
Mercury						
Nickel				0.0004		
Potassium						
Selenium				-0.0067		
Silver						
Sodium						
Thallium				0.0094		
Vanadium						
Zinc						

Comments:

GENERAL CHEMISTRY ANALYSIS DATA PACKAGE

Attention: Charles Appleby
U.S. Army - Fort Monmouth
SELFM-PW-EV
Building 173
Fort Monmouth, NJ 07703

Project #: 09508471
Date Received: 05/26/95 07:00

The following results are for Total Cyanide

Lab #	Conc.	Unit	Client Designation
95 0024196	<0.010	mg/l	Bldg.697 MW1-2931776
95 0024198	<0.010	mg/l	Field Blank

BLANKS

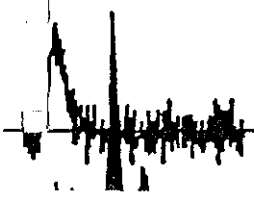
Lab Name: **EMSL Analytical** Contract: _____

Lab Code: _____ Case No.: _____ AS No.: _____ SDG No.: _____

Preparation Blank Matrix (Soil/Water): **Water**

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

Analyte	Initial Calib. Blank (ug/l)	C	Continuing Calibration Blank (ug/l) 1	C	2	C	3	C	Preparation Blank	C	M
T. Cyanide									**<0.01**		



EMSL

SPIKE SAMPLE RECOVERY

Lab Name: **EMSL Analytical** Contract: _____ Lab Sample No.: **95-23959**

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

Matrix (soil/water): **Water** Level (low/med) : _____

% Solids for Sample: _____

Concentration Units (mg/l or mg/kg dry weight): **mg/l**

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
T. Cyanide	**75-125**	**0.180**		**0.00**		**0.204**	**88**		

Comments: _____

EMSL

DUPLICATES

Lab Name: **EMSL ANALYTICAL** Contract: _____ Lab Sample No.: **95-23330**

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

Matrix (soil/water): **Water** :Level (low/med.): _____

% Solids for Sample: _____ % Solids for Duplicate: _____

Concentration units (mg/l or mg/kg dry weight): **mg/l**

Analyte	Control Limit	Sample(S)	C	Duplicate(D)	C	RPD	Q	M
T. Cyanide	**+/-20%**	**<0.01**		**<0.01**		**NC**		

EMSL

LABORATORY CONTROL SAMPLE

Lab Name: **EMSL Analytical** Contract: _____

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

Solid LCS Source: _____

Aqueous LCS Source: **Varopis**

Analyte	Aqueous (ug/l)			Solid (mg/kg)				
	True	Found	%R	True	Found	C	Limits	%R
T. Cyanide	**204**	**172**	**84**				**75-125**	

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)

DEPARTMENT OF THE ARMY
Headquarters, U.S. Army Garrison Fort Monmouth
Fort Monmouth, New Jersey 07703 - 5101

14 FEB 1996

REPLY TO
ATTENTION OF

Directorate of Public Works

N.J. Dept of Environmental Protection
Division of Responsible Party Site Remediation
Bureau of Federal Case Management- CN029
401 East State Street - 5th Floor
Trenton, N.J. 08625-0028
Attn: Ian Curtis - Case Manager

Dear Mr. Curtis:

Enclosed please find UST Closure and Site Investigation Reports for the following Fort Monmouth Sites:

Building 108 - 0090010-7	Building 411 - 0090010-28	Building 682 - 0081533-106
Building 114 - 0081533-1	Building 423 - 0090010-39	Building 161 - 0090010- 14
Building 443 - 0090010-49	Building 702 - 0081533-114	Building 167 - 0090010-18
Building 563 - 0081533-82	Building 789 - 0081533-126	Building 206 - 0081533-4
Building 608 - 0081533-86	Building 1106 - 0081533-166	Building 210 - 0081533-8
Building 620 - 0081533-93	Building 1122 - 0081533-199	Building 293 - 0081533-67
Building 625 - 0081533-96	Building 3027 - 0192486-28	Building 296 - 0081533-69
Building 659 - 0081533-101	Building 9002 - 0192468-1	Building 9017 - 0090029-6
Building 9049 - 0090029-20	Building 697 - 0081533-194	Building 2500 - 0081515-52
Building 9090 - 0090029-30	thru 196	thru 56

If the information provided in this enclosure is inadequate or you require further information with regard to these documents please contact Mr. Appleby at (908) 532-6224.

Sincerely,

James Ott
Director of Public Works

EMSL ANALYTICAL, INC.

Asbestos - Lead - Environmental - Materials

ew Jersey

Corporate Office &
Main Laboratory
1 Haddon Avenue
stmont, NJ 08108
9) 858-4800

3 Cooper Street
stmont, NJ 08108
9) 858-4800

1056 Stelton Road
Piscataway, NJ 08854
8) 981-0550

New York

) Fifth Avenue
pire State Bldg.
te 1524
New York, NY 10118
(212) 290-0051

3 Stonehenge Lane
de Place, NY 11514
(516) 997-7251

alifornia

1720 S. Amphlett Blvd.
Suite 130
Mateo, CA 94402
570-5401

lorida

78 Adams Avenue
lbourne, FL 32935
07) 253-4224

Georgia

00 Rosewell Street, SE
Suite One
Smyrna, GA 30080
4) 333-6066

lichigan

212 S. Wagner Road
n Arbor, MI 48103
13) 668-6810

North Carolina

0-G Guilford College Rd.
eensboro, NC 27409
(910) 297-1487

exas

01 Central Parkway
Suite C-13
Houston, TX 77092
13) 686-3635

ANALYTICAL DATA REPORT
FOR
U.S. ARMY, FORT MONMOUTH
SELFM-PW-EV
Building 173
Fort Monmouth, NJ 07703

PROJECT : **Bldg. #697**

EMSL Project: # 95064013

Field Sample No. & Location	Laboratory Sample ID	Matrix	Date & Time of Collection	Date Received
1876.1, Trip Blank	**95-26797**	**Aqueous**	**6/16/95 @ 0545**	**6/16/95**
1876.2, Field Blank	**95-26798**	**Aqueous**	**6/16/95 @ 1354**	**6/16/95**
1877.1, MW1-2931776, Bldg. #697	**95-26799**	**Aqueous**	**6/16/95 @ 1027**	**6/16/95**

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. Date Incorrect

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

	Page
Sample Data Summary Package	4-24
Laboratory Deliverables	25
QA/QC Checklist	26
Chain of Custody Documentation	27-30
Methodology Summary	31-33
Laboratory Chronicle	34
Analysis Conformance/Non-Conformance Summary Format	35-39
GC/MS Volatile Organic Data Package	40-145
. Initial Calibration BFB Tune	
. Initial Calibration Data	
. Continuing Calibration BFB Tune	
. Continuing Calibration Data	
. Internal Standards Area Summary	
. Sample Results	
. Surrogate Recovery Form	
. Method Blank Data	
. Matrix Spike/Matrix Spike Duplicate Data	
GC/MS Semivolatile Organic Data Package	146-238
. Initial Calibration DFTPP Tune	
. Initial Calibration Data	
. Continuing Calibration DFTPP Tune	
. Continuing Calibration Data	
. Internal Standards Area Summary	
. Sample Results	
. Surrogate Recovery Form	
. Method Blank Data	
. Matrix Spike/Matrix Spike Duplicate Data	
Pesticides & PCB Analysis Data Package	239-425
. Standard Data	
. Sample Results	
. Surrogate Recovery Form	
. Method Blank	
. Matrix Spike/Matrix Spike Duplicate Data	
Metals Analysis Data Package	426-440
. Sample Results	
. Calibrations	
. Blanks	
. Spike Recovery	
. Duplicates	
. Laboratory Control Sample	

EMSL

TABLE OF CONTENTS

	Page
Sample Data Summary Package	4-24
Laboratory Deliverables	25
QA/QC Checklist	26
Chain of Custody Documentation	27-30
Methodology Summary	31-33
Laboratory Chronicle	34
Analysis Conformance/Non-Conformance Summary Format	35-39
GC/MS Volatile Organic Data Package	40-145
. Initial Calibration BFB Tune	
. Initial Calibration Data	
. Continuing Calibration BFB Tune	
. Continuing Calibration Data	
. Internal Standards Area Summary	
. Sample Results	
. Surrogate Recovery Form	
. Method Blank Data	
. Matrix Spike/Matrix Spike Duplicate Data	
GC/MS Semivolatile Organic Data Package	146-238
. Initial Calibration DFTPP Tune	
. Initial Calibration Data	
. Continuing Calibration DFTPP Tune	
. Continuing Calibration Data	
. Internal Standards Area Summary	
. Sample Results	
. Surrogate Recovery Form	
. Method Blank Data	
. Matrix Spike/Matrix Spike Duplicate Data	
Pesticides & PCB Analysis Data Package	239-425
. Standard Data	
. Sample Results	
. Surrogate Recovery Form	
. Method Blank	
. Matrix Spike/Matrix Spike Duplicate Data	
Metals Analysis Data Package	426-440
. Sample Results	
. Calibrations	
. Blanks	
. Spike Recovery	
. Duplicates	
. Laboratory Control Sample	

TABLE OF CONTENTS, cont.

	Page
General Chemistry Analytical Data Package	441-446
. Sample Results	
. Blanks	
. Quality Assurance Data	
Statement of Authentication	447

SAMPLE DATA SUMMARY PACKAGE

EMSL

Date of Report: 07/17/95
Project Number: 95064013
Lab ID: 95-0026797
Date Collected: 06/16/95 05:45
Collected By: Client
Date Received: 06/16/95 18:10

Attention: Charles Appleby
U.S. Army - Fort Monmouth
SELFM-PW-EV
Building 173
Fort Monmouth NJ 07703

Client Project: None

Client Designation: Trip Blank

	Conc.	Unit
ORGANIC		
Volatiles		
Volatiles by 524.2 w/ Library Search	see attached	ug/l

VOLATILE ORGANICS ANALYSIS DATA SHEET

1876.1

006

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No.: FT. MONMOUTH NJ Bldg#: NJDEP MW#: TRIP BLANK

Matrix: (soil/water) WATER Lab Sample ID: 9526797

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C8686.D

Level: (low/med) LOW Date Received: 6/16/95

% Moisture: not dec. NA Date Analyzed: 6/27/95

GC Column: DB-624 x 75m ID: 0.53 (mm) Dilution Factor: 1.0

Concentration Units:

CAS No.	Compound	(ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	.50	U
74-87-3	Chloromethane	1.0	
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	.80	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	8.4	
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# 1876.1

007

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No.: FT. MONMOUTH NJ Bldg#: NJDEP MW#: TRIP BLANK

Matrix: (soil/water) WATER Lab Sample ID: 9526797

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C8686.D

Level: (low/med) LOW Date Received: 6/16/95

% Moisture: not dec. NA Date Analyzed: 6/27/95

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# 1876.1

008

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No. FT. MONMOUTH NJ Bldg#: _____ NJDEPMW#: TRIP BLANK

Matrix: (soil/water) WATER Lab Sample ID: 9526797V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C8686.D

Level: (low/med) LOW Date Received: 6/16/95

% Moisture: not dec. NA Date Analyzed: 6/27/95

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. 107-04-0	Ethane, 1-bromo-2-chloro-	13.88	3	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.				

EMSL

Date of Report: 07/18/95
Project Number: 95064013
Lab ID: 95-0026798
Date Collected: 06/16/95 13:54
Collected By: Client
Date Received: 06/16/95 18:10

Attention: Charles Appleby
U.S. Army - Fort Monmouth
SELFM-PW-EV
Building 173
Fort Monmouth NJ 07703

Client Project: None

Client Designation: Field Blank

	Conc.	Unit
LIMITED		
Total Cyanide	<0.010	mg/l
METALS		
Ag-CLP	<0.050	mg/l
Aluminum-CLP	<0.20	mg/l
Arsenic-CLP	<0.0050	mg/l
Barium-CLP	<0.020	mg/l
Beryllium-CLP	<0.0050	mg/l
Calcium-CLP	<0.40	mg/l
Cadmium-CLP	<0.010	mg/l
Cobalt-CLP	<0.050	mg/l
Chromium-CLP	<0.050	mg/l
Copper-CLP	<0.050	mg/l
Iron-CLP	<0.10	mg/l
Mercury, CLP	<0.0010	mg/l
Potassium-CLP	<3.0	mg/l
Magnesium-CLP	<0.10	mg/l
Manganese-CLP	<0.020	mg/l
Sodium-CLP	<0.40	mg/l
Nickel-CLP	<0.050	mg/l
Lead-CLP	<0.0025	mg/l
Antimony-CLP	<0.0050	mg/l
Selenium-CLP	<0.0050	mg/l
Thallium-CLP	<0.0050	mg/l
Vanadium-CLP	<0.050	mg/l
Zinc-CLP	<0.020	mg/l
ORGANIC		
Pesticides		
Pesticides and PCBs by 608	see attached	ug/l
Semi-Volatiles		
TCL BNA's 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 # 697 FMETL # 1876.2 NJDEP# Field Blank

1D

EPA SAMPLE NO. 010

PESTICIDE ORGANICS ANALYSIS DATA SHEET

Lab Name: EMSL Contract:

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

Matrix: (soil/water) water Lab Sample ID: 95-26798

Sample wt/vol: 960 (g/mL) mL Lab File ID: E:JU20E42

% Moisture N/A decanted: (Y/N) N Date Received: 06/16/95

Extraction: (SepF/Cont/Sonc) SepF Date Extracted: 06/21/95

Concentrated Extract Volume: 10 (ml) Date Analyzed: 06/29/95

Injection Volume: 1 (uL) Dilution Factor 1

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
319-84-6	alpha-BHC	0.02	U
319-85-7	beta-BHC	0.04	U
319-86-8	delta-BHC	0.02	U
58-89-9	gamma-BHC (Lindane)	0.03	U
76-44-8	Heptachlor	0.02	U
309-00-2	Aldrin	0.04	U
1024-57-3	Heptachlor epoxide	0.04	U
959-98-8	Endosulfan I	0.02	U
60-57-1	Dieldrin	0.03	U
72-55-9	4,4'-DDE	0.04	U
72-20-8	Endrin	0.04	U
33213-65-9	Endosulfan II	0.04	U
72-54-8	4,4'-DDD	0.04	U
1031-07-8	Endosulfan sulfate	0.04	U
50-29-3	4,4'-DDT	0.04	U
7421-36-3	Endrin aldehyde	0.1	U
57-74-9	Chlordane	0.1	U
8001-35-2	Toxaphene	1	U
12674-11-2	Aroclor-1016	1	U
11104-28-2	Aroclor-1221	1	U
11141-16-5	Aroclor-1232	1	U
53469-21-9	Aroclor-1242	1	U
12672-29-6	Aroclor-1248	1	U
11097-69-1	Aroclor-1254	1	U
11096-82-5	Aroclor-1260	1	U

US Army Fort Monmouth, NJ
Bldg #697
FMETL # 1876.2

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

9526798B
Field Blank

011

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Matrix: (soil/water) WATER Lab Sample ID: 9526798B

Sample wt/vol: 1000.0 (g/mL ML Lab File ID: B8087.D

Level: (low/med) _____ Date Received: 6/16/95

% Moisture: _____ decanted: (Y/N): N Date Extracted: 6/23/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 7/1/95

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
108-95-2	Phenol	3	JB
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	bis(2-chloroisopropyl)ether	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U

US Army Fort Monmouth, NJ
Bldg #697
FMETL #1876.2

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

9526798B
Field Blank

012

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Matrix: (soil/water) WATER Lab Sample ID: 9526798B

Sample wt/vol: 1000.0 (g/mL ML Lab File ID: B8087.D

Level: (low/med) _____ Date Received: 6/16/95

% Moisture: _____ decanted: (Y/N): N Date Extracted: 6/23/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 7/1/95

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
51-28-5	2,4-Dinitrophenol	25	U
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
86-73-7	Fluorene	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	n-Nitrosodiphenylamine	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-08	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
56-55-3	Benzo[a]anthracene	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	10	U
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo[b]fluoranthene	10	U
207-08-9	Benzo[k]fluoranthene	10	U
50-32-8	Benzo[a]pyrene	10	U
193-39-5	Indeno[1,2,3-cd]pyrene	10	U
53-70-3	Dibenz[a,h]anthracene	10	U
191-24-2	Benzo[g,h,i]perylene	10	U

US Army Fort Monmouth, NJ
Bldg # 697
FMETL #1876.2

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO. 9526798B Fld Blank

013

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Matrix: (soil/water) WATER Lab Sample ID: 9526798B

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: B8087.D

Level: (low/med) _____ Date Received: 6/16/95

% Moisture: _____ decanted: (Y/N) N Date Extracted: 6/23/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 7/1/95

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.				

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL# 1876.2

014

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No.: FT. MONMOUTH NJ Bldg#: NJDEP MW#: FIELD BLANK

Matrix: (soil/water) WATER Lab Sample ID: 9526798

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C8687.D

Level: (low/med) LOW Date Received: 6/16/95

% Moisture: not dec. NA Date Analyzed: 6/27/95

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	.90	
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	.80	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	7.3	
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

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL# 1876.2

01

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No.: FT. MONMOUTH NJ Bldg#: NJDEP MW#: FIELD BLANK

Matrix: (soil/water) WATER Lab Sample ID: 9526798

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C8687.D

Level: (low/med) LOW Date Received: 6/16/95

% Moisture: not dec. NA Date Analyzed: 6/27/95

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# 1876.2

016

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No. FT. MONMOUTH NJ Bldg#: NJDEPMW#: FIELD BLANK

Matrix: (soil/water) WATER Lab Sample ID: 9526798V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C8687.D

Level: (low/med) LOW Date Received: 6/16/95

% Moisture: not dec. NA Date Analyzed: 6/27/95

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. 107-04-0	Ethane, 1-bromo-2-chloro-	13.88	3	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.				

EMSL

Date of Report: 07/18/95
Project Number: 95064013
Lab ID: 95-0026799
Date Collected: 06/16/95 10:27
Collected By: Client
Date Received: 06/16/95 18:10

Attention: Charles Appleby
U.S. Army - Fort Monmouth
SELFM-PW-EV
Building 173
Fort Monmouth NJ 07703

Client Project: None

Client Designation: Bldg.697,MW1-2931776

	Conc.	Unit
LIMITED		
Total Cyanide	<0.010	mg/l
METALS		
Ag-CLP	<0.050	mg/l
Aluminum-CLP	0.20	mg/l
Arsenic-CLP	<0.0050	mg/l
Barium-CLP	0.029	mg/l
Beryllium-CLP	<0.0050	mg/l
Calcium-CLP	14	mg/l
Cadmium-CLP	<0.010	mg/l
Cobalt-CLP	<0.050	mg/l
Chromium-CLP	<0.050	mg/l
Copper-CLP	<0.050	mg/l
Iron-CLP	3.5	mg/l
Mercury, CLP	<0.0010	mg/l
Potassium-CLP	<3.0	mg/l
Magnesium-CLP	5.4	mg/l
Manganese-CLP	0.023	mg/l
Sodium-CLP	23	mg/l
Nickel-CLP	<0.050	mg/l
Lead-CLP	<0.0025	mg/l
Antimony-CLP	<0.0050	mg/l
Selenium-CLP	<0.0050	mg/l
Thallium-CLP	<0.0050	mg/l
Vanadium-CLP	<0.050	mg/l
Zinc-CLP	<0.020	mg/l
ORGANIC		
Pesticides		
Pesticides and PCBs by 608	see attached	ug/l
Semi-Volatiles		
TCL BNA's with Library Search	see attached	ug/l
Volatiles		
Volatiles by 524.2 w/ Library Search	see attached	ug/l

U.S. Army Ft. Monmouth
Bldg #694 FMETL # 1877.1 NJDEP # 1-2931776

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: EMSL Contract:

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

Matrix: (soil/water) water Lab Sample ID: 95-26799

Sample wt/vol: 980 (g/mL) mL Lab File ID: E:JU20E44

% Moisture N/A decanted: (Y/N) N Date Received: 06/16/95

Extraction: (SepF/Cont/Sonc) SepF Date Extracted: 06/21/95

Concentrated Extract Volume: 10 (ml) Date Analyzed: 06/29/95

Injection Volume: 1 (uL) Dilution Factor 1

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
319-84-6	alpha-BHC	0.02	U
319-85-7	beta-BHC	0.04	U
319-86-8	delta-BHC	0.02	U
58-89-9	gamma-BHC (Lindane)	0.03	U
76-44-8	Heptachlor	0.02	U
309-00-2	Aldrin	0.04	U
1024-57-3	Heptachlor epoxide	0.04	U
959-98-8	Endosulfan I	0.02	U
60-57-1	Dieldrin	0.03	U
72-55-9	4,4'-DDE	0.04	U
72-20-8	Endrin	0.04	U
33213-65-9	Endosulfan II	0.04	U
72-54-8	4,4'-DDD	0.31	P
1031-07-8	Endosulfan sulfate	0.04	U
50-29-3	4,4'-DDT	0.12	P
7421-36-3	Endrin aldehyde	0.1	U
57-74-9	Chlordane	1.6	
8001-35-2	Toxaphene	1	U
12674-11-2	Aroclor-1016	1	U
11104-28-2	Aroclor-1221	1	U
11141-16-5	Aroclor-1232	1	U
53469-21-9	Aroclor-1242	1	U
12672-29-6	Aroclor-1248	1	U
11097-69-1	Aroclor-1254	1	U
11096-82-5	Aroclor-1260	1	U

u Army Fort Monmouth, NJ
Bldg # 697
IRP # 1877.1

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

9526799B
MW1-293/776

019

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Matrix: (soil/water) WATER Lab Sample ID: 9526799B

Sample wt/vol: 1000.0 (g/mL ML Lab File ID: B8088.D

Level: (low/med) _____ Date Received: 6/16/95

% Moisture: _____ decanted: (Y/N): N Date Extracted: 6/23/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 7/1/95

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
108-95-2	Phenol	3	JB
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	bis(2-chloroisopropyl)ether	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U

US Army Fort Monmouth, NJ
Bldg # 697
FMDTC # 1877.1

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
9526799B
MB1-2931776

020

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Matrix: (soil/water) WATER Lab Sample ID: 9526799B

Sample wt/vol: 1000.0 (g/mL ML Lab File ID: B8088.D

Level: (low/med) _____ Date Received: 6/16/95

% Moisture: _____ decanted: (Y/N): N Date Extracted: 6/23/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 7/1/95

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
51-28-5	2,4-Dinitrophenol	25	U
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
86-73-7	Fluorene	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	n-Nitrosodiphenylamine	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-08	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
56-55-3	Benzo[a]anthracene	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	10	U
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo[b]fluoranthene	10	U
207-08-9	Benzo[k]fluoranthene	10	U
50-32-8	Benzo[a]pyrene	10	U
193-39-5	Indeno[1,2,3-cd]pyrene	10	U
53-70-3	Dibenz[a,h]anthracene	10	U
191-24-2	Benzo[g,h,i]perylene	10	U

US Army Fort Monmouth NJ
Bldg 697
FMETL #1877.1

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.
9526799B
MB-291776

021

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Matrix: (soil/water) WATER Lab Sample ID: 9526799B

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: B8088.D

Level: (low/med) _____ Date Received: 6/16/95

% Moisture: _____ decanted: (Y/N) N Date Extracted: 6/23/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 7/1/95

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

Number TICs found: 3 Concentration Units: (ug/L or ug/Kg) ug/L

CAS Number	Compound Name	RT	Est. Conc	Q
1. 2733-88-2	15-Tetracosenoic acid, methy	24.70	36	J
2. 112-80-1	Oleic Acid	24.82	12	J
3. 57-10-3	Hexadecanoic acid	24.95	7	J
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.				

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL# 1877.1

022

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No.: FT. MONMOUTH NJ Bldg#: 697 NJDEP MW#: 1-2931776

Matrix: (soil/water) WATER Lab Sample ID: 9526799

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C8690.D

Level: (low/med) LOW Date Received: 6/16/95

% Moisture: not dec. NA Date Analyzed: 6/27/95

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	.90	
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	7.8	
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	.80	
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# 1877.1

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No.: FT. MONMOUTH NJ Bldg#: 697 NJDEP MW#: 1-2931776

Matrix: (soil/water) WATER Lab Sample ID: 9526799

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C8690.D

Level: (low/med) LOW Date Received: 6/16/95

% Moisture: not dec. NA Date Analyzed: 6/27/95

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# 1877.1

024

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No. FT. MONMOUTH NJ Bldg#: 697 NJDEPMW#: 1-2931776

Matrix: (soil/water) WATER Lab Sample ID: 9526799V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C8690.D

Level: (low/med) LOW Date Received: 6/16/95

% Moisture: not dec. NA Date Analyzed: 6/27/95

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: 2 Concentration Units: (ug/L or ug/Kg) ug/L

CAS Number	Compound Name	RT	Est. Conc.	Q
1.	Unknown	3.34	1	J
2. 107-04-0	Ethane, 1-bromo-2-chloro-	13.88	3	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.				

025

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

Laboratory Manager or Environmental Consultant's Signature

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.
31-33	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.
34	11.	A list of all parameters (constituents and conditions) for which the analyses were performed.
4-24	12.	Sample results and corresponding units for each parameter.

EMSL

CHAIN OF CUSTODY

ARMY FORT MONMOUTH

P.O. #: ISO # 95-0091 / SAI

Chain of Custody

Project #: None	Sampler: EMSL (Baxter)	Date / Time 6/16/95	Analysis Parameters: TCL + 30 / TAL	Start:
Customer: Charles Appleby SELFM-RO-EV	Site Name: Bldg. #697			Finish:
Phone: 908-532-6224	MW Sampling			Preservation Method

Lab Sample ID Number	Date/Time	Customer Sample Location/ID Number	Sample Matrix	# of Bottles	VOA 524.2 + Xylene	Ortis Meth 625	Pest / PCB	TAL			Remarks
1876.1	6/16/95 0545	TRIP Blank	aq.	4	X				24	7	Samples Kept at 4 °C
1876.2	1354	Field Blank	aq.	10	X	X	X	X		9	
1877.1	1027	Bldg. #697) MW1-2931776	aq.	10	X	X	X	X		9	

Relinquished By (signature)	Date / Time	Received By (signature)	Shipped By: EMSL.
X	6/16/95 1617	X	
Relinquished By (signature)	Date / Time	Received For Lab by (signature):	Date / Time
	6-16-95 1810		

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

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

Enviornmental Laboratory

Certification Number

028

EMSL ANALYTICAL, INC. 029

INTERNAL CHAIN OF CUSTODY

EMSL

MSL LAB ID NO. 95-26797 to 26799 PROJECT NO. 950164013

SAMPLE/CONTAINERS

PARAMETERS

BN Ext, Metals Prep, TCN, Pest/PCB Ext.

DATE	TIME	ANALYSIS	NAME (PRINT)	SIGNATURE
6/23/95		BN Extraction Prep	Charles Bartolone	
6/20/95		Metals Prep.	David Kienga	
6/21/95		Pest/PCB Ext. Prep.	Jim Kelley	
6/27/95		T. Cyanide	Pavittar Singh	

INTERNAL CUSTODY

030

Project #: 95064613

Lab ID #'s: 95-26797 to 26799

Analyst

	Name (please print)	Signature	Date
1. Base/Neutrals	Scott Van Etten	SVE	7/1/95
2. Acids			
3. Pesticides	Dave Roberts	David Roberts	6/29/95
4. Herbicides			
5. PCB's	Dave Roberts	David Roberts	6/29/95
6. Metals:			
Flame			
✓ Furnace	Michael Boyle	MJB	6/29/95, 6/30/95
✓ ICP	Dom Tercuzzi	D. Tercuzzi	7/4/95
7. Volatiles:			
GC			
GC/MS	Scott Kessler	SK	6/27/95
8. TOC			
9. TOX			
10. Phenols (Total)			
✓ 11. Cyanide (Total)	PAVITTAR SINGH	PS	6/27/95
12. TPH -IR			
✓ 13. Mercury	Dom Tercuzzi	D. Tercuzzi	6/26/95
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.

Pesticides/PCB's - Aqueous

EPA Method 608 - This method covers the determination of pesticides and polychlorinated biphenyls (PCB's) in samples by extraction/concentration with organic solvents and subsequent qualification/quantification by Gas Chromatography. The gas chromatograph utilizes an electron capture detector (ECD) which is applicable for the determination of the compounds listed for this method in the U.S.E.P.A. Manual entitled "Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater".

Mercury, Solid/Aqueous

SW 846 Method 7471, a cold-vapor atomic absorption method, is based on the absorption of radiation at the 253.7-nm wavelength by mercury vapor. The mercury is reduced to the elemental state and aerated from solution in a closed system. The mercury vapor passes through a cell positioned in the light path of an atomic absorption spectrophotometer. Absorbance (peak height) is measured as a function of mercury concentration.

METHODOLOGY SUMMARY

Metals - Aqueous (Total)

This is a procedure used to determine metals concentrations in aqueous matrices. It involves an acidic digestion under oxidizing conditions of approximately 100 milliliters of sample. Nitric and hydrochloric acids as well as hydrogen peroxide are employed in the digestion. The digested sample is filtered and diluted to 100 milliliters. The analysis is performed by ICP, furnace atomic absorption or flame atomic absorption. Reference methods are SW-846 3rd Edition, September 1986, Revised July 1992, EPA Methods for the Chemical Analysis of Water and Wastes, Revised, March 1983 and Methods for the Determination of Metals in Environmental Samples EPA/600/4-91/010 June 1991.

Cyanide

An aliquot of sample is acidified under analysis conditions liberating cyanide as HCN. A distillation follows leaving behind interferences and scrubbing the distilled HCN in sodium hydroxide solution. An aliquot of the NaOH solution is analyzed colorimetrically for cyanide ion. Reference method is EPA Method 335.2.

EMSL

LABORATORY CHRONICLE

Lab ID: **95-26797 to 95-26799**

Client: **U.S. Army, Fort Monmouth**

	I DATE	II	Hold Time
Date Sampled	6/16/95		
Receipt/Refrigeration	6/16/95		
Extractions			
1.Semivolatile Organics, aqueous	**6/23/95**		**7 days**
2. Metals Prep.	**6/20/95**		**6 months**
3. Pesticide/PCB Extraction	**6/21/95**		**7 days**
Analyses			
1. Volatile Organics, aqueous	**6/27/95**		**14 days**
2. Semivolatile Organics, aqueous	**7/1/95**		**40 days**
3. Metals	**6/29, 30, 7/4/95**		**6 months**
4. Mercury	**6/26/95**		**28 days**
5. Pesticide/PCB	**6/27/95**		**40 days**
6. Total Cyanide	**6/27/95**		**14 days**

QC Supervisor
Review & Approval

(Signature) Peter B. Panton

(Printed Name) Peter B. Panton

(Date) 07/18/95

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 2.0-2.1 ppb.**		
	b. B/N Fraction **29206 MS/MSD Di-n-butylphthalate 40 ppb.**		
	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 76%, Chloromethane 122%, 1,2-Dichloroethane 121%.**		
	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

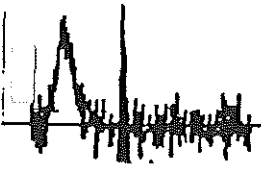
Additional Comments:

Laboratory Manager Paul Lorenz Date: 07-17-95

EMSL

GC ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY FORMAT

		No	Yes
1.	Chromatograms Labeled/Compounds Identified (Field Samples and Method Blanks)		X
2.	Standards Summary Submitted		X
3.	Calibration-Initial Calibration performed within 30 days before sample analysis and continuing calibration performed within 24 hours of sample analysis. **Initial Calibaration >30 days, continuing calibration within 24 hours.**	X	
4.	Blank Contamination - If yes, list compounds and concentrations in each blank:	X	
	a. VOA Fraction		
	b. B/N Fraction		
	c. Acid Fraction		
	d. Pesticides/PCB's		
	e. Other		
5.	Surrogate Recoveries Meet Criteria (If Applicable)		X
	a. VOA Fraction		
	b. B/N Fraction		
	c. Acid Fraction		
	d. Pesticides/PCB's		
	e. Other		
	If not Met, were the calculations checked and the results qualified (if applicable)		
6.	Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria (if applicable)		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		
	d. Pesticides/PCB's		
	e. Other		
7.	Retention Time Shift Meet Criteria (if applicable)		X



GC ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY FORMAT, cont.

		No	Yes
8.	Extraction Holding Time Met		X
	If not met, list number of days exceeded for each sample:		
9.	Analysis Holding Time Met		X
	If not met, list number of days exceeded for each sample:		

10. Definitions:
U=Not Detected. J=Detected, but below report detection limit. B=Compound found in blank. E=Estimated concentration. NA=Not Applicable

Additional Comments: **95-26799 results for DDD and DDT are flagged with a 'P' to indicate the concentrations calculated on both GC columns differed >25%.**

Laboratory Manager: Paul Faraig Date: 07-17-95

EMSL

METALS ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY FORMA

		No	Yes
1.	Calibration Summary Meet Criteria		X
2.	ICP Interference Check Sample Results Summary Submitted (if applicable) Meet Criteria		X
3.	Serial Dilution Summary Submitted (if applicable) / Meet Criteria	NA	
4.	Laboratory Control Sample Summary Submitted (if applicable) / Meet Criteria		X
5.	Blank Contamination - If yes, list compounds and concentrations in each blank.	X	
6.	Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria (if not met, list those compounds and their recoveries which fall outside the acceptable range) **Calcium 1%R, Magnesium 72%R, however, sample concentration was >5x spike level.**	X	
7.	Extraction Holding Time Met		X
	If not met, list number of days exceeded for each sample:		
8.	Analysis Holding Time Met		X
	If not met, list number of days exceeded for each sample:		

9. 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 Lavoie Date: 07-17-95

GC/MS VOLATILE ORGANIC DATA PACKAGE

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

041

Lab Name: EMSL ANALYTICAL Contract: _____

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

Lab File ID: C8651.D BFB Injection Date: 06/26/95

Instrument ID: 5972-INSTRUMENT 1 BFB Injection Time: 1349

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	19.0
75	30.0 - 60.0% of mass 95	45.9
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	60.1
175	5.0 - 9.0% of mass 174	4.0 (6.7)1
176	95.0 - 101.0% of mass 174	58.6 (97.5)1
177	5.0 - 9.0% of mass 176	3.7 (6.3)2

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

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

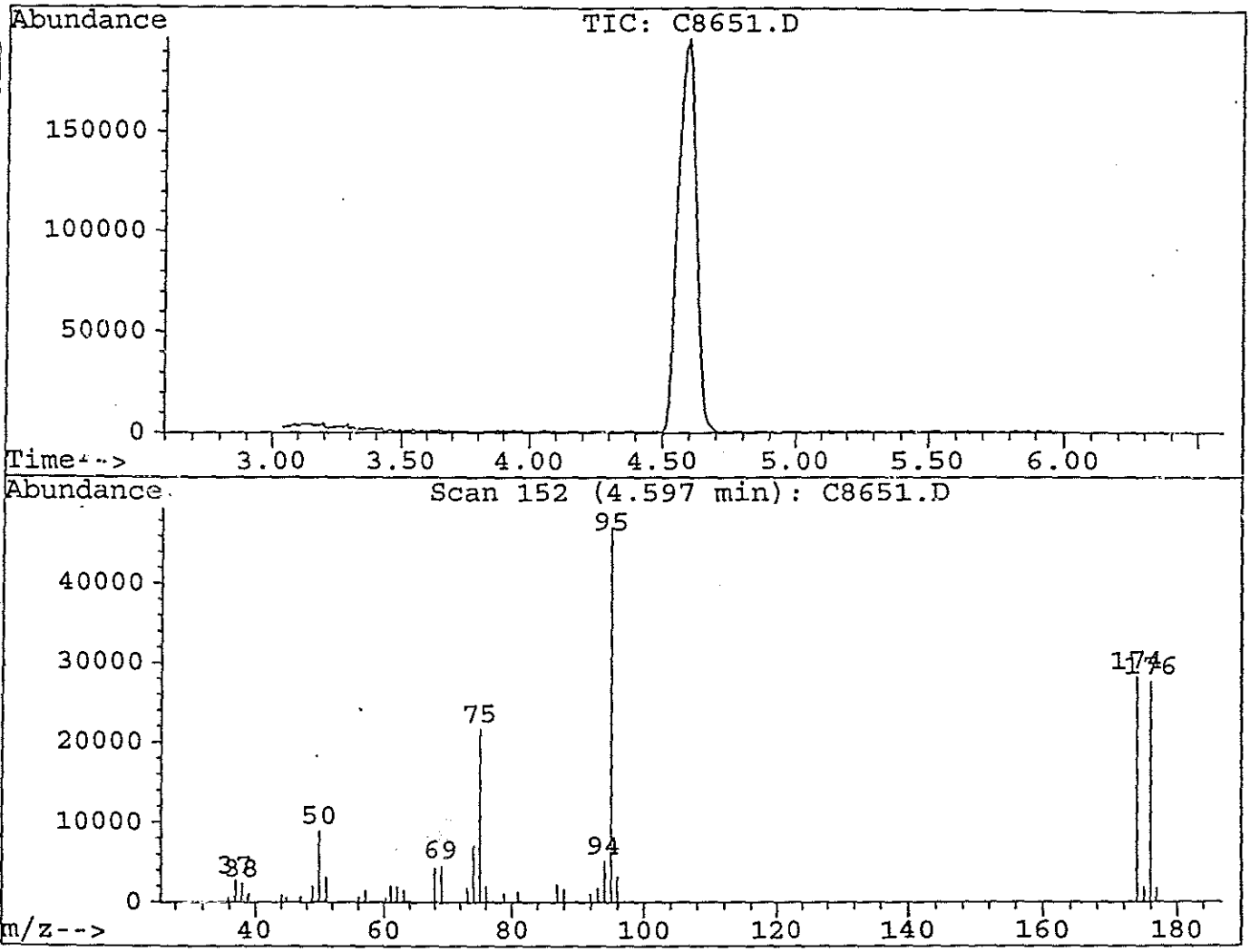
	CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01		4 PPB STANDARD	C8652.D	06/26/95	1412
02		10 PPB STANDARD	C8653.D	06/26/95	1450
03		20 PPB STANDARD	C8654.D	06/26/95	1534
04		30 PPB STANDARD	C8655.D	06/26/95	1635
05		40 PPB STANDARD	C8656.D	06/26/95	1711
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

CLPBFB

Data File : D:\HPCHEM\1\DATA\C8651.D
Acq On : 26 Jun 95 1:49 pm
Sample : BFB TUNE
Misc : 25 NG INJECTION

Vial: 1 042
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	19.0	8949	PASS
75	95	30	60	45.9	21648	PASS
95	95	100	100	100.0	47168	PASS
96	95	5	9	6.8	3184	PASS
173	174	0	2	0.0	0	PASS
174	95	50	100	60.1	28352	PASS
175	174	5	9	6.7	1888	PASS
176	174	95	101	97.5	27656	PASS
177	176	5	9	6.3	1739	PASS

C8651.D VOA524.M Mon Jun 26 18:31:50 1995 VOA

a 152 (4.597 min): C8651.D
BFB TUNE

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
35.95	630	56.95	1450	78.70	1099	175.90	27656
36.95	2704	60.10	636	80.90	1240	176.80	1739
7.95	2267	61.00	2061	86.90	2206		
3.95	1115	62.00	1896	87.85	1606		
44.00	852	63.00	1468	91.85	1038		
44.90	560	67.90	4286	92.95	1720		
47.00	730	68.95	4580	93.95	5132		
48.90	1993	72.95	1787	94.95	47168		
49.90	8949	73.95	7174	95.85	3184		
50.95	3073	74.95	21648	173.90	28352		
55.95	697	75.95	2011	174.90	1888		

Response Factor Report 5972 - In

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Mon Jun 26 18:48:37 1995
Response via : Initial Calibration

044

Calibration Files
4 =C8652.D 10 =C8653.D 20 =C8654.D
30 =C8655.D 40 =C8656.D

		Compound	4	10	20	30	40	Avg	%RSD
1)		Fluorobenzene	ISTD						
)	M	Dichlorodifluorometha	0.386	0.381	0.373	0.356	0.365	0.372	3.20
)	M	Chloromethane	0.172	0.168	0.164	0.158	0.168	0.166	3.12
4)	M	Vinyl chloride	0.206	0.219	0.216	0.208	0.212	0.212	2.44
5)	M	Bromomethane	0.191	0.182	0.162	0.156	0.158	0.170	9.36
)	M	Chloroethane	0.131	0.139	0.136	0.099	0.090	0.119	19.20
)	M	Trichlorofluoromethan	0.581	0.604	0.604	0.591	0.588	0.594	1.70
8)	M	1,1-Dichloroethene	0.247	0.259	0.257	0.254	0.256	0.255	1.78
)	M	Methylene chloride		0.342	0.273	0.243	0.231	0.272	18.36
)	M	trans-1,2-Dichloroeth	0.266	0.281	0.269	0.268	0.270	0.271	2.16
11)		Hexane						0.000#	-1.00
)	M	1,1-Dichloroethane	0.474	0.485	0.472	0.470	0.473	0.475	1.25
)	M	2,2-Dichloropropane	0.514	0.502	0.504	0.480	0.469	0.494	3.74
14)	M	cis-1,2-Dichloroethen	0.277	0.273	0.260	0.257	0.259	0.265	3.44
15)		2-Butanone						0.000#	-1.00
)	M	Bromochloromethane	0.104	0.107	0.105	0.107	0.105	0.105	1.29
)	M	Chloroform	0.520	0.519	0.502	0.508	0.507	0.511	1.52
)	M	1,1,1-Trichloroethane	0.567	0.583	0.568	0.566	0.569	0.571	1.23
)	M	Carbon tetrachloride	0.539	0.548	0.540	0.539	0.537	0.541	0.83
0)	M	1,1-Dichloropropene	0.455	0.465	0.452	0.446	0.439	0.451	2.18
21)	M	Benzene	0.812	0.826	0.806	0.805	0.803	0.810	1.13
)	M	1,2-Dichloroethane	0.211	0.207	0.199	0.204	0.206	0.205	2.04
)	M	Trichloroethene	0.390	0.398	0.391	0.386	0.385	0.390	1.23
24)	M	1,2-Dichloropropane	0.261	0.262	0.255	0.255	0.255	0.258	1.43
25)	M	Dibromomethane	0.134	0.133	0.130	0.133	0.130	0.132	1.46
6)	M	Bromodichloromethane	0.425	0.418	0.413	0.421	0.411	0.418	1.39
)	M	cis-1,3-Dichloroprope	0.341	0.340	0.338	0.341	0.332	0.339	1.04
28)	M	Toluene	0.606	0.610	0.597	0.601	0.597	0.602	0.93
9)	M	trans-1,3-Dichloropro	0.249	0.241	0.244	0.247	0.238	0.244	1.80
0)	M	1,1,2-Trichloroethane	0.120	0.118	0.115	0.119	0.116	0.118	1.95
31)	M	Tetrachloroethene	0.424	0.418	0.414	0.416	0.409	0.416	1.32
2)	M	1,3-Dichloropropane	0.228	0.224	0.216	0.224	0.215	0.222	2.52
3)	M	Dibromochloromethane	0.255	0.257	0.254	0.265	0.257	0.258	1.65
34)	M	1,2-Dibromomethane	0.174	0.179	0.173	0.181	0.176	0.177	1.90
35)	M	Chlorobenzene	0.688	0.688	0.678	0.689	0.673	0.683	1.06
6)	M	1,1,1,2-Tetrachloroet	0.308	0.298	0.295	0.299	0.295	0.299	1.80
37)	M	Ethylbenzene	1.328	1.309	1.285	1.287	1.275	1.297	1.65
38)	M	Xylene (para & meta)	0.484	0.478	0.467	0.470	0.456	0.471	2.23
9)	M	Xylene (Ortho)	0.438	0.436	0.425	0.432	0.420	0.430	1.79
0)	M	Styrene	0.676	0.678	0.659	0.671	0.654	0.668	1.61
41)	M	Bromoform	0.132	0.136	0.134	0.142	0.140	0.137	2.96
2)	M	Isopropylbenzene	1.369	1.360	1.343	1.351	1.328	1.350	1.17
3)	S	4-Bromofluorobenzene	0.213	0.532	0.525	0.534	0.531	0.467	30.39

#) = Out of Range

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Mon Jun 26 18:48:37 1995
Response via : Initial Calibration

Calibration Files
4 =C8652.D 10 =C8653.D 20 =C8654.D
30 =C8655.D 40 =C8656.D

		Compound	4	10	20	30	40	Avg	%RSD
4)	M	Bromobenzene	0.280	0.289	0.283	0.292	0.284	0.286	1.60
45)	M	1,1,2,2-Tetrachloroet	0.163	0.148	0.143	0.145	0.140	0.148	6.03
4)	M	1,2,3-Trichloropropan	0.149	0.152	0.148	0.155	0.147	0.150	2.28
4)	M	n-Propylbenzene	1.799	1.762	1.749	1.735	1.728	1.755	1.61
48)	M	2-Chlorotoluene	1.093	1.052	1.010	1.032	1.039	1.045	2.95
49)	M	4-Chlorotoluene	1.211	1.202	1.149	1.156	1.152	1.174	2.53
5)	M	1,3,5-Trimethylbenzen	1.151	1.163	1.126	1.139	1.119	1.140	1.58
51)	M	tert-Butylbenzene	1.268	1.250	1.234	1.241	1.224	1.243	1.35
52)	M	1,2,4-Trimethylbenzen	1.101	1.104	1.087	1.100	1.077	1.094	1.03
5)	M	sec-Butylbenzene	1.787	1.745	1.713	1.725	1.696	1.733	2.02
5)	M	1,3-Dichlorobenzene	0.590	0.582	0.561	0.571	0.566	0.574	2.07
55)	M	4-Isopropyltoluene	1.391	1.391	1.377	1.377	1.359	1.379	0.96
5)	M	1,4-Dichlorobenzene	0.590	0.572	0.567	0.579	0.561	0.574	1.95
5)	S	1,2-Dichlorobenzene-d	0.281	0.276	0.271	0.275	0.270	0.275	1.61
58)	M	1,2-Dichlorobenzene	0.456	0.450	0.434	0.441	0.425	0.441	2.81
59)	M	n-Butylbenzene	1.421	1.425	1.396	1.372	1.347	1.392	2.37
6)	M	1,2-Dibromo-3-chlorop	0.032	0.034	0.034	0.036	0.036	0.034	5.08
)	M	1,2,4-Trichlorobenzen	0.360	0.349	0.340	0.352	0.347	0.350	2.04
)	M	Hexachlorobutadiene	0.386	0.383	0.371	0.368	0.373	0.376	2.07
6)	M	Naphthalene	0.324	0.324	0.309	0.334	0.312	0.321	3.14
6)	M	1,2,3-Trichlorobenzen	0.259	0.262	0.253	0.259	0.258	0.258	1.20
65)		Methyl-tert butyl eth	0.336	0.322	0.305	0.311	0.307	0.316	3.99
6)		tert-Butyl Alcohol	0.006	0.009	0.009	0.010	0.010	0.009	18.64

( ) = Out of Range

Quantitation Report

Data File : d:\hpchem\1\data\c8652.d
Acq On : 26 Jun 95 2:12 pm
Sample : 4 PPB STANDARD
Misc :
Quant Time: Jun 26 14:40 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 : Mon Jun 26 18:48:37 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	11.87	96	224089	5.00	ug/L		0.03
System Monitoring Compounds							%Recovery
43) 4-Bromofluorobenzene	19.13	95	47774	2.14	ug/L		42.74%
57) 1,2-Dichlorobenzene-d4	21.92	152	25203	2.47	ug/L		49.36%
Target Compounds							Qvalue
2) Dichlorodifluoromethane	3.24	85	69175	3.89	ug/L		93
3) Chloromethane	3.59	50	30867	2.95	ug/L		96
4) Vinyl chloride	3.84	62	37007	3.14	ug/L		91
5) Bromomethane	4.51	94	34305	4.31	ug/L		97
6) Chloroethane	4.73	64	23444	3.39	ug/L		94
7) Trichlorofluoromethane	5.34	101	104207	3.96	ug/L		98
8) 1,1-Dichloroethene	6.44	96	44308	3.83	ug/L	#	84
9) Methylene chloride	7.41	84	111435	9.08	ug/L	#	86
10) trans-1,2-Dichloroethene	7.99	96	47768	3.91	ug/L	#	83
12) 1,1-Dichloroethane	8.77	63	84913	3.47	ug/L		98
13) 2,2-Dichloropropane	9.85	77	92210	3.85	ug/L		95
14) cis-1,2-Dichloroethene	9.85	96	49613	4.31	ug/L	#	83
16) Bromochloromethane	10.27	128	18647	4.62	ug/L	#	72
17) Chloroform	10.43	83	93211	4.06	ug/L		98
18) 1,1,1-Trichloroethane	10.76	97	101575	4.00	ug/L		95
19) Carbon tetrachloride	11.06	117	96580	4.10	ug/L		99
20) 1,1-Dichloropropene	11.04	75	81585	3.68	ug/L		96
21) Benzene	11.40	78	145582	3.73	ug/L		95
22) 1,2-Dichloroethane	11.40	62	37823	3.95	ug/L		90
23) Trichloroethene	12.52	95	69879	4.04	ug/L		92
24) 1,2-Dichloropropane	12.87	63	46748	3.66	ug/L		94
25) Dibromomethane	13.07	93	24054	4.65	ug/L		94
26) Bromodichloromethane	13.34	83	76253	4.30	ug/L		97
27) cis-1,3-Dichloropropene	14.10	75	61134	3.99	ug/L		100
28) Toluene	14.68	92	108604	3.92	ug/L		98
29) trans-1,3-Dichloropropene	15.02	75	44645	4.21	ug/L		95
30) 1,1,2-Trichloroethane	15.34	83	21596	4.36	ug/L		94
31) Tetrachloroethene	15.64	166	76065	4.38	ug/L		97
32) 1,3-Dichloropropane	15.63	76	40918	4.17	ug/L		99
33) Dibromochloromethane	16.03	129	45734	4.75	ug/L		99
34) 1,2-Dibromomethane	16.24	107	31157	4.56	ug/L		99
35) Chlorobenzene	17.12	112	123274	4.27	ug/L		95
36) 1,1,1,2-Tetrachloroethane	17.25	131	55209	4.82	ug/L		97
37) Ethylbenzene	17.30	91	238157	4.08	ug/L		99
38) Xylene (para & meta)	17.51	106	173387	8.27	ug/L		100
39) Xylene (Ortho)	18.21	106	78570	4.24	ug/L		91
40) Styrene	18.23	104	121233	4.22	ug/L		99

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c8652.d
Acq On : 26 Jun 95 2:12 pm
Sample : 4 PPB STANDARD
Misc :
Quant Time: Jun 26 14:40 1995

Vial: 2 047
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Mon Jun 26 18:48:37 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
41)	Bromoform	18.55	173	23749	5.03	ug/L		95
42)	Isopropylbenzene	18.87	105	245372	4.12	ug/L		92
44)	Bromobenzene	19.41	156	50264	4.68	ug/L		94
45)	1,1,2,2-Tetrachloroethane	19.36	83	29146	5.52	ug/L		93
46)	1,2,3-Trichloropropane	19.43	75	26778	4.17	ug/L	#	85
47)	n-Propylbenzene	19.61	91	322582	4.16	ug/L		95
48)	2-Chlorotoluene	19.76	91	195929	4.55	ug/L		97
49)	4-Chlorotoluene	19.96	91	217040	4.25	ug/L		89
50)	1,3,5-Trimethylbenzene	19.93	105	206401	4.18	ug/L		98
51)	tert-Butylbenzene	20.52	119	227230	4.44	ug/L		97
52)	1,2,4-Trimethylbenzene	20.60	105	197300	4.36	ug/L		100
53)	sec-Butylbenzene	20.92	105	320389	4.22	ug/L		97
54)	1,3-Dichlorobenzene	21.12	146	105858	4.83	ug/L		97
55)	4-Isopropyltoluene	21.18	119	249354	4.40	ug/L		96
56)	1,4-Dichlorobenzene	21.28	146	105830	4.87	ug/L		91
58)	1,2-Dichlorobenzene	21.96	146	81762	5.01	ug/L		92
59)	n-Butylbenzene	21.93	91	254788	4.20	ug/L		98
60)	1,2-Dibromo-3-chloropropan	23.35	75	5747	4.28	ug/L		81
61)	1,2,4-Trichlorobenzene	24.93	180	64460	5.37	ug/L		96
62)	Hexachlorobutadiene	25.28	225	69136	4.77	ug/L		98
63)	Naphthalene	25.37	128	58165	5.60	ug/L		100
64)	1,2,3-Trichlorobenzene	25.85	180	46363	5.54	ug/L		97
65)	Methyl-tert butyl ether	8.02	73	60179	4.60	ug/L		98
66)	tert-Butyl Alcohol	7.98	59	1112	5.54	ug/L		100

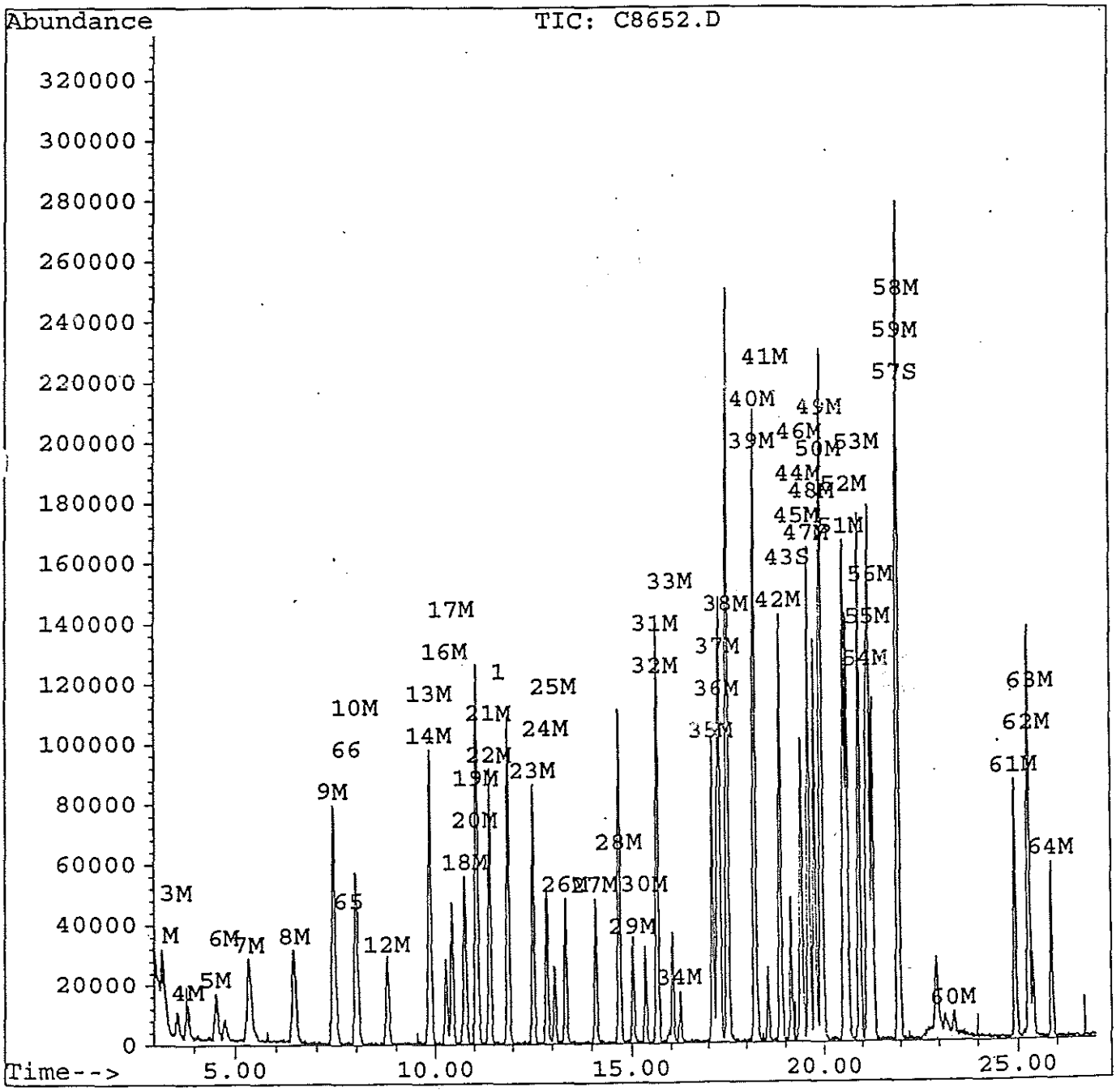
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c8652.d
Acq On : 26 Jun 95 2:12 pm
Sample : 4 PPB STANDARD
Misc :
Quant Time: Jun 26 14:40 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 : Mon Jun 26 18:48:37 1995
Response via : Multiple Level Calibration



Quantitation Report

Data File : d:\hpchem\1\data\c8653.d
Acq On : 26 Jun 95 2:50 pm
Sample : 10 PPB STANDARD
Misc :
Quant Time: Jun 26 18:47 1995

Vial: 3 049
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Mon Jun 26 18:48:37 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	11.90	96	368960	5.00	ug/L		0.06
System Monitoring Compounds							%Recovery
43) 4-Bromofluorobenzene	19.13	95	196151	5.33	ug/L		106.59%
57) 1,2-Dichlorobenzene-d4	21.93	152	101918	6.06	ug/L		121.24%
Target Compounds							Qvalue
2) Dichlorodifluoromethane	3.34	85	280838	9.60	ug/L		100
3) Chloromethane	3.72	50	124227	7.22	ug/L		94
4) Vinyl chloride	3.94	62	161318	8.31	ug/L		100
5) Bromomethane	4.59	94	134314	10.24	ug/L		98
6) Chloroethane	4.83	64	102594	9.02	ug/L		99
7) Trichlorofluoromethane	5.42	101	445972	10.29	ug/L		99
8) 1,1-Dichloroethene	6.50	96	191191	10.04	ug/L	#	84
9) Methylene chloride	7.47	84	252706	12.51	ug/L	m	89
10) trans-1,2-Dichloroethene	8.04	96	207478	10.31	ug/L	#	85
12) 1,1-Dichloroethane	8.83	63	357923	8.90	ug/L		100
13) 2,2-Dichloropropane	9.89	77	370413	9.39	ug/L		99
14) cis-1,2-Dichloroethene	9.89	96	201584	10.63	ug/L	#	87
16) Bromochloromethane	10.31	128	78809	11.86	ug/L	#	68
17) Chloroform	10.46	83	383089	10.15	ug/L		97
18) 1,1,1-Trichloroethane	10.79	97	430219	10.29	ug/L		94
19) Carbon tetrachloride	11.10	117	404572	10.43	ug/L		99
20) 1,1-Dichloropropene	11.08	75	343108	9.40	ug/L		96
21) Benzene	11.43	78	609294	9.48	ug/L		98
22) 1,2-Dichloroethane	11.44	62	152455	9.67	ug/L		100
23) Trichloroethene	12.54	95	293351	10.30	ug/L		93
24) 1,2-Dichloropropane	12.89	63	193677	9.21	ug/L		97
25) Dibromomethane	13.09	93	98220	11.53	ug/L		96
26) Bromodichloromethane	13.35	83	308703	10.57	ug/L		95
27) cis-1,3-Dichloropropene	14.12	75	251017	9.94	ug/L		92
28) Toluene	14.70	92	450259	9.86	ug/L		99
29) trans-1,3-Dichloropropene	15.04	75	178084	10.21	ug/L		94
30) 1,1,2-Trichloroethane	15.35	83	87287	10.71	ug/L		95
31) Tetrachloroethene	15.66	166	308584	10.79	ug/L		99
32) 1,3-Dichloropropane	15.64	76	165333	10.24	ug/L		99
33) Dibromochloromethane	16.04	129	189730	11.96	ug/L		97
34) 1,2-Dibromomethane	16.25	107	131879	11.73	ug/L		95
35) Chlorobenzene	17.11	112	508050	10.69	ug/L		95
36) 1,1,1,2-Tetrachloroethane	17.26	131	219959	11.65	ug/L		98
37) Ethylbenzene	17.31	91	965672	10.05	ug/L		99
38) Xylene (para & meta)	17.52	106	705403	20.44	ug/L		98
39) Xylene (Ortho)	18.22	106	322067	10.55	ug/L		97
40) Styrene	18.24	104	500496	10.58	ug/L		98

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c8653.d
Acq On : 26 Jun 95 2:50 pm
Sample : 10 PPB STANDARD
Misc :
Quant Time: Jun 26 18:47 1995

Vial: 3 050
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Mon Jun 26 18:48:37 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
41)	Bromoform	18.56	173	100251	12.88	ug/L		95
42)	Isopropylbenzene	18.88	105	1003904	10.23	ug/L		93
44)	Bromobenzene	19.42	156	213131	12.04	ug/L	#	88
45)	1,1,2,2-Tetrachloroethane	19.37	83	108980	12.53	ug/L		90
46)	1,2,3-Trichloropropane	19.43	75	112509	10.65	ug/L	#	51
47)	n-Propylbenzene	19.62	91	1300401	10.18	ug/L		97
48)	2-Chlorotoluene	19.77	91	776614	10.96	ug/L		95
49)	4-Chlorotoluene	19.96	91	886677	10.54	ug/L	m	92
50)	1,3,5-Trimethylbenzene	19.93	105	858128	10.56	ug/L		99
51)	tert-Butylbenzene	20.52	119	922128	10.94	ug/L		97
52)	1,2,4-Trimethylbenzene	20.61	105	814433	10.94	ug/L		97
53)	sec-Butylbenzene	20.93	105	1287414	10.31	ug/L		97
54)	1,3-Dichlorobenzene	21.12	146	429311	11.89	ug/L		96
55)	4-Isopropyltoluene	21.18	119	1026323	11.00	ug/L		97
56)	1,4-Dichlorobenzene	21.29	146	422281	11.80	ug/L		94
58)	1,2-Dichlorobenzene	21.96	146	331822	12.34	ug/L		95
59)	n-Butylbenzene	21.94	91	1051727	10.52	ug/L		95
60)	1,2-Dibromo-3-chloropropan	23.36	75	24740	11.20	ug/L		93
61)	1,2,4-Trichlorobenzene	24.93	180	257764	13.03	ug/L		98
62)	Hexachlorobutadiene	25.26	225	282368	11.84	ug/L		95
63)	Naphthalene	25.38	128	239454	13.99	ug/L		100
64)	1,2,3-Trichlorobenzene	25.86	180	192968	14.00	ug/L		99
65)	Methyl-tert butyl ether	8.07	73	237264	11.01	ug/L		100
66)	tert-Butyl Alcohol	7.80	59	6372	19.29	ug/L		100

(#) = qualifier out of range (m) = manual integration

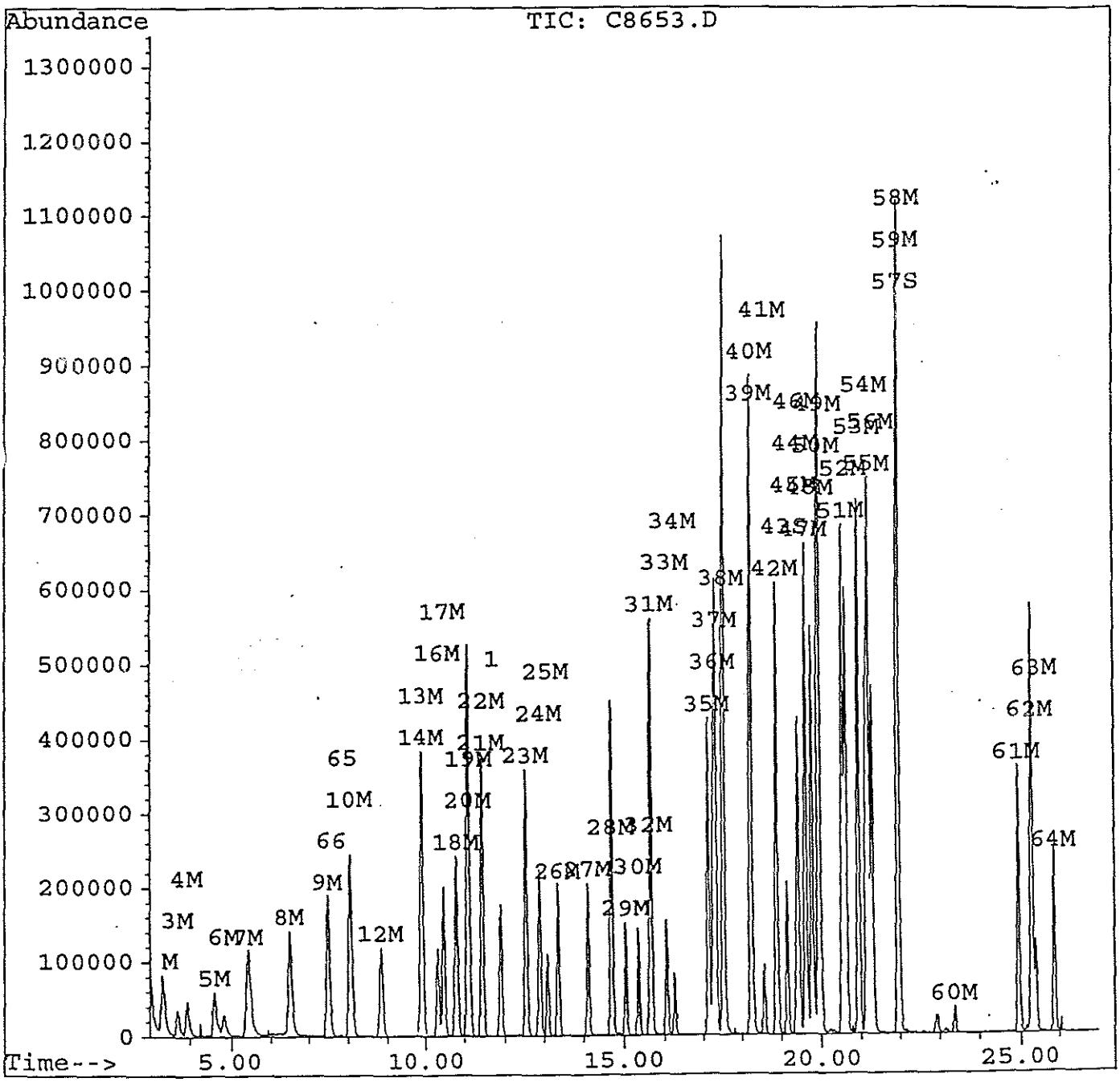
Quantitation Report

051

Data File : d:\hpchem\1\data\c8653.d
Acq On : 26 Jun 95 2:50 pm
Sample : 10 PPB STANDARD
Misc :
Quant Time: Jun 26 18:47 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 : Mon Jun 26 18:48:37 1995
Response via : Multiple Level Calibration



Quantitation Report

Data File : d:\hpchem\1\data\c8654.d
Acq On : 26 Jun 95 3:34 pm
Sample : 20 PPB STANDARD
Misc :
Quant Time: Jun 26 18:38 1995

Vial: 4 052
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Mon Jun 26 18:48:37 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	11.89	96	363430	5.00	ug/L		0.05
System Monitoring Compounds							%Recovery
43) 4-Bromofluorobenzene	19.13	95	381556	10.52	ug/L		210.49%
57) 1,2-Dichlorobenzene-d4	21.92	152	197116	11.90	ug/L		238.06%
Target Compounds							Qvalue
2) Dichlorodifluoromethane	3.34	85	542001	18.81	ug/L		98
3) Chloromethane	3.70	50	238402	14.06	ug/L		99
4) Vinyl chloride	3.93	62	314181	16.44	ug/L		99
5) Bromomethane	4.56	94	235570	18.23	ug/L		93
6) Chloroethane	4.77	64	198109	17.69	ug/L		97
7) Trichlorofluoromethane	5.39	101	877713	20.55	ug/L		100
8) 1,1-Dichloroethene	6.48	96	372929	19.88	ug/L		90
9) Methylene chloride	7.46	84	397089	19.95	ug/L	#	84
10) trans-1,2-Dichloroethene	8.03	96	391770	19.77	ug/L		90
12) 1,1-Dichloroethane	8.82	63	686093	17.31	ug/L		98
13) 2,2-Dichloropropane	9.88	77	732191	18.85	ug/L		95
14) cis-1,2-Dichloroethene	9.88	96	378261	20.25	ug/L		90
16) Bromochloromethane	10.29	128	152376	23.28	ug/L	#	73
17) Chloroform	10.45	83	730460	19.64	ug/L		97
18) 1,1,1-Trichloroethane	10.78	97	825891	20.06	ug/L		95
19) Carbon tetrachloride	11.09	117	785602	20.55	ug/L		97
20) 1,1-Dichloropropene	11.07	75	657615	18.29	ug/L		95
21) Benzene	11.42	78	1172038	18.52	ug/L		97
22) 1,2-Dichloroethane	11.42	62	290009	18.67	ug/L		99
23) Trichloroethene	12.53	95	567916	20.24	ug/L		97
24) 1,2-Dichloropropane	12.88	63	371261	17.92	ug/L		97
25) Dibromomethane	13.09	93	189599	22.59	ug/L		94
26) Bromodichloromethane	13.35	83	600894	20.88	ug/L		97
27) cis-1,3-Dichloropropene	14.11	75	492077	19.78	ug/L		94
28) Toluene	14.69	92	868102	19.31	ug/L		99
29) trans-1,3-Dichloropropene	15.04	75	354382	20.63	ug/L		95
30) 1,1,2-Trichloroethane	15.35	83	167724	20.90	ug/L		96
31) Tetrachloroethene	15.66	166	601551	21.35	ug/L		99
32) 1,3-Dichloropropane	15.63	76	314722	19.79	ug/L		99
33) Dibromochloromethane	16.04	129	369526	23.66	ug/L		97
34) 1,2-Dibromomethane	16.24	107	251859	22.74	ug/L		97
35) Chlorobenzene	17.12	112	986023	21.05	ug/L		97
36) 1,1,1,2-Tetrachloroethane	17.25	131	428363	23.04	ug/L		98
37) Ethylbenzene	17.31	91	1868743	19.74	ug/L		100
38) Xylene (para & meta)	17.52	106	1358232	39.96	ug/L		98
39) Xylene (Ortho)	18.22	106	617420	20.53	ug/L		99
40) Styrene	18.23	104	958161	20.56	ug/L		99

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c8654.d
Acq On : 26 Jun 95 3:34 pm
Sample : 20 PPB STANDARD
Misc :
Quant Time: Jun 26 18:38 1995

Vial: 4 053
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Mon Jun 26 18:48:37 1995
Response via : Multiple Level Calibration

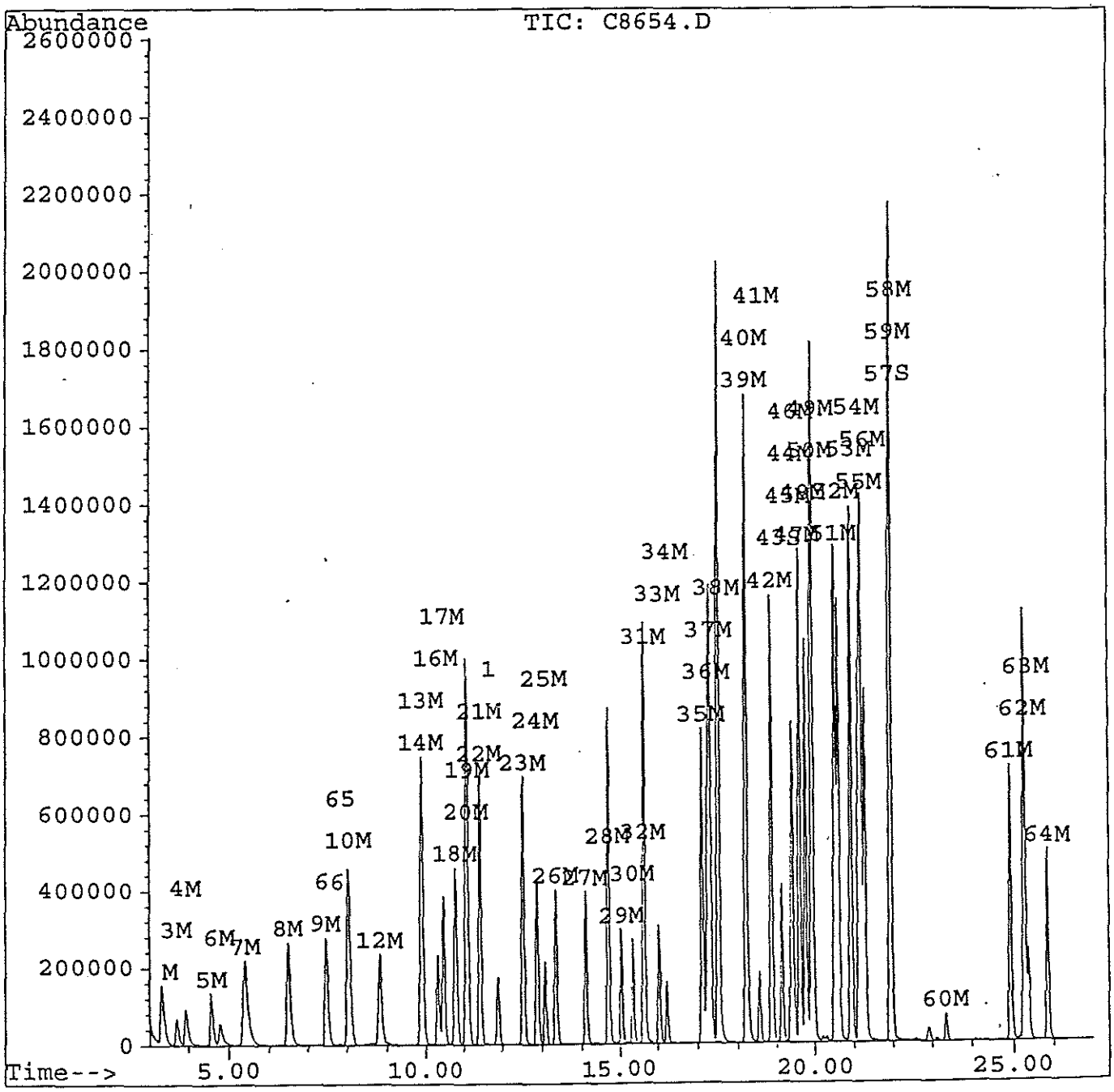
Compound	R.T.	QIon	Response	Conc Unit	Qvalue
41) Bromoform	18.55	173	194881	25.43 ug/L	88
42) Isopropylbenzene	18.87	105	1952985	20.20 ug/L	94
44) Bromobenzene	19.41	156	410948	23.58 ug/L #	90
45) 1,1,2,2-Tetrachloroethane	19.36	83	208347	24.31 ug/L	96
46) 1,2,3-Trichloropropane	19.44	75	215742	20.73 ug/L #	78
47) n-Propylbenzene	19.61	91	2543193	20.22 ug/L	97
48) 2-Chlorotoluene	19.76	91	1467640	21.02 ug/L	98
49) 4-Chlorotoluene	19.96	91	1670386	20.15 ug/L	87
50) 1,3,5-Trimethylbenzene	19.93	105	1636992	20.45 ug/L	98
51) tert-Butylbenzene	20.53	119	1793222	21.60 ug/L	97
52) 1,2,4-Trimethylbenzene	20.61	105	1580854	21.55 ug/L	95
53) sec-Butylbenzene	20.92	105	2490496	20.24 ug/L	99
54) 1,3-Dichlorobenzene	21.12	146	815628	22.94 ug/L	96
55) 4-Isopropyltoluene	21.18	119	2001847	21.78 ug/L	96
56) 1,4-Dichlorobenzene	21.28	146	824320	23.38 ug/L	93
58) 1,2-Dichlorobenzene	21.96	146	631052	23.82 ug/L m	0
59) n-Butylbenzene	21.94	91	2028690	20.60 ug/L	96
60) 1,2-Dibromo-3-chloropropan	23.36	75	49570	22.77 ug/L	91
61) 1,2,4-Trichlorobenzene	24.92	180	494403	25.38 ug/L	98
62) Hexachlorobutadiene	25.27	225	539565	22.97 ug/L	94
63) Naphthalene	25.37	128	449327	26.66 ug/L	100
64) 1,2,3-Trichlorobenzene	25.85	180	368003	27.10 ug/L	96
65) Methyl-tert butyl ether	8.06	73	443351	20.88 ug/L	97
66) tert-Butyl Alcohol	7.78	59	12905	39.66 ug/L	100

(#) = qualifier out of range (m) = manual integration

Data File : d:\hpchem\1\data\c8654.d
Acq On : 26 Jun 95 3:34 pm
Sample : 20 PPB STANDARD
Misc :
Quant Time: Jun 26 18:38 1995

Vial: 4 054
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Mon Jun 26 18:48:37 1995
Response via : Multiple Level Calibration



Quantitation Report

Data File : d:\hpchem\1\data\c8655.d
Acq On : 26 Jun 95 4:35 pm
Sample : 30 PPB STANDARD
Misc :
Quant Time: Jun 26 18:39 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 : Mon Jun 26 18:48:37 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	11.89	96	358297	5.00	ug/L		0.05
System Monitoring Compounds							%Recovery
43) 4-Bromofluorobenzene	19.14	95	573750	16.05	ug/L		321.05%
57) 1,2-Dichlorobenzene-d4	21.92	152	296123	18.14	ug/L		362.75%
Target Compounds							Qvalue
2) Dichlorodifluoromethane	3.32	85	766059	26.97	ug/L		99
3) Chloromethane	3.70	50	340725	20.38	ug/L		99
4) Vinyl chloride	3.92	62	447154	23.73	ug/L		100
5) Bromomethane	4.54	94	335011	26.30	ug/L		94
6) Chloroethane	4.74	64	213726	19.35	ug/L		94
7) Trichlorofluoromethane	5.36	101	1270617	30.18	ug/L		97
8) 1,1-Dichloroethene	6.47	96	546040	29.53	ug/L		91
9) Methylene chloride	7.46	84	522426	26.63	ug/L	#	83
10) trans-1,2-Dichloroethene	8.02	96	575427	29.45	ug/L		90
12) 1,1-Dichloroethane	8.81	63	1010275	25.86	ug/L		99
13) 2,2-Dichloropropane	9.88	77	1032645	26.96	ug/L		94
14) cis-1,2-Dichloroethene	9.88	96	552545	30.00	ug/L		88
16) Bromochloromethane	10.29	128	229963	35.64	ug/L	#	69
17) Chloroform	10.45	83	1091594	29.77	ug/L		98
18) 1,1,1-Trichloroethane	10.78	97	1217514	30.00	ug/L		95
19) Carbon tetrachloride	11.09	117	1157844	30.73	ug/L		99
20) 1,1-Dichloropropene	11.07	75	959511	27.07	ug/L		96
21) Benzene	11.42	78	1731246	27.75	ug/L		98
22) 1,2-Dichloroethane	11.42	62	438197	28.61	ug/L		98
23) Trichloroethene	12.53	95	830130	30.01	ug/L		93
24) 1,2-Dichloropropane	12.88	63	547652	26.82	ug/L		97
25) Dibromomethane	13.09	93	285463	34.50	ug/L		95
26) Bromodichloromethane	13.35	83	904059	31.86	ug/L		99
27) cis-1,3-Dichloropropene	14.11	75	732008	29.85	ug/L		95
28) Toluene	14.69	92	1292344	29.15	ug/L		97
29) trans-1,3-Dichloropropene	15.03	75	531590	31.38	ug/L	m	56
30) 1,1,2-Trichloroethane	15.35	83	256853	32.47	ug/L		99
31) Tetrachloroethene	15.66	166	894602	32.21	ug/L		99
32) 1,3-Dichloropropane	15.64	76	481819	30.73	ug/L		98
33) Dibromochloromethane	16.04	129	569640	36.99	ug/L		98
34) 1,2-Dibromomethane	16.25	107	389569	35.68	ug/L		97
35) Chlorobenzene	17.11	112	1480615	32.07	ug/L		95
36) 1,1,1,2-Tetrachloroethane	17.25	131	643820	35.13	ug/L		98
37) Ethylbenzene	17.31	91	2766353	29.65	ug/L		99
38) Xylene (para & meta)	17.52	106	2021292	60.32	ug/L		99
39) Xylene (Ortho)	18.22	106	929759	31.36	ug/L		100
40) Styrene	18.24	104	1441785	31.39	ug/L		98

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c8655.d
Acq On : 26 Jun 95 4:35 pm
Sample : 30 PPB STANDARD
Misc :
Quant Time: Jun 26 18:39 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 : Mon Jun 26 18:48:37 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
41)	Bromoform	18.55	173	305991	40.50	ug/L		87
42)	Isopropylbenzene	18.88	105	2905392	30.48	ug/L	m	0
44)	Bromobenzene	19.42	156	626940	36.48	ug/L	#	88
45)	1,1,2,2-Tetrachloroethane	19.37	83	310912	36.80	ug/L		97
46)	1,2,3-Trichloropropane	19.44	75	333515	32.51	ug/L	#	89
47)	n-Propylbenzene	19.62	91	3729091	30.07	ug/L		96
48)	2-Chlorotoluene	19.77	91	2218236	32.23	ug/L		98
49)	4-Chlorotoluene	19.96	91	2485427	30.42	ug/L		87
50)	1,3,5-Trimethylbenzene	19.93	105	2449465	31.03	ug/L		100
51)	tert-Butylbenzene	20.52	119	2667221	32.59	ug/L		96
52)	1,2,4-Trimethylbenzene	20.61	105	2365588	32.72	ug/L		96
53)	sec-Butylbenzene	20.93	105	3708945	30.57	ug/L		97
54)	1,3-Dichlorobenzene	21.12	146	1228546	35.05	ug/L		98
55)	4-Isopropyltoluene	21.18	119	2961111	32.68	ug/L		96
56)	1,4-Dichlorobenzene	21.29	146	1244028	35.79	ug/L		94
58)	1,2-Dichlorobenzene	21.96	146	947311	36.28	ug/L		97
59)	n-Butylbenzene	21.94	91	2949542	30.38	ug/L		95
60)	1,2-Dibromo-3-chloropropan	23.36	75	78194	36.44	ug/L		92
61)	1,2,4-Trichlorobenzene	24.92	180	756964	39.42	ug/L		100
62)	Hexachlorobutadiene	25.27	225	790352	34.13	ug/L		94
63)	Naphthalene	25.38	128	717487	43.17	ug/L		100
64)	1,2,3-Trichlorobenzene	25.85	180	557776	41.66	ug/L		95
65)	Methyl-tert butyl ether	8.06	73	668640	31.94	ug/L		96
66)	tert-Butyl Alcohol	7.83	59	22370	69.73	ug/L		100

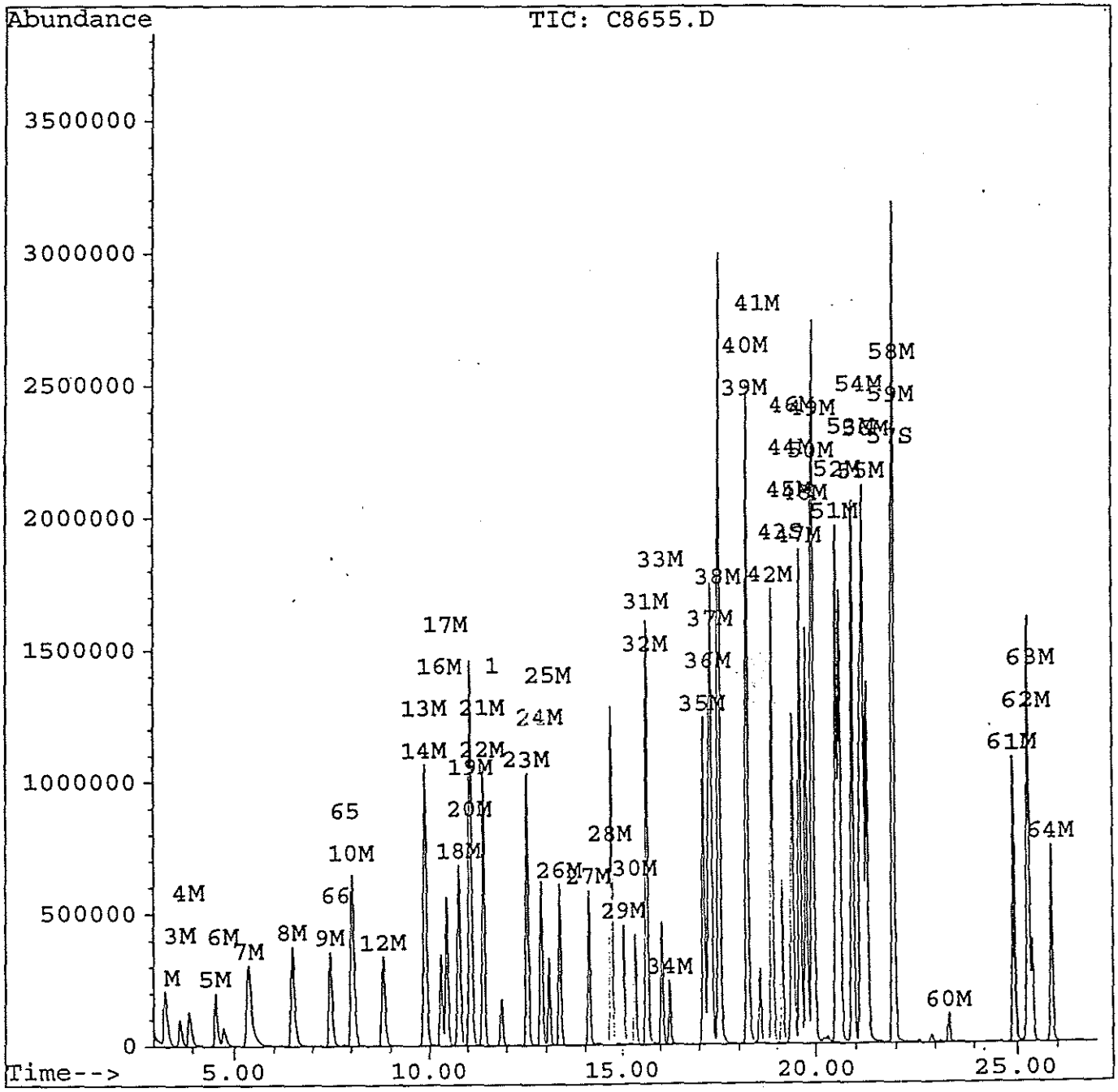
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c8655.d
Acq On : 26 Jun 95 4:35 pm
Sample : 30 PPB STANDARD
Misc :
Quant Time: Jun 26 18:39 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 : Mon Jun 26 18:48:37 1995
Response via : Multiple Level Calibration



Quantitation Report

Data File : d:\hpchem\1\data\c8656.d
Acq On : 26 Jun 95 5:11 pm
Sample : 40 PPB STANDARD
Misc :
Quant Time: Jun 26 18:40 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 : Mon Jun 26 18:48:37 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	11.90	96	363604	5.00	ug/L		0.06
System Monitoring Compounds							%Recovery
43) 4-Bromofluorobenzene	19.14	95	772947	21.31	ug/L		426.20%
57) 1,2-Dichlorobenzene-d4	21.93	152	392763	23.71	ug/L		474.12%
Target Compounds							Qvalue
2) Dichlorodifluoromethane	3.34	85	1060487	36.80	ug/L		98
3) Chloromethane	3.71	50	488523	28.79	ug/L		97
4) Vinyl chloride	3.94	62	616250	32.23	ug/L		100
5) Bromomethane	4.57	94	459401	35.53	ug/L		98
6) Chloroethane	4.76	64	260518	23.25	ug/L		97
7) Trichlorofluoromethane	5.36	101	1710787	40.04	ug/L		99
8) 1,1-Dichloroethene	6.49	96	744884	39.69	ug/L		89
9) Methylene chloride	7.47	84	671485	33.73	ug/L	#	84
10) trans-1,2-Dichloroethene	8.04	96	786800	39.69	ug/L		90
12) 1,1-Dichloroethane	8.83	63	1375890	34.70	ug/L		100
13) 2,2-Dichloropropane	9.90	77	1365109	35.13	ug/L		94
14) cis-1,2-Dichloroethene	9.89	96	752279	40.25	ug/L	#	88
16) Bromochloromethane	10.31	128	304179	46.45	ug/L	#	72
17) Chloroform	10.47	83	1475559	39.66	ug/L		99
18) 1,1,1-Trichloroethane	10.79	97	1655569	40.20	ug/L		96
19) Carbon tetrachloride	11.10	117	1561620	40.84	ug/L		99
20) 1,1-Dichloropropene	11.08	75	1275995	35.47	ug/L		95
21) Benzene	11.43	78	2336100	36.90	ug/L		99
22) 1,2-Dichloroethane	11.43	62	599613	38.58	ug/L		98
23) Trichloroethene	12.54	95	1121352	39.95	ug/L		95
24) 1,2-Dichloropropane	12.89	63	741113	35.76	ug/L		96
25) Dibromomethane	13.09	93	376987	44.89	ug/L		94
26) Bromodichloromethane	13.36	83	1194872	41.50	ug/L		99
27) cis-1,3-Dichloropropene	14.12	75	967004	38.86	ug/L		93
28) Toluene	14.70	92	1737678	38.63	ug/L		97
29) trans-1,3-Dichloropropene	15.04	75	692767	40.30	ug/L	m	56
30) 1,1,2-Trichloroethane	15.35	83	336042	41.86	ug/L		96
31) Tetrachloroethene	15.66	166	1190931	42.25	ug/L		99
32) 1,3-Dichloropropane	15.64	76	625736	39.32	ug/L		98
33) Dibromochloromethane	16.05	129	748996	47.93	ug/L		96
34) 1,2-Dibromomethane	16.25	107	512332	46.24	ug/L		95
35) Chlorobenzene	17.13	112	1957063	41.77	ug/L		95
36) 1,1,1,2-Tetrachloroethane	17.26	131	858156	46.14	ug/L		99
37) Ethylbenzene	17.32	91	3710162	39.18	ug/L		100
38) Xylene (para & meta)	17.53	106	2654410	78.06	ug/L		98
39) Xylene (Ortho)	18.23	106	1222465	40.63	ug/L		98
40) Styrene	18.24	104	1901674	40.79	ug/L		99

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c8656.d
Acq On : 26 Jun 95 5:11 pm
Sample : 40 PPB STANDARD
Misc :
Quant Time: Jun 26 18:40 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 : Mon Jun 26 18:48:37 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
41)	Bromoform	18.56	173	406163	52.97 ug/L		89
42)	Isopropylbenzene	18.88	105	3862052	39.92 ug/L	m	0
44)	Bromobenzene	19.42	156	827164	47.43 ug/L	#	90
45)	1,1,2,2-Tetrachloroethane	19.37	83	405928	47.35 ug/L		93
46)	1,2,3-Trichloropropane	19.44	75	426163	40.94 ug/L	#	77
47)	n-Propylbenzene	19.62	91	5027633	39.95 ug/L		97
48)	2-Chlorotoluene	19.77	91	3022550	43.28 ug/L		97
49)	4-Chlorotoluene	19.97	91	3350823	40.41 ug/L	m	90
50)	1,3,5-Trimethylbenzene	19.94	105	3253930	40.63 ug/L		99
51)	tert-Butylbenzene	20.53	119	3559052	42.85 ug/L		99
52)	1,2,4-Trimethylbenzene	20.62	105	3133241	42.70 ug/L		94
53)	sec-Butylbenzene	20.93	105	4932738	40.07 ug/L		98
54)	1,3-Dichlorobenzene	21.13	146	1647620	46.32 ug/L		96
55)	4-Isopropyltoluene	21.20	119	3952303	42.99 ug/L		97
56)	1,4-Dichlorobenzene	21.29	146	1632915	46.29 ug/L		94
58)	1,2-Dichlorobenzene	21.97	146	1235530	46.62 ug/L		95
59)	n-Butylbenzene	21.94	91	3919480	39.78 ug/L		96
60)	1,2-Dibromo-3-chloropropan	23.37	75	104168	47.84 ug/L		91
61)	1,2,4-Trichlorobenzene	24.94	180	1009305	51.79 ug/L		100
62)	Hexachlorobutadiene	25.28	225	1083830	46.12 ug/L		96
63)	Naphthalene	25.38	128	907970	53.84 ug/L	m	0
64)	1,2,3-Trichlorobenzene	25.86	180	750680	55.25 ug/L		96
65)	Methyl-tert butyl ether	8.09	73	894243	42.10 ug/L		96
66)	tert-Butyl Alcohol	7.85	59	29136	89.50 ug/L		100

(#) = qualifier out of range (m) = manual integration

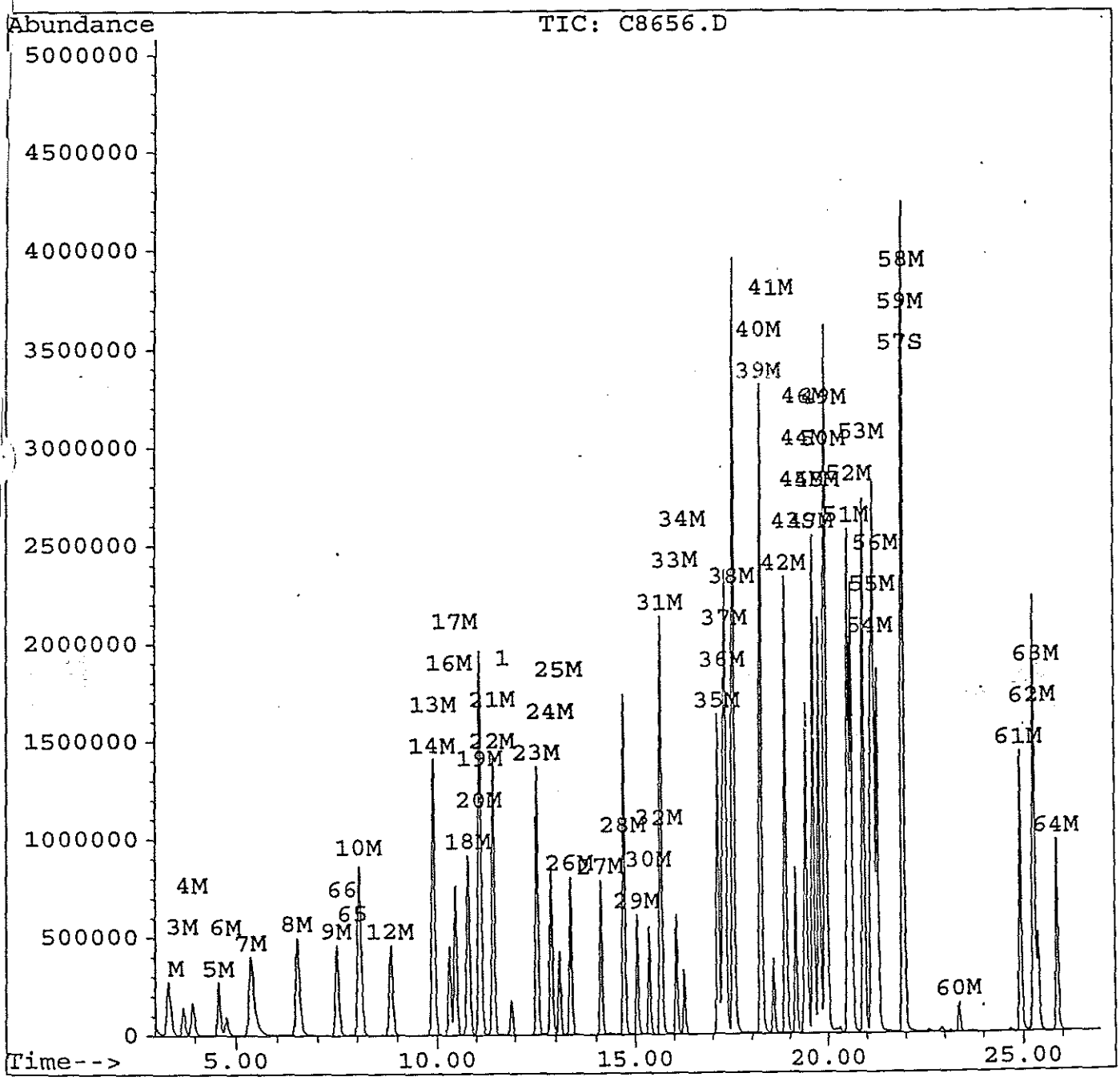
Quantitation Report

060

Data File : d:\hpchem\1\data\c8656.d
Acq On : 26 Jun 95 5:11 pm
Sample : 40 PPB STANDARD
Misc :
Quant Time: Jun 26 18:40 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 : Mon Jun 26 18:48:37 1995
Response via : Multiple Level Calibration



VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

061

Lab Name : EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Lab File ID: C8657.D BFB Injection Date: 6/26/95

Instrument ID: 5972-INSTRUMENT 1 BFB Injection Time: 1821

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	18.2
75	30.0 - 66.0% of mass 95	51.1
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.4
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 120.0% of mass 95	59.9
175	4.0 - 9.0% of mass 174	4.0 (6.7)1
176	93.0 - 101.0% of mass 174	58.9 (98.3)1
177	5.0 - 9.0% of mass 176	3.6 (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:

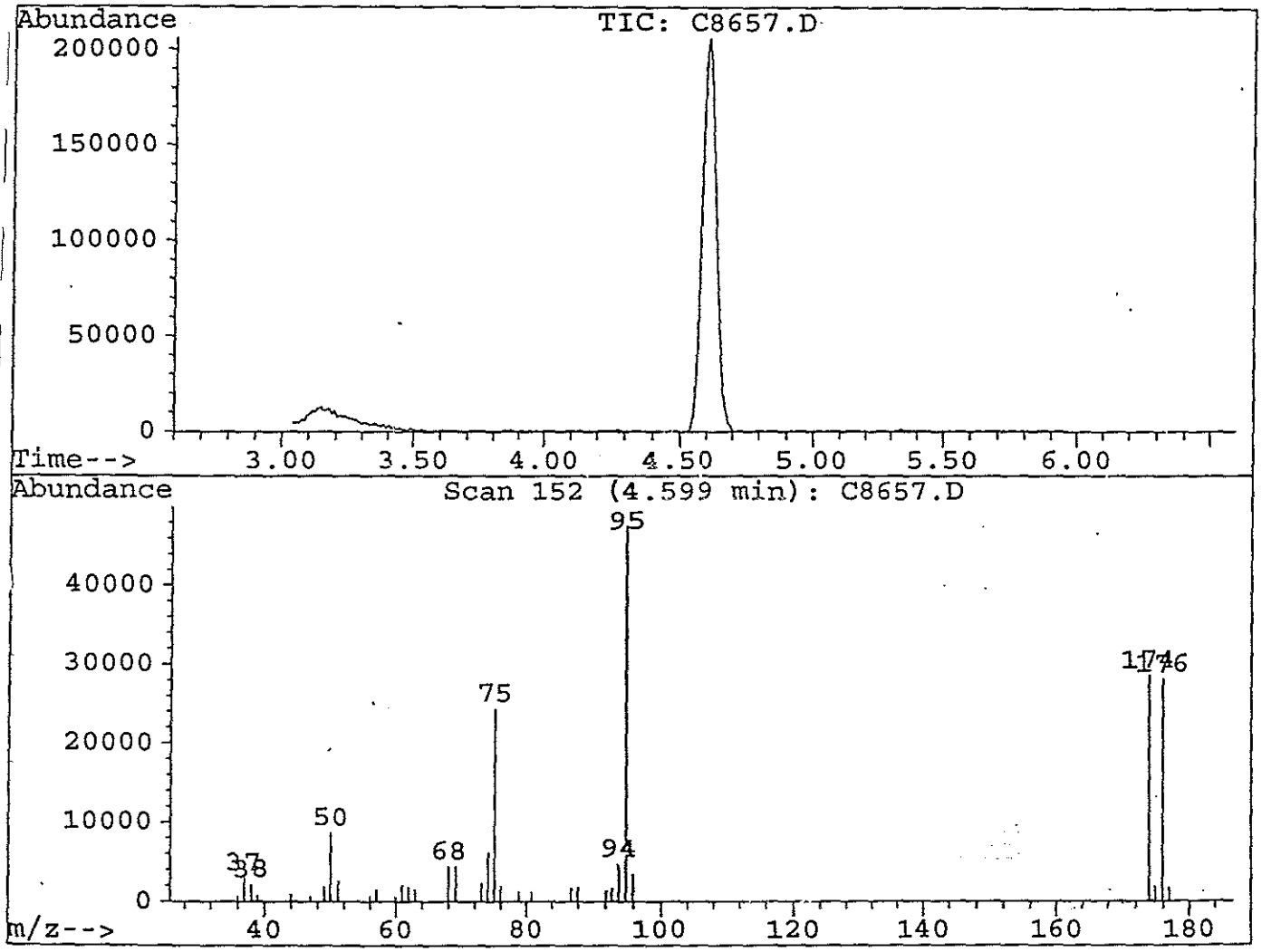
	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD010	10 STND	C8658.D	6/26/95	1836
02	1PPB STD	1PPB STD	C8659.D	6/26/95	1912
03	VBLK01	M. BLANK	C8660.D	6/26/95	1947
04	9526461V	9526461V	C8663.D	6/26/95	2131
05	9526606V	9526606V	C8664.D	6/26/95	2206
06	9526607V	9526607V	C8665.D	6/26/95	2240
07	9526607MS	26607MS	C8666.D	6/26/95	2315
08	9526607MSD	26607MSD	C8667.D	6/26/95	2349
09	9526435V	9526435V	C8670.D	6/27/95	0133
10	1PPB QCS	1PPB QCS	C8671.D	6/27/95	0208
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

CLPBFB

Data File : D:\HPCHEM\1\DATA\C8657.D
Acq On : 26 Jun 95 6:21 pm
Sample : BFB TUNE
Misc : 25 NG INJECTION

Vial: 062
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	18.2	8663	PASS
75	95	30	60	51.1	24352	PASS
95	95	100	100	100.0	47624	PASS
96	95	5	9	7.4	3533	PASS
173	174	0	2	0.0	0	PASS
174	95	50	100	59.9	28512	PASS
175	174	5	9	6.7	1914	PASS
176	174	95	101	98.3	28040	PASS
177	176	5	9	6.1	1712	PASS

a | 152 (4.599 min): C8657.D
BFB TUNE

063

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
35.95	674	60.00	579	80.90	1178	176.90	1712
36.95	2951	61.00	2071	86.90	1749		
38.05	2125	62.00	1820	87.95	1794		
43.95	768	63.00	1528	92.05	1366		
44.00	904	68.00	4404	92.95	1604		
46.90	636	69.05	4384	93.95	4729		
49.00	1902	72.95	2217	94.95	47624		
49.90	8663	73.95	6154	95.95	3533		
51.05	2632	74.95	24352	173.90	28512		
55.95	717	75.95	1950	174.80	1914		
56.95	1512	78.90	1135	175.90	28040		

7A

VOLATILE CONTINUING CALIBRATION CHECK

064

Lab Name: EMSL ANALYTICAL Contract: _____

Project No. _____ Site: _____ Location: _____ Group: _____

Instrument ID: 5972-INSTRUMENT 1 Calibration Date: 6/26/95 Time: 1836

Lab File ID: C8658.D Init. Calib. Date(s): 6/26/95 _____

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	0.372	0.380		-2.2	30.0
Chloromethane	0.166	0.164		1.2	30.0
Vinyl chloride	0.212	0.217		-2.4	30.0
Bromomethane	0.170	0.201		-18.2	30.0
Chloroethane	0.119	0.137		-15.1	30.0
Trichlorofluoromethane	0.594	0.616		-3.7	30.0
1,1-Dichloroethene	0.255	0.264		-3.5	30.0
Methylene chloride	0.272	0.325		-19.5	30.0
trans-1,2-Dichloroethene	0.271	0.286		-5.5	30.0
1,1-Dichloroethane	0.475	0.492		-3.6	30.0
2,2-Dichloropropane	0.494	0.539		-9.1	30.0
cis-1,2-Dichloroethene	0.265	0.277		-4.5	30.0
Bromochloromethane	0.105	0.109		-3.8	30.0
Chloroform	0.511	0.533		-4.3	30.0
1,1,1-Trichloroethane	0.571	0.601		-5.3	30.0
Carbon tetrachloride	0.541	0.568		-5.0	30.0
1,1-Dichloropropene	0.451	0.471		-4.4	30.0
Benzene	0.810	0.845		-4.3	30.0
1,2-Dichloroethane	0.205	0.212		-3.4	30.0
Trichloroethene	0.390	0.410		-5.1	30.0
1,2-Dichloropropane	0.258	0.268		-3.9	30.0
Dibromomethane	0.132	0.136		-3.0	30.0
Bromodichloromethane	0.418	0.437		-4.5	30.0
cis-1,3-Dichloropropene	0.339	0.356		-5.0	30.0
Toluene	0.602	0.635		-5.5	30.0
trans-1,3-Dichloropropene	0.244	0.252		-3.3	30.0
1,1,2-Trichloroethane	0.118	0.123		-4.2	30.0
Tetrachloroethene	0.416	0.442		-6.3	30.0
1,3-Dichloropropane	0.222	0.234		-5.4	30.0
Dibromochloromethane	0.258	0.274		-6.2	30.0
1,2-Dibromomethane	0.177	0.183		-3.4	30.0
Chlorobenzene	0.683	0.730		-6.9	30.0
1,1,1,2-Tetrachloroethane	0.299	0.312		-4.3	30.0
Ethylbenzene	1.297	1.364		-5.2	30.0
Xylene (para & meta)	0.471	0.500		-6.2	30.0
Xylene (Ortho)	0.430	0.460		-7.0	30.0

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: EMSL ANALYTICAL Contract: _____

Project No. _____ Site: _____ Location: _____ Group: _____

Instrument ID: 5972-INSTRUMENT 1 Calibration Date: 6/26/95 Time: 1836

Lab File ID: C8658.D Init. Calib. Date(s): 6/26/95 _____

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	0.668	0.706		-5.7	30.0
Bromoform	0.137	0.144		-5.1	30.0
Isopropylbenzene	1.350	1.410		-4.4	30.0
Bromobenzene	0.286	0.303		-5.9	30.0
1,1,2,2-Tetrachloroethane	0.148	0.155		-4.7	30.0
1,2,3-Trichloropropane	0.150	0.160		-6.7	30.0
n-Propylbenzene	1.755	1.836		-4.6	30.0
2-Chlorotoluene	1.045	1.030		1.4	30.0
4-Chlorotoluene	1.174	1.226		-4.4	30.0
1,3,5-Trimethylbenzene	1.140	1.211		-6.2	30.0
tert-Butylbenzene	1.243	1.303		-4.8	30.0
1,2,4-Trimethylbenzene	1.094	1.154		-5.5	30.0
sec-Butylbenzene	1.733	1.816		-4.8	30.0
1,3-Dichlorobenzene	0.574	0.604		-5.2	30.0
4-Isopropyltoluene	1.379	1.436		-4.1	30.0
1,4-Dichlorobenzene	0.574	0.610		-6.3	30.0
1,2-Dichlorobenzene	0.441	0.475		-7.7	30.0
n-Butylbenzene	1.392	1.462		-5.0	30.0
1,2-Dibromo-3-chloropropane	0.034	0.036		-5.9	30.0
1,2,4-Trichlorobenzene	0.350	0.365		-4.3	30.0
Hexachlorobutadiene	0.376	0.387		-2.9	30.0
Naphthalene	0.321	0.331		-3.1	30.0
1,2,3-Trichlorobenzene	0.258	0.269		-4.3	30.0
4-Bromofluorobenzene	0.467	0.551		-18.0	30.0
1,2-Dichlorobenzene-d4	0.275	0.303		-10.2	30.0

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\C8658.D
Acq On : 26 Jun 95 6:36 pm
Sample : 10 PPB CHK STANDARD
Misc :

Vial: 8
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

066

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Jun 27 10:34:27 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)
	Fluorobenzene	1.000	1.000	0.0	94	0.00
M	Dichlorodifluoromethane	0.372	0.380	-2.2	94	0.00
M	Chloromethane	0.166	0.164	1.3	92	0.00
M	Vinyl chloride	0.212	0.217	-2.3	93	0.00
M	Bromomethane	0.170	0.201	-18.1	103	0.01
M	Chloroethane	0.119	0.137	-14.7	92	0.00
M	Trichlorofluoromethane	0.594	0.616	-3.7	96	0.01
M	1,1-Dichloroethene	0.255	0.264	-3.8	96	0.01
M	Methylene chloride	0.272	0.325	-19.3	89	0.02
M	trans-1,2-Dichloroethene	0.271	0.286	-5.6	96	0.00
	Hexane	0.000	0.000#	0.0	0#	-9.46#
M	1,1-Dichloroethane	0.475	0.492	-3.5	95	0.00
M	2,2-Dichloropropane	0.494	0.539	-9.1	101	0.00
M	cis-1,2-Dichloroethene	0.265	0.277	-4.6	95	0.01
	2-Butanone	0.000	0.000#	0.0	0#	-11.24#
	Bromochloromethane	0.105	0.109	-3.8	96	0.00
M	Chloroform	0.511	0.533	-4.3	96	0.01
M	1,1,1-Trichloroethane	0.571	0.601	-5.4	97	0.00
M	Carbon tetrachloride	0.541	0.568	-5.1	97	0.00
M	1,1-Dichloropropene	0.451	0.471	-4.4	95	0.01
M	Benzene	0.810	0.845	-4.3	96	0.00
M	1,2-Dichloroethane	0.205	0.212	-3.1	96	0.00
M	Trichloroethene	0.390	0.410	-5.2	97	0.00
M	1,2-Dichloropropane	0.258	0.268	-4.1	96	0.00
M	Dibromomethane	0.132	0.136	-3.3	96	0.01
M	Bromodichloromethane	0.418	0.437	-4.5	98	0.00
M	cis-1,3-Dichloropropene	0.339	0.356	-5.1	98	0.00
M	Toluene	0.602	0.635	-5.4	98	0.00
M	trans-1,3-Dichloropropene	0.244	0.252	-3.1	98	0.00
M	1,1,2-Trichloroethane	0.118	0.123	-4.5	98	0.00
M	Tetrachloroethene	0.416	0.442	-6.2	99	0.00
M	1,3-Dichloropropane	0.222	0.234	-5.8	98	0.00
M	Dibromochloromethane	0.258	0.274	-6.3	100	0.00
M	1,2-Dibromomethane	0.177	0.183	-3.6	96	0.00
M	Chlorobenzene	0.683	0.730	-6.8	100	0.00
M	1,1,1,2-Tetrachloroethane	0.299	0.312	-4.3	98	0.00
M	Ethylbenzene	1.297	1.364	-5.1	98	0.00
M	Xylene (para & meta)	0.471	0.500	-6.2	98	0.00
M	Xylene (Ortho)	0.430	0.460	-7.0	99	0.00
M	Styrene	0.668	0.706	-5.7	98	0.00
M	Bromoform	0.137	0.144	-5.1	99	0.00
M	Isopropylbenzene	1.350	1.410	-4.4	97	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

067

Data File : D:\HPCHEM\1\DATA\C8658.D
Acq On : 26 Jun 95 6:36 pm
Sample : 10 PPB CHK STANDARD
Misc :

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 Jun 27 10:34:27 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)
3	S	4-Bromofluorobenzene	0.467	0.551	-17.9	97	0.00
4	M	Bromobenzene	0.286	0.303	-6.0	98	0.00
5	M	1,1,2,2-Tetrachloroethane	0.148	0.155	-4.9	98	0.00
6	M	1,2,3-Trichloropropane	0.150	0.160	-6.6	99	0.01
7	M	n-Propylbenzene	1.755	1.836	-4.7	98	0.00
8	M	2-Chlorotoluene	1.045	1.030	1.4	92	0.00
9	M	4-Chlorotoluene	1.174	1.226	-4.5	96	0.00
50	M	1,3,5-Trimethylbenzene	1.140	1.211	-6.2	98	0.00
51	M	tert-Butylbenzene	1.243	1.303	-4.9	98	0.00
52	M	1,2,4-Trimethylbenzene	1.094	1.154	-5.5	98	0.00
53	M	sec-Butylbenzene	1.733	1.816	-4.8	98	0.00
54	M	1,3-Dichlorobenzene	0.574	0.604	-5.2	97	0.00
55	M	4-Isopropyltoluene	1.379	1.436	-4.1	97	0.00
56	M	1,4-Dichlorobenzene	0.574	0.610	-6.2	100	0.00
		1,2-Dichlorobenzene-d4	0.275	0.303	-10.3	103	0.00
		1,2-Dichlorobenzene	0.441	0.475	-7.6	99	0.00
59	M	n-Butylbenzene	1.392	1.462	-5.0	96	0.00
60	M	1,2-Dibromo-3-chloropropane	0.034	0.036	-4.3	100	0.00
61	M	1,2,4-Trichlorobenzene	0.350	0.365	-4.5	98	0.00
62	M	Hexachlorobutadiene	0.376	0.387	-3.0	95	0.01
63	M	Naphthalene	0.321	0.331	-3.1	96	0.00
64	M	1,2,3-Trichlorobenzene	0.258	0.269	-4.3	97	0.00
65		Methyl-tert butyl ether	0.316	0.317	-0.4	93	0.00
66		tert-Butyl Alcohol	0.004	0.004	2.9	93	0.01

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report

Data File : d:\hpchem\1\data\c8658.d
Acq On : 26 Jun 95 6:36 pm
Sample : 10 PPB CHK STANDARD
Misc :
Quant Time: Jun 27 10:38 1995

Vial: 8
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

068

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Jun 27 10:34:27 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	11.90	96	346431	5.00	ug/L		0.00
System Monitoring Compounds							%Recovery
43) 4-Bromofluorobenzene	19.13	95	190715	5.89	ug/L		117.88%
57) 1,2-Dichlorobenzene-d4	21.93	152	105018	5.52	ug/L		110.30%
Target Compounds							Qvalue
2) Dichlorodifluoromethane	3.33	85	263562	10.22	ug/L		95
3) Chloromethane	3.71	50	113673	9.87	ug/L		98
4) Vinyl chloride	3.94	62	150401	10.23	ug/L		98
5) Bromomethane	4.60	94	138974	11.81	ug/L		98
6) Chloroethane	4.82	64	94586	11.47	ug/L		97
7) Trichlorofluoromethane	5.43	101	426583	10.37	ug/L		100
8) 1,1-Dichloroethene	6.51	96	183045	10.38	ug/L		92
9) Methylene chloride	7.49	84	225190	11.93	ug/L	m	87
10) trans-1,2-Dichloroethene	8.04	96	198331	10.56	ug/L		95
12) 1,1-Dichloroethane	8.83	63	340573	10.35	ug/L		99
13) 2,2-Dichloropropane	9.89	77	373308	10.91	ug/L		100
14) cis-1,2-Dichloroethene	9.90	96	192078	10.46	ug/L		97
16) Bromochloromethane	10.30	128	75803	10.38	ug/L		96
17) Chloroform	10.47	83	369567	10.43	ug/L		98
18) 1,1,1-Trichloroethane	10.79	97	416669	10.54	ug/L		96
19) Carbon tetrachloride	11.10	117	393552	10.51	ug/L		100
20) 1,1-Dichloropropene	11.09	75	326596	10.44	ug/L		98
21) Benzene	11.43	78	585656	10.43	ug/L		100
22) 1,2-Dichloroethane	11.43	62	146743	10.31	ug/L		98
23) Trichloroethene	12.54	95	284154	10.52	ug/L		97
24) 1,2-Dichloropropane	12.89	63	185741	10.41	ug/L		99
25) Dibromomethane	13.10	93	94457	10.33	ug/L		99
26) Bromodichloromethane	13.35	83	302550	10.45	ug/L		99
27) cis-1,3-Dichloropropene	14.12	75	246567	10.51	ug/L		98
28) Toluene	14.69	92	440033	10.54	ug/L		94
29) trans-1,3-Dichloropropene	15.03	75	174288	10.31	ug/L		99
30) 1,1,2-Trichloroethane	15.35	83	85319	10.45	ug/L		95
31) Tetrachloroethene	15.65	166	306332	10.62	ug/L		97
32) 1,3-Dichloropropane	15.64	76	162375	10.58	ug/L		99
33) Dibromochloromethane	16.04	129	189861	10.63	ug/L		96
34) 1,2-Dibromomethane	16.25	107	126762	10.36	ug/L		96
35) Chlorobenzene	17.12	112	505647	10.68	ug/L		97
36) 1,1,1,2-Tetrachloroethane	17.25	131	216016	10.43	ug/L		96
37) Ethylbenzene	17.31	91	944755	10.51	ug/L		99
38) Xylene (para & meta)	17.52	106	693177	21.24	ug/L		100
39) Xylene (Ortho)	18.22	106	319007	10.70	ug/L		100
40) Styrene	18.23	104	489051	10.57	ug/L		97

(#) = qualifier out of range (m) = manual integration

Data File : d:\hpchem\1\data\c8658.d
Acq On : 26 Jun 95 6:36 pm
Sample : 10 PPB CHK STANDARD
Misc :
Quant Time: Jun 27 10:38 1995

Vial: 8 069
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Jun 27 10:34:27 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
41)	Bromoform	18.56	173	99700	10.51 ug/L		98
42)	Isopropylbenzene	18.88	105	976875	10.44 ug/L		100
44)	Bromobenzene	19.41	156	209707	10.60 ug/L		97
45)	1,1,2,2-Tetrachloroethane	19.36	83	107198	10.49 ug/L		98
46)	1,2,3-Trichloropropane	19.44	75	111084	10.66 ug/L	#	42
47)	n-Propylbenzene	19.61	91	1272421	10.47 ug/L		99
48)	2-Chlorotoluene	19.77	91	713761	9.86 ug/L		97
49)	4-Chlorotoluene	19.96	91	849656	10.45 ug/L		100
50)	1,3,5-Trimethylbenzene	19.93	105	838758	10.62 ug/L		99
51)	tert-Butylbenzene	20.53	119	903124	10.49 ug/L		99
52)	1,2,4-Trimethylbenzene	20.61	105	799667	10.55 ug/L		98
53)	sec-Butylbenzene	20.93	105	1258030	10.48 ug/L		99
54)	1,3-Dichlorobenzene	21.12	146	418569	10.52 ug/L		97
55)	4-Isopropyltoluene	21.18	119	994609	10.41 ug/L		99
56)	1,4-Dichlorobenzene	21.28	146	422310	10.62 ug/L		99
58)	1,2-Dichlorobenzene	21.96	146	328787	10.76 ug/L		99
59)	n-Butylbenzene	21.94	91	1013097	10.50 ug/L		99
60)	1,2-Dibromo-3-chloropropan	23.36	75	24835	10.43 ug/L		93
61)	1,2,4-Trichlorobenzene	24.93	180	253161	10.45 ug/L		97
62)	Hexachlorobutadiene	25.28	225	268406	10.30 ug/L		97
63)	Naphthalene	25.38	128	229075	10.31 ug/L		100
64)	1,2,3-Trichlorobenzene	25.85	180	186523	10.43 ug/L		92
65)	Methyl-tert butyl ether	8.07	73	219929	10.04 ug/L		97
66)	tert-Butyl Alcohol	7.81	59	5940	19.42 ug/L		100

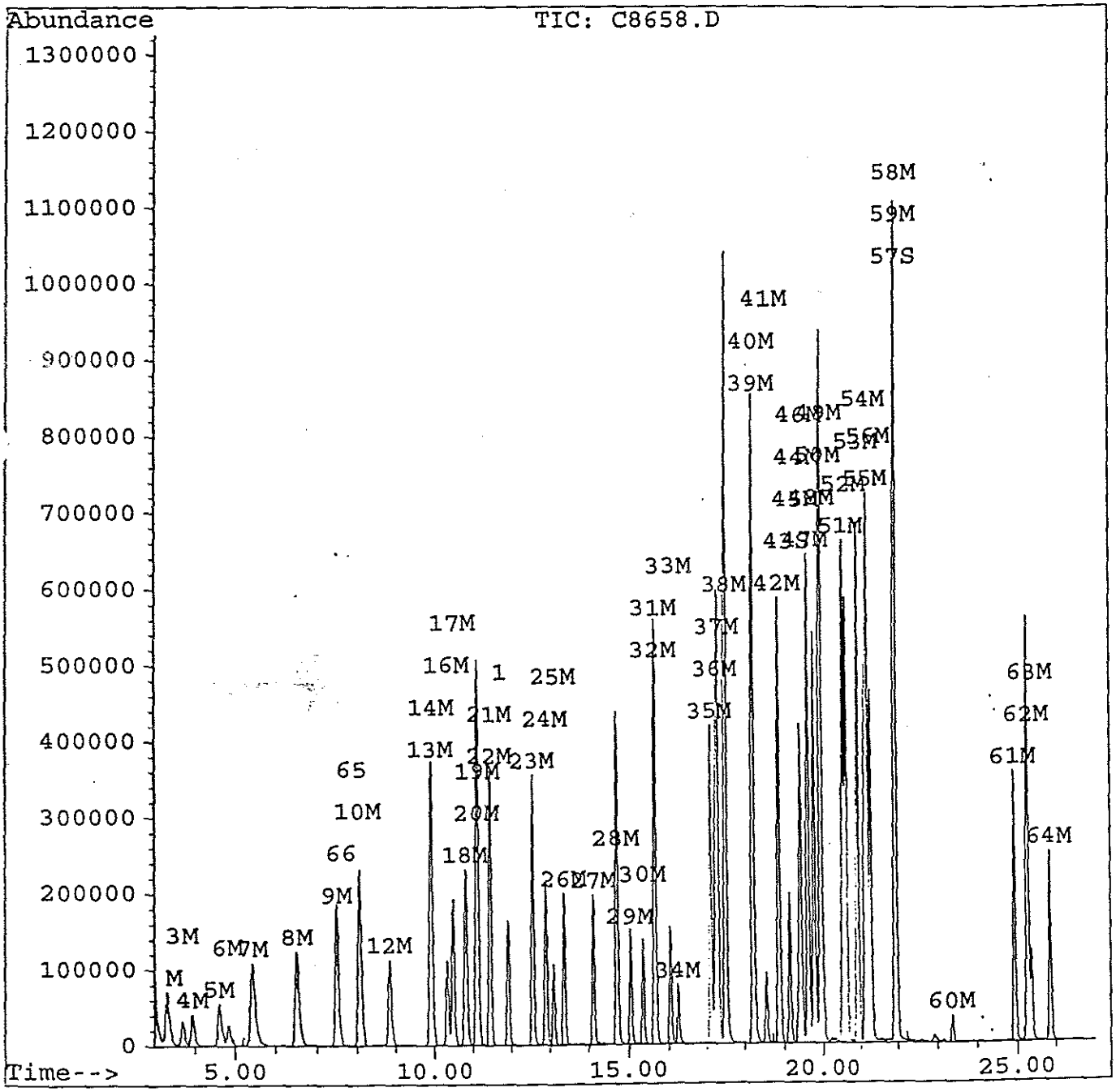
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c8658.d
Acq On : 26 Jun 95 6:36 pm
Sample : 10 PPB CHK STANDARD
Misc :
Quant Time: Jun 27 10:38 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 Jun 27 10:34:27 1995
Response via : Multiple Level Calibration



Quantitation Report

Data File : d:\hpchem\1\data\c8659.d
Acq On : 26 Jun 95 7:12 pm
Sample : 1 PPB CHK STANDARD
Misc :
Quant Time: Jun 27 10:36 1995

Vial: 9 071
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Jun 27 10:34:27 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	11.90	96	357198	5.00	ug/L		0.00
System Monitoring Compounds							%Recovery
43) 4-Bromofluorobenzene	19.14	95	184261	5.52	ug/L		110.46%
57) 1,2-Dichlorobenzene-d4	21.93	152	106860	5.44	ug/L		108.85%
Target Compounds							Qvalue
2) Dichlorodifluoromethane	3.34	85	30589	1.15	ug/L		95
3) Chloromethane	3.71	50	13645	1.15	ug/L		84
4) Vinyl chloride	3.94	62	16328	1.08	ug/L		93
5) Bromomethane	4.63	94	18016	1.48	ug/L		96
6) Chloroethane	4.84	64	10220	1.20	ug/L		86
7) Trichlorofluoromethane	5.42	101	48757	1.15	ug/L		94
8) 1,1-Dichloroethene	6.51	96	21259	1.17	ug/L		96
9) Methylene chloride	7.48	84	155537	7.99	ug/L		93
10) trans-1,2-Dichloroethene	8.05	96	23684	1.22	ug/L		93
12) 1,1-Dichloroethane	8.83	63	39109	1.15	ug/L		99
13) 2,2-Dichloropropane	9.90	77	41474	1.18	ug/L		96
14) cis-1,2-Dichloroethene	9.90	96	22679	1.20	ug/L		91
16) Bromochloromethane	10.30	128	8331	1.11	ug/L	#	89
17) Chloroform	10.46	83	43315	1.19	ug/L		100
18) 1,1,1-Trichloroethane	10.78	97	47248	1.16	ug/L		96
19) Carbon tetrachloride	11.09	117	45224	1.17	ug/L		92
20) 1,1-Dichloropropene	11.09	75	38724	1.20	ug/L		98
21) Benzene	11.43	78	68147	1.18	ug/L		93
22) 1,2-Dichloroethane	11.44	62	16883	1.15	ug/L		75
23) Trichloroethene	12.53	95	32516	1.17	ug/L		90
24) 1,2-Dichloropropane	12.89	63	21434	1.16	ug/L		86
25) Dibromomethane	13.09	93	10276	1.09	ug/L		94
26) Bromodichloromethane	13.37	83	34255	1.15	ug/L		94
27) cis-1,3-Dichloropropene	14.12	75	27824	1.15	ug/L		94
28) Toluene	14.70	92	52409	1.22	ug/L		98
29) trans-1,3-Dichloropropene	15.05	75	18497	1.06	ug/L		100
30) 1,1,2-Trichloroethane	15.35	83	10212	1.21	ug/L		89
31) Tetrachloroethene	15.66	166	36391	1.22	ug/L		97
32) 1,3-Dichloropropane	15.64	76	18610	1.18	ug/L		96
33) Dibromochloromethane	16.05	129	19815	1.08	ug/L		98
34) 1,2-Dibromomethane	16.24	107	13678	1.08	ug/L		93
35) Chlorobenzene	17.12	112	59137	1.21	ug/L		97
36) 1,1,1,2-Tetrachloroethane	17.25	131	24262	1.14	ug/L		93
37) Ethylbenzene	17.31	91	111305	1.20	ug/L		98
38) Xylene (para & meta)	17.52	106	79279	2.36	ug/L		94
39) Xylene (Ortho)	18.22	106	36565	1.19	ug/L		90
40) Styrene	18.23	104	57656	1.21	ug/L		96

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c8659.d
Acq On : 26 Jun 95 7:12 pm
Sample : 1 PPB CHK STANDARD
Misc :
Quant Time: Jun 27 10:36 1995

Vial: 9 072
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Jun 27 10:34:27 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
41)	Bromoform	18.56	173	10635	1.09	ug/L		83
42)	Isopropylbenzene	18.88	105	112588	1.17	ug/L		97
44)	Bromobenzene	19.42	156	24118	1.18	ug/L		94
45)	1,1,2,2-Tetrachloroethane	19.36	83	11129	1.06	ug/L		77
46)	1,2,3-Trichloropropane	19.45	75	12813	1.19	ug/L	#	21
47)	n-Propylbenzene	19.61	91	147497	1.18	ug/L		98
48)	2-Chlorotoluene	19.77	91	88396	1.18	ug/L		99
49)	4-Chlorotoluene	19.96	91	99559	1.19	ug/L		99
50)	1,3,5-Trimethylbenzene	19.93	105	96501	1.19	ug/L		99
51)	tert-Butylbenzene	20.53	119	105202	1.18	ug/L		99
52)	1,2,4-Trimethylbenzene	20.61	105	91844	1.18	ug/L		99
53)	sec-Butylbenzene	20.92	105	147189	1.19	ug/L		98
54)	1,3-Dichlorobenzene	21.12	146	50594	1.23	ug/L		98
55)	4-Isopropyltoluene	21.19	119	112216	1.14	ug/L		98
56)	1,4-Dichlorobenzene	21.28	146	48976	1.19	ug/L		97
58)	1,2-Dichlorobenzene	21.96	146	39727	1.26	ug/L		96
59)	n-Butylbenzene	21.94	91	115078	1.16	ug/L		97
60)	1,2-Dibromo-3-chloropropan	23.38	75	2089	0.85	ug/L	#	56
61)	1,2,4-Trichlorobenzene	24.93	180	31894	1.28	ug/L		98
62)	Hexachlorobutadiene	25.28	225	32098	1.20	ug/L		97
63)	Naphthalene	25.39	128	30930	1.35	ug/L		100
64)	1,2,3-Trichlorobenzene	25.85	180	25052	1.36	ug/L		93
65)	Methyl-tert butyl ether	8.09	73	28826	1.28	ug/L		94

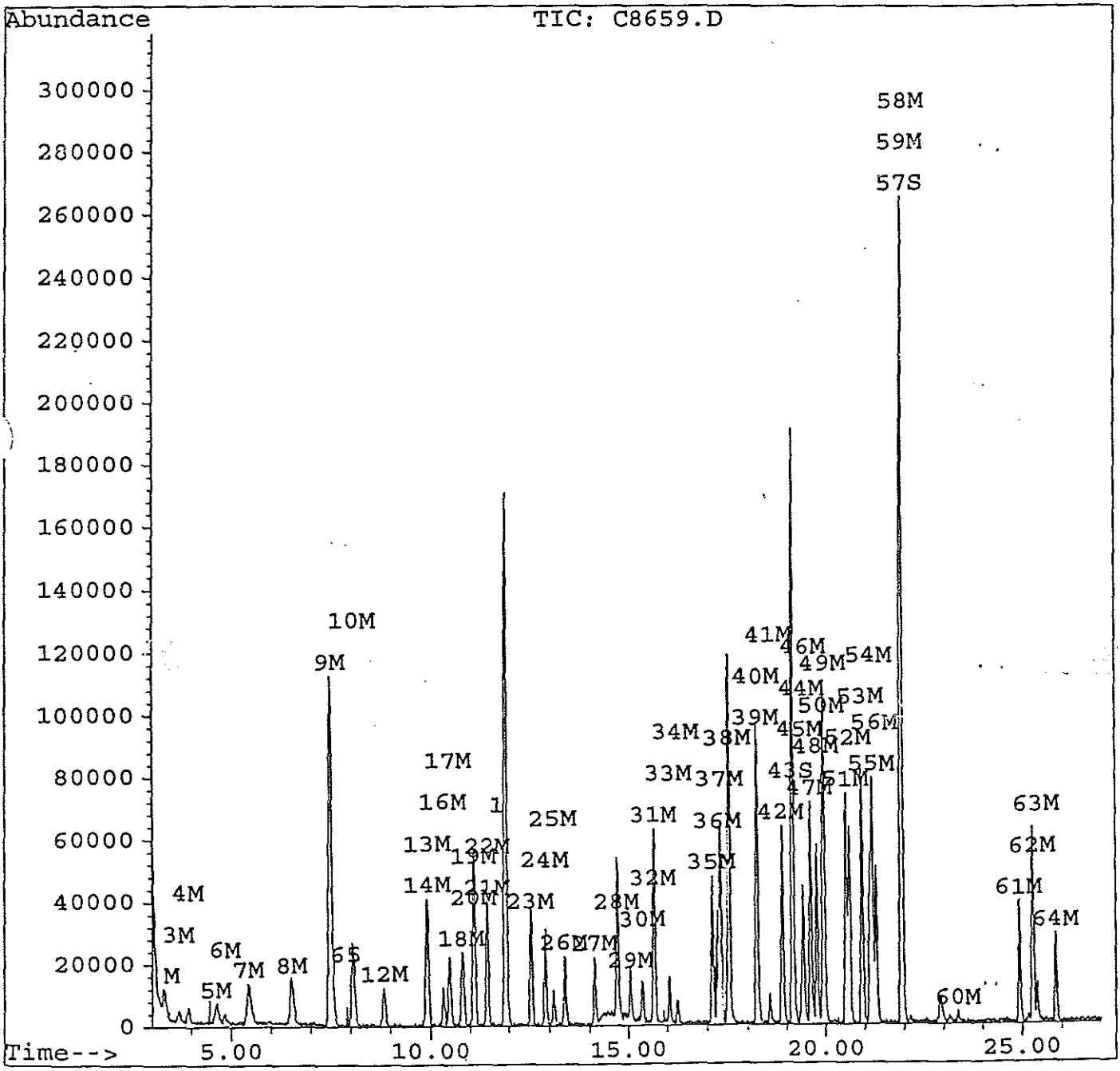
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c8659.d
Acq On : 26 Jun 95 7:12 pm
Sample : 1 PPB CHK STANDARD
Misc :
Quant Time: Jun 27 10:36 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 Jun 27 10:34:27 1995
Response via : Multiple Level Calibration



Quantitation Report

Data File : d:\hpchem\1\data\c8671.d
Acq On : 27 Jun 95 2:08 am
Sample : 10 PPB QCS
Misc : 25 ML
Quant Time: Jun 27 11:04 1995

Vial: 21
Operator: SRK 074
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Jun 27 10:34:27 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	11.91	96	371402	5.00	ug/L		0.01
System Monitoring Compounds							%Recovery
43) 4-Bromofluorobenzene	19.14	95	178870	5.16	ug/L		103.13%
57) 1,2-Dichlorobenzene-d4	21.94	152	99111	4.86	ug/L		97.10%
Target Compounds							Qvalue
2) Dichlorodifluoromethane	3.34	85	301048	10.89	ug/L		97
3) Chloromethane	3.71	50	122853	9.95	ug/L		98
4) Vinyl chloride	3.94	62	163440	10.37	ug/L		94
5) Bromomethane	4.62	94	132909	10.54	ug/L		97
6) Chloroethane	4.84	64	98377	11.13	ug/L		95
7) Trichlorofluoromethane	5.44	101	433952	9.84	ug/L		99
8) 1,1-Dichloroethene	6.52	96	200279	10.59	ug/L		94
9) Methylene chloride	7.49	84	264490	13.07	ug/L	m	99
10) trans-1,2-Dichloroethene	8.06	96	217039	10.78	ug/L		93
12) 1,1-Dichloroethane	8.85	63	370684	10.51	ug/L		99
13) 2,2-Dichloropropane	9.91	77	319087	8.70	ug/L		91
14) cis-1,2-Dichloroethene	9.91	96	197550	10.03	ug/L		99
16) Bromochloromethane	10.32	128	73921	9.44	ug/L		95
17) Chloroform	10.48	83	391746	10.31	ug/L		95
18) 1,1,1-Trichloroethane	10.81	97	449182	10.60	ug/L		98
19) Carbon tetrachloride	11.11	117	424828	10.58	ug/L		99
20) 1,1-Dichloropropene	11.10	75	362913	10.82	ug/L		98
21) Benzene	11.44	78	616057	10.23	ug/L		99
22) 1,2-Dichloroethane	11.45	62	146488	9.60	ug/L		98
23) Trichloroethene	12.55	95	312761	10.80	ug/L		96
24) 1,2-Dichloropropane	12.90	63	194766	10.18	ug/L		100
25) Dibromomethane	13.10	93	88881	9.06	ug/L		97
26) Bromodichloromethane	13.37	83	310173	10.00	ug/L	m	95
27) cis-1,3-Dichloropropene	14.13	75	228062	9.07	ug/L		97
28) Toluene	14.71	92	462902	10.35	ug/L		96
29) trans-1,3-Dichloropropene	15.05	75	158939	8.77	ug/L		100
30) 1,1,2-Trichloroethane	15.37	83	83207	9.51	ug/L		96
31) Tetrachloroethene	15.67	166	320327	10.36	ug/L		99
32) 1,3-Dichloropropane	15.65	76	154352	9.38	ug/L		97
33) Dibromochloromethane	16.05	129	191090	9.98	ug/L		99
34) 1,2-Dibromomethane	16.26	107	129123	9.84	ug/L	m	97
35) Chlorobenzene	17.13	112	513626	10.12	ug/L		99
36) 1,1,1,2-Tetrachloroethane	17.26	131	238264	10.73	ug/L		96
37) Ethylbenzene	17.31	91	1004724	10.43	ug/L		97
38) Xylene (para & meta)	17.53	106	734821	21.00	ug/L		99
39) Xylene (Ortho)	18.23	106	330113	10.32	ug/L		99
40) Styrene	18.24	104	498169	10.05	ug/L		99

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c8671.d
Acq On : 27 Jun 95 2:08 am
Sample : 10 PPB QCS
Misc : 25 ML
Quant Time: Jun 27 11:04 1995

Vial: 21
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Jun 27 10:34:27 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
41)	Bromoform	18.56	173	88346	8.69	ug/L		93
42)	Isopropylbenzene	18.89	105	1064243	10.61	ug/L	m	0
44)	Bromobenzene	19.43	156	199763	9.42	ug/L		98
45)	1,1,2,2-Tetrachloroethane	19.37	83	99327	9.06	ug/L	m	16
46)	1,2,3-Trichloropropane	19.45	75	101951	9.13	ug/L	#	59
47)	n-Propylbenzene	19.62	91	1357857	10.42	ug/L		100
48)	2-Chlorotoluene	19.78	91	789572	10.17	ug/L		97
49)	4-Chlorotoluene	19.97	91	873530	10.02	ug/L		98
50)	1,3,5-Trimethylbenzene	19.94	105	846787	10.00	ug/L		99
51)	tert-Butylbenzene	20.54	119	967366	10.48	ug/L		98
52)	1,2,4-Trimethylbenzene	20.62	105	825889	10.16	ug/L		97
53)	sec-Butylbenzene	20.94	105	1348058	10.47	ug/L		99
54)	1,3-Dichlorobenzene	21.13	146	415773	9.75	ug/L		99
55)	4-Isopropyltoluene	21.19	119	1033677	10.09	ug/L		99
56)	1,4-Dichlorobenzene	21.30	146	415376	9.74	ug/L		99
58)	1,2-Dichlorobenzene	21.97	146	313298	9.56	ug/L		98
59)	n-Butylbenzene	21.95	91	1071742	10.36	ug/L		99
60)	1,2-Dibromo-3-chloropropan	23.37	75	21537	8.44	ug/L		91
61)	1,2,4-Trichlorobenzene	24.94	180	236663	9.11	ug/L		100
62)	Hexachlorobutadiene	25.29	225	287080	10.28	ug/L		99
63)	Naphthalene	25.39	128	208299	8.74	ug/L		100
64)	1,2,3-Trichlorobenzene	25.86	180	170360	8.88	ug/L		92

(#) = qualifier out of range (m) = manual integration

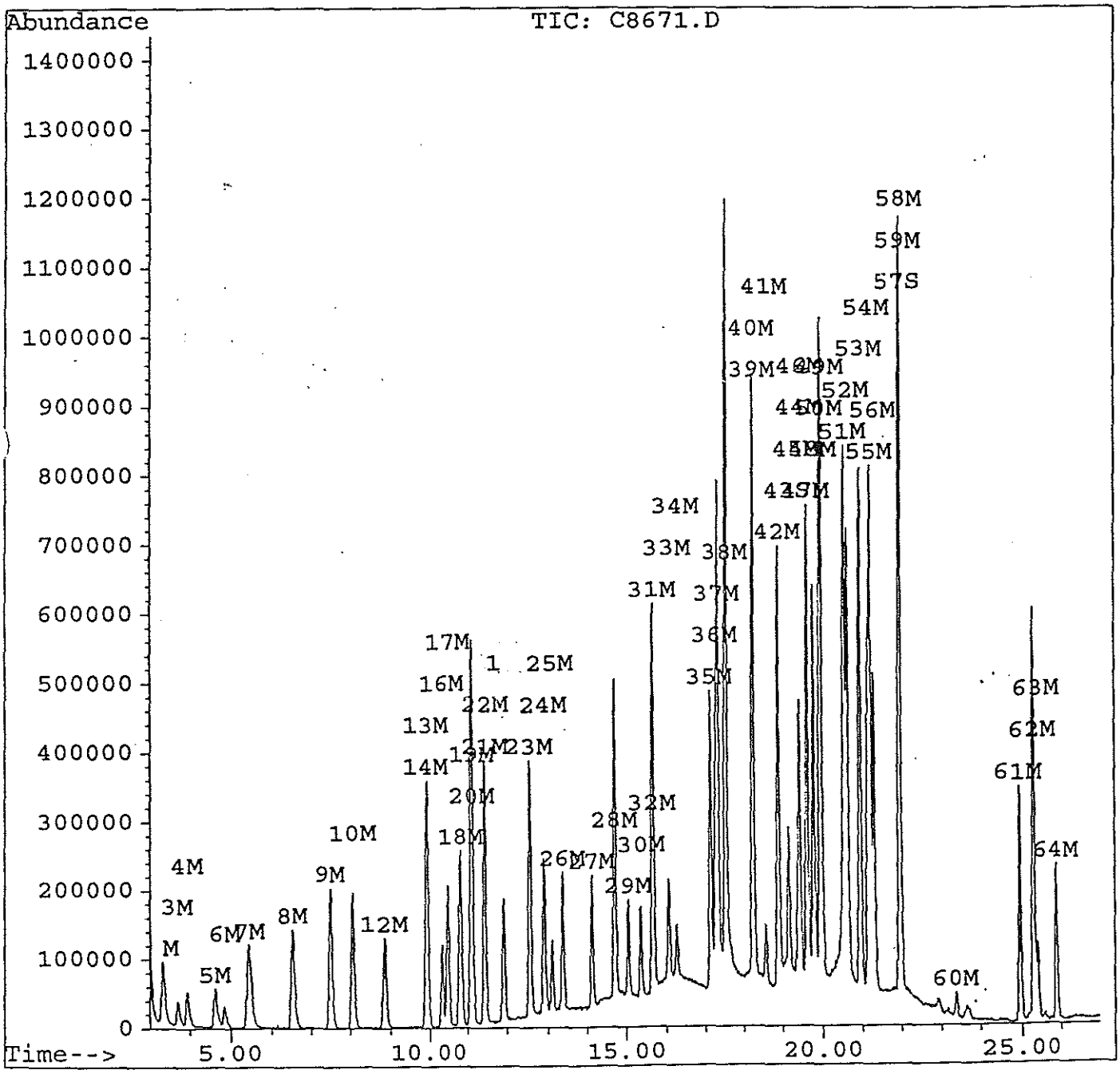
Quantitation Report

076

Data File : d:\hpchem\1\data\c8671.d
Acq On : 27 Jun 95 2:08 am
Sample : 10 PPB QCS
Misc : 25 ML
Quant Time: Jun 27 11:04 1995

Vial: 21
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Jun 27 10:34:27 1995
Response via : Multiple Level Calibration



5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

077

Lab Name : EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Lab File ID: C8680.D BFB Injection Date: 6/27/95

Instrument ID: 5972-INSTRUMENT 1 BFB Injection Time: 1634

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	20.6
75	30.0 - 66.0% of mass 95	49.6
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	50.2
175	4.0 - 9.0% of mass 174	4.5 (8.9)1
176	93.0 - 101.0% of mass 174	50.4 (100.4)1
177	5.0 - 9.0% of mass 176	3.4 (6.7)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	C8681.D	6/27/95	1648
02	1PPB STD	1PPB STD	C8682.D	6/27/95	1723
03	VBLK01	M. BLANK	C8683.D	6/27/95	1757
04	9526604V	9526604V	C8684.D	6/27/95	1831
05	9526605V	9526605V	C8685.D	6/27/95	1905
06	9526797V	9526797V	C8686.D	6/27/95	1939
07	9526798V	9526798V	C8687.D	6/27/95	2013
08	9526609V	9526609V	C8688.D	6/27/95	2047
09	9526460V	9526460V	C8689.D	6/27/95	2121
10	9526799V	9526799V	C8690.D	6/27/95	2155
11	9526800V	9526800V	C8691.D	6/27/95	2230
12	9526801V	9526801V	C8692.D	6/27/95	2304
13	9526608V	9526608V	C8693.D	6/27/95	2338
14	1PPB QCS	1PPB QCS	C8694.D	6/28/95	0012
15					
16					
17					
18					
19					
20					
21					
22					

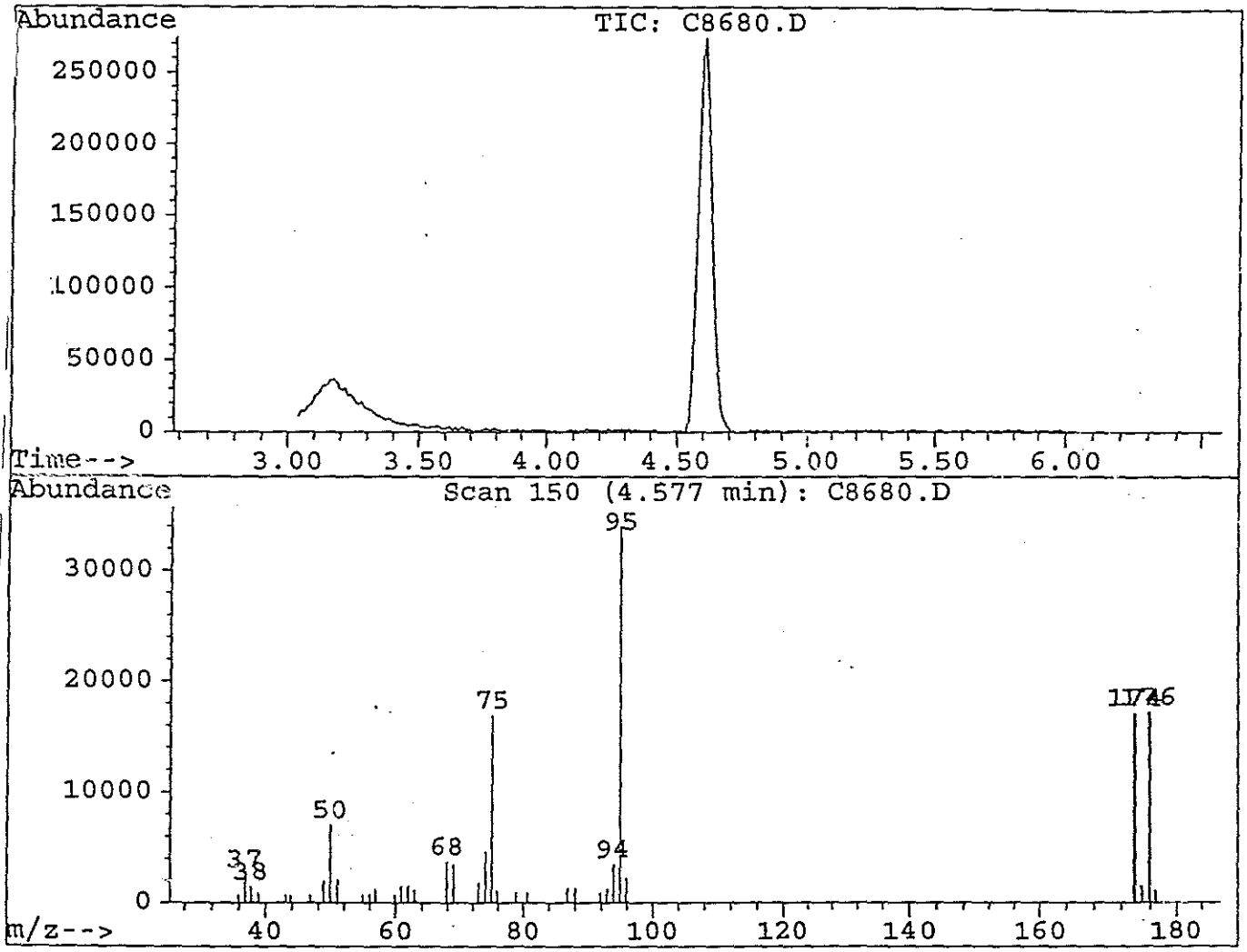
CLPBFB

078

Data File : D:\HPCHEM\1\DATA\C8680.D
Acq On : 27 Jun 95 4:34 pm
Sample : BFB TUNE
Misc : 25 NG INJECTION

Vial: 7
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics



Peak Apex is scan: 150

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.6	6997	PASS
75	95	30	60	49.6	16848	PASS
95	95	100	100	100.0	34000	PASS
96	95	5	9	6.4	2181	PASS
173	174	0	2	0.0	0	PASS
174	95	50	100	50.2	17080	PASS
175	174	5	9	8.9	1522	PASS
176	174	95	101	100.4	17144	PASS
177	176	5	9	6.7	1144	PASS

C8680.D VOA524.M Tue Jun 27 16:44:19 1995 VOA

n 150 (4.577 min): C8680.D
BFB TUNE

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
55.95	684	55.95	745	75.85	1070	174.90	1522
56.95	2534	56.85	1173	78.90	942	175.90	17144
57.85	1412	59.90	711	80.70	925	176.80	1144
58.95	845	60.90	1495	86.80	1297		
43.10	624	61.90	1496	87.95	1330		
63.90	658	62.90	1147	91.85	852		
66.90	663	67.90	3658	92.85	1205		
48.90	1981	68.95	3466	93.85	3442		
49.90	6997	72.85	1820	94.85	34000		
50.95	2115	73.95	4595	95.85	2181		
54.85	647	74.95	16848	173.90	17080		

7A

VOLATILE CONTINUING CALIBRATION CHECK

080

Lab Name: EMSL ANALYTICAL Contract: _____

Project No. _____ Site: _____ Location: _____ Group: _____

Instrument ID: 5972-INSTRUMENT 1 Calibration Date: 6/27/95 Time: 1648

Lab File ID: C8681.D Init. Calib. Date(s): 6/26/95 _____

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	0.372	0.404		-8.6	30.0
Chloromethane	0.166	0.194		-16.9	30.0
Vinyl chloride	0.212	0.251		-18.4	30.0
Bromomethane	0.170	0.205		-20.6	30.0
Chloroethane	0.119	0.137		-15.1	30.0
Trichlorofluoromethane	0.594	0.656		-10.4	30.0
1,1-Dichloroethene	0.255	0.286		-12.2	30.0
Methylene chloride	0.272	0.319		-17.3	30.0
trans-1,2-Dichloroethene	0.271	0.296		-9.2	30.0
1,1-Dichloroethane	0.475	0.517		-8.8	30.0
2,2-Dichloropropane	0.494	0.545		-10.3	30.0
cis-1,2-Dichloroethene	0.265	0.275		-3.8	30.0
Bromochloromethane	0.105	0.104		1.0	30.0
Chloroform	0.511	0.526		-2.9	30.0
1,1,1-Trichloroethane	0.571	0.604		-5.8	30.0
Carbon tetrachloride	0.541	0.575		-6.3	30.0
1,1-Dichloropropene	0.451	0.487		-8.0	30.0
Benzene	0.810	0.850		-4.9	30.0
1,2-Dichloroethane	0.205	0.203		1.0	30.0
Trichloroethene	0.390	0.404		-3.6	30.0
1,2-Dichloropropane	0.258	0.257		0.4	30.0
Dibromomethane	0.132	0.125		5.3	30.0
Bromodichloromethane	0.418	0.411		1.7	30.0
cis-1,3-Dichloropropene	0.339	0.333		1.8	30.0
Toluene	0.602	0.620		-3.0	30.0
trans-1,3-Dichloropropene	0.244	0.229		6.1	30.0
1,1,2-Trichloroethane	0.118	0.110		6.8	30.0
Tetrachloroethene	0.416	0.438		-5.3	30.0
1,3-Dichloropropane	0.222	0.212		4.5	30.0
Dibromochloromethane	0.258	0.241		6.6	30.0
1,2-Dibromomethane	0.177	0.162		8.5	30.0
Chlorobenzene	0.683	0.683		0.0	30.0
1,1,1,2-Tetrachloroethane	0.299	0.283		5.4	30.0
Ethylbenzene	1.297	1.319		-1.7	30.0
Xylene (para & meta)	0.471	0.482		-2.3	30.0
Xylene (Ortho)	0.430	0.435		-1.2	30.0

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: EMSL ANALYTICAL Contract: _____

Project No. _____ Site: _____ Location: _____ Group: _____

Instrument ID: 5972-INSTRUMENT 1 Calibration Date: 6/27/95 Time: 1648

Lab File ID: C8681.D Init. Calib. Date(s): 6/26/95 _____

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	0.668	0.660		1.2	30.0
Bromoform	0.137	0.120		12.4	30.0
Isopropylbenzene	1.350	1.375		-1.9	30.0
Bromobenzene	0.286	0.270		5.6	30.0
1,1,2,2-Tetrachloroethane	0.148	0.127		14.2	30.0
1,2,3-Trichloropropane	0.150	0.138		8.0	30.0
n-Propylbenzene	1.755	1.757		-0.1	30.0
2-Chlorotoluene	1.045	0.965		7.7	30.0
4-Chlorotoluene	1.174	1.143		2.6	30.0
1,3,5-Trimethylbenzene	1.140	1.147		-0.6	30.0
tert-Butylbenzene	1.243	1.242		0.1	30.0
1,2,4-Trimethylbenzene	1.094	1.081		1.2	30.0
sec-Butylbenzene	1.733	1.772		-2.3	30.0
1,3-Dichlorobenzene	0.574	0.543		5.4	30.0
4-Isopropyltoluene	1.379	1.365		1.0	30.0
1,4-Dichlorobenzene	0.574	0.551		4.0	30.0
1,2-Dichlorobenzene	0.441	0.420		4.8	30.0
n-Butylbenzene	1.392	1.410		-1.3	30.0
1,2-Dibromo-3-chloropropane	0.034	0.029		14.7	30.0
1,2,4-Trichlorobenzene	0.350	0.312		10.9	30.0
Hexachlorobutadiene	0.376	0.376		0.0	30.0
Naphthalene	0.321	0.261		18.7	30.0
1,2,3-Trichlorobenzene	0.258	0.223		13.6	30.0
4-Bromofluorobenzene	0.467	0.502		-7.5	30.0
1,2-Dichlorobenzene-d4	0.275	0.269		2.2	30.0

Evaluate Continuing Calibration Report

082

Data File : D:\HPCHEM\1\DATA\C8681.D
Acq On : 27 Jun 95 4:48 pm
Sample : 10 PPB CHK STANDARD
Misc :

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 Jun 27 10:34:27 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	111	0.00
2	M	Dichlorodifluoromethane	0.372	0.404	-8.6	118	0.00
3	M	Chloromethane	0.166	0.194	-16.7	128	-0.02
4	M	Vinyl chloride	0.212	0.251	-18.4	128	0.00
5	M	Bromomethane	0.170	0.205	-20.7	125	0.02
6	M	Chloroethane	0.119	0.137	-15.4	110	0.01
7	M	Trichlorofluoromethane	0.594	0.656	-10.5	121	0.00
8	M	1,1-Dichloroethene	0.255	0.286	-12.3	123	0.01
9	M	Methylene chloride	0.272	0.319	-17.1	103	0.02
0	M	trans-1,2-Dichloroethene	0.271	0.296	-9.2	117	0.01
1		Hexane	0.000	0.000#	0.0	0#	-9.46#
2	M	1,1-Dichloroethane	0.475	0.517	-8.8	118	0.00
3	M	2,2-Dichloropropane	0.494	0.545	-10.3	120	0.00
4	M	cis-1,2-Dichloroethene	0.265	0.275	-3.5	112	0.01
		2-Butanone	0.000	0.000#	0.0	0#	0.10
		Bromochloromethane	0.105	0.104	1.8	108	0.00
7	M	Chloroform	0.511	0.526	-2.9	112	0.01
8	M	1,1,1-Trichloroethane	0.571	0.604	-5.8	115	0.00
9	M	Carbon tetrachloride	0.541	0.575	-6.3	116	0.00
0	M	1,1-Dichloropropene	0.451	0.487	-7.8	116	0.00
1	M	Benzene	0.810	0.850	-4.9	114	0.00
2	M	1,2-Dichloroethane	0.205	0.203	1.1	109	0.00
3	M	Trichloroethene	0.390	0.404	-3.6	113	0.00
4	M	1,2-Dichloropropane	0.258	0.257	0.2	109	0.01
5	M	Dibromomethane	0.132	0.125	5.3	104	0.00
6	M	Bromodichloromethane	0.418	0.411	1.6	109	0.01
7	M	cis-1,3-Dichloropropene	0.339	0.333	1.7	109	0.00
8	M	Toluene	0.602	0.620	-3.0	113	0.00
9	M	trans-1,3-Dichloropropene	0.244	0.229	6.3	105	0.00
0	M	1,1,2-Trichloroethane	0.118	0.110	6.9	103	0.00
1	M	Tetrachloroethene	0.416	0.438	-5.3	116	0.00
2	M	1,3-Dichloropropane	0.222	0.212	4.4	105	0.00
3	M	Dibromochloromethane	0.258	0.241	6.5	104	0.00
4	M	1,2-Dibromomethane	0.177	0.162	8.5	100	0.00
5	M	Chlorobenzene	0.683	0.683	0.0	110	0.00
6	M	1,1,1,2-Tetrachloroethane	0.299	0.283	5.5	105	0.00
7	M	Ethylbenzene	1.297	1.319	-1.7	112	0.00
8	M	Xylene (para & meta)	0.471	0.482	-2.2	112	0.00
9	M	Xylene (Ortho)	0.430	0.435	-1.0	111	0.00
0	M	Styrene	0.668	0.660	1.2	108	0.00
	M	Bromoform	0.137	0.120	12.5	98	0.00
	M	Isopropylbenzene	1.350	1.375	-1.8	112	0.00

( ) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\C8681.D
Acq On : 27 Jun 95 4:48 pm
Sample : 10 PPB CHK STANDARD
Misc :

Vial: 8
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

083

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Jun 27 10:34:27 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)
3	S	4-Bromofluorobenzene	0.467	0.502	-7.6	105	0.00
4	M	Bromobenzene	0.286	0.270	5.3	104	0.00
5	M	1,1,2,2-Tetrachloroethane	0.148	0.127	13.6	96	0.00
6	M	1,2,3-Trichloropropane	0.150	0.138	8.3	100	0.01
7	M	n-Propylbenzene	1.755	1.757	-0.1	111	0.00
8	M	2-Chlorotoluene	1.045	0.965	7.6	102	0.00
9	M	4-Chlorotoluene	1.174	1.143	2.6	106	0.00
0	M	1,3,5-Trimethylbenzene	1.140	1.147	-0.7	110	0.00
1	M	tert-Butylbenzene	1.243	1.242	0.1	110	0.00
2	M	1,2,4-Trimethylbenzene	1.094	1.081	1.2	109	0.00
3	M	sec-Butylbenzene	1.733	1.772	-2.2	113	0.00
4	M	1,3-Dichlorobenzene	0.574	0.543	5.4	104	0.00
5	M	4-Isopropyltoluene	1.379	1.365	1.0	109	0.00
6	M	1,4-Dichlorobenzene	0.574	0.551	4.0	107	0.00
		1,2-Dichlorobenzene-d4	0.275	0.269	2.3	108	0.00
		1,2-Dichlorobenzene	0.441	0.420	4.8	104	0.00
9	M	n-Butylbenzene	1.392	1.410	-1.3	110	0.00
0	M	1,2-Dibromo-3-chloropropane	0.034	0.029	15.6	96	0.00
1	M	1,2,4-Trichlorobenzene	0.350	0.312	10.8	99	0.00
2	M	Hexachlorobutadiene	0.376	0.376	0.0	109	0.00
3	M	Naphthalene	0.321	0.261	18.6	89	0.00
4	M	1,2,3-Trichlorobenzene	0.258	0.223	13.5	95	0.00
5		Methyl-tert butyl ether	0.316	0.298	5.6	103	0.00
6		tert-Butyl Alcohol	0.004	0.004	17.7	93	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report

Data File : d:\hpchem\1\data\c8681.d
Acq On : 27 Jun 95 4:48 pm
Sample : 10 PPB CHK STANDARD
Misc :
Quant Time: Jun 28 9:45 1995

Vial: 8 084
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Jun 27 10:34:27 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	11.90	96	409662	5.00	ug/L		0.00
System Monitoring Compounds							%Recovery
43) 4-Bromofluorobenzene	19.14	95	205760	5.38	ug/L		107.55%
57) 1,2-Dichlorobenzene-d4	21.93	152	110033	4.89	ug/L		97.73%
Target Compounds							Qvalue
2) Dichlorodifluoromethane	3.33	85	331058	10.86	ug/L		99
3) Chloromethane	3.70	50	158915	11.67	ug/L		97
4) Vinyl chloride	3.93	62	205871	11.84	ug/L		100
5) Bromomethane	4.61	94	167927	12.07	ug/L	m	92
6) Chloroethane	4.85	64	112552	11.54	ug/L	m	99
7) Trichlorofluoromethane	5.42	101	537546	11.05	ug/L		98
8) 1,1-Dichloroethene	6.52	96	234242	11.23	ug/L		97
9) Methylene chloride	7.49	84	261358	11.71	ug/L	m	97
10) trans-1,2-Dichloroethene	8.05	96	242603	10.92	ug/L		90
12) 1,1-Dichloroethane	8.83	63	423332	10.88	ug/L		100
13) 2,2-Dichloropropane	9.89	77	446342	11.03	ug/L		97
14) cis-1,2-Dichloroethene	9.91	96	224908	10.35	ug/L		96
16) Bromochloromethane	10.32	128	84845	9.82	ug/L		89
17) Chloroform	10.47	83	430953	10.29	ug/L		98
18) 1,1,1-Trichloroethane	10.79	97	494771	10.58	ug/L		96
19) Carbon tetrachloride	11.09	117	470990	10.63	ug/L		96
20) 1,1-Dichloropropene	11.08	75	398649	10.78	ug/L		98
21) Benzene	11.43	78	696498	10.49	ug/L		99
22) 1,2-Dichloroethane	11.44	62	166467	9.89	ug/L		100
23) Trichloroethene	12.54	95	330983	10.36	ug/L		96
24) 1,2-Dichloropropane	12.90	63	210744	9.98	ug/L		99
25) Dibromomethane	13.09	93	102411	9.47	ug/L		97
26) Bromodichloromethane	13.37	83	336568	9.84	ug/L		98
27) cis-1,3-Dichloropropene	14.12	75	272704	9.83	ug/L		98
28) Toluene	14.71	92	508231	10.30	ug/L		100
29) trans-1,3-Dichloropropene	15.05	75	187258	9.37	ug/L		97
30) 1,1,2-Trichloroethane	15.36	83	89907	9.31	ug/L		97
31) Tetrachloroethene	15.66	166	359061	10.53	ug/L		99
32) 1,3-Dichloropropane	15.64	76	173495	9.56	ug/L		98
33) Dibromochloromethane	16.05	129	197447	9.35	ug/L		98
34) 1,2-Dibromomethane	16.24	107	132436	9.15	ug/L		98
35) Chlorobenzene	17.12	112	559559	10.00	ug/L		99
36) 1,1,1,2-Tetrachloroethane	17.25	131	231656	9.45	ug/L		94
37) Ethylbenzene	17.31	91	1080678	10.17	ug/L		98
38) Xylene (para & meta)	17.52	106	789073	20.45	ug/L		98
39) Xylene (Ortho)	18.22	106	356277	10.10	ug/L		96
40) Styrene	18.24	104	540440	9.88	ug/L		94

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c8681.d
Acq On : 27 Jun 95 4:48 pm
Sample : 10 PPB CHK STANDARD
Misc :
Quant Time: Jun 28 9:45 1995

Vial: 8 085
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Jun 27 10:34:27 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
41)	Bromoform	18.55	173	98107	8.75	ug/L		91
42)	Isopropylbenzene	18.88	105	1126485	10.18	ug/L		99
44)	Bromobenzene	19.42	156	221507	9.47	ug/L		95
45)	1,1,2,2-Tetrachloroethane	19.37	83	104402	8.64	ug/L		93
46)	1,2,3-Trichloropropane	19.45	75	113039	9.17	ug/L	#	50
47)	n-Propylbenzene	19.61	91	1439550	10.01	ug/L		99
48)	2-Chlorotoluene	19.78	91	790929	9.24	ug/L		98
49)	4-Chlorotoluene	19.96	91	936482	9.74	ug/L		99
50)	1,3,5-Trimethylbenzene	19.93	105	939938	10.07	ug/L		99
51)	tert-Butylbenzene	20.53	119	1017705	9.99	ug/L		99
52)	1,2,4-Trimethylbenzene	20.61	105	885746	9.88	ug/L		99
53)	sec-Butylbenzene	20.93	105	1451842	10.22	ug/L		100
54)	1,3-Dichlorobenzene	21.13	146	445262	9.46	ug/L		99
55)	4-Isopropyltoluene	21.19	119	1118757	9.90	ug/L		98
56)	1,4-Dichlorobenzene	21.28	146	451520	9.60	ug/L		99
58)	1,2-Dichlorobenzene	21.96	146	344140	9.52	ug/L		99
59)	n-Butylbenzene	21.94	91	1155581	10.13	ug/L		99
60)	1,2-Dibromo-3-chloropropan	23.36	75	23779	8.44	ug/L		95
61)	1,2,4-Trichlorobenzene	24.94	180	255475	8.92	ug/L		97
62)	Hexachlorobutadiene	25.27	225	308018	10.00	ug/L		99
63)	Naphthalene	25.38	128	214016	8.14	ug/L		100
64)	1,2,3-Trichlorobenzene	25.85	180	182973	8.65	ug/L		93
65)	Methyl-tert butyl ether	8.07	73	244463	9.44	ug/L		100
66)	tert-Butyl Alcohol	7.80	59	5955	16.47	ug/L	m	100

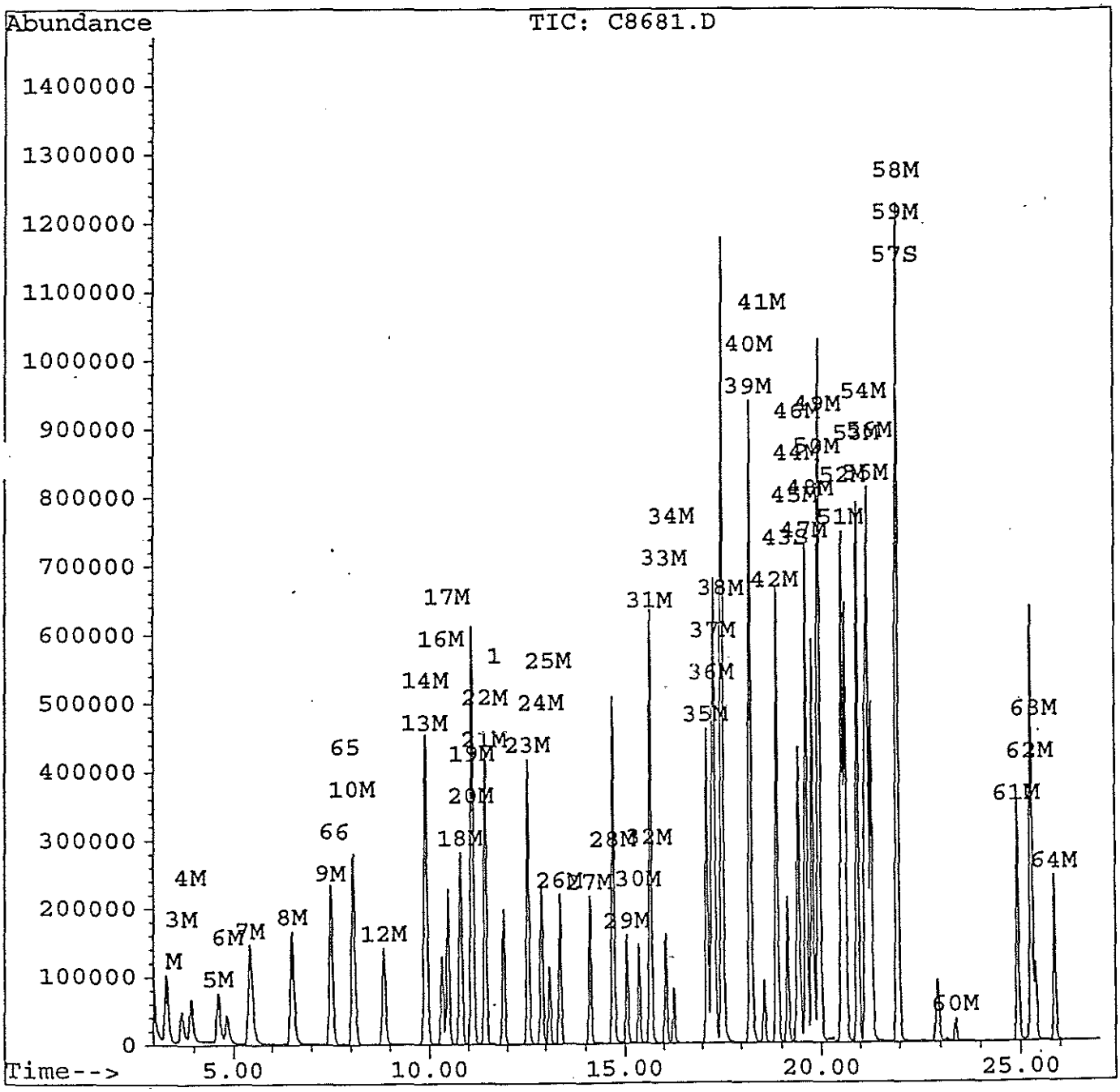
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c8681.d
Acq On : 27 Jun 95 4:48 pm
Sample : 10 PPB CHK STANDARD
Misc :
Quant Time: Jun 28 9:45 1995

Vial: 8 086
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Jun 27 10:34:27 1995
Response via : Multiple Level Calibration



Quantitation Report

Data File : d:\hpchem\1\data\c8682.d
Acq On : 27 Jun 95 5:23 pm
Sample : 1 PPB CHK STANDARD
Misc :
Quant Time: Jun 27 17:50 1995

Vial: 9 087
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Jun 27 10:34:27 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	11.88	96	263808	5.00	ug/L		-0.02
System Monitoring Compounds							%Recovery
43) 4-Bromofluorobenzene	19.14	95	137316	5.57	ug/L		111.46%
57) 1,2-Dichlorobenzene-d4	21.93	152	76724	5.29	ug/L		105.82%
Target Compounds							Qvalue
2) Dichlorodifluoromethane	3.26	85	22602	1.15	ug/L		94
3) Chloromethane	3.62	50	10343	1.18	ug/L		97
4) Vinyl chloride	3.86	62	12530	1.12	ug/L		100
5) Bromomethane	4.54	94	12840	1.43	ug/L		82
6) Chloroethane	4.77	64	7887	1.26	ug/L		86
7) Trichlorofluoromethane	5.35	101	35286	1.13	ug/L		99
8) 1,1-Dichloroethene	6.44	96	14764	1.10	ug/L		89
9) Methylene chloride	7.42	84	114634	7.98	ug/L		97
10) trans-1,2-Dichloroethene	8.00	96	16388	1.15	ug/L		96
12) 1,1-Dichloroethane	8.79	63	28932	1.16	ug/L		94
13) 2,2-Dichloropropane	9.86	77	30183	1.16	ug/L		95
14) cis-1,2-Dichloroethene	9.86	96	15970	1.14	ug/L		87
16) Bromochloromethane	10.28	128	5581	1.00	ug/L		92
17) Chloroform	10.43	83	31554	1.17	ug/L		98
18) 1,1,1-Trichloroethane	10.76	97	33861	1.12	ug/L		94
19) Carbon tetrachloride	11.07	117	31113	1.09	ug/L		99
20) 1,1-Dichloropropene	11.06	75	27263	1.14	ug/L		97
21) Benzene	11.40	78	49099	1.15	ug/L		98
22) 1,2-Dichloroethane	11.41	62	11845	1.09	ug/L		75
23) Trichloroethene	12.52	95	22428	1.09	ug/L		93
24) 1,2-Dichloropropane	12.87	63	15280	1.12	ug/L		86
25) Dibromomethane	13.07	93	7466	1.07	ug/L		99
26) Bromodichloromethane	13.35	83	24509	1.11	ug/L		99
27) cis-1,3-Dichloropropene	14.10	75	19184	1.07	ug/L		99
28) Toluene	14.70	92	36945	1.16	ug/L		94
29) trans-1,3-Dichloropropene	15.03	75	13315	1.03	ug/L		88
30) 1,1,2-Trichloroethane	15.35	83	6291	1.01	ug/L	#	86
31) Tetrachloroethene	15.65	166	25193	1.15	ug/L		92
32) 1,3-Dichloropropane	15.63	76	12303	1.05	ug/L		95
33) Dibromochloromethane	16.04	129	14502	1.07	ug/L		98
34) 1,2-Dibromomethane	16.24	107	9467	1.02	ug/L		93
35) Chlorobenzene	17.12	112	41128	1.14	ug/L		93
36) 1,1,1,2-Tetrachloroethane	17.25	131	17181	1.09	ug/L		92
37) Ethylbenzene	17.31	91	76398	1.12	ug/L		97
38) Xylene (para & meta)	17.52	106	55916	2.25	ug/L		90
39) Xylene (Ortho)	18.21	106	26115	1.15	ug/L		94
40) Styrene	18.24	104	39324	1.12	ug/L		92

(#) = qualifier out of range (m) = manual integration

Quantitation Report

088

Data File : d:\hpchem\1\data\c8682.d
Acq On : 27 Jun 95 5:23 pm
Sample : 1 PPB CHK STANDARD
Misc :
Quant Time: Jun 27 17:50 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 Jun 27 10:34:27 1995
Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
41) Bromoform	18.56	173	7207	1.00 ug/L	86
42) Isopropylbenzene	18.87	105	79811	1.12 ug/L	99
44) Bromobenzene	19.42	156	17152	1.14 ug/L #	87
45) 1,1,2,2-Tetrachloroethane	19.36	83	7304	0.94 ug/L	96
46) 1,2,3-Trichloropropane	19.43	75	9868	1.24 ug/L	92
47) n-Propylbenzene	19.61	91	102029	1.10 ug/L	98
48) 2-Chlorotoluene	19.77	91	64581	1.17 ug/L	99
49) 4-Chlorotoluene	19.96	91	71389	1.15 ug/L	96
50) 1,3,5-Trimethylbenzene	19.93	105	66144	1.10 ug/L	97
51) tert-Butylbenzene	20.52	119	73140	1.12 ug/L	100
52) 1,2,4-Trimethylbenzene	20.61	105	64279	1.11 ug/L	99
53) sec-Butylbenzene	20.92	105	101804	1.11 ug/L	99
54) 1,3-Dichlorobenzene	21.13	146	34724	1.15 ug/L	97
55) 4-Isopropyltoluene	21.19	119	79236	1.09 ug/L	96
56) 1,4-Dichlorobenzene	21.28	146	34821	1.15 ug/L	98
58) 1,2-Dichlorobenzene	21.95	146	27570	1.18 ug/L	93
59) n-Butylbenzene	21.94	91	82538	1.12 ug/L	97
61) 1,2,4-Trichlorobenzene	24.93	180	21662	1.17 ug/L	95
62) Hexachlorobutadiene	25.27	225	21927	1.11 ug/L	93
63) Naphthalene	25.37	128	20937	1.24 ug/L	100
64) 1,2,3-Trichlorobenzene	25.84	180	16216	1.19 ug/L	100
65) Methyl-tert butyl ether	8.05	73	20584	1.23 ug/L	92

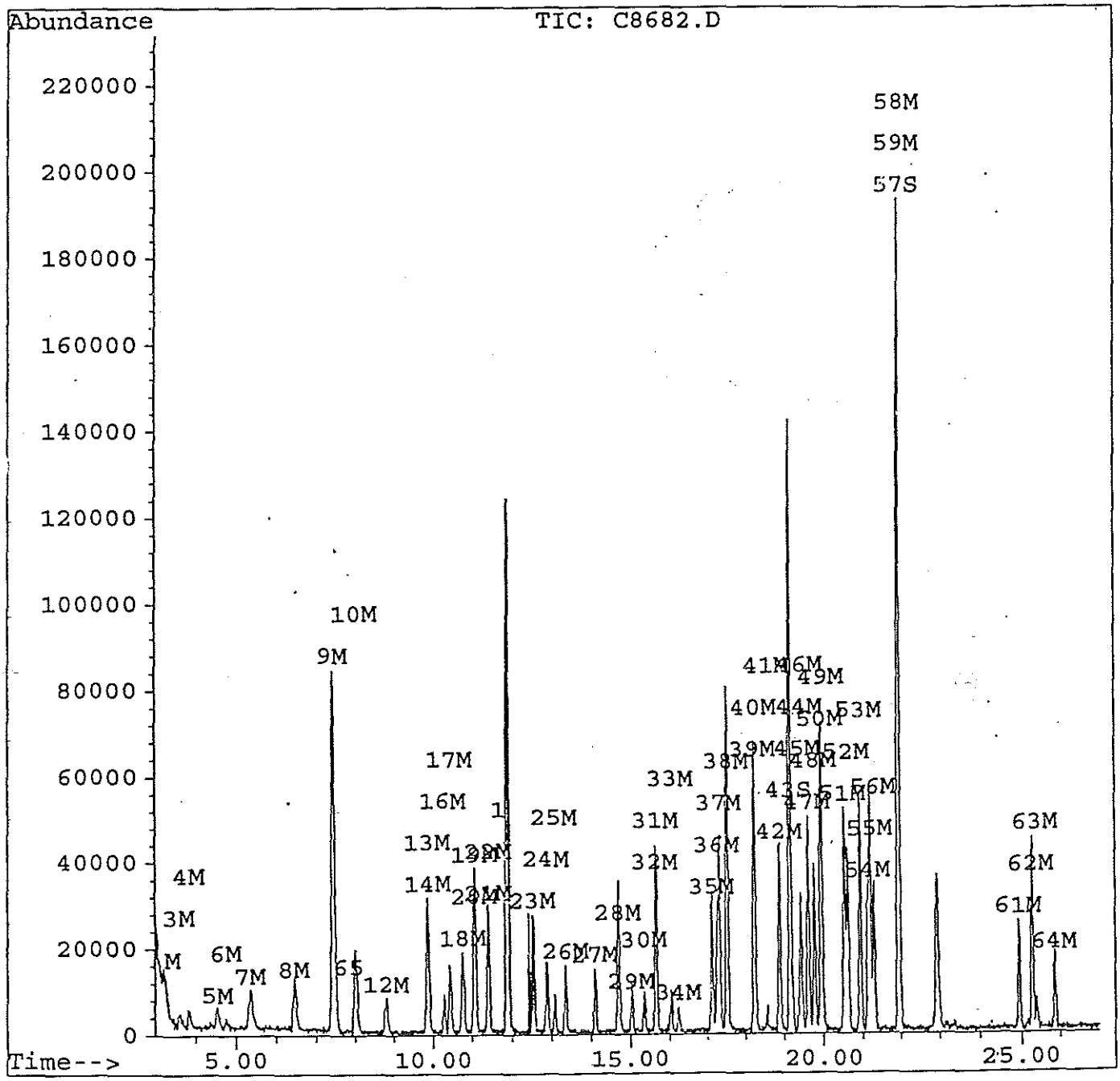
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c8682.d
Acq On : 27 Jun 95 5:23 pm
Sample : 1 PPB CHK STANDARD
Misc :
Quant Time: Jun 27 17:50 1995

Vial: 9 089
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Jun 27 10:34:27 1995
Response via : Multiple Level Calibration



Quantitation Report

090

Data File : d:\hpchem\1\data\c8694.d
Acq On : 28 Jun 95 12:12 am
Sample : 10 PPB QCS
Misc : 25 ML
Quant Time: Jun 28 10:32 1995

Vial: 21
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Jun 27 10:34:27 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	11.90	96	379632	5.00	ug/L		0.00
System Monitoring Compounds							%Recovery
43) 4-Bromofluorobenzene	19.14	95	194311	5.48	ug/L		109.60%
57) 1,2-Dichlorobenzene-d4	21.93	152	104370	5.00	ug/L		100.04%
Target Compounds							Qvalue
2) Dichlorodifluoromethane	3.34	85	315568	11.17	ug/L		99
3) Chloromethane	3.72	50	128256	10.16	ug/L		97
4) Vinyl chloride	3.95	62	174736	10.85	ug/L		97
5) Bromomethane	4.61	94	149044	11.56	ug/L		95
6) Chloroethane	4.83	64	106070	11.74	ug/L		92
7) Trichlorofluoromethane	5.43	101	475738	10.55	ug/L		99
8) 1,1-Dichloroethene	6.51	96	221383	11.45	ug/L		94
9) Methylene chloride	7.48	84	246490	11.92	ug/L	m	96
10) trans-1,2-Dichloroethene	8.05	96	230531	11.20	ug/L		95
12) 1,1-Dichloroethane	8.84	63	393805	10.93	ug/L		97
13) 2,2-Dichloropropane	9.90	77	348648	9.30	ug/L		96
14) cis-1,2-Dichloroethene	9.90	96	206176	10.24	ug/L		97
16) Bromochloromethane	10.31	128	80040	10.00	ug/L		92
17) Chloroform	10.47	83	400088	10.31	ug/L		100
18) 1,1,1-Trichloroethane	10.80	97	471990	10.89	ug/L		99
19) Carbon tetrachloride	11.10	117	453943	11.06	ug/L		99
20) 1,1-Dichloropropene	11.09	75	384500	11.22	ug/L		95
21) Benzene	11.44	78	642985	10.45	ug/L		100
22) 1,2-Dichloroethane	11.44	62	151892	9.74	ug/L		99
23) Trichloroethene	12.54	95	313029	10.57	ug/L		97
24) 1,2-Dichloropropane	12.89	63	201601	10.31	ug/L		97
25) Dibromomethane	13.10	93	92689	9.25	ug/L		97
26) Bromodichloromethane	13.36	83	312800	9.86	ug/L		98
27) cis-1,3-Dichloropropene	14.12	75	239788	9.33	ug/L		100
28) Toluene	14.70	92	478723	10.47	ug/L		97
29) trans-1,3-Dichloropropene	15.04	75	164860	8.90	ug/L		99
30) 1,1,2-Trichloroethane	15.35	83	83657	9.35	ug/L		96
31) Tetrachloroethene	15.66	166	337519	10.68	ug/L		98
32) 1,3-Dichloropropane	15.64	76	159908	9.50	ug/L		99
33) Dibromochloromethane	16.05	129	185310	9.47	ug/L		97
34) 1,2-Dibromomethane	16.25	107	123241	9.19	ug/L		98
35) Chlorobenzene	17.12	112	534718	10.31	ug/L		98
36) 1,1,1,2-Tetrachloroethane	17.26	131	225224	9.92	ug/L		99
37) Ethylbenzene	17.31	91	1018160	10.34	ug/L		98
38) Xylene (para & meta)	17.52	106	740251	20.70	ug/L		99
39) Xylene (Ortho)	18.22	106	337049	10.31	ug/L		99
40) Styrene	18.24	104	512024	10.10	ug/L		99

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c8694.d
Acq On : 28 Jun 95 12:12 am
Sample : 10 PPB QCS
Misc : 25 ML
Quant Time: Jun 28 10:32 1995

Vial: 21
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

091

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Jun 27 10:34:27 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
41)	Bromoform	18.56	173	89912	8.65	ug/L		96
42)	Isopropylbenzene	18.88	105	1111141	10.84	ug/L	m	0
44)	Bromobenzene	19.42	156	204497	9.43	ug/L		97
45)	1,1,2,2-Tetrachloroethane	19.37	83	102400	9.14	ug/L		94
46)	1,2,3-Trichloropropane	19.43	75	103256	9.04	ug/L	#	85
47)	n-Propylbenzene	19.62	91	1409392	10.58	ug/L		99
48)	2-Chlorotoluene	19.77	91	770228	9.71	ug/L		97
49)	4-Chlorotoluene	19.96	91	890343	9.99	ug/L		100
50)	1,3,5-Trimethylbenzene	19.93	105	875416	10.12	ug/L		98
51)	tert-Butylbenzene	20.53	119	998023	10.58	ug/L		97
52)	1,2,4-Trimethylbenzene	20.61	105	859065	10.34	ug/L		99
53)	sec-Butylbenzene	20.93	105	1410372	10.72	ug/L		99
54)	1,3-Dichlorobenzene	21.12	146	432969	9.93	ug/L		100
55)	4-Isopropyltoluene	21.18	119	1080844	10.32	ug/L		99
56)	1,4-Dichlorobenzene	21.29	146	429940	9.87	ug/L		98
58)	1,2-Dichlorobenzene	21.96	146	319349	9.54	ug/L		99
59)	n-Butylbenzene	21.94	91	1120802	10.60	ug/L		99
60)	1,2-Dibromo-3-chloropropan	23.36	75	21566	8.26	ug/L		97
61)	1,2,4-Trichlorobenzene	24.92	180	239352	9.02	ug/L		98
62)	Hexachlorobutadiene	25.27	225	299893	10.51	ug/L		98
63)	Naphthalene	25.38	128	209564	8.60	ug/L		100
64)	1,2,3-Trichlorobenzene	25.85	180	170189	8.68	ug/L		94

(#) = qualifier out of range (m) = manual integration

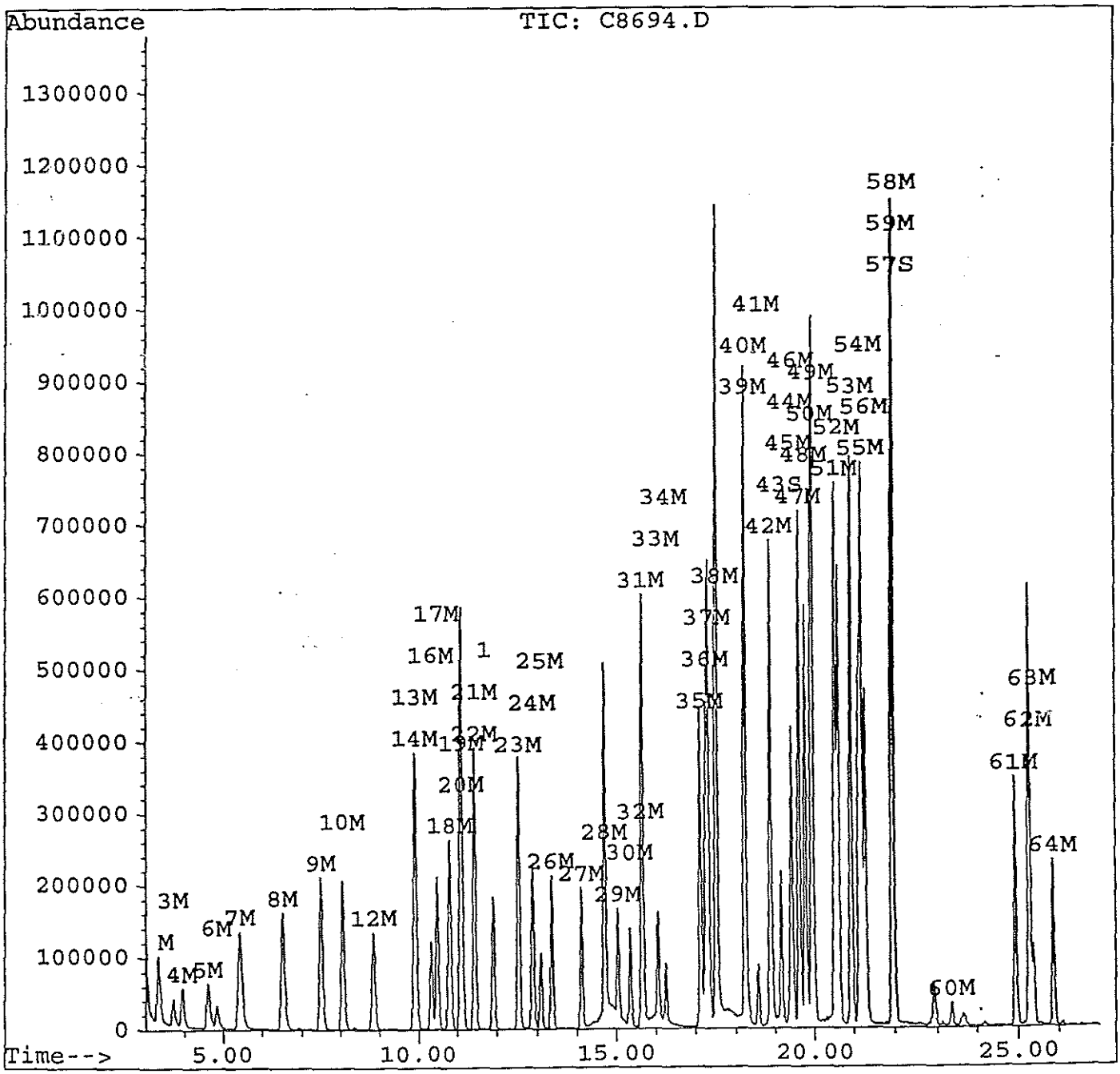
Quantitation Report

Data File : d:\hpchem\1\data\c8694.d
Acq On : 28 Jun 95 12:12 am
Sample : 10 PPB QCS
Misc : 25 ML
Quant Time: Jun 28 10:32 1995

Vial: 21
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

092

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Jun 27 10:34:27 1995
Response via : Multiple Level Calibration



8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

093

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Lab File ID (Standard): C8658.D Date Analyzed: 6/26/95

Instrument ID: 5972-INSTRUMENT 1 Time Analyzed: 1836

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	346431	11.90				
	UPPER LIMIT	692862	12.40				
	LOWER LIMIT	173216	11.40				
	SAMPLE NO.						
01	1PPB STD	357198	11.90				
02	VBLK01	356851	11.91				
03	9526461V	364162	11.91				
04	9526606V	355384	11.91				
05	9526607V	348754	11.90				
06	9526607MS	366716	11.92				
07	9526607MSD	362102	11.91				
08	9526435V	333198	11.91				
09	1PPB QCS	371402	11.91				
10							
11							
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.

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

094

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Lab File ID (Standard): C8681.D Date Analyzed: 6/27/95

Instrument ID: 5972-INSTRUMENT 1 Time Analyzed: 1648

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	409662	11.90				
	UPPER LIMIT	819324	12.40				
	LOWER LIMIT	204831	11.40				
	SAMPLE NO.						
01	1PPB STD	263808	11.88				
02	VBLK01	390703	11.90				
03	9526604V	379554	11.90				
04	9526605V	373858	11.90				
05	9526797V	370831	11.90				
06	9526798V	373021	11.90				
07	9526609V	383064	11.90				
08	9526460V	384686	11.91				
09	9526799V	377715	11.90				
10	9526800V	375620	11.90				
11	9526801V	381531	11.90				
12	9526608V	365952	11.90				
13	1PPB QCS	379632	11.90				
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 ORGANICS ANALYSIS DATA SHEET

EMSL#

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No.: FT. MONMOUTH NJ Bldg#: NJDEP MW#: TRIP BLANK

Matrix: (soil/water) WATER Lab Sample ID: 9526797

095

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C8686.D

Level: (low/med) LOW Date Received: 6/16/95

% Moisture: not dec. NA Date Analyzed: 6/27/95

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	1.0	
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	.80	
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	8.4	
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

EMSL#

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No.: FT. MONMOUTH NJ Bldg#: NJDEP MW#: TRIP BLANK

Matrix: (soil/water) WATER Lab Sample ID: 9526797

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C8686.D

Level: (low/med) LOW Date Received: 6/16/95

% Moisture: not dec. NA Date Analyzed: 6/27/95

GC Column: DB-624 x 75m ID: 0.53 (mm) Dilution Factor: 1.0

096

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

IE

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EMSL#

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No. FT. MONMOUTH NJ Bldg#: NJDEPMW#: TRIP BLANK 097

Matrix: (soil/water) WATER Lab Sample ID: 9526797V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C8686.D

Level: (low/med) LOW Date Received: 6/16/95

% Moisture: not dec. NA Date Analyzed: 6/27/95

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. 107-04-0	Ethane, 1-bromo-2-chloro-	13.88	3	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\c8686.d
Acq On : 27 Jun 95 7:39 pm
Sample : 9526797
Misc : 25 ML
Quant Time: Jun 28 9:50 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 Jun 27 10:34:27 1995
Response via : Multiple Level Calibration

098

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	11.90	96	370831	5.00	ug/L	0.00
System Monitoring Compounds						%Recovery
43) 4-Bromofluorobenzene	19.14	95	183239	5.29	ug/L	105.81%
57) 1,2-Dichlorobenzene-d4	21.93	152	103435	5.07	ug/L	101.49%
Target Compounds						Qvalue
3) Chloromethane	3.71	50	11705	0.95	ug/L	97
9) Methylene chloride	7.48	84	17034	0.84	ug/L #	81
22) 1,2-Dichloroethane	11.43	62	128296	8.42	ug/L	100

(#) = qualifier out of range (m) = manual integration

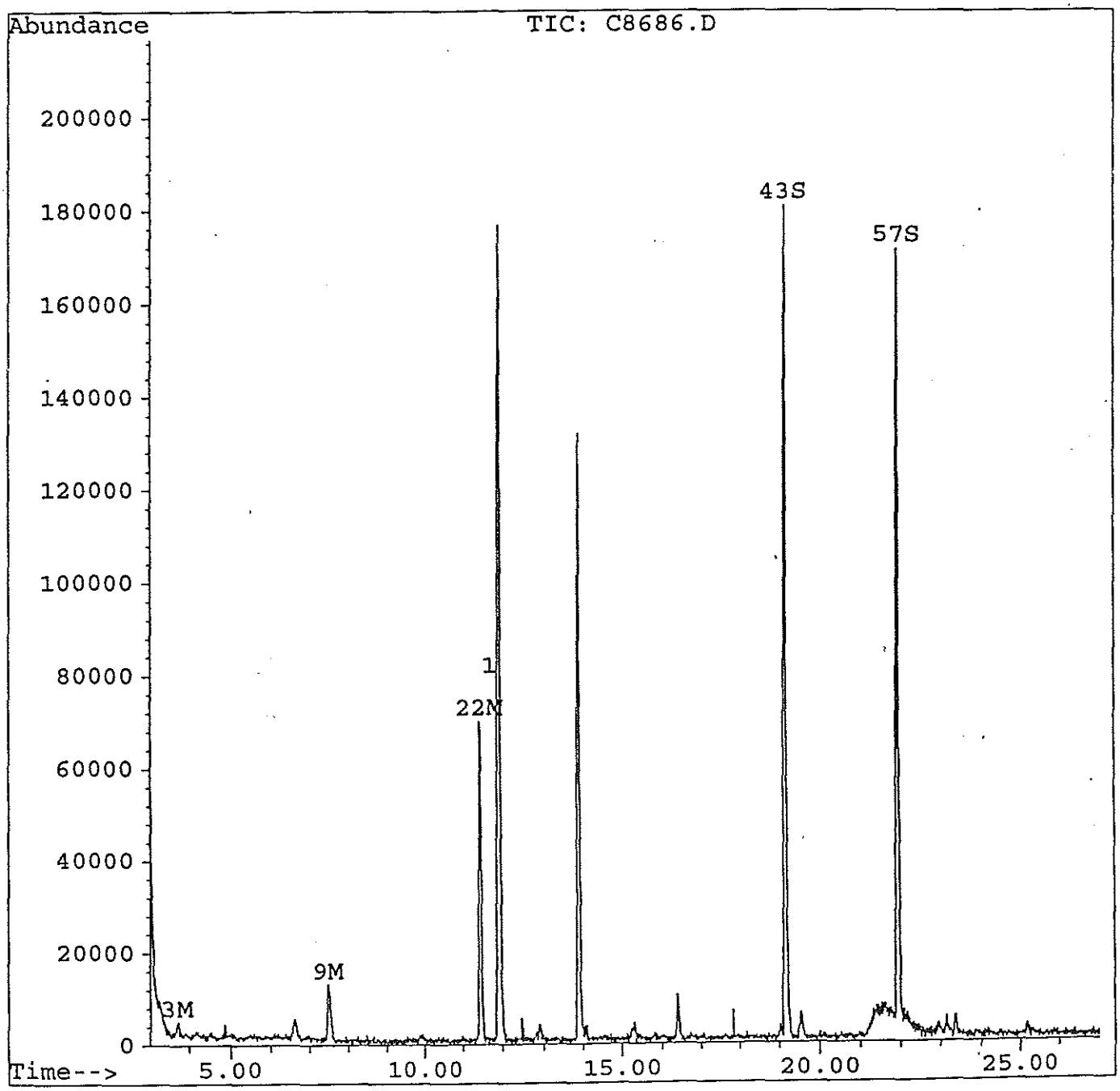
Quantitation Report

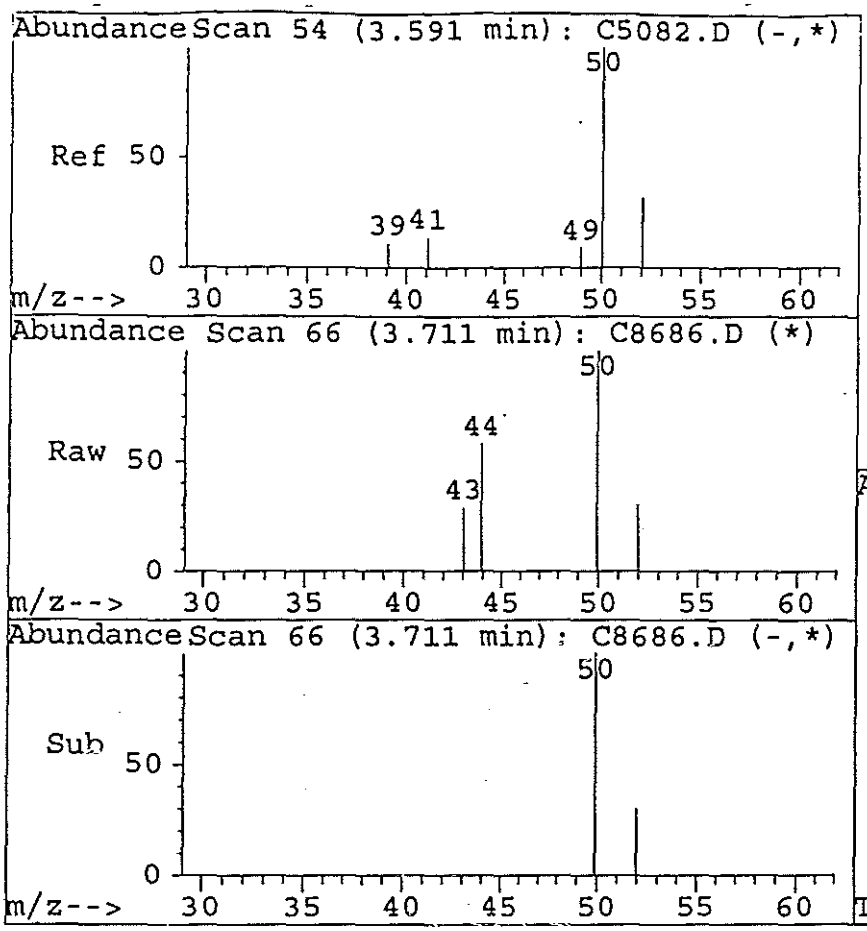
Data File : d:\hpchem\1\data\c8686.d
Acq On : 27 Jun 95 7:39 pm
Sample : 9526797
Misc : 25 ML
Quant Time: Jun 28 9:50 1995

Vial: 13
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

099

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Jun 27 10:34:27 1995
Response via : Multiple Level Calibration



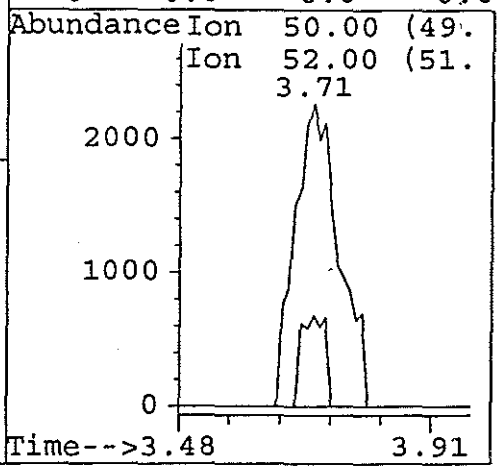


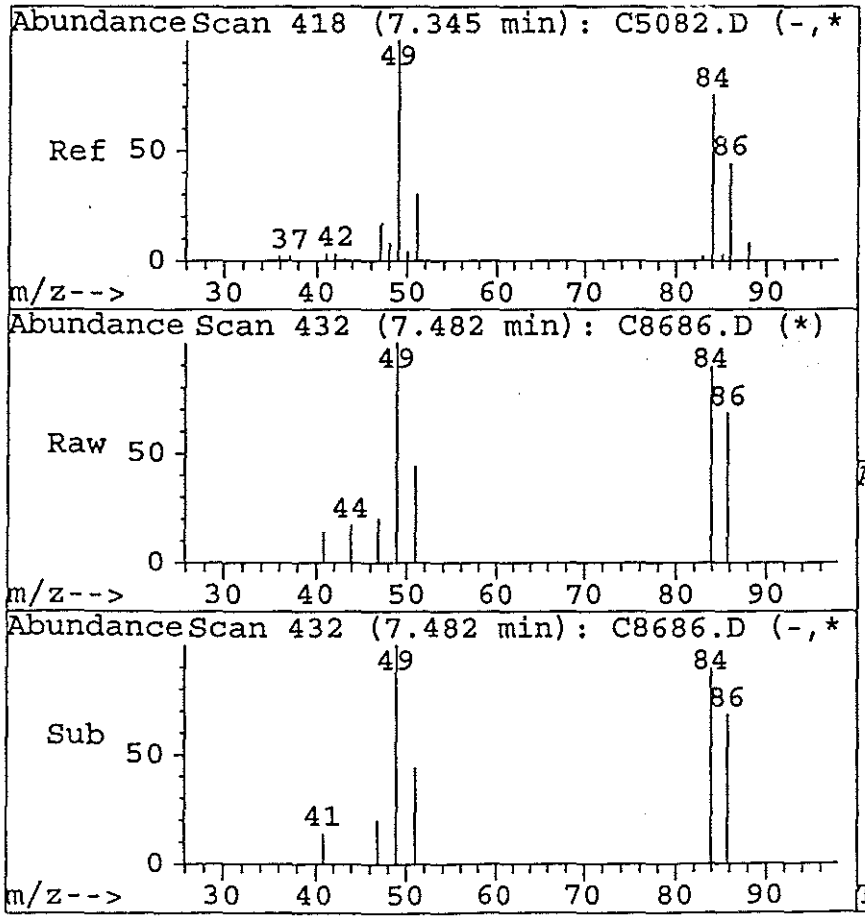
#3
Chloromethane
Concen: 0.95 ug/L
RT: 3.71 min Scan# 66
Delta R.T. -0.01 min
Lab File: c8686.d
Acq: 27 Jun 95 7:39 pm

100

Tgt Ion:50 Resp: 11705

Ion	Ratio	Lower	Upper
50	100		
52	30.2	12.0	52.0
0	0.0	0.0	0.0
0	0.0	0.0	0.0

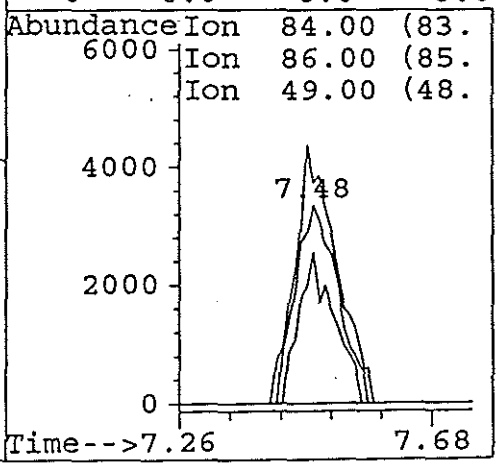


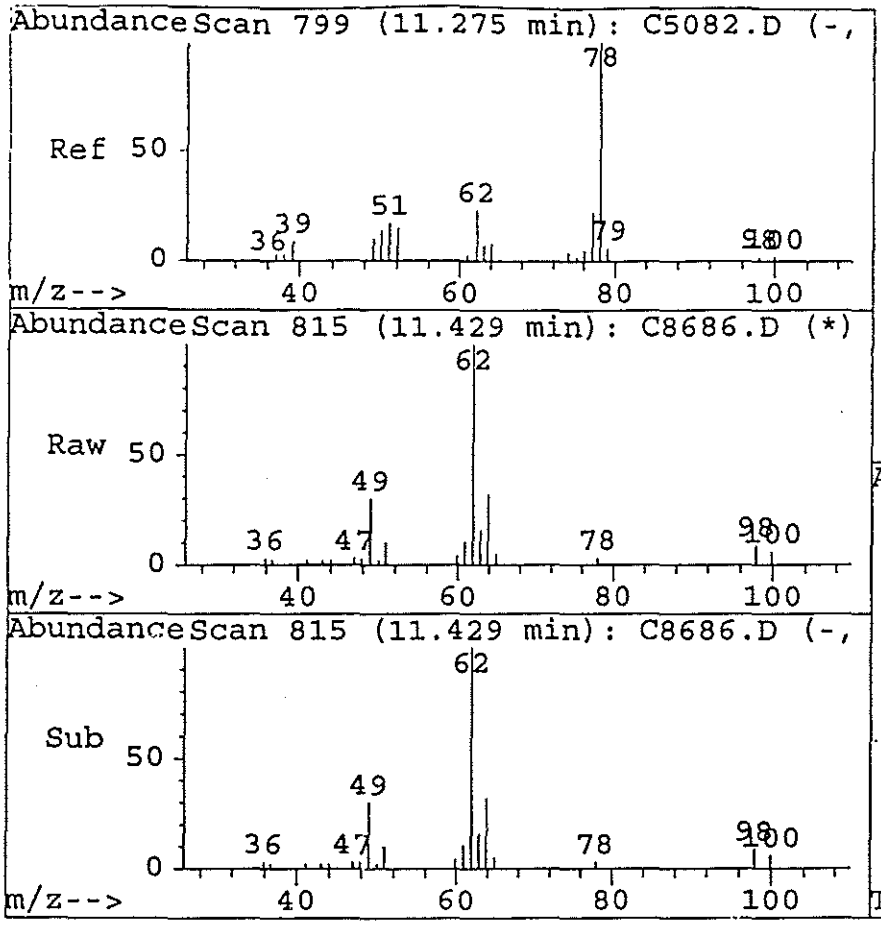


#9
Methylene chloride
Concen: 0.84 ug/L
RT: 7.48 min Scan# 432
Delta R.T. 0.01 min
Lab File: c8686.d
Acq: 27 Jun 95 7:39 pm

Tgt Ion:84 Resp: 17034

Ion	Ratio	Lower	Upper
84	100		
86	76.3	45.6	85.6
49	111.9	117.2	157.2#
0	0.0	0.0	0.0

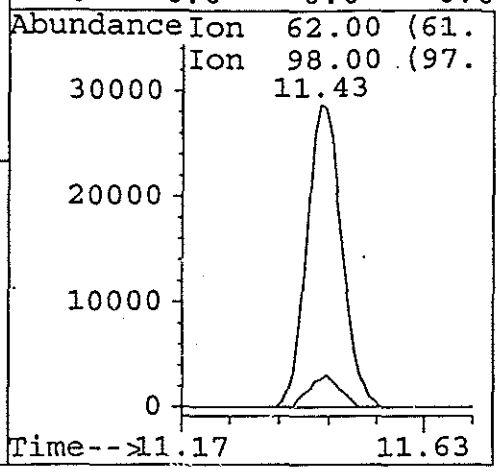




#22
1,2-Dichloroethane
Concen: 8.42 ug/L
RT: 11.43 min Scan# 815
Delta R.T. -0.01 min
Lab File: c8686.d
Acq: 27 Jun 95 7:39 pm

Tgt Ion:62 Resp: 128296

Ion	Ratio	Lower	Upper
62	100		
98	9.4	0.0	29.2
0	0.0	0.0	0.0
0	0.0	0.0	0.0



Library Search Compound Report

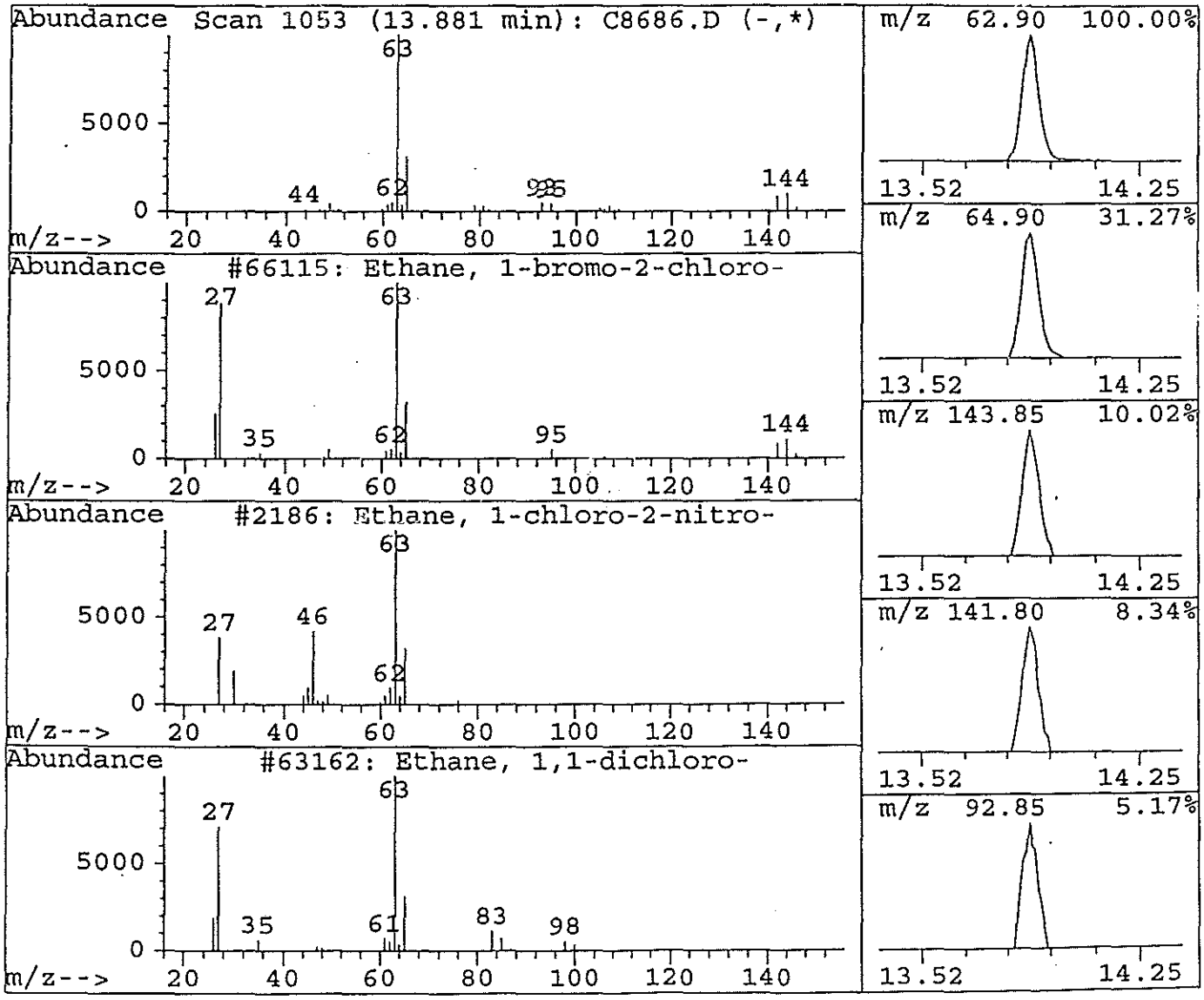
Data File : d:\hpchem\1\data\c8686.d
Acq On : 27 Jun 95 7:39 pm
Sample : 9526797
Misc : 25 ML

Vial: 13
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.
13.88	3.23 ug/L	508047	Fluorobenzene	11.90

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Ethane, 1-bromo-2-chloro-	66115	000107-04-0	91
2	Ethane, 1-chloro-2-nitro-	2186	000625-47-8	43
3	Ethane, 1,1-dichloro-	63162	000075-34-3	9
4	Carbonochloridic acid, ethyl ester	63749	000541-41-3	9
5	2-Chloropropionyl chloride	4369	007623-09-8	43



VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No.: FT. MONMOUTH NJ Bldg#: NJDEP MW#: FIELD BLANK

Matrix: (soil/water) WATER Lab Sample ID: 9526798

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C8687.D

Level: (low/med) LOW Date Received: 6/16/95

% Moisture: not dec. NA Date Analyzed: 6/27/95

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	.90	
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	.80	
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	7.3	
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# 104

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No.: FT. MONMOUTH NJ Bldg#: NJDEP MW#: FIELD BLANK

Matrix: (soil/water) WATER Lab Sample ID: 9526798

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C8687.D

Level: (low/med) LOW Date Received: 6/16/95

% Moisture: not dec. NA Date Analyzed: 6/27/95

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#

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No. FT. MONMOUTH NJ Bldg#: NJDEPMW#: FIELD BLANK

Matrix: (soil/water) WATER Lab Sample ID: 9526798V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C8687.D

Level: (low/med) LOW Date Received: 6/16/95

% Moisture: not dec. NA Date Analyzed: 6/27/95

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. 107-04-0	Ethane, 1-bromo-2-chloro-	13.88	3	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.				

Data File : d:\hpchem\1\data\c8687.d
Acq On : 27 Jun 95 8:13 pm
Sample : 9526798
Misc : 25 ML
Quant Time: Jun 28 9:51 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 Jun 27 10:34:27 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	11.90	96	373021	5.00	ug/L	0.00
System Monitoring Compounds						%Recovery
43) 4-Bromofluorobenzene	19.14	95	181551	5.21	ug/L	104.22%
57) 1,2-Dichlorobenzene-d4	21.93	152	102208	4.98	ug/L	99.70%
Target Compounds						Qvalue
3) Chloromethane	3.71	50	11002	0.89	ug/L	96
9) Methylene chloride	7.50	84	16817	0.83	ug/L	95
22) 1,2-Dichloroethane	11.44	62	111756	7.29	ug/L	98

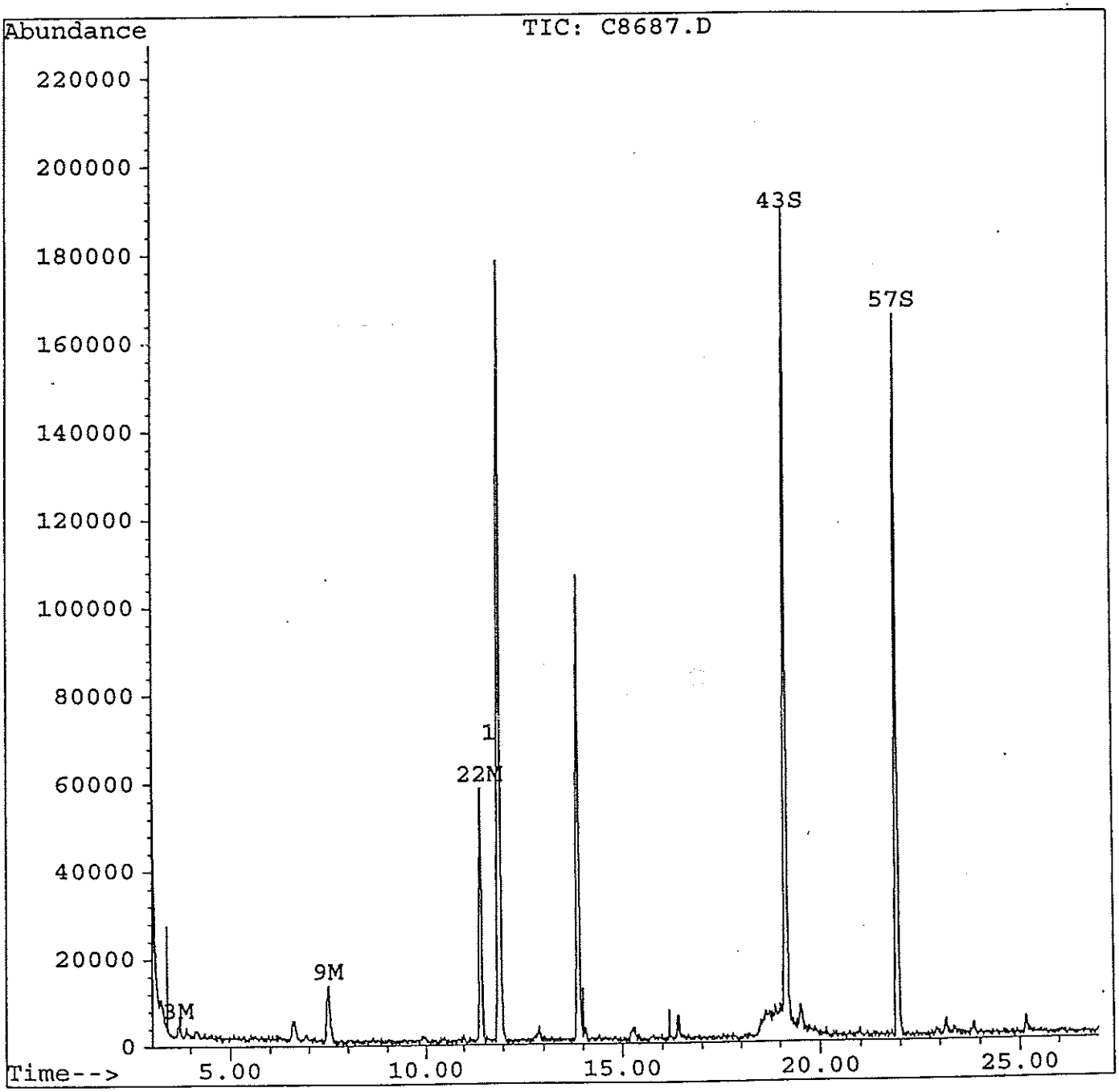
(#) = qualifier out of range (m) = manual integration

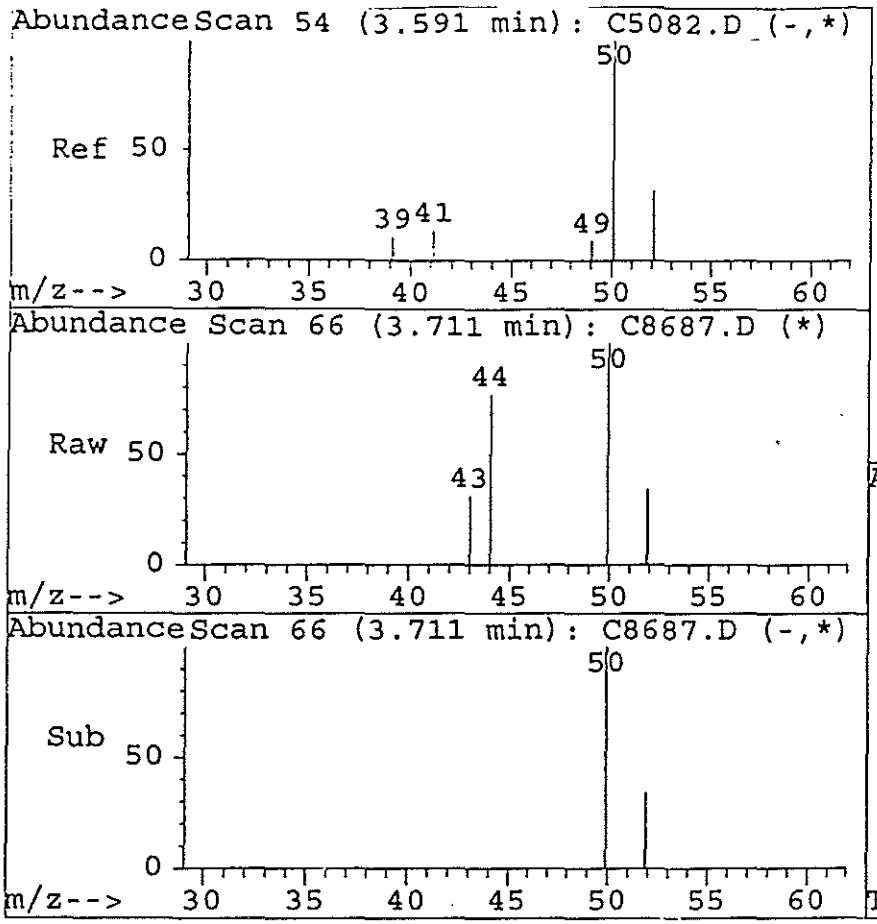
Quantitation Report

Data File : d:\hpchem\1\data\c8687.d
Acq On : 27 Jun 95 8:13 pm
Sample : 9526798
Misc : 25 ML
Quant Time: Jun 28 9:51 1995

Vial: 14 107
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Jun 27 10:34:27 1995
Response via : Multiple Level Calibration

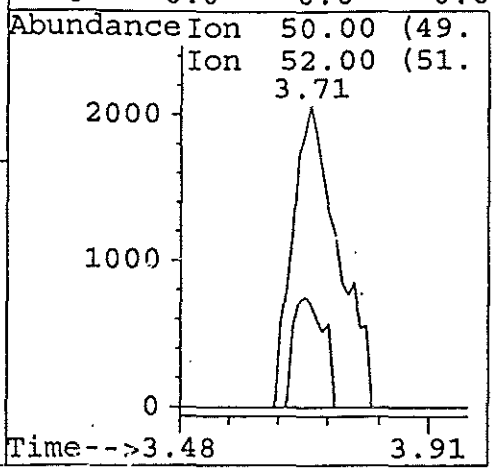


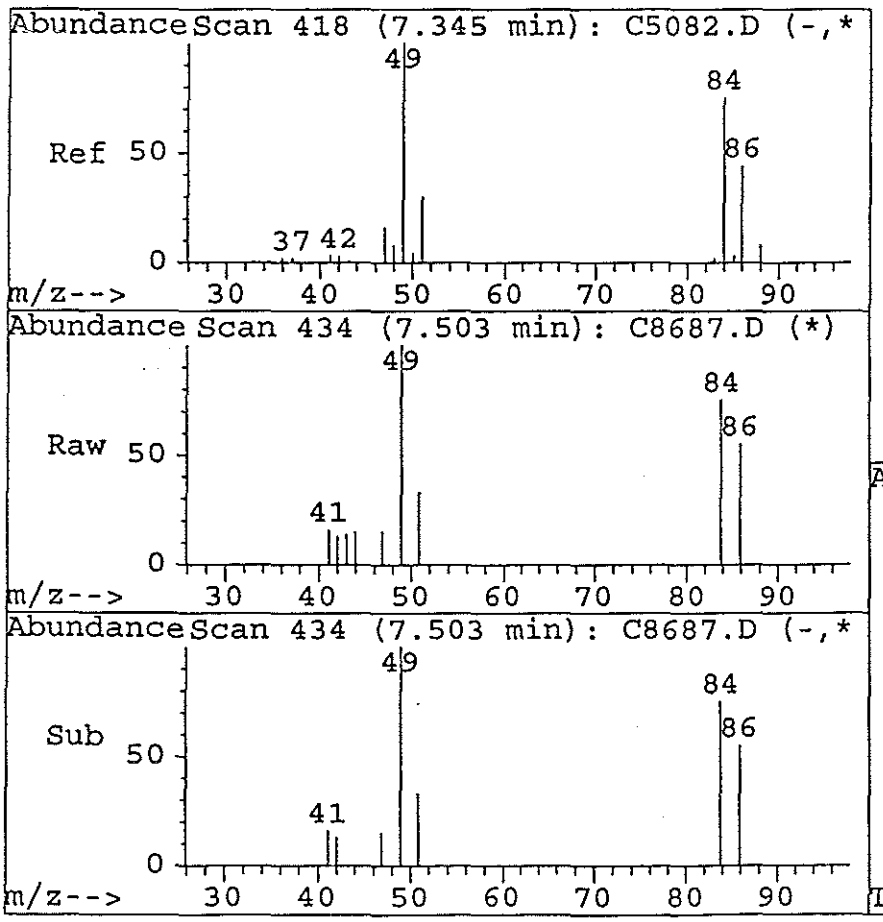


#3
Chloromethane
Concen: 0.89 ug/L
RT: 3.71 min Scan# 66
Delta R.T. -0.01 min
Lab File: c8687.d
Acq: 27 Jun 95 8:13 pm

Tgt Ion:50 Resp: 11002

Ion	Ratio	Lower	Upper
50	100		
52	34.3	12.0	52.0
0	0.0	0.0	0.0
0	0.0	0.0	0.0

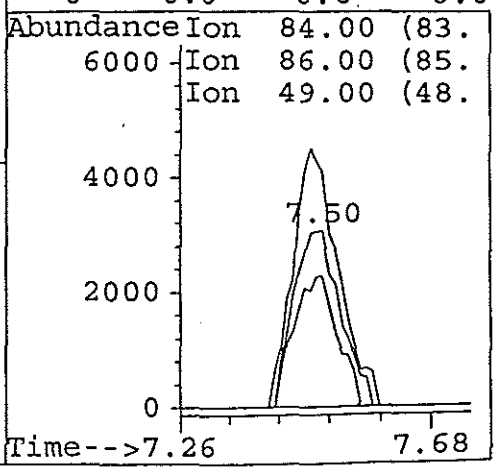


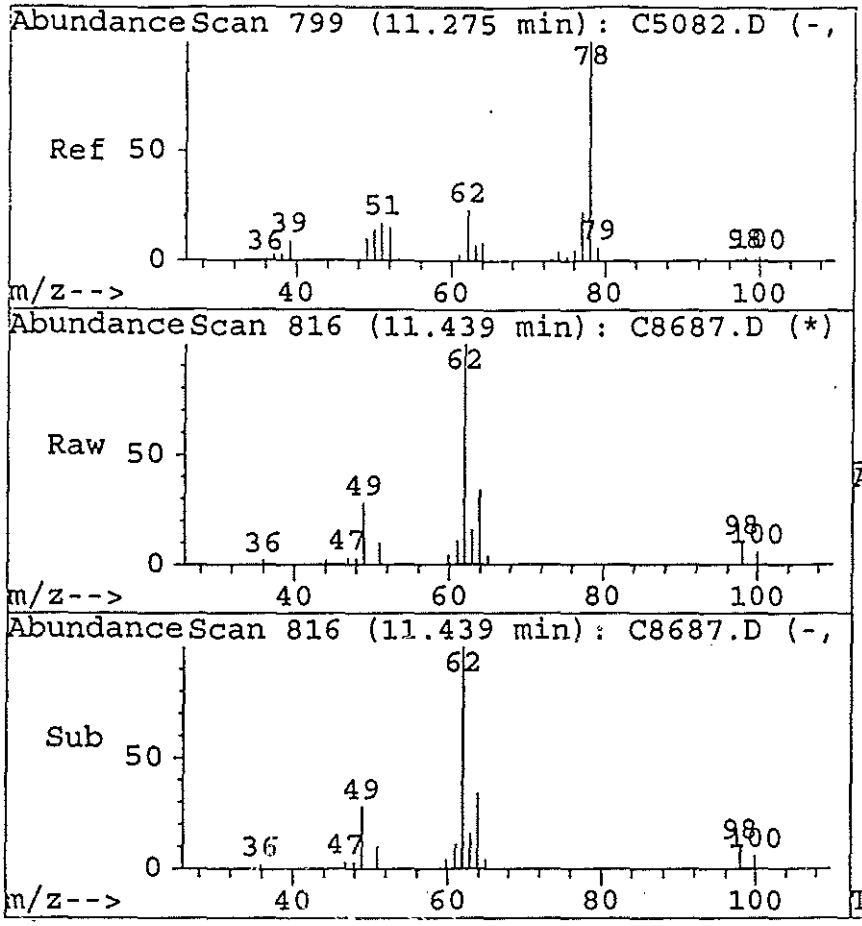


#9
Methylene chloride
Concen: 0.83 ug/L
RT: 7.50 min Scan# 434
Delta R.T. 0.03 min
Lab File: c8687.d
Acq: 27 Jun 95 8:13 pm

Tgt Ion:84 Resp: 16817

Ion	Ratio	Lower	Upper
84	100		
86	74.4	45.6	85.6
49	134.1	117.2	157.2
0	0.0	0.0	0.0

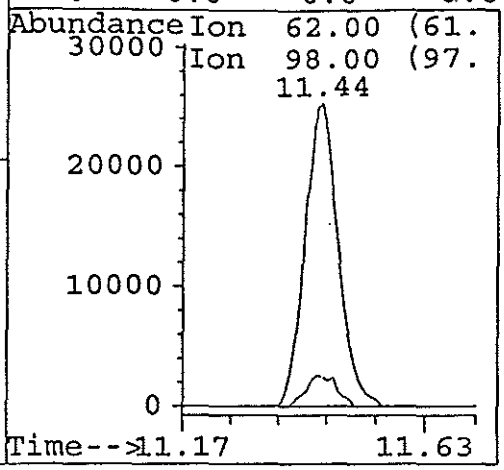




#22
1,2-Dichloroethane
Concen: 7.29 ug/L
RT: 11.44 min Scan# 816
Delta R.T. 0.00 min
Lab File: c8687.d
Acq: 27 Jun 95 8:13 pm

Tgt Ion:62 Resp: 111756

Ion	Ratio	Lower	Upper
62	100		
98	10.0	0.0	29.2
0	0.0	0.0	0.0
0	0.0	0.0	0.0



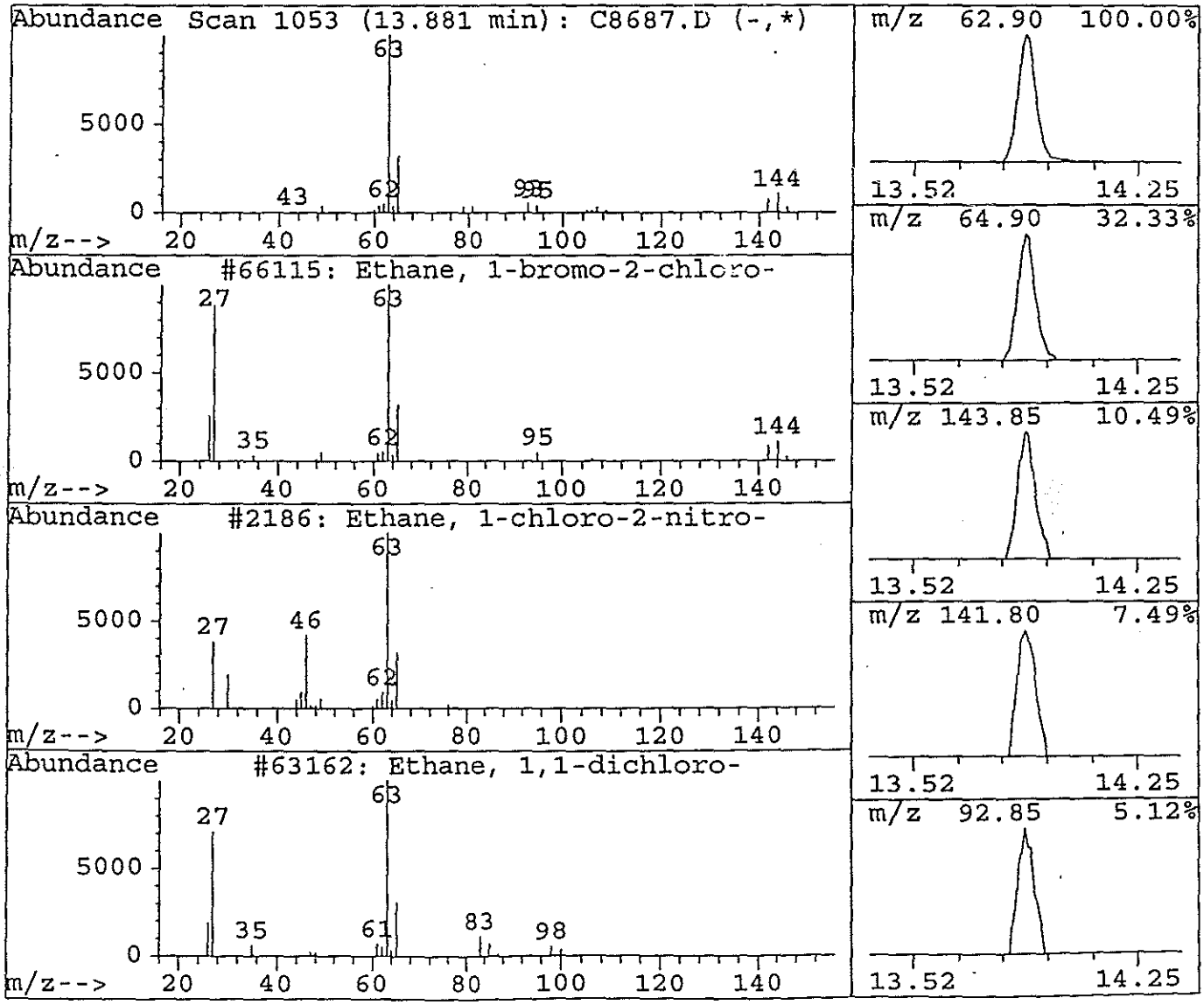
Data File : d:\hpchem\1\data\c8687.d
Acq On : 27 Jun 95 8:13 pm
Sample : 9526798
Misc : 25 ML

Vial: 14
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.
13.88	2.76 ug/L	438393	Fluorobenzene	11.90

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Ethane, 1-bromo-2-chloro-	66115	000107-04-0	91
2	Ethane, 1-chloro-2-nitro-	2186	000625-47-8	9
3	Ethane, 1,1-dichloro-	63162	000075-34-3	9
4	Carbonochloridic acid, ethyl ester	63749	000541-41-3	4
5	2-Chloropropionyl chloride	4369	007623-09-8	43



1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL# MW1-293177L

111

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No.: FT. MONMOUTH NJ Bldg#: 697 NJDEP MW#: 1

Matrix: (soil/water) WATER Lab Sample ID: 9526799

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C8690.D

Level: (low/med) LOW Date Received: 6/16/95

% Moisture: not dec. NA Date Analyzed: 6/27/95

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	.90	
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	
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	7.8	
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	.80	
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

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL# mw1-293176

112

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No.: FT. MONMOUTH NJ Bldg#: 697 NJDEP MW#: 1

Matrix: (soil/water) WATER Lab Sample ID: 9526799

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C8690.D

Level: (low/med) LOW Date Received: 6/16/95

% Moisture: not dec. NA Date Analyzed: 6/27/95

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# MW1-293176

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No. FT. MONMOUTH NJ Bldg#: 697 NJDEPMW#: 1

Matrix: (soil/water) WATER Lab Sample ID: 9526799V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C8690.D

Level: (low/med) LOW Date Received: 6/16/95

% Moisture: not dec. NA Date Analyzed: 6/27/95

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: 2 Concentration Units: (ug/L or ug/Kg) ug/L

CAS Number	Compound Name	RT	Est. Conc.	Q
1.	Unknown	3.34	1	J
2. 107-04-0	Ethane, 1-bromo-2-chloro-	13.88	3	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 : d:\hpchem\1\data\c8690.d
Acq On : 27 Jun 95 9:55 pm
Sample : 9526799
Misc : 25 ML
Quant Time: Jun 28 10:19 1995

Vial: 17
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Jun 27 10:34:27 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	11.90	96	377715	5.00	ug/L	0.00
System Monitoring Compounds						%Recovery
43) 4-Bromofluorobenzene	19.15	95	184117	5.22	ug/L	104.38%
57) 1,2-Dichlorobenzene-d4	21.93	152	100219	4.83	ug/L	96.54%
Target Compounds						Qvalue
3) Chloromethane	3.73	50	11757	0.94	ug/L	92
9) Methylene chloride	7.48	84	27552	1.34	ug/L	96
22) 1,2-Dichloroethane	11.43	62	121157	7.81	ug/L	98
31) Tetrachloroethene	15.66	166	26363	0.84	ug/L	92

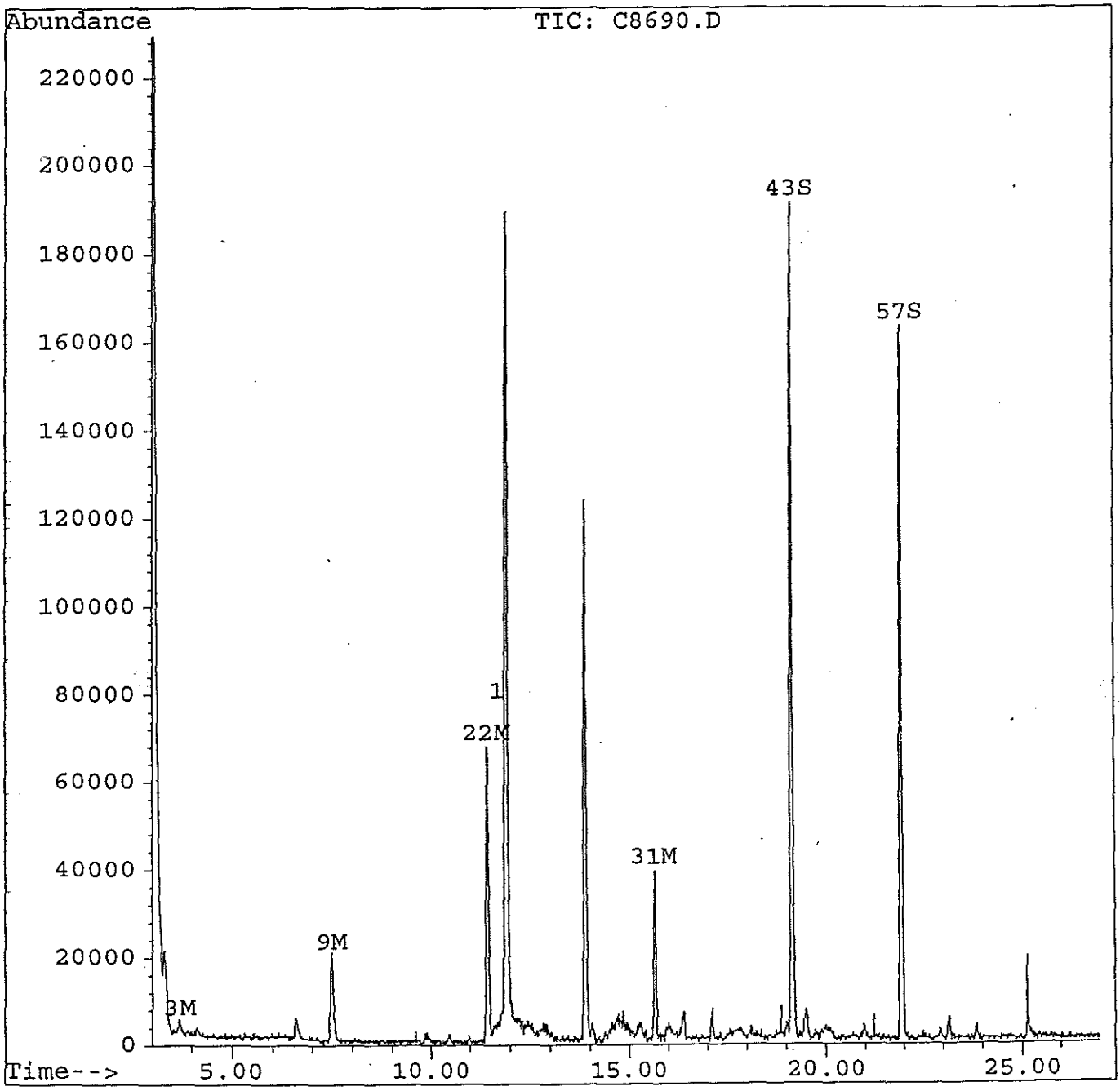
(#) = qualifier out of range (m) = manual integration

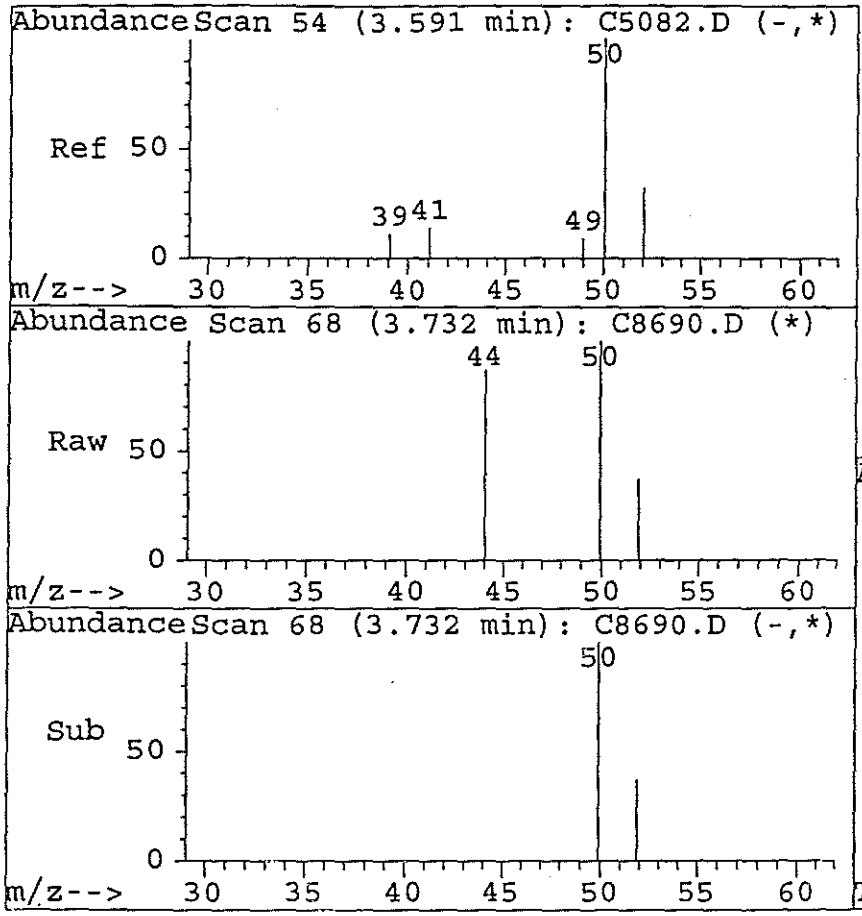
Quantitation Report

Data File : d:\hpchem\1\data\c8690.d
Acq On : 27 Jun 95 9:55 pm
Sample : 9526799
Misc : 25 ML
Quant Time: Jun 28 10:19 1995

Vial: 17
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Jun 27 10:34:27 1995
Response via : Multiple Level Calibration

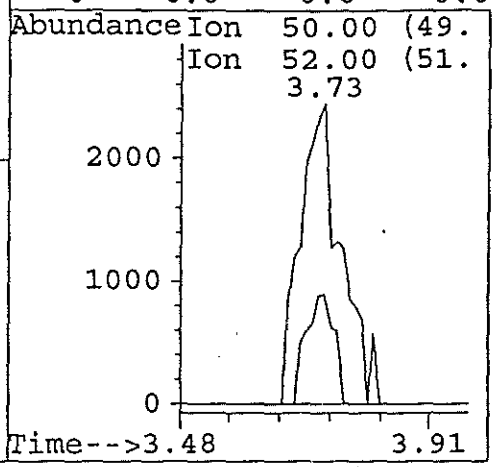


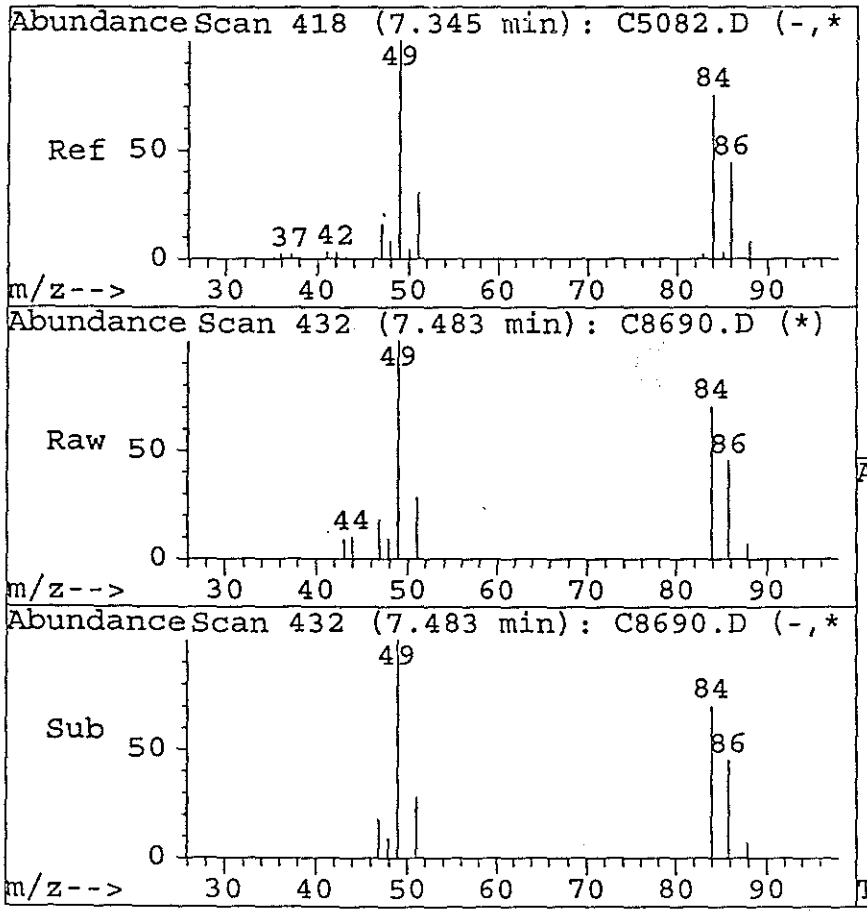


#3
Chloromethane
Concen: 0.94 ug/L
RT: 3.73 min Scan# 68
Delta R.T. 0.01 min
Lab File: c8690.d
Acq: 27 Jun 95 9:55 pm

Tgt Ion:50 Resp: 11757

Ion	Ratio	Lower	Upper
50	100		
52	36.7	12.0	52.0
0	0.0	0.0	0.0
0	0.0	0.0	0.0

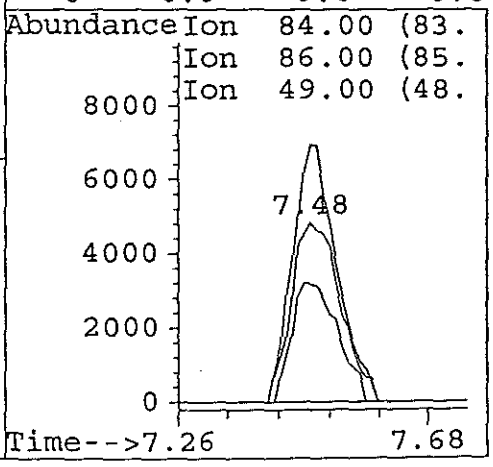


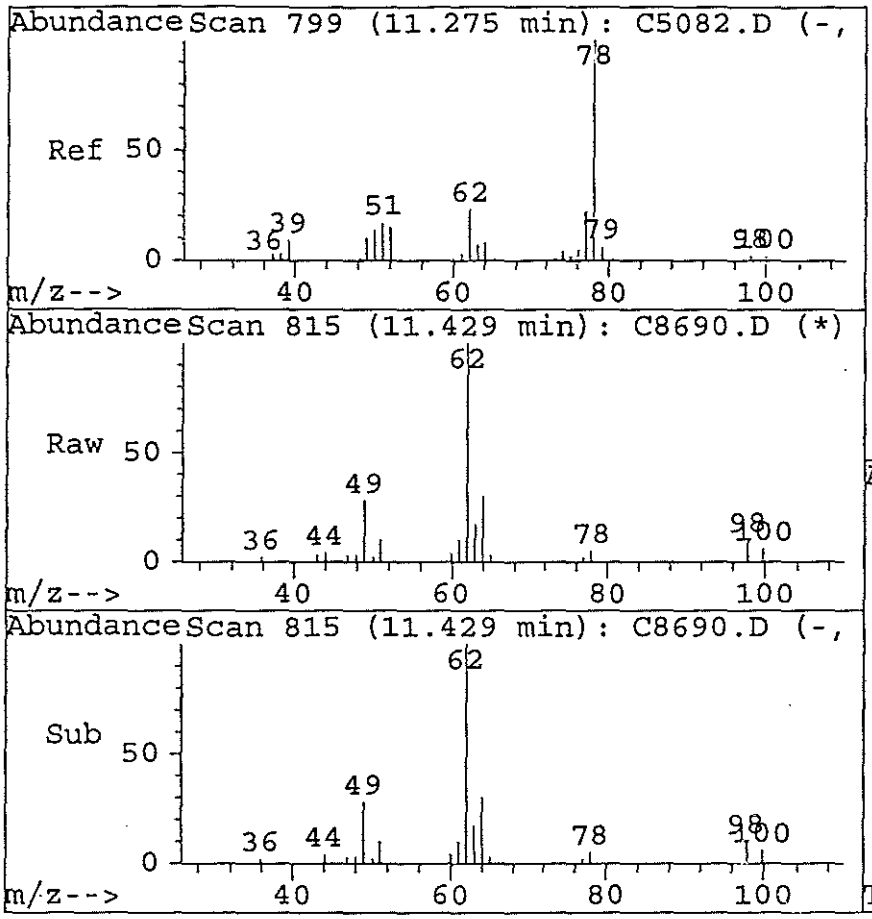


#9
Methylene chloride
Concen: 1.34 ug/L
RT: 7.48 min Scan# 432
Delta R.T. 0.01 min
Lab File: c8690.d
Acq: 27 Jun 95 9:55 pm

Tgt Ion:84 Resp: 27552

Ion	Ratio	Lower	Upper
84	100		
86	65.3	45.6	85.6
49	143.8	117.2	157.2
0	0.0	0.0	0.0

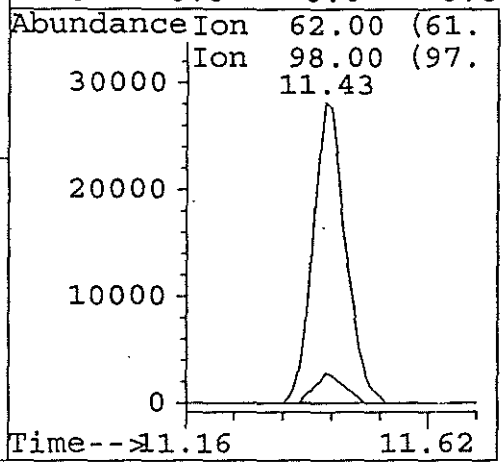


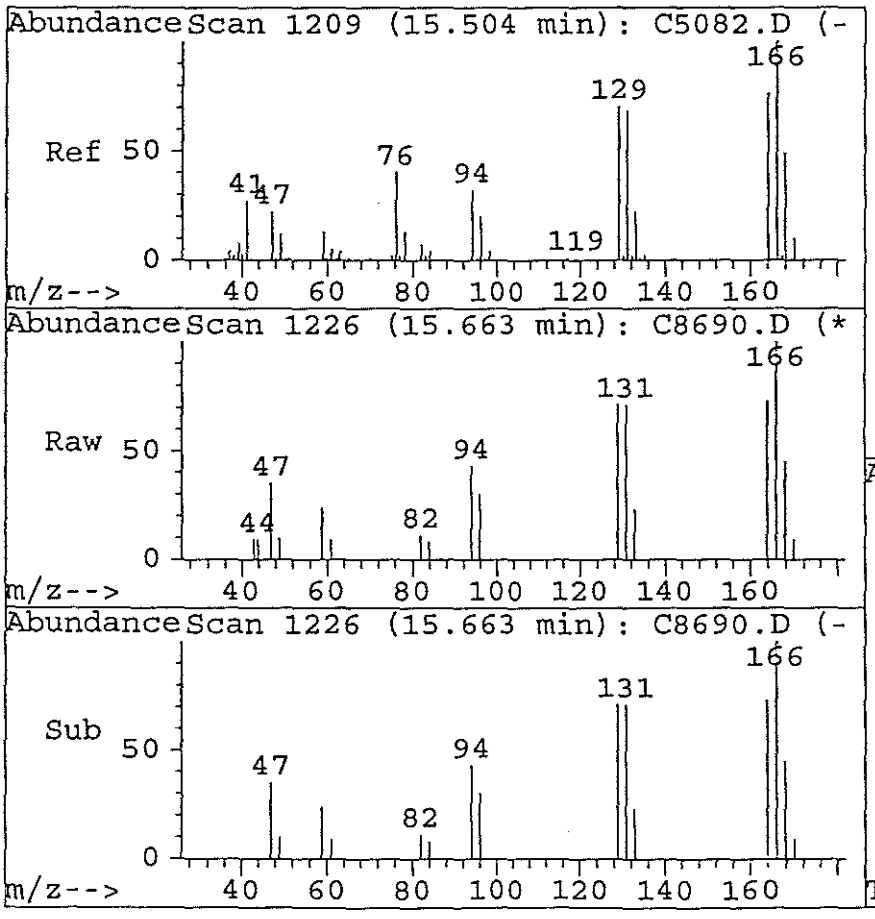


#22
1,2-Dichloroethane
Concen: 7.81 ug/L
RT: 11.43 min Scan# 815
Delta R.T. -0.01 min
Lab File: c8690.d
Acq: 27 Jun 95 9:55 pm

Tgt Ion:62 Resp: 121157

Ion	Ratio	Lower	Upper
62	100		
98	9.9	0.0	29.2
0	0.0	0.0	0.0
0	0.0	0.0	0.0

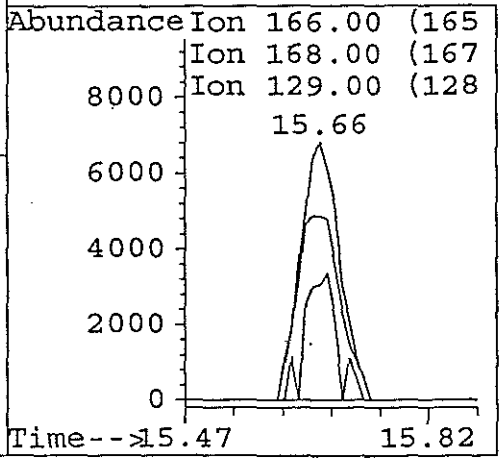




#31
Tetrachloroethene
Concen: 0.84 ug/L
RT: 15.66 min Scan# 1226
Delta R.T. 0.00 min
Lab File: c8690.d
Acq: 27 Jun 95 9:55 pm

Tgt Ion:166 Resp: 26363

Ion	Ratio	Lower	Upper
166	100		
168	44.7	28.7	68.7
129	71.1	59.7	99.7
0	0.0	0.0	0.0



Library Search Compound Report

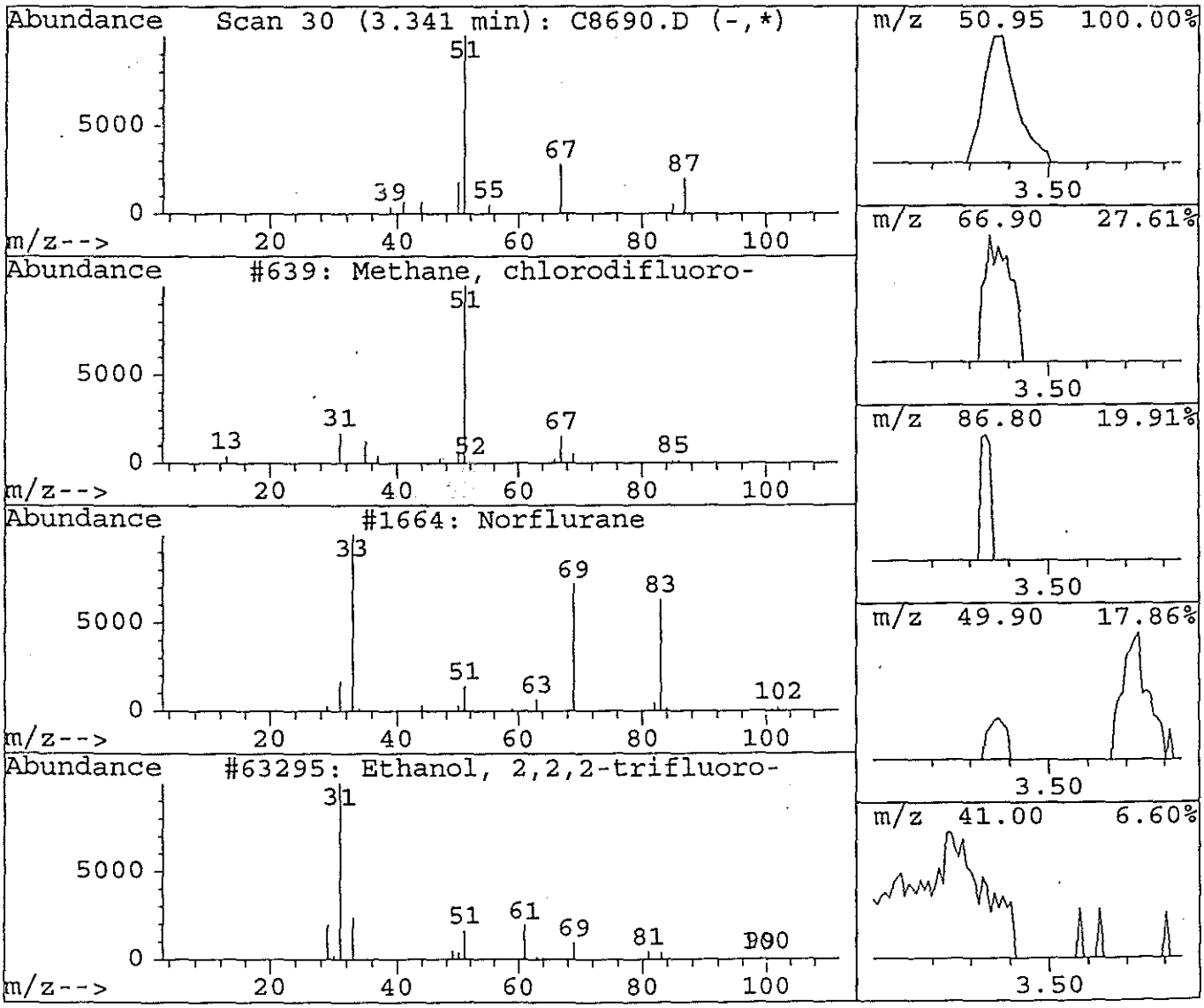
Data File : d:\hpchem\1\data\c8690.d
Acq On : 27 Jun 95 9:55 pm
Sample : 9526799
Misc : 25 ML

Vial: 17
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.
3.34	0.56 ug/L	95138	Fluorobenzene	11.90

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Methane, chlorodifluoro-	639	000075-45-6	1
2	Norflurane	1664	000811-97-2	1
3	Ethanol, 2,2,2-trifluoro-	63295	000075-89-8	1
4	Propiolonitrile	56	001070-71-9	5
5	Methane, difluoro-	62284	000075-10-5	1



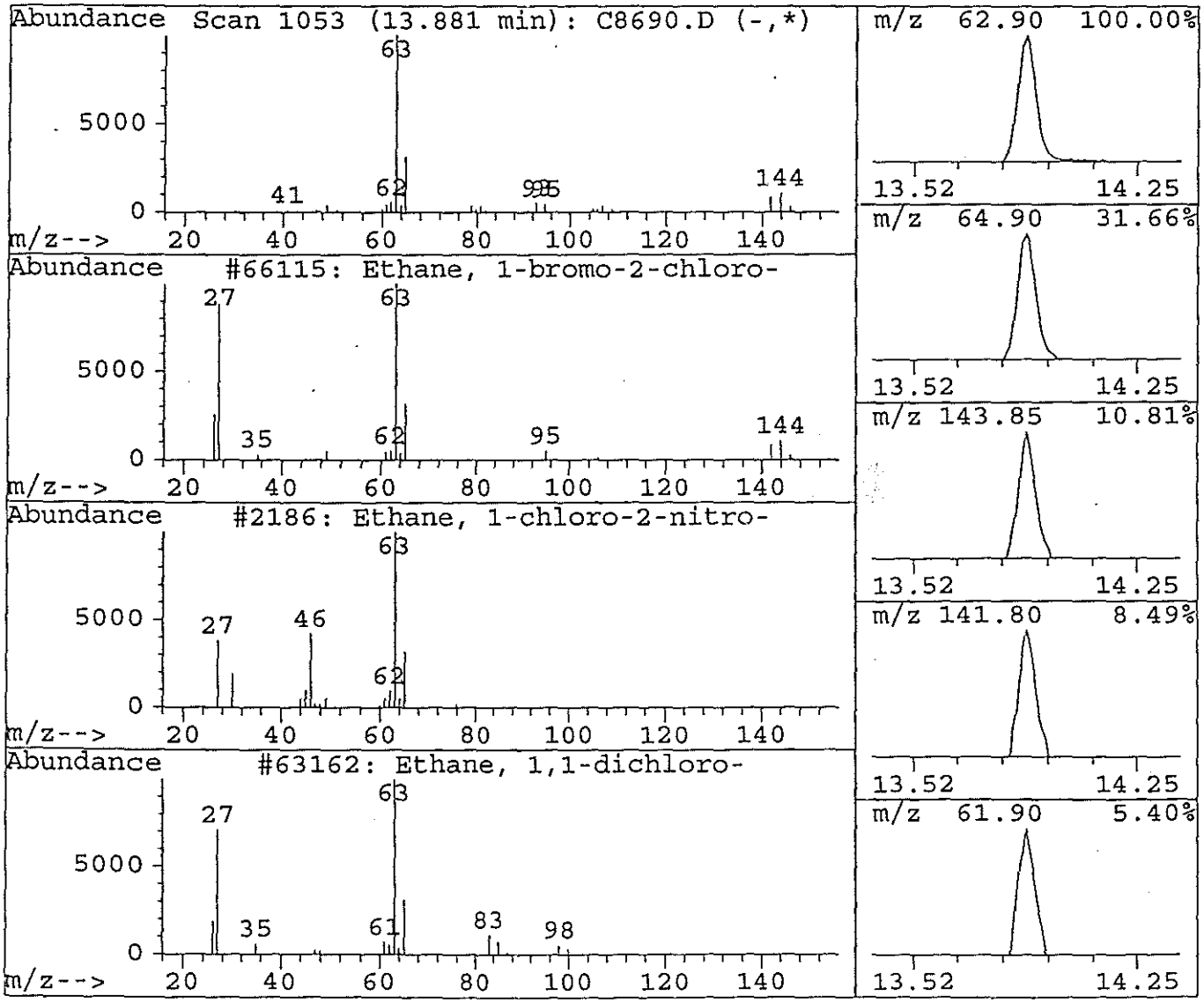
Data File : d:\hpchem\1\data\c8690.d
Acq On : 27 Jun 95 9:55 pm
Sample : 9526799
Misc : 25 ML

Vial: 17
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.
13.88	2.86 ug/L	484260	Fluorobenzene	11.90

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Ethane, 1-bromo-2-chloro-	66115	000107-04-0	91
2	Ethane, 1-chloro-2-nitro-	2186	000625-47-8	43
3	Ethane, 1,1-dichloro-	63162	000075-34-3	9
4	Carbonochloridic acid, ethyl ester	63749	000541-41-3	9
5	2-Chloropropionyl chloride	4369	007623-09-8	43



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	110	109			
02	VBLK01	111	104			
03	9526461V	109	104			
04	9526606V	111	105			
05	9526607V	107	102			
06	9526607MS	110	102			
07	9526607MSD	108	102			
08	9526435V	111	106			
09	1PPB QCS	103	97			
10						
11						
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

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	111	106			
02	VBLK01	105	100			
03	9526604V	106	100			
04	9526605V	109	104			
05	9526797V	106	101			
06	9526798V	104	100			
07	9526609V	106	97			
08	9526460V	109	100			
09	9526799V	104	97			
10	9526800V	106	101			
11	9526801V	115	102			
12	9526608V	111	104			
13	1PPB QCS	110	100			
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: 122

Lab File ID: C8660.D Lab Sample ID: M. BLANK

Date Analyzed: 6/26/95 Time Analyzed: 1947

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	C8659.D	1912
02	9526461V	9526461V	C8663.D	2131
03	9526606V	9526606V	C8664.D	2206
04	9526607V	9526607V	C8665.D	2240
05	9526607MS	26607MS	C8666.D	2315
06	9526607MSD	26607MSD	C8667.D	2349
07	9526435V	9526435V	C8670.D	0133
08	1PPB QCS	1PPB QCS	C8671.D	0208
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

COMMENTS:

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL#

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No.: FT. MONMOUTH NJ Bldg#: NJDEP MW#:

123

Matrix: (soil/water) WATER Lab Sample ID: M. BLANK

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C8660.D

Level: (low/med) LOW Date Received: NA

% Moisture: not dec. NA Date Analyzed: 6/26/95

GC Column: DB-624 x 75m ID: 0.53 (mm) Dilution Factor: 1.0

Concentration Units:

CAS No.	Compound	(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#

124

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: C8660.D

Level: (low/med) LOW Date Received: NA

% Moisture: not dec. NA Date Analyzed: 6/26/95

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#

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

125

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No. FT. MONMOUTH NJ Bldg#: NJDEPMW#:

Matrix: (soil/water) WATER Lab Sample ID: M. BLANK

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C8660.D

Level: (low/med) LOW Date Received: NA

% Moisture: not dec. NA Date Analyzed: 6/26/95

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

126

Data File : d:\hpchem\1\data\c8660.d
Acq On : 26 Jun 95 7:47 pm
Sample : METHOD BLANK
Misc : 25 ML
Quant Time: Jun 27 10:42 1995

Vial: 10
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Jun 27 10:34:27 1995
Response via : Multiple Level Calibration

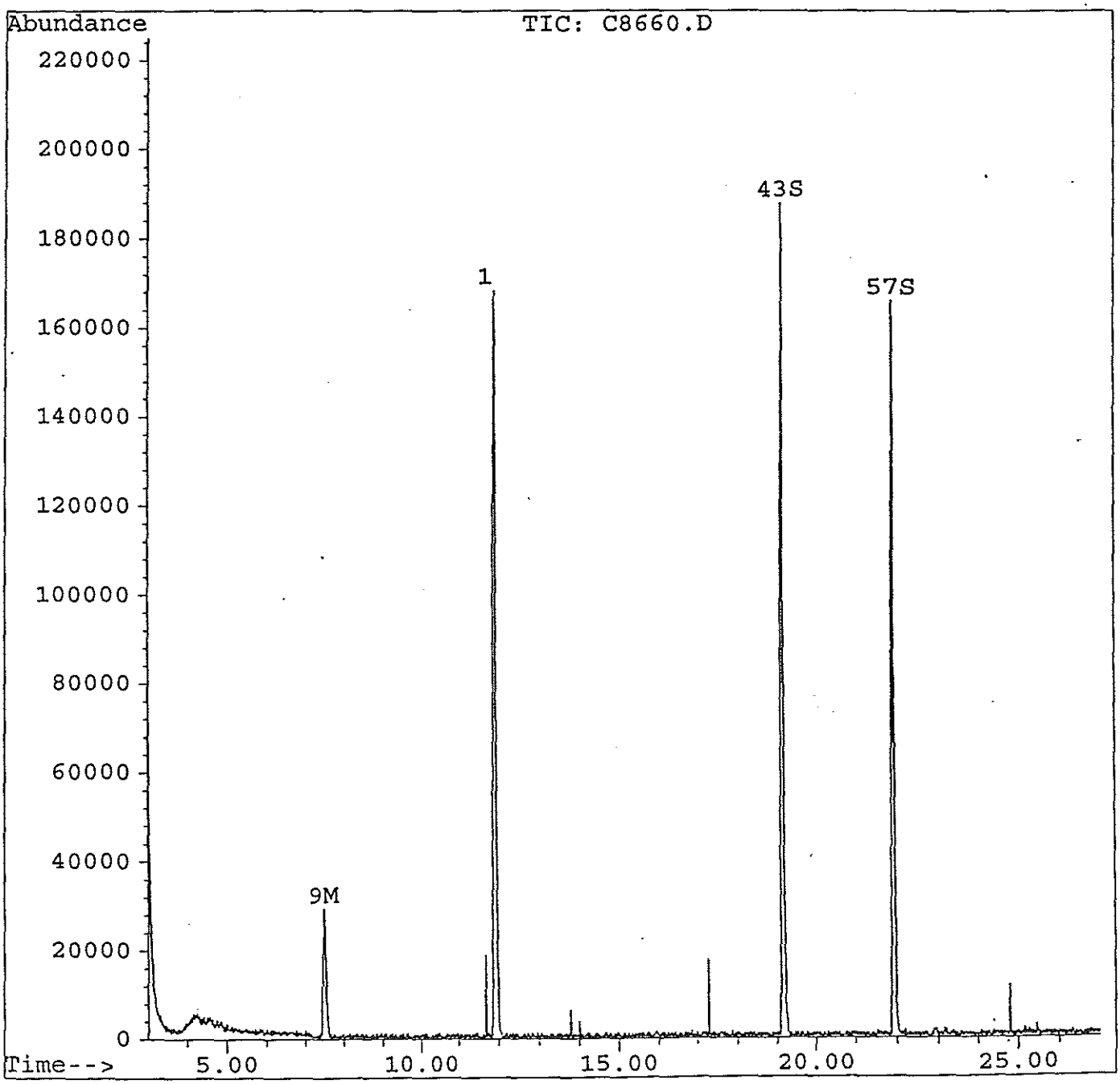
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	11.91	96	356851	5.00	ug/L	0.01
System Monitoring Compounds						%Recovery
43) 4-Bromofluorobenzene	19.15	95	184279	5.53	ug/L	110.58%
57) 1,2-Dichlorobenzene-d4	21.93	152	101848	5.19	ug/L	103.85%
Target Compounds						Qvalue
9) Methylene chloride	7.49	84	39510	2.03	ug/L	90

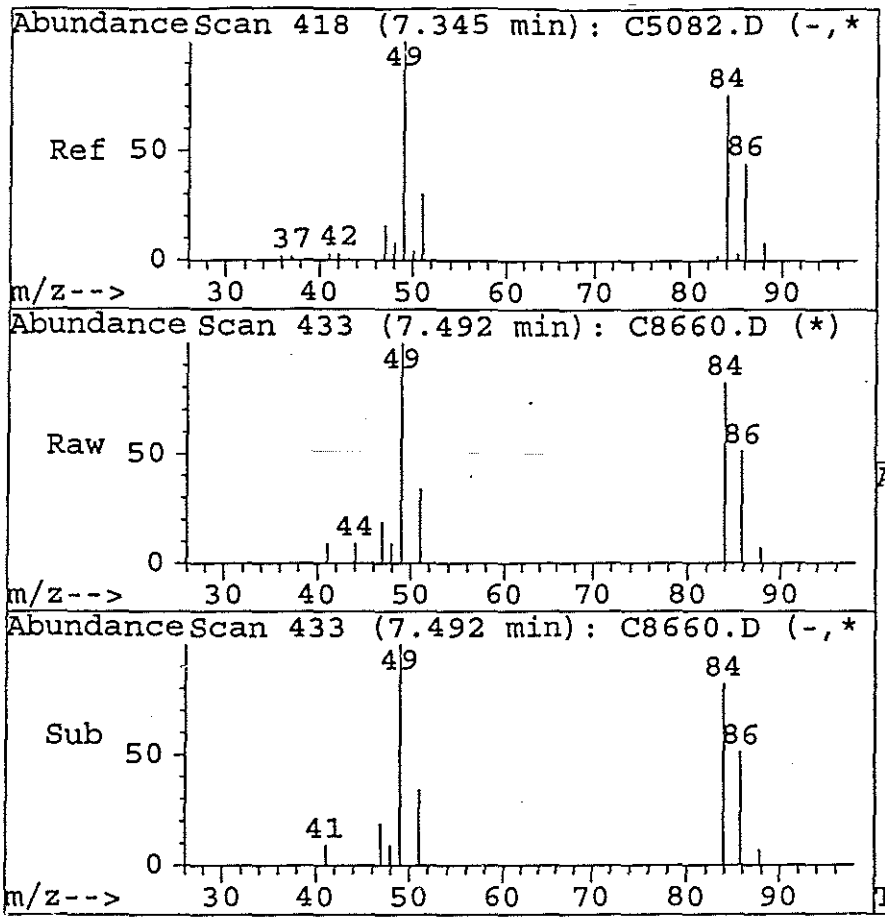
(#) = qualifier out of range (m) = manual integration

Data File : d:\hpchem\1\data\c8660.d
Acq On : 26 Jun 95 7:47 pm
Sample : METHOD BLANK
Misc : 25 ML
Quant Time: Jun 27 10:42 1995

Vial: 10
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Jun 27 10:34:27 1995
Response via : Multiple Level Calibration

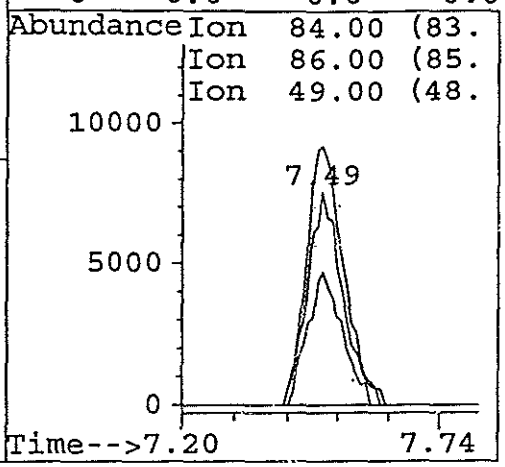




#9
Methylene chloride
Concen: 2.03 ug/L
RT: 7.49 min Scan# 433
Delta R.T. 0.02 min
Lab File: c8660.d
Acq: 26 Jun 95 7:47 pm

Tgt Ion:84 Resp: 39510

Ion	Ratio	Lower	Upper
84	100		
86	62.1	45.6	85.6
49	122.0	117.2	157.2
0	0.0	0.0	0.0



Data File : d:\hpchem\1\data\c8660.d
Acq On : 26 Jun 95 7:47 pm
Sample : METHOD BLANK
Misc : 25 ML

Vial: 10
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 METHOD BLANK SUMMARY

SAMPLE NO.

VBLK01

130

Lab Name: EMSL ANALYTICAL Contract: U.S. AR

Project No.: FT. MONMOUTH NJ Site: Location: Group:

Lab File ID: C8683.D Lab Sample ID: M. BLANK

Date Analyzed: 6/27/95 Time Analyzed: 1757

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	C8682.D	1723
02	9526604V	9526604V	C8684.D	1831
03	9526605V	9526605V	C8685.D	1905
04	9526797V	9526797V	C8686.D	1939
05	9526798V	9526798V	C8687.D	2013
06	9526609V	9526609V	C8688.D	2047
07	9526460V	9526460V	C8689.D	2121
08	9526799V	9526799V	C8690.D	2155
09	9526800V	9526800V	C8691.D	2230
10	9526801V	9526801V	C8692.D	2304
11	9526608V	9526608V	C8693.D	2338
12	1PPB QCS	1PPB QCS	C8694.D	0012
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

COMMENTS:

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL#

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: C8683.D

Level: (low/med) LOW Date Received: NA

% Moisture: not dec. NA Date Analyzed: 6/27/95

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	2.1	
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

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL#

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: C8683.D

Level: (low/med) LOW Date Received: NA

% Moisture: not dec. NA Date Analyzed: 6/27/95

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
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# 133

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: EMSL ANALYTICAL Contract: U.S. ARMY

Project No. FT. MONMOUTH NJ Bldg#: _____ NJDEPMW#: _____

Matrix: (soil/water) WATER Lab Sample ID: M. BLANK

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C8683.D

Level: (low/med) LOW Date Received: NA

% Moisture: not dec. NA Date Analyzed: 6/27/95

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\c8683.d
Acq On : 27 Jun 95 5:57 pm
Sample : METHOD BLANK
Misc : 25 ML
Quant Time: Jun 28 9:48 1995

Vial: 10
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

134

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Jun 27 10:34:27 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	11.90	96	390703	5.00	ug/L	0.00
System Monitoring Compounds						%Recovery
43) 4-Bromofluorobenzene	19.14	95	192203	5.27	ug/L	105.34%
57) 1,2-Dichlorobenzene-d4	21.93	152	107530	5.01	ug/L	100.14%
Target Compounds						Qvalue
9) Methylene chloride	7.48	84	43951	2.07	ug/L	88

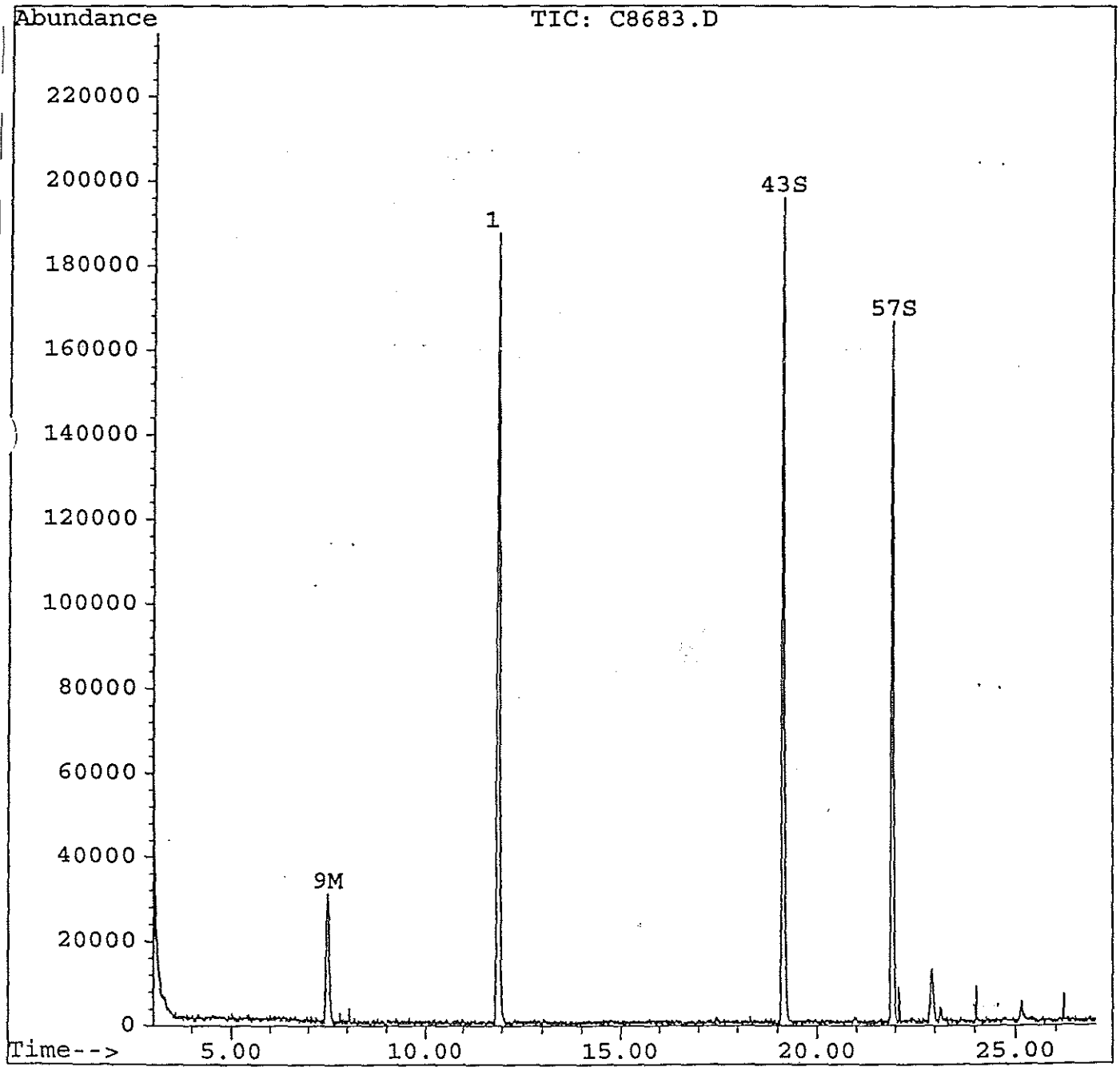
(#) = qualifier out of range (m) = manual integration

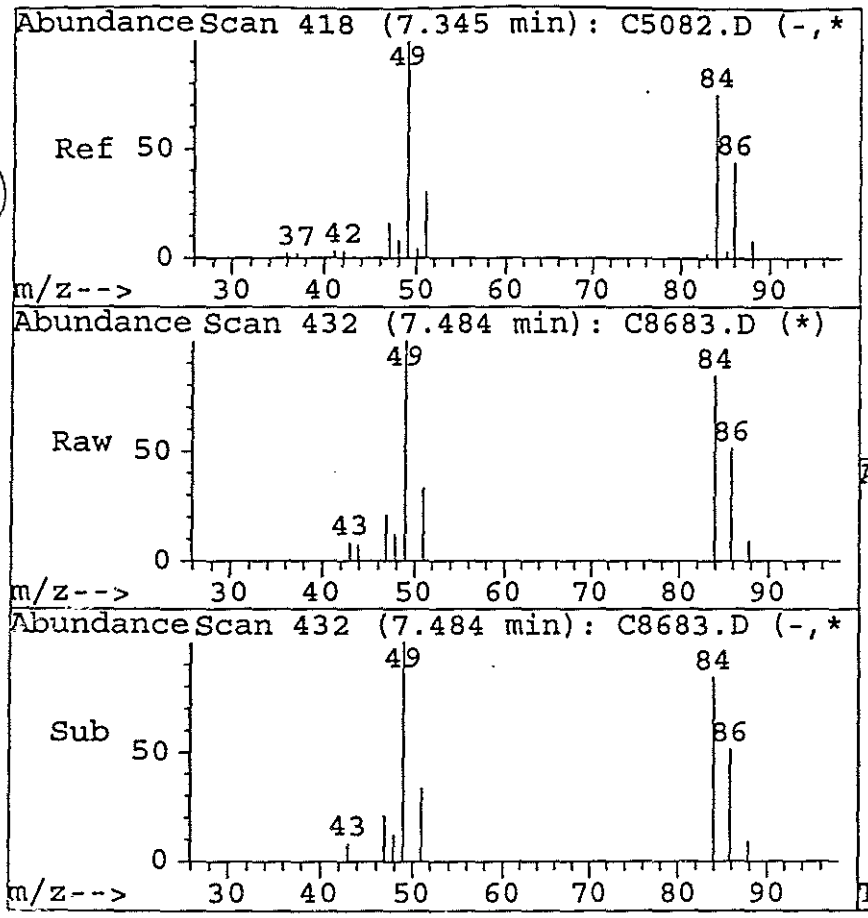
Quantitation Report

Data File : d:\hpchem\1\data\c8683.d
Acq On : 27 Jun 95 5:57 pm
Sample : METHOD BLANK
Misc : 25 ML
Quant Time: Jun 28 9:48 1995

Vial: 10
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Jun 27 10:34:27 1995
Response via : Multiple Level Calibration

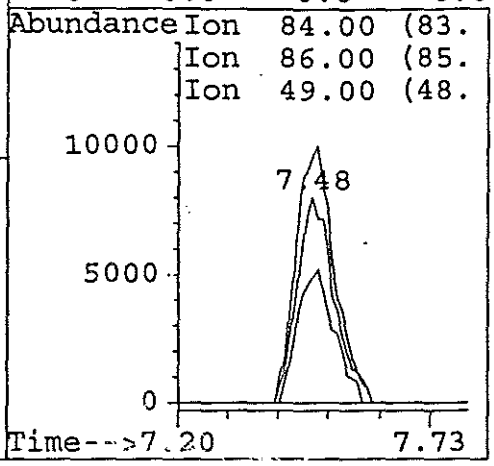




#9
Methylene chloride
Concen: 2.07 ug/L
RT: 7.48 min Scan# 432
Delta R.T. 0.01 min
Lab File: c8683.d
Acq: 27 Jun 95 5:57 pm

Tgt Ion:84 Resp: 43951

Ion	Ratio	Lower	Upper
84	100		
86	60.9	45.6	85.6
49	119.6	117.2	157.2
0	0.0	0.0	0.0



Data File : d:\hpchem\1\data\c8683.d
Acq On : 27 Jun 95 5:57 pm
Sample : METHOD BLANK
Misc : 25 ML

Vial: 10
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 Jun 27 10:34:27 1995
Response via : Initial Calibration

Spiked Sample: C8665.D

	Spike Sample	Spike Duplicate Sample
File ID :	C8666.D	C8667.D
Sample :	9526607 MS	9526607 MSD
Acq Time:	26 Jun 95 11:15 pm	26 Jun 95 11:49 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	11	11	107	108	0	25	80-120
Chloromethane	0.0	10	12	12	119	122#	2	25	80-120
Vinyl chloride	0.0	10	12	11	115	114	1	25	80-120
Bromomethane	0.0	10	12	12	119	120	1	25	80-120
Chloroethane	0.0	10	12	11	117	110	7	25	80-120
Trichlorofluorometha	0.0	10	11	11	110	112	2	25	80-120
1,1-Dichloroethene	0.0	10	11	11	111	111	1	25	80-120
Methylene chloride	1.4	10	10	9	81	76#	7	25	80-120
trans-1,2-Dichloroet	0.0	10	11	11	110	109	1	25	80-120
1,1-Dichloroethane	0.0	10	11	11	109	109	1	25	80-120
2,2-Dichloropropane	0.0	10	9	9	94	93	1	25	80-120
cis-1,2-Dichloroethe	0.0	10	11	11	105	107	2	25	80-120
Bromochloromethane	0.0	10	10	10	101	102	1	25	80-120
Chloroform	0.0	10	11	11	105	104	1	25	80-120
1,1,1-Trichloroethan	0.0	10	11	11	109	109	0	25	80-120
Carbon tetrachloride	0.0	10	11	11	106	108	2	25	80-120
1,1-Dichloropropene	0.0	10	11	11	106	107	2	25	80-120
Benzene	0.0	10	11	11	106	107	1	25	80-120
1,2-Dichloroethane	6.3	10	17	18	103	121#	17	25	80-120
Trichloroethene	1.2	10	12	12	103	103	0	25	80-120
1,2-Dichloropropane	0.0	10	11	11	106	106	0	25	80-120
Dibromomethane	0.0	10	10	10	96	98	2	25	80-120
Bromodichloromethane	0.0	10	10	10	97	100	3	25	80-120
cis-1,3-Dichloroprop	0.0	10	10	10	96	98	2	25	80-120
Toluene	0.0	10	11	11	105	105	0	25	80-120
trans-1,3-Dichloropr	0.0	10	9	9	92	94	3	25	80-120
1,1,2-Trichloroethan	0.0	10	10	10	98	97	1	25	80-120
Tetrachloroethene	1.9	10	12	13	106	108	2	25	80-120
1,3-Dichloropropane	0.0	10	10	10	97	98	1	25	80-120
Dibromochloromethane	0.0	10	9	10	95	96	2	25	80-120
1,2-Dibromomethane	0.0	10	9	9	95	94	1	25	80-120
Chlorobenzene	0.0	10	10	11	104	106	2	25	80-120
1,1,1,2-Tetrachloroe	0.0	10	10	10	98	100	2	25	80-120
Ethylbenzene	0.0	10	10	10	102	103	1	25	80-120
Xylene (para & meta)	0.0	20	20	20	100	100	0	25	80-120
Xylene (Ortho)	0.0	10	10	10	99	100	1	25	80-120
Styrene	0.0	10	8	9	85	89	5	25	80-120
Bromoform	0.0	10	9	9	88	91	4	25	80-120
Isopropylbenzene	0.0	10	10	10	102	102	1	25	80-120
Bromobenzene	0.0	10	10	10	99	100	2	25	80-120
1,1,2,2-Tetrachloroe	0.0	10	10	10	97	97	1	25	80-120
1,2,3-Trichloropropa	0.0	10	9	10	95	104	9	25	80-120
n-Propylbenzene	0.0	10	10	10	101	101	1	25	80-120

2-Chlorotoluene	0.0	10	10	10	97	100	4	25	80-120
4-Chlorotoluene	0.0	10	10	10	99	100	1	25	80-120
1,3,5-Trimethylbenze	0.0	10	9	9	93	94	1	25	80-120
tert-Butylbenzene	0.0	10	10	10	102	101	0	25	80-120
1,2,4-Trimethylbenze	0.0	10	9	9	90	92	2	25	80-120
sec-Butylbenzene	0.0	10	10	10	101	102	1	25	80-120
1,3-Dichlorobenzene	0.0	10	10	10	99	99	0	25	80-120
p-Isopropyltoluene	0.0	10	10	10	97	98	1	25	80-120
1,4-Dichlorobenzene	0.0	10	10	10	99	100	1	25	80-120
1,2-Dichlorobenzene	0.0	10	10	10	99	100	1	25	80-120
n-Butylbenzene	0.0	10	10	10	100	102	2	25	80-120
1,2-Dibromo-3-chloro	0.0	10	9	9	87	89	2	25	80-120
1,2,4-Trichlorobenze	0.0	10	9	10	92	97	5	25	80-120
Hexachlorobutadiene	0.0	10	10	10	99	101	2	25	80-120
Naphthalene	0.0	10	9	10	90	96	6	25	80-120
1,2,3-Trichlorobenze	0.0	10	9	10	91	97	6	25	80-120

VOA524.M Wed Jun 28 15:56:41 1995 VOA

Quantitation Report

Data File : d:\hpchem\1\data\c8666.d
Acq On : 26 Jun 95 11:15 pm
Sample : 9526607 MS
Misc : 25 ML
Quant Time: Jun 27 10:52 1995

Vial: 16
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Jun 27 10:34:27 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	11.92	96	366716	5.00	ug/L		0.01
System Monitoring Compounds							%Recovery
43) 4-Bromofluorobenzene	19.15	95	187984	5.49	ug/L		109.77%
57) 1,2-Dichlorobenzene-d4	21.93	152	102813	5.10	ug/L		102.01%
Target Compounds							Qvalue
2) Dichlorodifluoromethane	3.34	85	294550	10.79	ug/L		100
3) Chloromethane	3.71	50	145303	11.92	ug/L		98
4) Vinyl chloride	3.94	62	179373	11.53	ug/L		94
5) Bromomethane	4.62	94	147746	11.86	ug/L	m	98
6) Chloroethane	4.85	64	102491	11.74	ug/L	m	98
7) Trichlorofluoromethane	5.44	101	478947	11.00	ug/L		99
8) 1,1-Dichloroethene	6.52	96	206498	11.06	ug/L		93
9) Methylene chloride	7.50	84	190453	9.53	ug/L		99
10) trans-1,2-Dichloroethene	8.06	96	219023	11.02	ug/L		97
12) 1,1-Dichloroethane	8.84	63	380990	10.94	ug/L		100
13) 2,2-Dichloropropane	9.91	77	339836	9.38	ug/L		95
14) cis-1,2-Dichloroethene	9.91	96	208774	10.74	ug/L		99
16) Bromochloromethane	10.32	128	78104	10.10	ug/L		95
17) Chloroform	10.47	83	401312	10.70	ug/L		98
18) 1,1,1-Trichloroethane	10.80	97	456313	10.90	ug/L		99
19) Carbon tetrachloride	11.11	117	419622	10.58	ug/L		99
20) 1,1-Dichloropropene	11.09	75	349543	10.56	ug/L		96
21) Benzene	11.44	78	631143	10.62	ug/L		100
22) 1,2-Dichloroethane	11.44	62	249251	16.54	ug/L		97
23) Trichloroethene	12.55	95	330824	11.57	ug/L		98
24) 1,2-Dichloropropane	12.90	63	201128	10.64	ug/L		98
25) Dibromomethane	13.10	93	93133	9.62	ug/L		95
26) Bromodichloromethane	13.37	83	295790	9.66	ug/L		98
27) cis-1,3-Dichloropropene	14.13	75	237859	9.58	ug/L		99
28) Toluene	14.71	92	465040	10.53	ug/L		96
29) trans-1,3-Dichloropropene	15.05	75	163932	9.16	ug/L		94
30) 1,1,2-Trichloroethane	15.37	83	84598	9.79	ug/L		96
31) Tetrachloroethene	15.68	166	381423	12.49	ug/L		99
32) 1,3-Dichloropropane	15.66	76	157214	9.67	ug/L		100
33) Dibromochloromethane	16.06	129	178848	9.46	ug/L		98
34) 1,2-Dibromomethane	16.25	107	123061	9.50	ug/L		98
35) Chlorobenzene	17.13	112	519639	10.37	ug/L		97
36) 1,1,1,2-Tetrachloroethane	17.26	131	214777	9.79	ug/L		98
37) Ethylbenzene	17.32	91	971803	10.22	ug/L		99
38) Xylene (para & meta)	17.53	106	693500	20.07	ug/L		100
39) Xylene (Ortho)	18.23	106	313986	9.95	ug/L		98
40) Styrene	18.24	104	414352	8.46	ug/L		95

(#) = qualifier out of range (m) = manual integration

Data File : d:\hpchem\1\data\c8666.d
Acq On : 26 Jun 95 11:15 pm
Sample : 9526607 MS
Misc : 25 ML
Quant Time: Jun 27 10:52 1995

Vial: 16 141
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Jun 27 10:34:27 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
41)	Bromoform	18.56	173	88349	8.80	ug/L		95
42)	Isopropylbenzene	18.88	105	1005993	10.16	ug/L		100
44)	Bromobenzene	19.43	156	206816	9.87	ug/L		97
45)	1,1,2,2-Tetrachloroethane	19.37	83	104602	9.67	ug/L		97
46)	1,2,3-Trichloropropane	19.46	75	104571	9.48	ug/L	#	43
47)	n-Propylbenzene	19.62	91	1294469	10.06	ug/L		100
48)	2-Chlorotoluene	19.78	91	740653	9.66	ug/L		99
49)	4-Chlorotoluene	19.97	91	851990	9.90	ug/L		99
50)	1,3,5-Trimethylbenzene	19.94	105	776108	9.29	ug/L		96
51)	tert-Butylbenzene	20.54	119	926333	10.16	ug/L		99
52)	1,2,4-Trimethylbenzene	20.62	105	723849	9.02	ug/L		99
53)	sec-Butylbenzene	20.93	105	1279023	10.06	ug/L		99
54)	1,3-Dichlorobenzene	21.14	146	417162	9.90	ug/L		97
55)	4-Isopropyltoluene	21.20	119	982866	9.72	ug/L		99
56)	1,4-Dichlorobenzene	21.29	146	416822	9.90	ug/L		99
58)	1,2-Dichlorobenzene	21.97	146	319868	9.89	ug/L		98
59)	n-Butylbenzene	21.95	91	1022461	10.01	ug/L		100
60)	1,2-Dibromo-3-chloropropan	23.37	75	21873	8.68	ug/L		95
61)	1,2,4-Trichlorobenzene	24.94	180	236769	9.23	ug/L		100
62)	Hexachlorobutadiene	25.28	225	273187	9.91	ug/L		99
63)	Naphthalene	25.38	128	212146	9.02	ug/L		100
64)	1,2,3-Trichlorobenzene	25.87	180	173013	9.14	ug/L		90
65)	Methyl-tert butyl ether	8.09	73	225139	9.71	ug/L		99
66)	tert-Butyl Alcohol	7.79	59	5737	17.72	ug/L		100

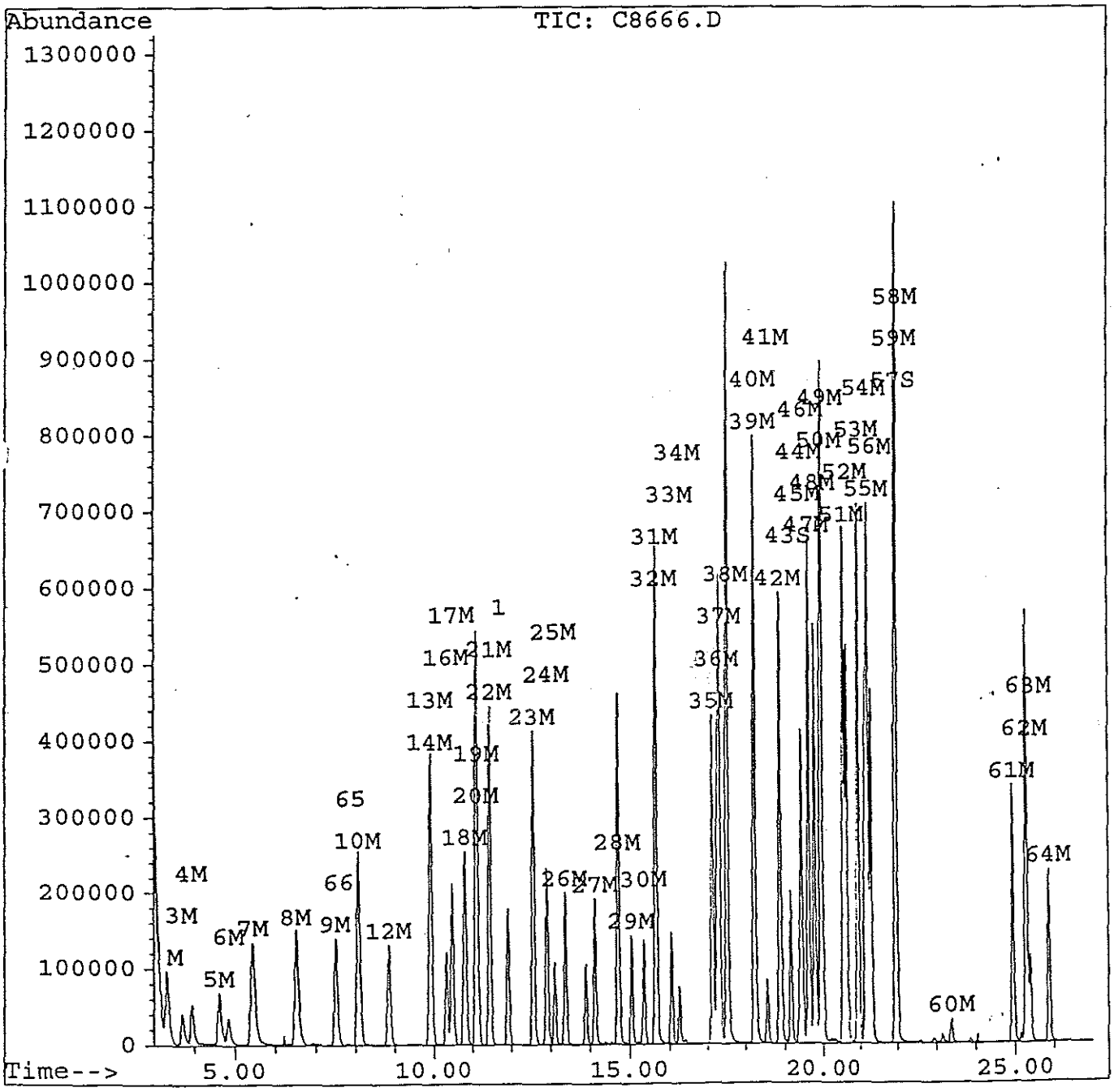
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c8666.d
Acq On : 26 Jun 95 11:15 pm
Sample : 9526607 MS
Misc : 25 ML
Quant Time: Jun 27 10:52 1995

Vial: 16
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Jun 27 10:34:27 1995
Response via : Multiple Level Calibration



Quantitation Report

Data File : d:\hpchem\1\data\c8667.d
Acq On : 26 Jun 95 11:49 pm
Sample : 9526607 MSD
Misc : 25 ML
Quant Time: Jun 27 10:54 1995

Vial: 17
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

143

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Jun 27 10:34:27 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	11.91	96	362102	5.00	ug/L		0.01
System Monitoring Compounds							%Recovery
43) 4-Bromofluorobenzene	19.15	95	183144	5.42	ug/L		108.30%
57) 1,2-Dichlorobenzene-d4	21.94	152	101122	5.08	ug/L		101.61%
Target Compounds							Qvalue
2) Dichlorodifluoromethane	3.34	85	292002	10.84	ug/L		97
3) Chloromethane	3.72	50	147044	12.22	ug/L		98
4) Vinyl chloride	3.95	62	174863	11.38	ug/L		100
5) Bromomethane	4.62	94	147013	11.95	ug/L	m	99
6) Chloroethane	4.84	64	94432	10.96	ug/L	m	93
7) Trichlorofluoromethane	5.44	101	482448	11.22	ug/L		99
8) 1,1-Dichloroethene	6.52	96	205227	11.13	ug/L		95
9) Methylene chloride	7.49	84	177659	9.01	ug/L		96
10) trans-1,2-Dichloroethene	8.06	96	214273	10.92	ug/L		92
12) 1,1-Dichloroethane	8.84	63	373903	10.88	ug/L		97
13) 2,2-Dichloropropane	9.90	77	330931	9.25	ug/L		97
14) cis-1,2-Dichloroethene	9.91	96	210192	10.95	ug/L		98
16) Bromochloromethane	10.32	128	78041	10.22	ug/L		93
17) Chloroform	10.48	83	394165	10.64	ug/L		95
18) 1,1,1-Trichloroethane	10.81	97	450949	10.91	ug/L		98
19) Carbon tetrachloride	11.11	117	424129	10.83	ug/L		100
20) 1,1-Dichloropropene	11.10	75	350365	10.72	ug/L		98
21) Benzene	11.44	78	629132	10.72	ug/L		100
22) 1,2-Dichloroethane	11.44	62	274073	18.42	ug/L		99
23) Trichloroethene	12.55	95	326065	11.55	ug/L		98
24) 1,2-Dichloropropane	12.90	63	198544	10.64	ug/L		99
25) Dibromomethane	13.10	93	93447	9.77	ug/L		100
26) Bromodichloromethane	13.37	83	301419	9.96	ug/L		94
27) cis-1,3-Dichloropropene	14.13	75	239425	9.77	ug/L		100
28) Toluene	14.71	92	458808	10.52	ug/L		99
29) trans-1,3-Dichloropropene	15.05	75	166605	9.43	ug/L		98
30) 1,1,2-Trichloroethane	15.36	83	82546	9.67	ug/L		94
31) Tetrachloroethene	15.67	166	382367	12.68	ug/L		96
32) 1,3-Dichloropropane	15.65	76	157077	9.79	ug/L		96
33) Dibromochloromethane	16.05	129	179723	9.63	ug/L		95
34) 1,2-Dibromomethane	16.26	107	120027	9.38	ug/L		96
35) Chlorobenzene	17.12	112	525919	10.63	ug/L		99
36) 1,1,1,2-Tetrachloroethane	17.26	131	216242	9.98	ug/L		97
37) Ethylbenzene	17.32	91	968974	10.32	ug/L		98
38) Xylene (para & meta)	17.53	106	687039	20.14	ug/L		98
39) Xylene (Ortho)	18.23	106	312436	10.02	ug/L		98
40) Styrene	18.25	104	431711	8.93	ug/L		99

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c8667.d
Acq On : 26 Jun 95 11:49 pm
Sample : 9526607 MSD
Misc : 25 ML
Quant Time: Jun 27 10:54 1995

Vial: 17
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Jun 27 10:34:27 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
41)	Bromoform	18.56	173	90459	9.13	ug/L		97
42)	Isopropylbenzene	18.89	105	998763	10.21	ug/L		99
44)	Bromobenzene	19.42	156	207305	10.02	ug/L		98
45)	1,1,2,2-Tetrachloroethane	19.37	83	103955	9.73	ug/L		88
46)	1,2,3-Trichloropropane	19.45	75	113427	10.42	ug/L	#	56
47)	n-Propylbenzene	19.62	91	1288217	10.14	ug/L		98
48)	2-Chlorotoluene	19.78	91	758885	10.03	ug/L		98
49)	4-Chlorotoluene	19.97	91	851223	10.01	ug/L		100
50)	1,3,5-Trimethylbenzene	19.94	105	776986	9.41	ug/L		97
51)	tert-Butylbenzene	20.54	119	912485	10.14	ug/L		100
52)	1,2,4-Trimethylbenzene	20.62	105	730553	9.22	ug/L		97
53)	sec-Butylbenzene	20.94	105	1276049	10.17	ug/L		99
54)	1,3-Dichlorobenzene	21.13	146	413323	9.94	ug/L		97
55)	4-Isopropyltoluene	21.19	119	981175	9.82	ug/L		99
56)	1,4-Dichlorobenzene	21.29	146	415632	10.00	ug/L		96
58)	1,2-Dichlorobenzene	21.97	146	320312	10.03	ug/L		99
59)	n-Butylbenzene	21.95	91	1029548	10.21	ug/L		99
60)	1,2-Dibromo-3-chloropropan	23.36	75	22130	8.89	ug/L		89
61)	1,2,4-Trichlorobenzene	24.95	180	245715	9.70	ug/L		96
62)	Hexachlorobutadiene	25.27	225	274520	10.08	ug/L		99
63)	Naphthalene	25.39	128	223347	9.61	ug/L		100
64)	1,2,3-Trichlorobenzene	25.86	180	181557	9.71	ug/L		99
65)	Methyl-tert butyl ether	8.09	73	227593	9.94	ug/L		96
66)	tert-Butyl Alcohol	7.82	59	6093	19.06	ug/L		100

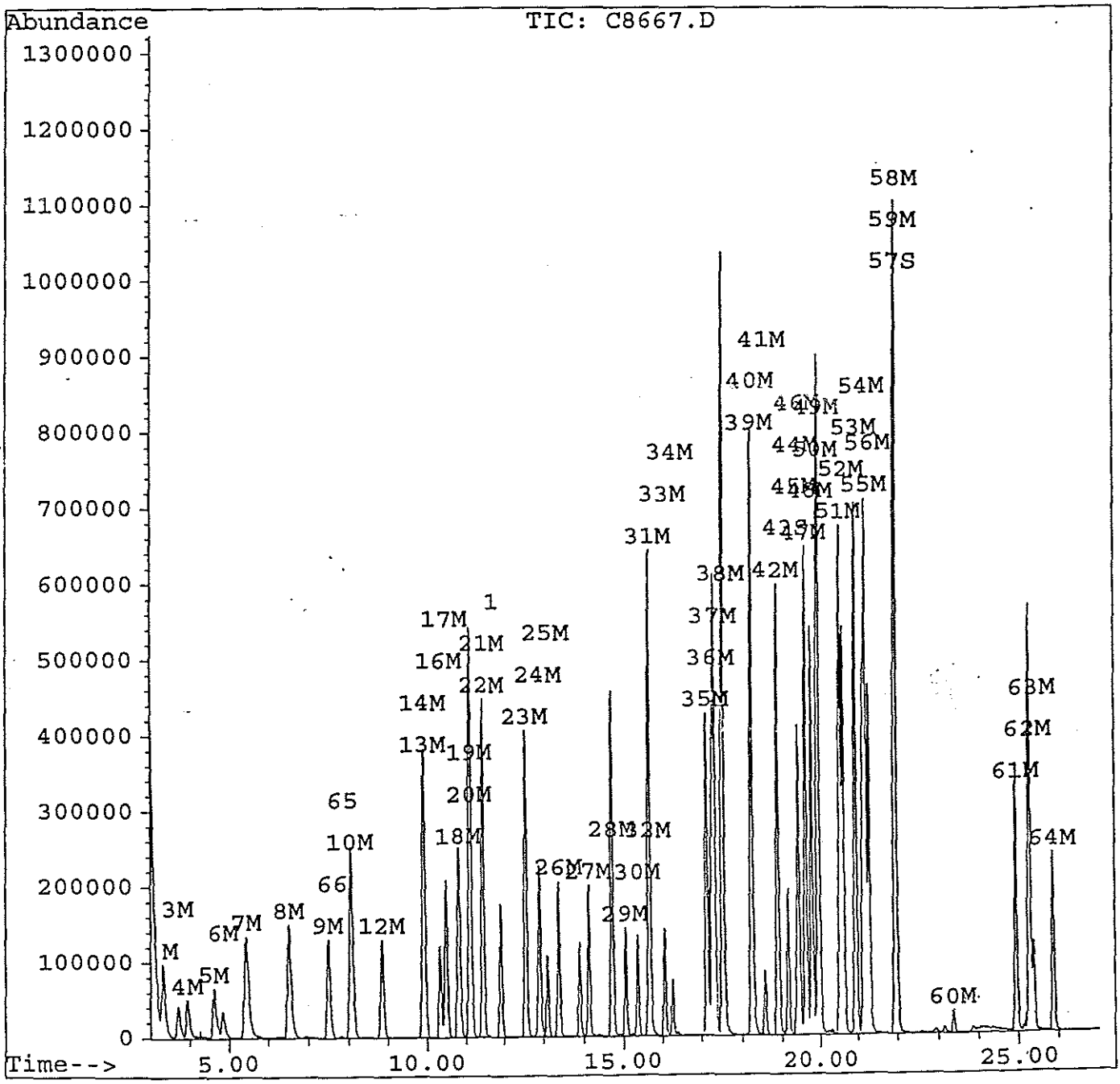
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c8667.d
Acq On : 26 Jun 95 11:49 pm
Sample : 9526607 MSD
Misc : 25 ML
Quant Time: Jun 27 10:54 1995

Vial: 17
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Jun 27 10:34:27 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: B8063.D DFTPP Injection Date: 06/29/95

Instrument ID: ABNA DFTPP Injection Time: 1140

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE		
51	30.0 - 80.0% of mass 198	48.1		
68	Less than 2.0% of mass 69	0.0	0.0	)1
69	Mass 69 relative abundance	57.6		
70	Less than 2.0% of mass 69	0.0	0.0	)1
127	25.0 - 75.0% of mass 198	45.5		
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	7.3		
275	10.0 - 30.0% of mass 198	20.9		
365	Greater than 0.75% of mass 198	2.1		
441	Present, but less than mass 443	71.3		
442	40.0 - 110.0% of mass 198	44.0		
443	15.0 - 24.0% of mass 442	9.1	20.6	)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDAR

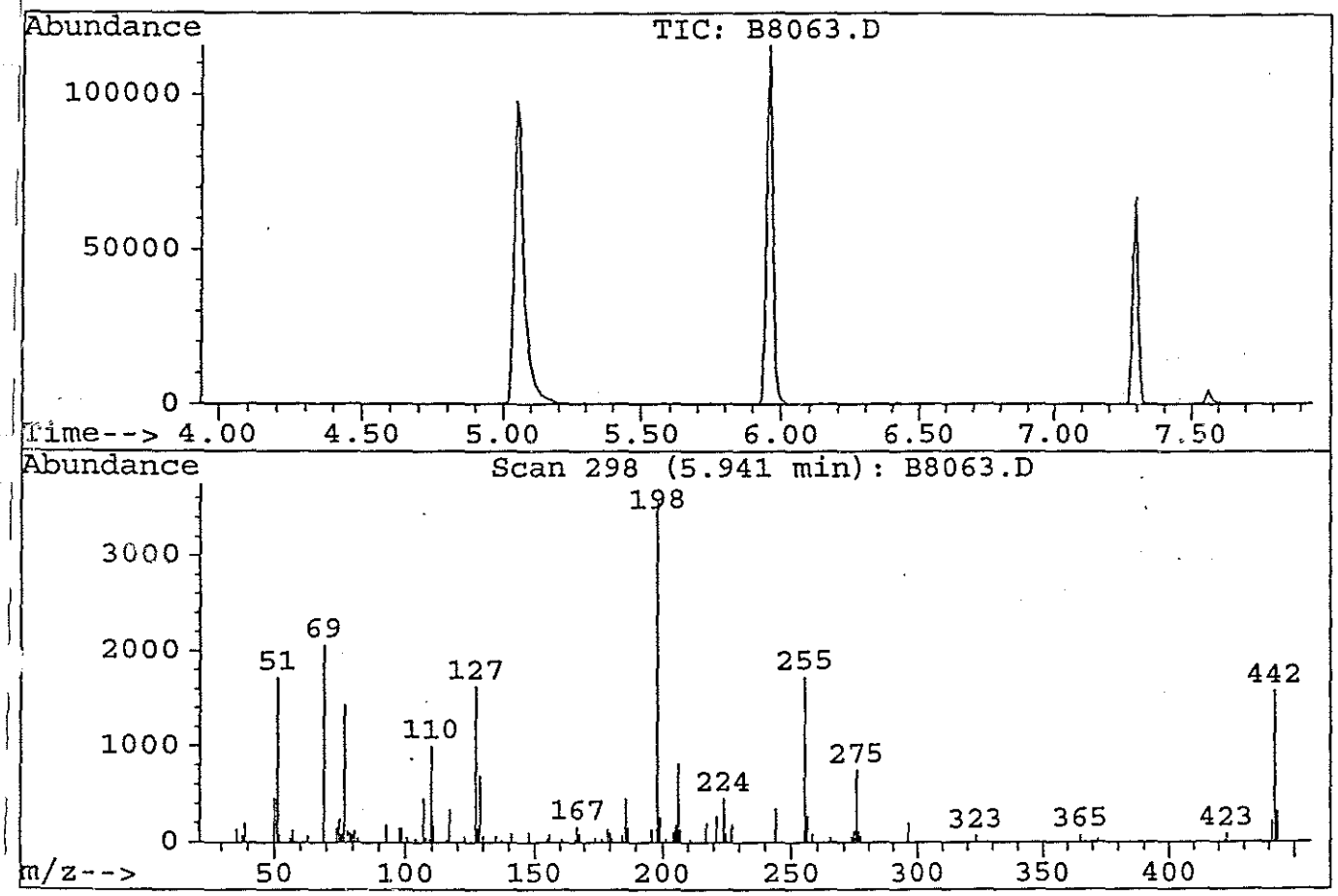
	EPA SAMPLE N	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
#		20 STANDARD	B8064	06/29/95	1205
#		50 STANDARD	B8065	06/29/95	1257
#		80 STANDARD	B8066	06/29/95	1354
#		120 STANDARD	B8067	06/29/95	1447
#		160 STANDARD	B8068	06/29/95	1541
#					
#					
#					
#					
#					
#					
#					
#					
#					
#					
#					
#					
#					
#					
#					
#					
#					

DFTPP

Data File : C:\HPCHEM\1\DATA2\B8063.D
Acq On : 29 Jun 95 11:40 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: 298

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	48.1	1717	PASS
68	69	0	2	0.0	0	PASS
69	198	0	100	57.6	2057	PASS
70	69	0	2	0.0	0	PASS
127	198	40	60	45.5	1624	PASS
197	198	0	1	0.0	0	PASS
198	198	100	100	100.0	3569	PASS
199	198	5	9	7.3	262	PASS
275	198	10	30	20.9	746	PASS
365	198	1	100	2.1	75	PASS
441	443	0	100	71.3	231	PASS
442	198	40	100	44.0	1570	PASS
443	442	17	23	20.6	324	PASS

B8063.D BNACLP.M Thu Jun 29 10:57:50 1995 BNA

298 (5.941 min): B8063.D
TIP..... Converted from RTE data file >B8063::D5

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	130	75.00	245	100.95	55	128.05	143
38.00	73	75.95	90	103.95	39	128.95	694
9.00	196	77.05	1430	106.95	456	130.05	63
0.00	461	78.05	120	107.95	54	134.95	65
51.00	1717	79.05	103	109.05	35	137.05	29
51.90	80	79.95	88	109.95	996	141.05	93
56.10	46	80.95	120	110.95	175	147.95	99
57.00	126	82.05	47	116.05	32	155.05	41
63.00	67	92.95	184	116.95	340	156.05	77
69.00	2057	97.95	141	122.95	50	160.95	33
74.00	153	98.95	142	127.05	1624	166.05	36

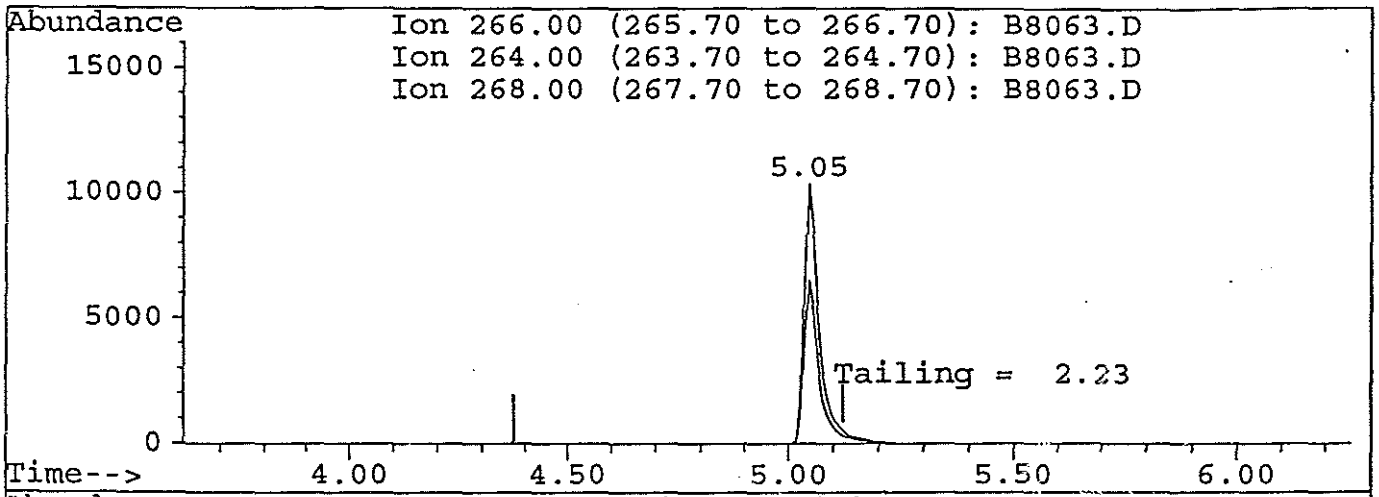
an 298 (5.941 min): B8063.D
TIP..... Converted from RTE data file >B8063::D5

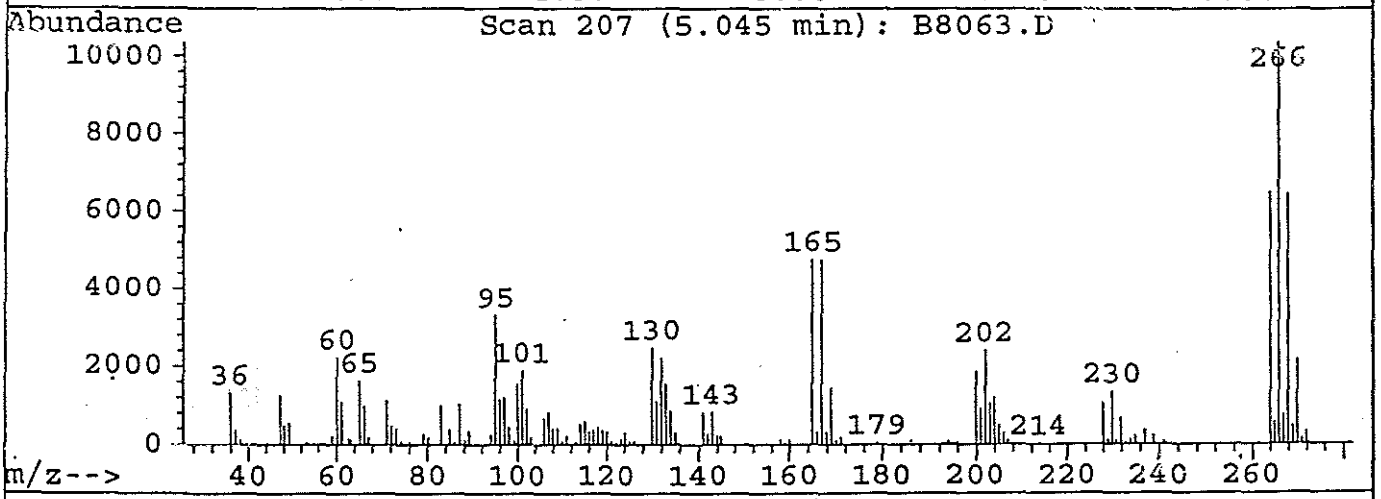
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
167.05	160	198.05	3569	225.10	91	277.10	65
68.05	86	199.05	262	227.00	178	296.00	199
74.05	40	201.55	35	244.10	347	323.20	65
176.95	30	204.05	108	255.00	1725	365.10	75
79.05	133	205.05	185	256.00	277	372.20	34
80.05	95	206.15	814	258.10	88	423.15	82
180.95	44	207.15	133	265.10	49	441.15	231
185.05	71	210.95	33	273.00	57	442.15	1570
86.05	445	217.05	198	274.10	121	443.15	324
187.05	142	221.15	270	275.10	746		
196.05	134	224.10	453	276.10	111		

Data File : C:\HPCHEM\1\DATA2\B8063.D
Acq On : 29 Jun 95 11:40 am
Sample : DFTPP..... Converted from RTE d
Misc :
Quant Time: Jun 29 10:51 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: B8063.D

(1) Pentachlorophenol (CM)

5.05min 74.53ug/mL

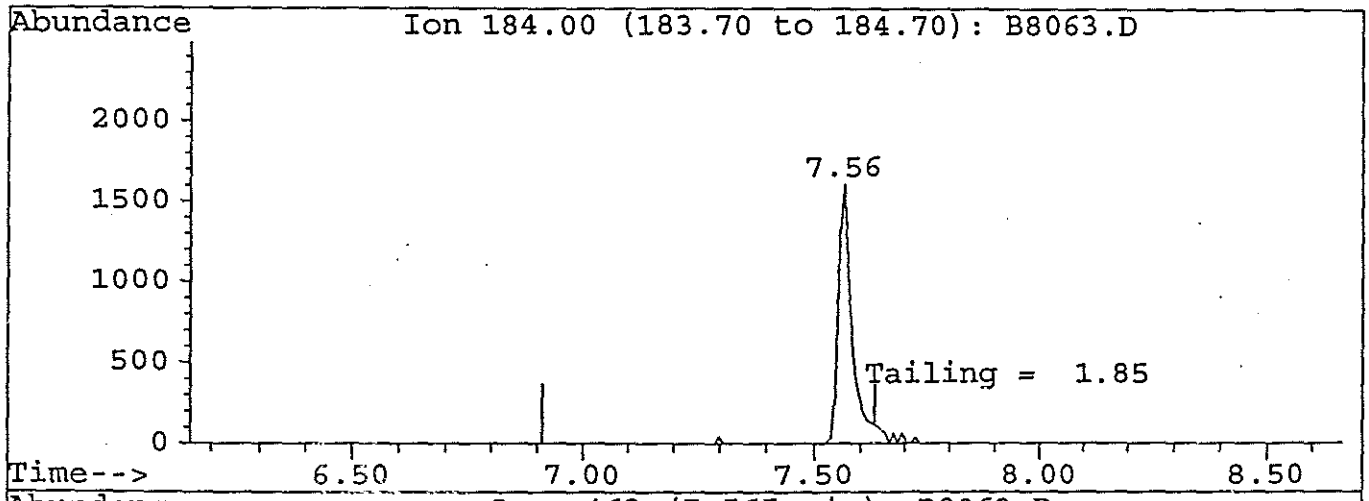
response 24618

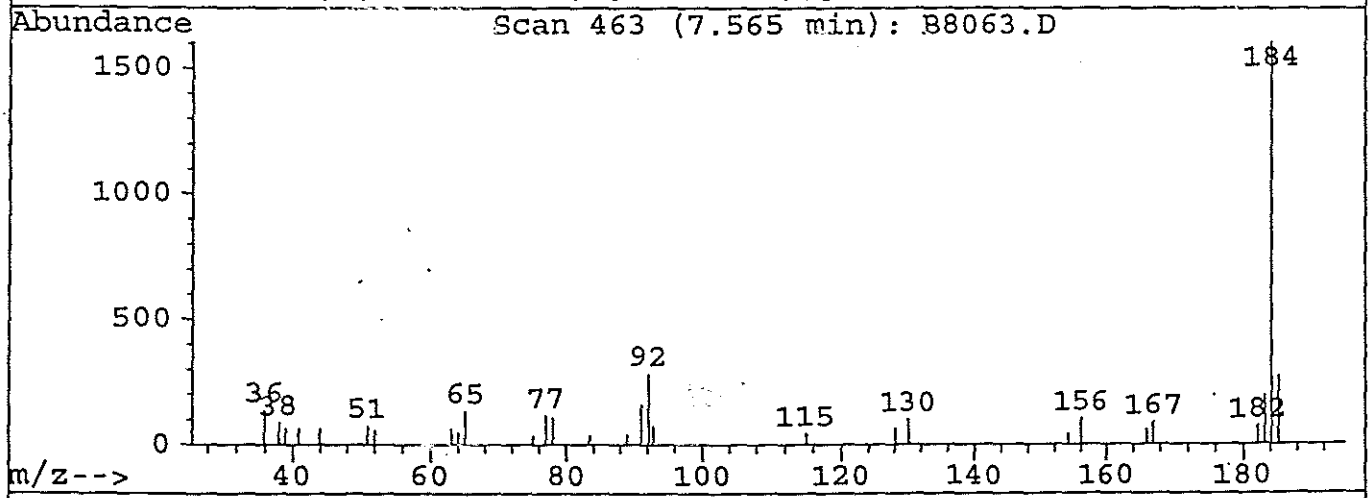
Ion	Exp%	Act%
266.00	100	100
264.00	64.30	62.75
268.00	64.70	62.22
0.00	0.00	0.00

Data File : C:\HPCHEM\1\DATA2\B8063.D
Acq On : 29 Jun 95 11:40 am
Sample : DFTPP..... Converted from RTE d
Misc :
Quant Time: Jun 29 10:51 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: B8063.D

(2) Benzidine
7.56min 10.99ug/ml
response 3377

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

152

Method : C:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Thu Jun 29 16:02:45 1995
Response via : Initial Calibration

Calibration Files
160 =B8068.D 120 =B8067.D 80 =B8066.D
50 =B8065.D 20 =B8064.D

		Compound	160	120	80	50	20	Avg	%RSD
1)	I	1,4-Dichlorobenzene-d	ISTD						
2)	S	2-Fluorophenol	0.968	1.091	1.038	0.968	1.049	1.023	5.25
3)	S	Phenol-d5	1.610	1.792	1.717	1.569	1.658	1.669	5.25
4)	M	N-nitrosodimethylamin	0.372	0.417	0.501	0.430		0.430	12.43
5)		Pyridine	2.278	2.169	2.454	3.005	2.166	2.414	14.51
6)	CM	Phenol	1.365	1.590	1.611	1.535	1.569	1.534	6.44
7)	MT	bis(2-Chloroethyl)eth	1.924	2.092	2.068	2.007	1.900	1.998	4.25
8)	M	2-Chlorophenol	1.094	1.229	1.286	1.194	1.254	1.211	6.10
9)	MT	1,3-Dichlorobenzene	1.290	1.411	1.487	1.396	1.325	1.382	5.56
10)	CM	1,4-Dichlorobenzene	1.327	1.466	1.523	1.431	1.379	1.425	5.31
11)	M	1,2-Dichlorobenzene	1.277	1.395	1.448	1.402	1.279	1.360	5.72
12)	T	2-Methylphenol	1.065	1.171	1.207	1.107	1.083	1.126	5.36
13)	M	bis(2-chloroisopropyl	1.729	1.904	1.842	1.704	1.681	1.772	5.44
14)	T	4-Methylphenol	1.163	1.289	1.338	1.179	1.208	1.235	6.09
15)	PM	N-Nitroso-Di-n-propyl	1.173	1.225	1.332	1.177	1.128	1.207	6.46
16)	M	Hexachloroethane	0.685	0.755	0.776	0.724	0.659	0.720	6.67
)	I	Naphthalene-d8	ISTD						
18)	S	Nitrobenzene-d5	0.386	0.417	0.417	0.380	0.405	0.401	4.35
19)	M	Nitrobenzene	0.319	0.432	0.420	0.402	0.382	0.391	11.42
20)	M	Isophorone	0.736	0.814	0.800	0.758	1.012	0.824	13.32
21)	MC	2-Nitrophenol	0.190	0.208	0.205	0.189	0.180	0.194	6.12
22)	M	2,4-Dimethylphenol	0.345	0.388	0.398	0.365	0.367	0.373	5.59
23)	M	bis(2-Chloroethoxy)me	0.391	0.403	0.416	0.377	0.391	0.396	3.65
24)	MC	2,4-Dichlorophenol	0.269	0.311	0.310	0.299	0.297	0.297	5.74
25)	M	1,2,4-Trichlorobenzen	0.295	0.329	0.339	0.327	0.309	0.320	5.53
26)	M	Naphthalene	0.933	0.993	1.046	0.974	0.970	0.983	4.19
27)	T	4-Chloroaniline	0.422	0.449	0.462	0.424	0.416	0.434	4.54
28)	MC	Hexachlorobutadiene	0.161	0.182	0.195	0.193	0.178	0.182	7.37
29)	MC	4-Chloro-3-methylphen	0.313	0.359	0.363	0.335	0.339	0.342	5.89
30)	M	2-Chloronaphthalene	0.675	0.749	0.739	0.716	0.674	0.710	4.91
31)	T	2-Methylnaphthalene	0.829	0.956	0.999	0.957	0.955	0.939	6.85
32)	I	Acenaphthene-d10	ISTD						
33)	P	Hexachlorocyclopentad	0.252	0.272	0.279	0.225	0.200	0.246	13.40
34)	MC	2,4,6-Trichlorophenol	0.356	0.363	0.368	0.350	0.341	0.356	2.92
35)	T	2,4,5-Trichlorophenol	0.317	0.382	0.405	0.380	0.344	0.365	9.55
36)	S	2-Fluorobiphenyl	1.130	1.206	1.221	1.211	1.209	1.195	3.08
37)	T	2-Nitroaniline	0.461	0.507	0.503	0.443	0.378	0.458	11.49
38)	M	Dimethylphthalate	1.182	1.354	1.352	1.340	1.284	1.302	5.60
39)	M	Acenaphthylene	1.591	1.738	1.864	1.738	1.677	1.722	5.80
40)	M	2,6-Dinitrotoluene	0.286	0.190	0.315	0.282	0.254	0.265	17.84
41)	T	3-Nitroaniline	0.326	0.356	0.316	0.280	0.266	0.309	11.76

) = Out of Range

Response Factor Report ABNA

Method : C:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Thu Jun 29 16:02:45 1995
Response via : Initial Calibration

Calibration Files
160 =B8068.D 120 =B8067.D 80 =B8066.D
50 =B8065.D 20 =B8064.D

		Compound	160	120	80	50	20	Avg	%RSD
2)	CM	Acenaphthene	0.974	1.064	1.124	1.043	1.051	1.051	5.11
43)	MP	2,4-Dinitrophenol	0.132	0.178	0.165	0.127	0.098	0.140	22.68
44)	PM	4-Nitrophenol	0.128	0.139	0.166	0.142	0.134	0.142	10.12
5)	T	Dibenzofuran	1.431	1.625	1.593	1.502	1.481	1.526	5.29
6)	M	2,4-Dinitrotoluene	0.291	0.263	0.359	0.359	0.323	0.319	13.21
47)	M	Diethylphthalate	1.331	1.526	1.542	1.472	1.412	1.457	5.95
8)	M	Fluorene	1.159	1.287	1.275	1.210	1.190	1.224	4.51
9)	M	4-Chlorophenyl-phenyl	0.536	0.620	0.599	0.597	0.589	0.588	5.35
0)		Phenanthrene-d10	----------ISTD----------						
1)	T	4-Nitroaniline	0.194	0.108	0.152	0.188	0.166	0.162	21.11
52)	MC	4,6-Dinitro-2-methylp	0.119	0.079	0.111	0.119	0.107	0.107	15.51
53)	T	n-Nitrosodiphenylamin	0.431	0.483	0.511	0.486	0.480	0.478	6.09
4)	S	2,4,6-Tribromophenol	0.075	0.089	0.087	0.085	0.097	0.086	9.27
5)		1,2-Diphenylhydrazine	1.007	1.163	1.209	1.141	1.104	1.124	6.77
56)	M	4-Bromophenyl-phenyle	0.174	0.197	0.203	0.195	0.196	0.193	5.76
7)	M	Hexachlorobenzene	0.121	0.210	0.224	0.168	0.217	0.188	23.06
8)	CM	Pentachlorophenol	0.127	0.143	0.139	0.132	0.139	0.136	4.77
)	M	Phenanthrene	0.877	1.092	1.094	1.067	1.097	1.045	9.09
.)	M	Anthracene	0.696	0.799	0.995	1.012	1.092	0.919	17.89
1)		Carbazole	0.664	0.741	0.892	0.885	1.003	0.837	16.02
62)	M	Di-n-butylphthalate	1.000	1.367	1.577	1.685	1.627	1.451	19.24
63)	MC	Fluoranthene	0.942	0.910	1.070	1.134	1.160	1.043	10.78
4)	I	Chrysene-d12	----------ISTD----------						
65)		Benzidine	0.319	0.236	0.207	0.293	0.297	0.270	17.31
6)	M	Pyrene	1.536	1.728	1.505	1.201	1.143	1.423	17.21
67)	S	Terphenyl-d14	1.137	1.140	1.028	0.828	0.809	0.988	16.36
68)	M	Butylbenzylphthalate	1.005	0.990	0.950	0.861	0.738	0.908	12.18
69)	M	Benzo[a]anthracene	1.330	1.296	1.285	1.114	1.107	1.226	8.73
70)	M	3,3'-Dichlorobenzidin	0.356	0.371	0.391	0.365	0.387	0.374	4.03
71)	M	Chrysene	1.050	1.117	1.187	1.033	1.086	1.095	5.59
72)	M	bis(2-Ethylhexyl)phth	1.502	1.485	1.408	1.276	1.146	1.363	11.04
73)	I	Perylene-d12	----------ISTD----------						
74)	MC	Di-n-octylphthalate	3.910	5.049	4.974	3.473		4.351	18.00
75)	M	Benzo[b]fluoranthene	1.197	1.582	1.707	1.431	1.300	1.443	14.28
76)	m	Benzo[k]fluoranthene	1.103	1.311	1.696	1.279	1.231	1.324	16.80
77)	mc	Benzo[a]pyrene	1.120	1.582	1.298	1.144	1.057	1.240	16.98
78)	m	Indeno[1,2,3-cd]pyren	0.478	0.512	0.352	0.312	0.517	0.434	21.99
79)	m	Dibenz[a,h]anthracene	0.474	0.610	0.473	0.301	0.555	0.483	24.20
80)	M	Benzo[g,h,i]perylene	0.527	0.512	0.352	0.318	0.513	0.444	22.67
81)		1-Methyl naphthalene						0.000#	-1.00
2)		7,12-Dimethylbenz(a)a						0.000#	-1.00

#) = Out of Range

Quantitation Report

Data File : c:\hpchem\1\data2\b8064.d Vial: 2 154
Acq On : 29 Jun 95 12:05 pm Operator: SCOTTV
Sample : 20 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jun 29 15:49 1995

Method : C:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Thu Jun 29 16:02:59 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.83	152	13365	40.00	ug/mL	-0.20
17) Naphthalene-d8	12.55	136	54268	40.00	ug/mL	-0.20
32) Acenaphthene-d10	17.84	164	37292	40.00	ug/mL	-0.21
50) Phenanthrene-d10	22.32	188	61490	40.00	ug/ml	-0.20
64) Chrysene-d12	30.38	240	65754	40.00	ug/mL	-0.20
73) Perylene-d12	34.36	264	55641	40.00	ug/mL	-0.23
System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	5.29	112	17520	46.35	ug/mL	46.35%
3) Phenol-d5	8.24	99	27707	44.28	ug/mL	44.28%
18) Nitrobenzene-d5	10.51	82	27464	44.42	ug/mL	44.42%
36) 2-Fluorobiphenyl	16.01	172	56361	50.38	ug/mL	50.38%
54) 2,4,6-Tribromophenol	20.26	330	7457	44.90	ug/mL	44.90%
67) Terphenyl-d14	27.46	244	66467	38.08	ug/mL	38.08%
Target Compounds						Qvalue
4) N-nitrosodimethylamine	2.20	74	1425	7.38	ug/ml	100
6) Phenol	8.27	94	10486	18.82	ug/mL	100
7) bis(2-Chloroethyl)ether	12.22	93	12699	18.76	ug/mL	96
8) 2-Chlorophenol	8.27	128	8381	19.76	ug/mL#	88
9) 1,3-Dichlorobenzene	8.64	146	8856	19.14	ug/mL	97
10) 1,4-Dichlorobenzene	8.89	146	9216	19.30	ug/mL	99
11) 1,2-Dichlorobenzene	9.27	146	8548	18.85	ug/mL	98
12) 2-Methylphenol	9.97	108	7235	17.98	ug/mLm	71
13) bis(2-chloroisopropyl)ethe	9.93	45	11234	17.99	ug/mL#	69
14) 4-Methylphenol	10.47	108	8072	18.28	ug/mL	97
15) N-Nitroso-Di-n-propylamine	10.28	70	7538	16.76	ug/mL#	98
16) Hexachloroethane	10.22	117	4406	17.88	ug/mL#	75
19) Nitrobenzene	10.55	77	10362	18.02	ug/mL#	74
20) Isophorone	10.51	82	27465	22.66	ug/mL#	68
21) 2-Nitrophenol	11.51	139	4876	17.09	ug/mL	94
22) 2,4-Dimethylphenol	10.47	107	9964	18.66	ug/mL#	32
23) bis(2-Chloroethoxy)methane	7.97	93	10618	17.16	ug/mL#	42
24) 2,4-Dichlorophenol	12.32	162	8052	19.91	ug/mL	97
25) 1,2,4-Trichlorobenzene	12.45	180	8391	19.52	ug/mL	96
26) Naphthalene	12.60	128	26320	19.82	ug/mL#	89
27) 4-Chloroaniline	12.97	127	11279	17.95	ug/mL	99
28) Hexachlorobutadiene	13.12	225	4834	19.26	ug/mL	96
29) 4-Chloro-3-methylphenol	14.72	107	9205	17.67	ug/mL#	1
30) 2-Chloronaphthalene	16.16	162	18277	19.35	ug/ml	96
31) 2-Methylnaphthalene	14.74	142	25910	24.31	ug/mL	96
33) Hexachlorocyclopentadiene	15.26	237	3728	14.37	ug/mL	99
34) 2,4,6-Trichlorophenol	15.72	196	6367	16.44	ug/mL	99
35) 2,4,5-Trichlorophenol	15.86	196	6412	21.22	ug/mL	96

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data2\b8064.d Vial: 2
Acq On : 29 Jun 95 12:05 pm Operator: SCOTTV
Sample : 20 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jun 29 15:49 1995

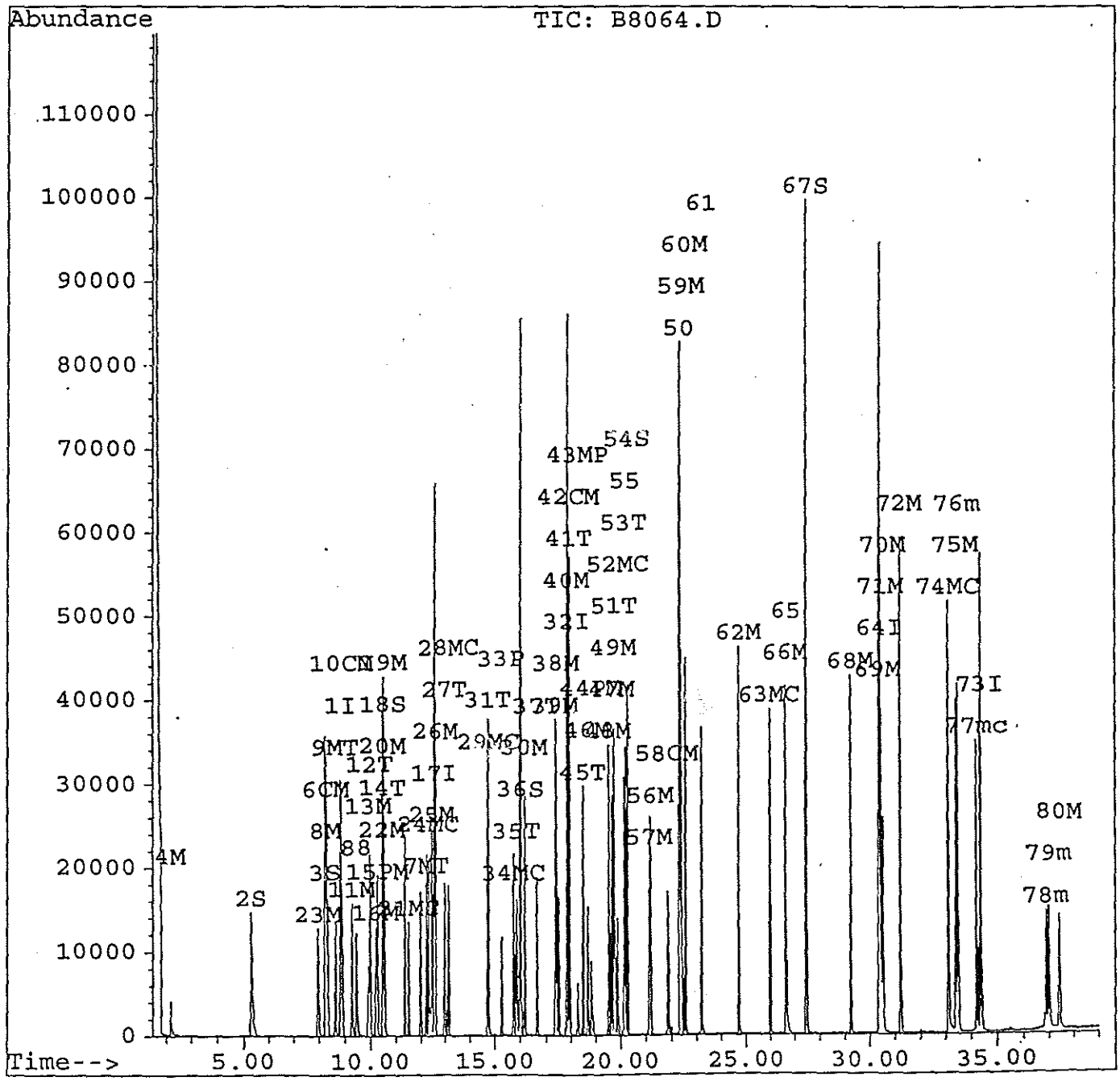
Method : C:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Thu Jun 29 16:02:59 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
37)	2-Nitroaniline	16.64	65	7048	13.76	ug/mL#	100
38)	Dimethylphthalate	17.41	163	23940	19.76	ug/mL	100
39)	Acenaphthylene	17.38	152	31268	19.68	ug/mL	98
40)	2,6-Dinitrotoluene	17.84	165	4730	16.35	ug/mL#	36
41)	3-Nitroaniline	17.91	138	4953	15.36	ug/mL	92
42)	Acenaphthene	17.93	153	19595	20.50	ug/mL	98
43)	2,4-Dinitrophenol	18.26	184	1830	11.40	ug/mL#	83
44)	4-Nitrophenol	18.82	109	2500	16.19	ug/mL	94
45)	Dibenzofuran	18.49	168	27613	18.41	ug/mL	99
46)	2,4-Dinitrotoluene	18.66	165	6030	5.54	ug/mLm	31
47)	Diethylphthalate	19.65	149	26337	19.58	ug/mL	97
48)	Fluorene	19.51	166	22183	18.90	ug/mL	98
49)	4-Chlorophenyl-phenylether	19.72	204	10975	19.74	ug/mL	91
51)	4-Nitroaniline	19.76	138	5108	19.99	ug/mL	99
52)	4,6-Dinitro-2-methylphenol	19.88	198	3305	16.31	ug/mL	100
53)	n-Nitrosodiphenylamine	20.13	169	14768	18.90	ug/mL#	1
55)	1,2-Diphenylhydrazine (as	20.19	77	33931	18.22	ug/ml	100
56)	4-Bromophenyl-phenylether	21.17	248	6024	19.01	ug/mL	89
57)	Hexachlorobenzene	21.13	284	6667	20.20	ug/mL#	79
58)	Pentachlorophenol	21.86	266	4279	20.25	ug/mL	97
59)	Phenanthrene	22.38	178	33722	20.04	ug/mL	99
60)	Anthracene	22.53	178	33559	21.64	ug/mLm	99
61)	Carbazole	23.19	167	30830	21.25	ug/ml	100
62)	Di-n-butylphthalate	24.71	149	50032	20.26	ug/mL	99
63)	Fluoranthene	25.98	202	35652	22.41	ug/mLm	90
65)	Benzidine	26.69	184	9755	13.57	ug/ml	100
66)	Pyrene	26.61	202	37590	15.23	ug/mL#	91
68)	Butylbenzylphthalate	29.23	149	24254	15.34	ug/mL	86
69)	Benzo[a]anthracene	30.34	228	36397	14.61	ug/mL	99
70)	3,3'-Dichlorobenzidine	30.52	252	12720	20.03	ug/mL	98
71)	Chrysene	30.44	228	35708	25.77	ug/mLm	96
72)	bis(2-Ethylhexyl)phthalate	31.19	149	37691	16.81	ug/mL	98
74)	Di-n-octylphthalate	33.09	149	64415	9.09	ug/mL	98
75)	Benzo[b]fluoranthene	33.40	252	36179	10.54	ug/mL#	94
76)	Benzo[k]fluoranthene	33.48	252	34252	20.69	ug/mLm	97
77)	Benzo[a]pyrene	34.21	252	29410	17.24	ug/mLm	96
78)	Indeno[1,2,3-cd]pyrene	36.88	276	14397	22.88	ug/mLm	93
79)	Dibenz[a,h]anthracene	37.00	278	15452	25.50	ug/mL	94
80)	Benzo[g,h,i]perylene	37.42	276	14273	28.85	ug/mL#	88
88)	Benzyl alcohol	9.45	79	7245	4.96	ug/ml#	20

(#) = qualifier out of range (m) = manual integration

Data File : c:\hpchem\1\data2\b8064.d Vial: 2
Acq On : 29 Jun 95 12:05 pm Operator: SCOTTV
Sample : 20 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jun 29 15:49 1995

Method : C:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Thu Jun 29 16:02:59 1995
Response via : Multiple Level Calibration



Quantitation Report

Data File : c:\hpchem\1\data2\b8065.d Vial: 3
Acq On : 29 Jun 95 12:57 pm Operator: SCOTTV
Sample : 50 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jun 29 16:02 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Thu Jun 29 16:02:59 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.81	152	14547	40.00	ug/mL	-0.22
17) Naphthalene-d8	12.53	136	59496	40.00	ug/mL	-0.22
32) Acenaphthene-d10	17.82	164	40945	40.00	ug/mL	-0.23
50) Phenanthrene-d10	22.31	188	67662	40.00	ug/ml	-0.21
64) Chrysene-d12	30.37	240	65110	40.00	ug/mL	-0.21
73) Perylene-d12	34.35	264	37965	40.00	ug/mL	-0.24
System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	5.29	112	17604	42.78	ug/mL	42.78%
3) Phenol-d5	8.22	99	28538	41.91	ug/mL	41.91%
18) Nitrobenzene-d5	10.49	82	28269	41.70	ug/mL	41.70%
36) 2-Fluorobiphenyl	15.99	172	61991	50.47	ug/mL	50.47%
54) 2,4,6-Tribromophenol	20.25	330	7150	39.13	ug/mL	39.13%
67) Terphenyl-d14	27.42	244	67407	39.01	ug/mL	39.01%
Target Compounds						Qvalue
4) N-nitrosodimethylamine	2.18	74	7818	37.18	ug/ml	100
6) Phenol	8.25	94	27914	46.02	ug/mL	100
7) bis(2-Chloroethyl)ether	12.22	93	36499	49.54	ug/mL	98
8) 2-Chlorophenol	8.25	128	21703	47.02	ug/mL#	88
9) 1,3-Dichlorobenzene	8.62	146	25389	50.41	ug/mL	97
10) 1,4-Dichlorobenzene	8.87	146	26019	50.07	ug/mL	98
11) 1,2-Dichlorobenzene	9.26	146	25502	51.66	ug/mL	96
12) 2-Methylphenol	9.95	108	20128	45.95	ug/mLm	65
13) bis(2-chloroisopropyl)ethe	9.91	45	30983	45.60	ug/mL#	66
14) 4-Methylphenol	10.45	108	21437	44.60	ug/mL	98
15) N-Nitroso-Di-n-propylamine	10.28	70	21397	43.72	ug/mL	98
16) Hexachloroethane	10.22	117	13173	49.12	ug/mL	98
19) Nitrobenzene	10.55	77	29866	47.36	ug/mL#	79
20) Isophorone	11.35	82	56392	42.44	ug/mL	99
21) 2-Nitrophenol	11.49	139	14029	44.84	ug/mL	90
22) 2,4-Dimethylphenol	10.45	107	27159	46.39	ug/mL#	32
23) bis(2-Chloroethoxy)methane	7.95	93	28060	41.36	ug/mL#	42
24) 2,4-Dichlorophenol	12.30	162	22230	50.13	ug/mL	98
25) 1,2,4-Trichlorobenzene	12.43	180	24289	51.53	ug/mL	99
26) Naphthalene	12.59	128	72426	49.75	ug/mL#	90
27) 4-Chloroaniline	12.95	127	31502	45.74	ug/mL	98
28) Hexachlorobutadiene	13.11	225	14337	52.09	ug/mL	97
29) 4-Chloro-3-methylphenol	14.68	107	24928	43.66	ug/mL#	76
30) 2-Chloronaphthalene	16.17	162	53275	51.46	ug/ml	97
31) 2-Methylnaphthalene	14.72	142	71182	60.91	ug/mL	97
33) Hexachlorocyclopentadiene	15.24	237	11533	40.48	ug/mL	100
34) 2,4,6-Trichlorophenol	15.70	196	17914	42.13	ug/mL	97
35) 2,4,5-Trichlorophenol	15.82	196	19473	58.70	ug/mL	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data2\b8065.d Vial: 3
Acq On : 29 Jun 95 12:57 pm Operator: SCOTTV
Sample : 50 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jun 29 16:02 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Thu Jun 29 16:02:59 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
37)	2-Nitroaniline	16.63	65	22655	40.30	ug/mL#	100
38)	Dimethylphthalate	17.42	163	68587	51.56	ug/mL	99
39)	Acenaphthylene	17.36	152	88956	50.99	ug/mL	98
40)	2,6-Dinitrotoluene	17.49	165	14437	45.46	ug/mL	99
41)	3-Nitroaniline	17.92	138	14337	40.49	ug/mL	99
42)	Acenaphthene	17.92	153	53368	50.86	ug/mL	99
43)	2,4-Dinitrophenol	18.24	184	6518	36.98	ug/mL	95
44)	4-Nitrophenol	18.78	109	7270	42.88	ug/mL	92
45)	Dibenzofuran	18.47	168	76865	46.68	ug/mL	98
46)	2,4-Dinitrotoluene	18.67	165	18394	15.40	ug/mLm	31
47)	Diethylphthalate	19.63	149	75350	51.02	ug/mL	99
48)	Fluorene	19.49	166	61953	48.08	ug/mL	99
49)	4-Chlorophenyl-phenylether	19.71	204	30545	50.04	ug/mL	93
51)	4-Nitroaniline	19.78	138	15882	56.48	ug/mL	95
52)	4,6-Dinitro-2-methylphenol	19.88	198	10061	45.13	ug/mL	100
53)	n-Nitrosodiphenylamine	20.11	169	41144	47.85	ug/mL#	1
55)	1,2-Diphenylhydrazine (as	20.17	77	96476	47.09	ug/ml	100
56)	4-Bromophenyl-phenylether	21.15	248	16456	47.20	ug/mL	94
57)	Hexachlorobenzene	21.11	284	14212	39.14	ug/mL#	76
58)	Pentachlorophenol	21.84	266	11142	47.91	ug/mL	99
59)	Phenanthrene	22.36	178	90217	48.73	ug/mL	99
60)	Anthracene	22.52	178	85555	50.13	ug/mLm	98
61)	Carbazole	23.17	167	74815	46.86	ug/ml	99
62)	Di-n-butylphthalate	24.69	149	142513	52.45	ug/mL	99
63)	Fluoranthene	25.96	202	95950	54.81	ug/mLm	88
65)	Benzidine	26.65	184	23842	33.49	ug/mlm	100
66)	Pyrene	26.60	202	97766	40.00	ug/mL	93
68)	Butylbenzylphthalate	29.21	149	70051	44.76	ug/mL	88
69)	Benzo[a]anthracene	30.33	228	90665	36.75	ug/mL	98
70)	3,3'-Dichlorobenzidine	30.50	252	29666	47.17	ug/mL#	97
71)	Chrysene	30.43	228	84078	61.28	ug/mLm	96
72)	bis(2-Ethylhexyl)phthalate	31.18	149	103826	46.76	ug/mL	99
74)	Di-n-octylphthalate	33.08	149	164826	34.09	ug/mL	99
75)	Benzo[b]fluoranthene	33.39	252	67919	29.01	ug/mL#	93
76)	Benzo[k]fluoranthene	33.47	252	60697	53.74	ug/mLm	98
77)	Benzo[a]pyrene	34.20	252	54268	46.61	ug/mLm	93
78)	Indeno[1,2,3-cd]pyrene	36.85	276	14812	34.49	ug/mL	92
79)	Dibenz[a,h]anthracene	36.97	278	14290	34.56	ug/mL	98
80)	Benzo[g,h,i]perylene	37.39	276	15096	44.72	ug/mLm	97
88)	Benzyl alcohol	9.45	79	21416	21.49	ug/ml#	20
89)	Benzoic acid	12.57	105	14194	15.52	ug/ml#	62

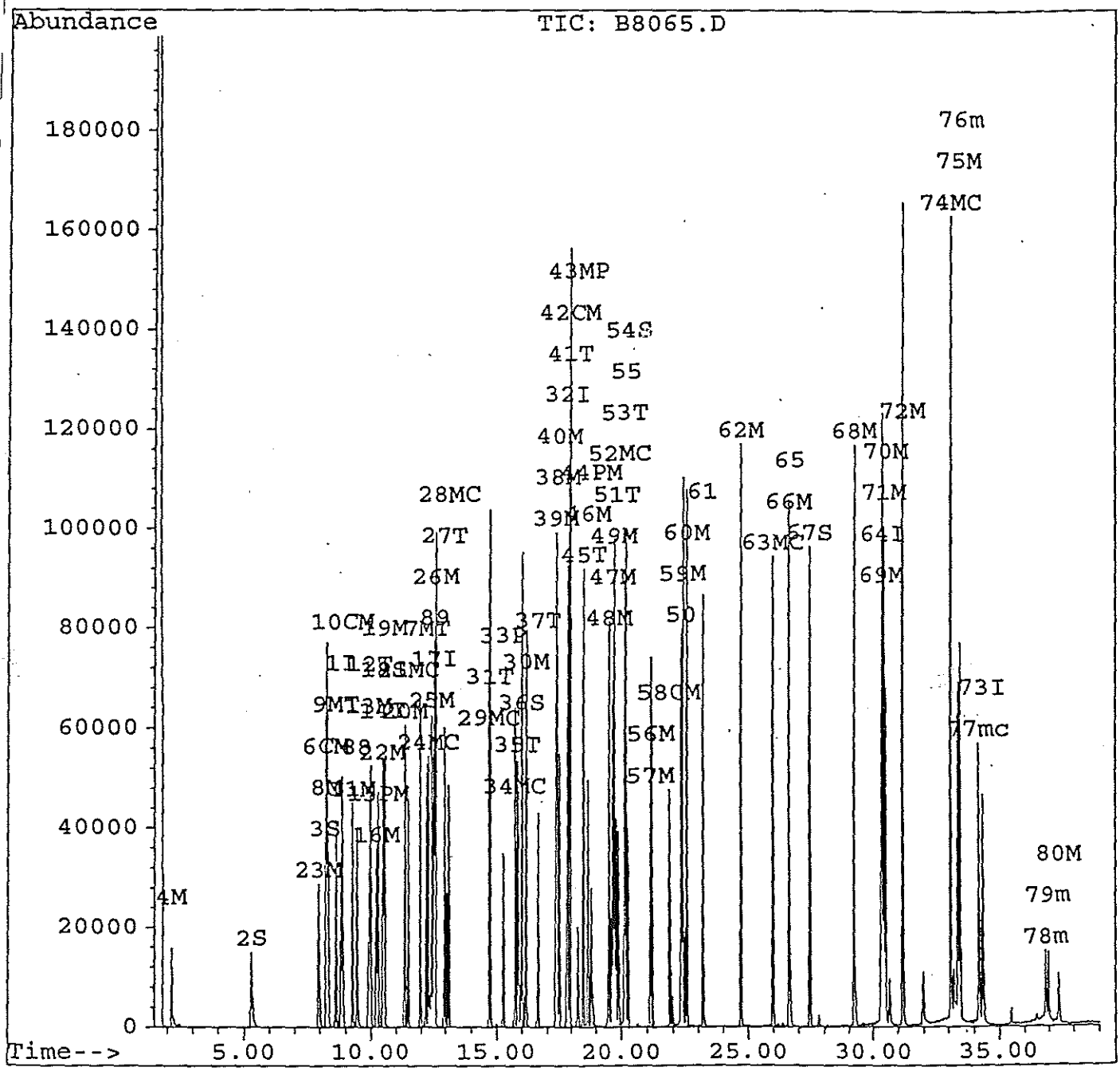
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data2\b8065.d
Acq On : 29 Jun 95 12:57 pm
Sample : 50 STD..... Converted from RTE d
Misc :
Quant Time: Jun 29 16:02 1995

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 29 16:02:59 1995
Response via : Multiple Level Calibration



Quantitation Report

Data File : c:\hpchem\1\data2\b8066.d Vial: 4
Acq On : 29 Jun 95 1:54 pm Operator: SCOTTV
Sample : 80 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jun 29 15:48 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Thu Jun 29 16:02:59 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.82	152	17277	40.00	ug/mL	-0.22
17) Naphthalene-d8	12.53	136	71843	40.00	ug/mL	-0.22
32) Acenaphthene-d10	17.83	164	50626	40.00	ug/mL	-0.22
50) Phenanthrene-d10	22.30	188	87929	40.00	ug/ml	-0.22
64) Chrysene-d12	30.36	240	62991	40.00	ug/mL	-0.21
73) Perylene-d12	34.35	264	25506	40.00	ug/mL	-0.24
System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	5.27	112	22407	45.85	ug/mL	45.85%
3) Phenol-d5	8.24	99	37078	45.84	ug/mL	45.84%
18) Nitrobenzene-d5	10.49	82	37479	45.79	ug/mL	45.79%
36) 2-Fluorobiphenyl	16.00	172	77245	50.87	ug/mL	50.87%
54) 2,4,6-Tribromophenol	20.25	330	9520	40.09	ug/mL	40.09%
67) Terphenyl-d14	27.44	244	80948	48.42	ug/mL	48.42%
Target Compounds						Qvalue
4) N-nitrosodimethylamine	2.18	74	17305	69.29	ug/ml	100
6) Phenol	8.28	94	55652	77.26	ug/mL	100
7) bis(2-Chloroethyl)ether	12.22	93	71445	81.65	ug/mL	93
8) 2-Chlorophenol	8.26	128	44433	81.05	ug/mL#	90
9) 1,3-Dichlorobenzene	8.62	146	51365	85.86	ug/mL	98
10) 1,4-Dichlorobenzene	8.87	146	52609	85.24	ug/mL	99
11) 1,2-Dichlorobenzene	9.26	146	50029	85.33	ug/mL	97
12) 2-Methylphenol	9.95	108	41706	80.17	ug/mLm	64
13) bis(2-chloroisopropyl)ethe	9.91	45	63635	78.85	ug/mL#	66
14) 4-Methylphenol	10.47	108	46245	81.01	ug/mL	98
15) N-Nitroso-Di-n-propylamine	10.32	70	46037	79.20	ug/mL	94
16) Hexachloroethane	10.22	117	26804	84.15	ug/mL	99
19) Nitrobenzene	10.57	77	60403	79.33	ug/mL#	86
20) Isophorone	11.38	82	114896	71.61	ug/mL	99
21) 2-Nitrophenol	11.49	139	29413	77.85	ug/mL#	84
22) 2,4-Dimethylphenol	10.47	107	57252	80.99	ug/mL#	32
23) bis(2-Chloroethoxy)methane	7.97	93	59759	72.95	ug/mL#	42
24) 2,4-Dichlorophenol	12.32	162	44548	83.19	ug/mL	97
25) 1,2,4-Trichlorobenzene	12.43	180	48736	85.62	ug/mL	99
26) Naphthalene	12.61	128	150279	85.48	ug/mL#	92
27) 4-Chloroaniline	12.97	127	66336	79.76	ug/mL	98
28) Hexachlorobutadiene	13.11	225	28001	84.25	ug/mL	97
29) 4-Chloro-3-methylphenol	14.69	107	52198	75.71	ug/mL#	77
30) 2-Chloronaphthalene	16.17	162	106127	84.89	ug/ml	97
31) 2-Methylnaphthalene	14.73	142	143496	101.68	ug/mL	97
33) Hexachlorocyclopentadiene	15.24	237	28223	80.11	ug/mL	99
34) 2,4,6-Trichlorophenol	15.73	196	37254	70.86	ug/mL	98
35) 2,4,5-Trichlorophenol	15.82	196	40969	99.88	ug/mL	98

(#) = qualifier out of range (m) = manual integration

Data File : c:\hpchem\1\data2\b8066.d Vial: 4
Acq On : 29 Jun 95 1:54 pm Operator: SCOTTV
Sample : 80 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jun 29 15:48 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Thu Jun 29 16:02:59 1995
Response via : Multiple Level Calibration

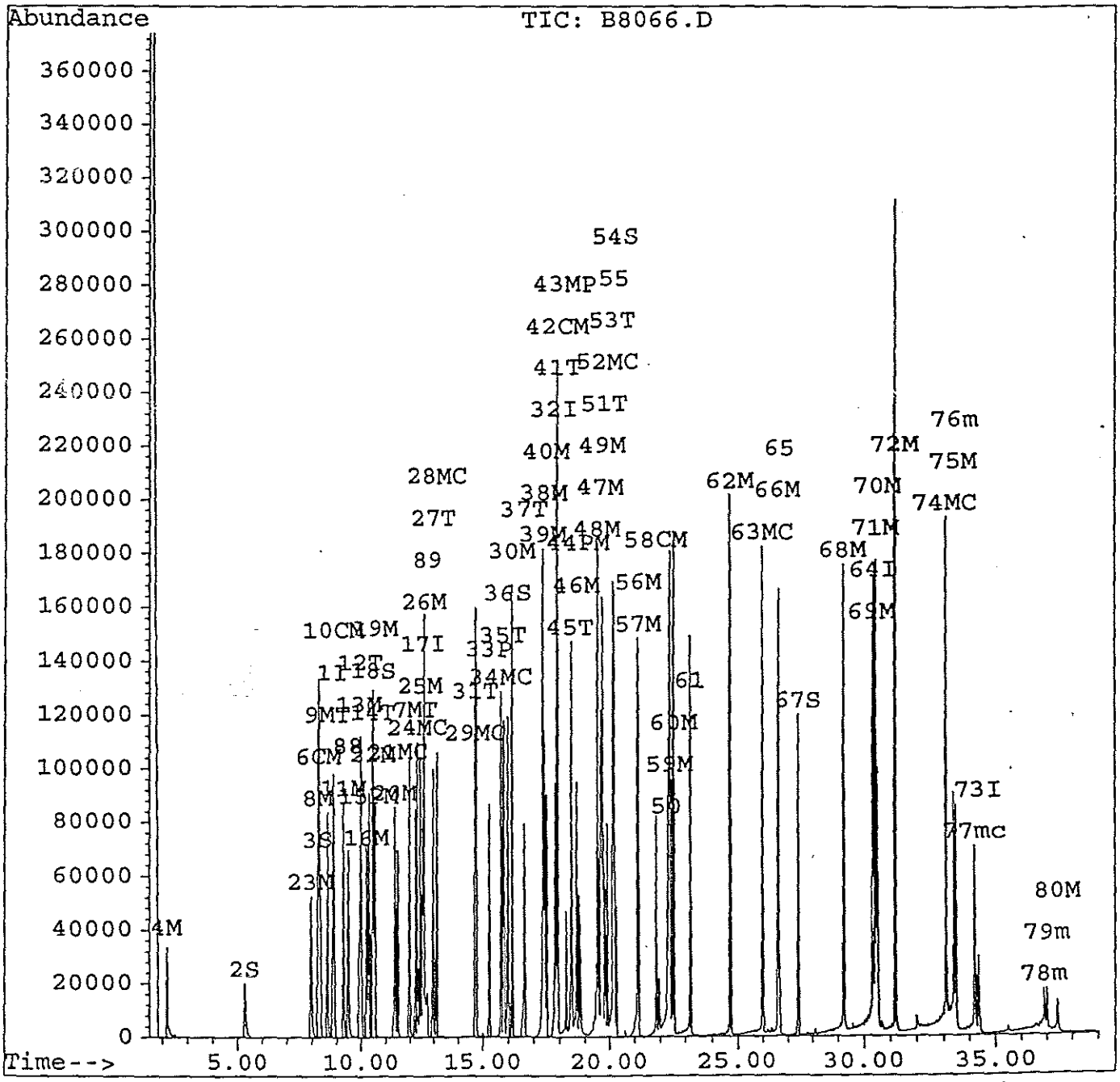
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
37)	2-Nitroaniline	16.65	65	50964	73.31	ug/mL#	100
38)	Dimethylphthalate	17.44	163	136916	83.25	ug/mL	99
39)	Acenaphthylene	17.38	152	188759	87.50	ug/mL	99
40)	2,6-Dinitrotoluene	17.52	165	31867	81.16	ug/mL	99
41)	3-Nitroaniline	17.94	138	32041	73.19	ug/mL	98
42)	Acenaphthene	17.94	153	113836	87.74	ug/mL	97
43)	2,4-Dinitrophenol	18.27	184	16701	76.64	ug/mL	95
44)	4-Nitrophenol	18.79	109	16775	80.01	ug/mL	92
45)	Dibenzofuran	18.48	168	161285	79.22	ug/mL	96
46)	2,4-Dinitrotoluene	18.69	165	36360	24.61	ug/mLm	32
47)	Diethylphthalate	19.66	149	156121	85.49	ug/mL	99
48)	Fluorene	19.52	166	129131	81.05	ug/mL	98
49)	4-Chlorophenyl-phenylether	19.71	204	60641	80.35	ug/mL	95
51)	4-Nitroaniline	19.81	138	26725	73.13	ug/mL	98
52)	4,6-Dinitro-2-methylphenol	19.91	198	19510	67.35	ug/mL	100
53)	n-Nitrosodiphenylamine	20.14	169	89777	80.35	ug/mL#	1
55)	1,2-Diphenylhydrazine (as	20.18	77	212575	79.84	ug/ml	100
56)	4-Bromophenyl-phenylether	21.16	248	35700	78.80	ug/mL#	90
57)	Hexachlorobenzene	21.14	284	39474	83.65	ug/mL#	58
58)	Pentachlorophenol	21.85	266	24486	81.02	ug/mL	97
59)	Phenanthrene	22.39	178	192397	79.97	ug/mL	99
60)	Anthracene	22.55	178	175030	78.92	ug/mLm	98
61)	Carbazole	23.18	167	156941	75.65	ug/ml	98
62)	Di-n-butylphthalate	24.70	149	277296	78.53	ug/mL	100
63)	Fluoranthene	25.99	202	188178	82.72	ug/mLm	90
65)	Benzidine	26.67	184	26067	37.84	ug/ml	100
66)	Pyrene	26.61	202	189569	80.17	ug/mL#	90
68)	Butylbenzylphthalate	29.21	149	119623	79.00	ug/mL	98
69)	Benzo[a]anthracene	30.34	228	161881	67.83	ug/mL	99
70)	3,3'-Dichlorobenzidine	30.52	252	49315	81.05	ug/mL#	95
71)	Chrysene	30.46	228	149573	112.69	ug/mLm	97
72)	bis(2-Ethylhexyl)phthalate	31.19	149	177386	82.58	ug/mL	99
74)	Di-n-octylphthalate	33.08	149	253727	78.11	ug/mL	99
75)	Benzo[b]fluoranthene	33.39	252	87059	55.35	ug/mL	98
76)	Benzo[k]fluoranthene	33.47	252	86496	113.98	ug/mLm	95
77)	Benzo[a]pyrene	34.20	252	66214	84.66	ug/mLm	98
78)	Indeno[1,2,3-cd]pyrene	36.86	276	17962	62.26	ug/mL	91
79)	Dibenz[a,h]anthracene	36.97	278	24144	86.91	ug/mL	98
80)	Benzo[g,h,i]perylene	37.39	276	17954	79.16	ug/mL	96
88)	Benzyl alcohol	9.47	79	46144	68.93	ug/ml#	62
89)	Benzoic acid	12.74	105	39585	64.41	ug/ml#	50

(#) = qualifier out of range (m) = manual integration

Data File : c:\hpchem\1\data2\b8066.d
Acq On : 29 Jun 95 1:54 pm
Sample : 80 STD..... Converted from RTE d
Misc :
Quant Time: Jun 29 15:48 1995

Vial: 4
Operator: SCOTTV
Inst : ABNA
BT Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Thu Jun 29 16:02:59 1995
Response via : Multiple Level Calibration



Quantitation Report

Data File : c:\hpchem\1\data2\b8067.d Vial: 5
Acq On : 29 Jun 95 2:47 pm Operator: SCOTTV
Sample : 120 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jun 29 15:51 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Thu Jun 29 16:02:59 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.83	152	17486	40.00	ug/mL	-0.20
17) Naphthalene-d8	12.55	136	72472	40.00	ug/mL	-0.20
32) Acenaphthene-d10	17.85	164	51963	40.00	ug/mL	-0.20
50) Phenanthrene-d10	22.30	188	91133	40.00	ug/ml	-0.22
64) Chrysene-d12	30.38	240	48900	40.00	ug/mL	-0.20
73) Perylene-d12	34.35	264	19054	40.00	ug/mL	-0.24
System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	5.29	112	23844	48.21	ug/mL	48.21%
3) Phenol-d5	8.26	99	39159	47.84	ug/mL	47.84%
18) Nitrobenzene-d5	10.51	82	37795	45.77	ug/mL	45.77%
36) 2-Fluorobiphenyl	16.00	172	78329	50.25	ug/mL	50.25%
54) 2,4,6-Tribromophenol	20.28	330	10094	41.01	ug/mL	41.01%
67) Terphenyl-d14	27.43	244	69677	53.68	ug/mL	53.68%
Target Compounds						Qvalue
4) N-nitrosodimethylamine	2.20	74	21898	86.64	ug/ml	100
6) Phenol	8.29	94	83427	114.43	ug/mL	100
7) bis(2-Chloroethyl)ether	12.24	93	109745	123.92	ug/mL	94
8) 2-Chlorophenol	8.26	128	64491	116.23	ug/mL	95
9) 1,3-Dichlorobenzene	8.64	146	74025	122.26	ug/mL	97
10) 1,4-Dichlorobenzene	8.89	146	76920	123.14	ug/mL	99
11) 1,2-Dichlorobenzene	9.28	146	73195	123.34	ug/mL	98
12) 2-Methylphenol	9.97	108	61421	116.66	ug/mLm	65
13) bis(2-chloroisopropyl)ethe	9.93	45	99893	122.30	ug/mL#	67
14) 4-Methylphenol	10.49	108	67600	117.01	ug/mL	98
15) N-Nitroso-Di-n-propylamine	10.34	70	64258	109.22	ug/mL	98
16) Hexachloroethane	10.22	117	39586	122.79	ug/mL#	85
19) Nitrobenzene	10.59	77	94004	122.39	ug/mL	90
20) Isophorone	11.41	82	176948	109.32	ug/mL	97
21) 2-Nitrophenol	11.51	139	45230	118.67	ug/mL	88
22) 2,4-Dimethylphenol	10.49	107	84313	118.24	ug/mL#	32
23) bis(2-Chloroethoxy)methane	7.97	93	87553	105.95	ug/mL#	42
24) 2,4-Dichlorophenol	12.34	162	67604	125.16	ug/mL	97
25) 1,2,4-Trichlorobenzene	12.45	180	71457	124.45	ug/mL	98
26) Naphthalene	12.61	128	215807	121.69	ug/mL#	90
27) 4-Chloroaniline	12.97	127	97528	116.25	ug/mL	99
28) Hexachlorobutadiene	13.13	225	39610	118.15	ug/mL	98
29) 4-Chloro-3-methylphenol	14.71	107	78147	112.36	ug/mL#	42
30) 2-Chloronaphthalene	16.17	162	162744	129.05	ug/ml	98
31) 2-Methylnaphthalene	14.74	142	207947	146.07	ug/mL	99
33) Hexachlorocyclopentadiene	15.26	237	42408	117.28	ug/mL	99
34) 2,4,6-Trichlorophenol	15.73	196	56521	104.74	ug/mL	99
35) 2,4,5-Trichlorophenol	15.82	196	59502	141.34	ug/mL	98

(#) = qualifier out of range (m) = manual integration

Data File : c:\hpchem\1\data2\b8067.d Vial: 5
Acq On : 29 Jun 95 2:47 pm Operator: SCOTTV
Sample : 120 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jun 29 15:51 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Thu Jun 29 16:02:59 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
37)	2-Nitroaniline	16.67	65	79009	110.73	ug/mL#	100
38)	Dimethylphthalate	17.44	163	211012	125.00	ug/mL	98
39)	Acenaphthylene	17.38	152	270910	122.35	ug/mL	98
40)	2,6-Dinitrotoluene	17.54	165	29612	73.48	ug/mL	94
41)	3-Nitroaniline	17.96	138	55503	123.52	ug/mL	98
42)	Acenaphthene	17.94	153	165891	124.57	ug/mL	99
43)	2,4-Dinitrophenol	18.29	184	27771	124.16	ug/mL#	79
44)	4-Nitrophenol	18.81	109	21695	100.82	ug/mL	89
45)	Dibenzofuran	18.50	168	253380	121.25	ug/mL	99
46)	2,4-Dinitrotoluene	18.69	165	41067	27.09	ug/mLm	32
47)	Diethylphthalate	19.66	149	237907	126.93	ug/mL	99
48)	Fluorene	19.52	166	200637	122.69	ug/mL	98
49)	4-Chlorophenyl-phenylether	19.72	204	96628	124.74	ug/mL	99
51)	4-Nitroaniline	19.83	138	29661	78.31	ug/mL	97
52)	4,6-Dinitro-2-methylphenol	19.91	198	21513	71.65	ug/mL	100
53)	n-Nitrosodiphenylamine	20.14	169	132050	114.02	ug/mL#	1
55)	1,2-Diphenylhydrazine (as	20.20	77	317865	115.18	ug/ml	100
56)	4-Bromophenyl-phenylether	21.16	248	53803	114.58	ug/mL	93
57)	Hexachlorobenzene	21.14	284	57426	117.41	ug/mL#	64
58)	Pentachlorophenol	21.86	266	39063	124.70	ug/mL	99
59)	Phenanthrene	22.40	178	298512	119.71	ug/mL	99
60)	Anthracene	22.55	178	218495	95.05	ug/mLm	98
61)	Carbazole	23.19	167	202684	94.26	ug/ml	99
62)	Di-n-butylphthalate	24.71	149	373826	102.14	ug/mL	99
63)	Fluoranthene	26.00	202	248710	105.48	ug/mLm	80
65)	Benzidine	26.68	184	34644	64.79	ug/ml	100
66)	Pyrene	26.64	202	253494	138.10	ug/mL	98
68)	Butylbenzylphthalate	29.22	149	145168	123.50	ug/mL	100
69)	Benzo[a]anthracene	30.36	228	190127	102.62	ug/mL	99
70)	3,3'-Dichlorobenzidine	30.52	252	54461	115.29	ug/mL	98
71)	Chrysene	30.46	228	163915	159.08	ug/mLm	98
72)	bis(2-Ethylhexyl)phthalate	31.19	149	217818	130.62	ug/mL	100
74)	Di-n-octylphthalate	33.10	149	288602	118.94	ug/mL	99
75)	Benzo[b]fluoranthene	33.39	252	90431	76.96	ug/mL	99
76)	Benzo[k]fluoranthene	34.20	252	74945	132.20	ug/mLm	93
77)	Benzo[a]pyrene	33.39	252	90431	154.77	ug/mL	100
78)	Indeno[1,2,3-cd]pyrene	36.86	276	29241	135.68	ug/mLm	95
79)	Dibenz[a,h]anthracene	36.97	278	34850	167.92	ug/mL	97
80)	Benzo[g,h,i]perylene	37.40	276	29268	172.74	ug/mL	96
88)	Benzyl alcohol	9.49	79	69379	138.74	ug/ml#	66
89)	Benzoic acid	12.84	105	64351	140.17	ug/ml#	42

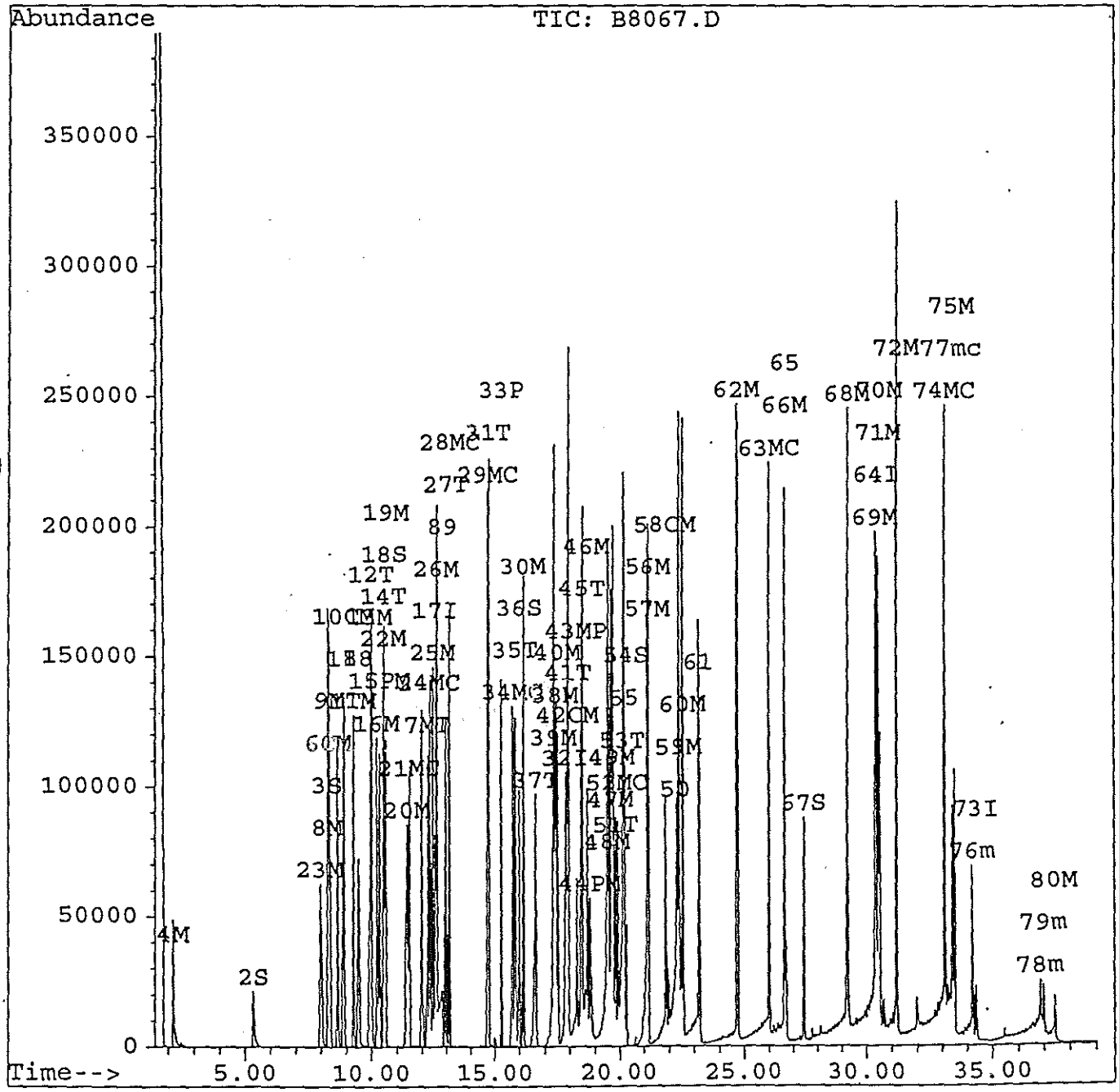
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data2\b8067.d
Acq On : 29 Jun 95 2:47 pm
Sample : 120 STD..... Converted from RTE d
Misc :
Quant Time: Jun 29 15:51 1995

Vial: 5
Operator: SCOTTV
Inst : ABNA
BT Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Thu Jun 29 16:02:59 1995
Response via : Multiple Level Calibration



Quantitation Report

Data File : c:\hpchem\1\data2\b8068.d Vial: 6
Acq On : 29 Jun 95 3:41 pm Operator: SCOTTV
Sample : 160 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jun 29 16:01 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Thu Jun 29 16:02:59 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.83	152	18521	40.00	ug/mL	-0.20
17) Naphthalene-d8	12.55	136	77831	40.00	ug/mL	-0.20
32) Acenaphthene-d10	17.85	164	56471	40.00	ug/mL	-0.20
50) Phenanthrene-d10	22.31	188	98564	40.00	ug/ml	-0.21
64) Chrysene-d12	30.37	240	42364	40.00	ug/mL	-0.21
73) Perylene-d12	34.35	264	21318	40.00	ug/mL	-0.25
System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	5.29	112	22408	42.77	ug/mL	42.77%
3) Phenol-d5	8.26	99	37283	43.00	ug/mL	43.00%
18) Nitrobenzene-d5	10.53	82	37515	42.31	ug/mL	42.31%
36) 2-Fluorobiphenyl	16.00	172	79787	47.10	ug/mL	47.10%
54) 2,4,6-Tribromophenol	20.26	330	9213	34.61	ug/mL	34.61%
67) Terphenyl-d14	27.44	244	60202	53.54	ug/mL	53.54%
Target Compounds						Qvalue
4) N-nitrosodimethylamine	2.20	74	27534	102.85	ug/ml	100
6) Phenol	8.30	94	101094	130.92	ug/mL	100
7) bis(2-Chloroethyl)ether	12.26	93	142519	151.94	ug/mL	99
8) 2-Chlorophenol	8.26	128	81026	137.87	ug/mL	92
9) 1,3-Dichlorobenzene	8.64	146	95571	149.03	ug/mL	96
10) 1,4-Dichlorobenzene	8.89	146	98332	148.62	ug/mL	97
11) 1,2-Dichlorobenzene	9.28	146	94586	150.48	ug/mL	98
12) 2-Methylphenol	9.99	108	78868	141.42	ug/mLm	67
13) bis(2-chloroisopropyl)ethe	9.93	45	128070	148.03	ug/mL#	71
14) 4-Methylphenol	10.49	108	86139	140.77	ug/mL	99
15) N-Nitroso-Di-n-propylamine	10.36	70	86937	139.51	ug/mL	97
16) Hexachloroethane	10.22	117	50764	148.66	ug/mL#	85
19) Nitrobenzene	10.59	77	99277	120.35	ug/mL#	77
20) Isophorone	11.43	82	229160	131.83	ug/mL	96
21) 2-Nitrophenol	11.51	139	59021	144.20	ug/mL	90
22) 2,4-Dimethylphenol	10.49	107	107437	140.29	ug/mL#	32
23) bis(2-Chloroethoxy)methane	7.99	93	121874	137.33	ug/mL#	42
24) 2,4-Dichlorophenol	12.34	162	83695	144.28	ug/mL	99
25) 1,2,4-Trichlorobenzene	12.46	180	91690	148.69	ug/mL	99
26) Naphthalene	12.63	128	290465	152.51	ug/mL#	92
27) 4-Chloroaniline	12.98	127	131486	145.94	ug/mL	99
28) Hexachlorobutadiene	13.13	225	50262	139.60	ug/mL	98
29) 4-Chloro-3-methylphenol	14.71	107	97589	130.65	ug/mL#	21
30) 2-Chloronaphthalene	16.17	162	210252	155.24	ug/ml	99
31) 2-Methylnaphthalene	14.75	142	258095	168.82	ug/mL	100
33) Hexachlorocyclopentadiene	15.27	237	56861	144.70	ug/mL	99
34) 2,4,6-Trichlorophenol	15.73	196	80405	137.10	ug/mL	99
35) 2,4,5-Trichlorophenol	15.82	196	71533	156.35	ug/mL	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data2\b8068.d Vial: 6
Acq On : 29 Jun 95 3:41 pm Operator: SCOTTV
Sample : 160 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jun 29 16:01 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Thu Jun 29 16:02:59 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
37)	2-Nitroaniline	16.67	65	104112	134.27	ug/mL#	100
38)	Dimethylphthalate	17.46	163	267039	145.56	ug/mLm	99
39)	Acenaphthylene	17.39	152	359372	149.34	ug/mL	98
40)	2,6-Dinitrotoluene	17.54	165	64527	147.34	ug/mLm	93
41)	3-Nitroaniline	17.96	138	73675	150.87	ug/mL	99
42)	Acenaphthene	17.95	153	220007	152.02	ug/mL	99
43)	2,4-Dinitrophenol	18.29	184	29920	123.09	ug/mLm	45
44)	4-Nitrophenol	18.81	109	28944	123.77	ug/mLm	88
45)	Dibenzofuran	18.51	168	323162	142.30	ug/mL	99
46)	2,4-Dinitrotoluene	18.72	165	65773	39.92	ug/mLm	33
47)	Diethylphthalate	19.66	149	300649	147.60	ug/mLm	99
48)	Fluorene	19.53	166	261793	147.31	ug/mL	99
49)	4-Chlorophenyl-phenylether	19.72	204	120997	143.73	ug/mL	96
51)	4-Nitroaniline	19.82	138	76426	186.57	ug/mLm	99
52)	4,6-Dinitro-2-methylphenol	19.91	198	46856	144.29	ug/mLm	100
53)	n-Nitrosodiphenylamine	20.15	169	169807	135.57	ug/mLm	1
55)	1,2-Diphenylhydrazine (as	20.18	77	396873	132.97	ug/ml	100
56)	4-Bromophenyl-phenylether	21.17	248	68536	134.95	ug/mL	93
57)	Hexachlorobenzene	21.15	284	47734	90.23	ug/mLm	34
58)	Pentachlorophenol	21.86	266	50039	147.70	ug/mLm	96
59)	Phenanthrene	22.39	178	345582	128.14	ug/mL	99
60)	Anthracene	22.54	178	274561	110.43	ug/mLm	99
61)	Carbazole	23.20	167	261747	112.55	ug/mlm	98
62)	Di-n-butylphthalate	24.72	149	394286	99.61	ug/mL	100
63)	Fluoranthene	25.99	202	371553	145.70	ug/mLm	88
65)	Benzidine	26.67	184	54047	116.67	ug/mlm	100
66)	Pyrene	26.63	202	260282	163.67	ug/mL	92
68)	Butylbenzylphthalate	29.23	149	170265	167.19	ug/mL#	86
69)	Benzo[a]anthracene	30.35	228	225327	140.38	ug/mL	100
70)	3,3'-Dichlorobenzidine	30.51	252	60251	147.23	ug/mL	98
71)	Chrysene	30.47	228	177916	199.31	ug/mLm	97
72)	bis(2-Ethylhexyl)phthalate	31.18	149	254505	176.17	ug/mL	100
74)	Di-n-octylphthalate	33.09	149	333391	122.80	ug/mL	99
75)	Benzo[b]fluoranthene	33.40	252	102037	77.62	ug/mL#	95
76)	Benzo[k]fluoranthene	33.48	252	94035	148.26	ug/mLm	98
77)	Benzo[a]pyrene	34.19	252	95530	146.13	ug/mL	97
78)	Indeno[1,2,3-cd]pyrene	36.87	276	40742	168.97	ug/mL	92
79)	Dibenz[a,h]anthracene	36.97	278	40395	173.97	ug/mL	96
80)	Benzo[g,h,i]perylene	37.41	276	44943	237.08	ug/mLm	80
88)	Benzyl alcohol	9.49	79	89694	160.31	ug/ml#	20
89)	Benzoic acid	12.88	105	58374	113.64	ug/ml#	55

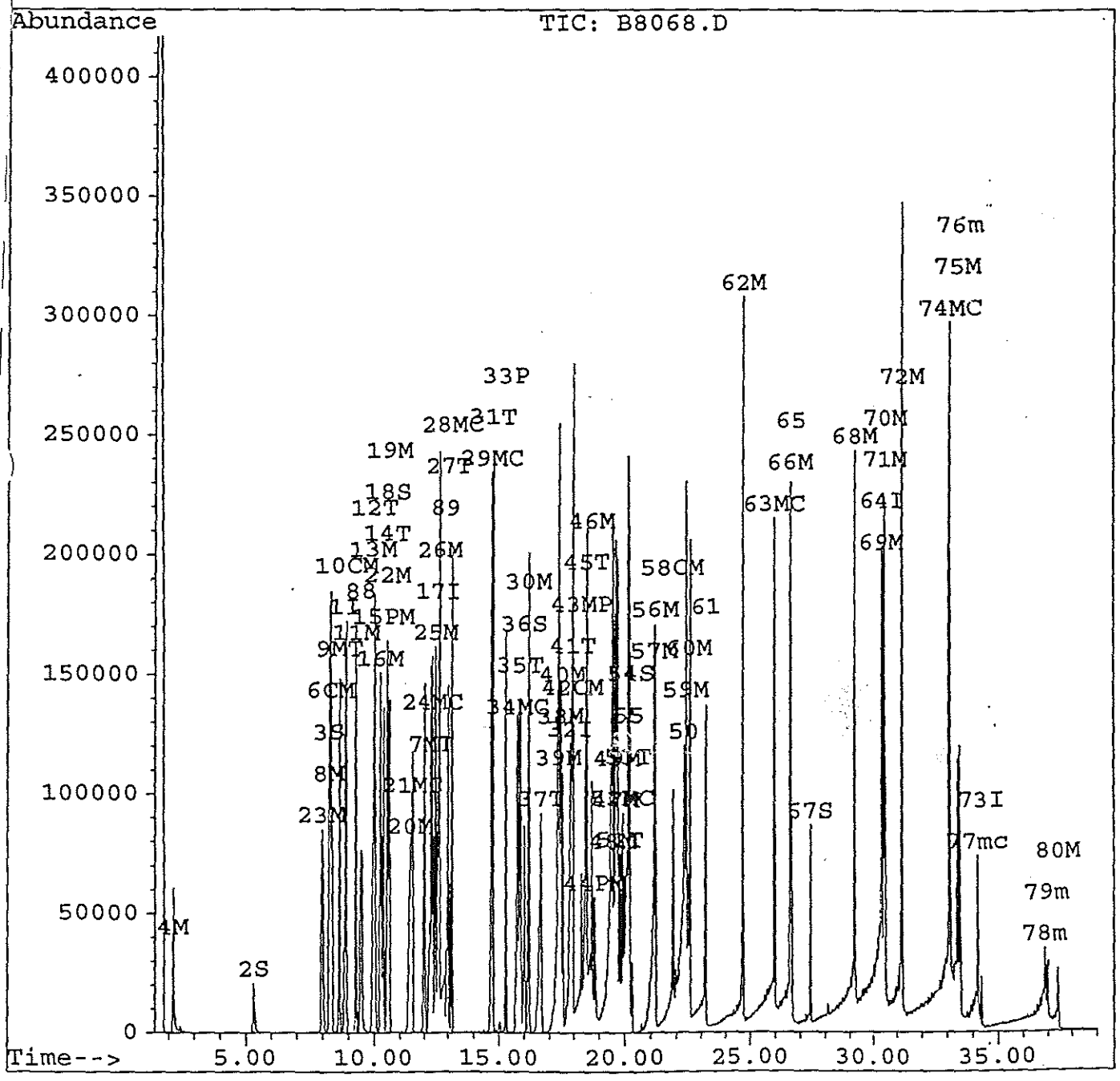
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data2\b8068.d
Acq On : 29 Jun 95 3:41 pm
Sample : 160 STD..... Converted from RTE d
Misc :
Quant Time: Jun 29 16:01 1995

Vial: 6
Operator: SCOTTV
Inst : ABNA
BT Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Thu Jun 29 16:02:59 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: B8084.D DFTPP Injection Date: 7/1/95

Instrument ID: ABNA DFTPP Injection Time: 1803

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
51	30.0 - 80.0% of mass 198	57.8
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	68.2
70	Less than 2.0% of mass 69	0.0 (0.0)1
127	25.0 - 75.0% of mass 198	47.7
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	7.1
275	10.0 - 30.0% of mass 198	20.1
365	Greater than 0.75% of mass 198	2.0
441	Present, but less than mass 443	6.6
442	40.0 - 110.0% of mass 198	40.1
443	15.0 - 24.0% of mass 442	8.1 (20.2)2

1-Value is % mass 69 2-Value is % mass 442

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

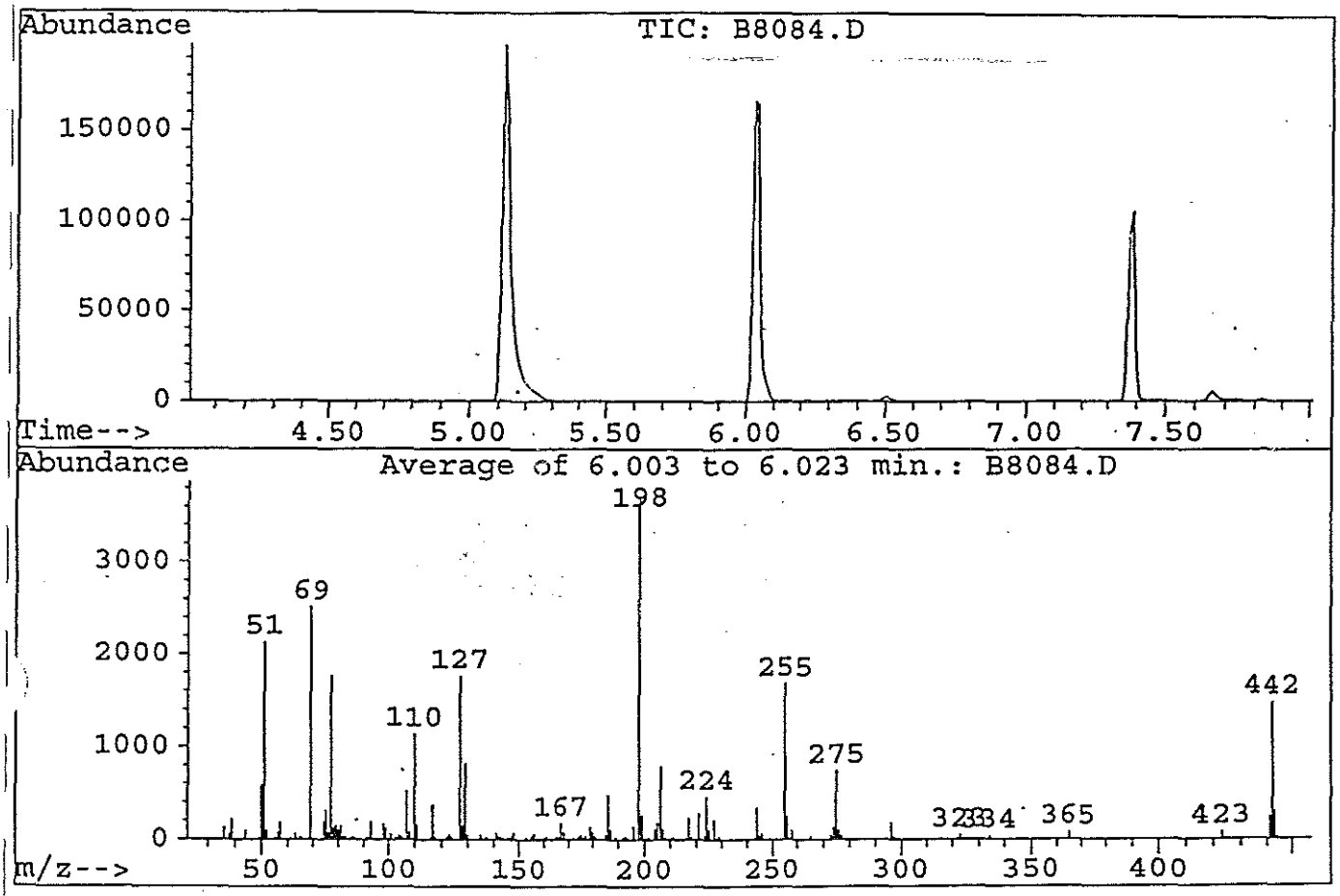
	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD050	50 STD	B8085.D	7/1/95	1824
02	SBLK01	BLANK	B8086.D	7/1/95	1915
03	9526798B	9526798B	B8087.D	7/1/95	2006
04	9526799B	9526799B	B8088.D	7/1/95	2057
05	9526800B	9526800B	B8089.D	7/1/95	2149
06	9526801B	9526801B	B8090.D	7/1/95	2240
07	9526802B	9526802B	B8091.D	7/1/95	2331
08	26801MS	26801MS	B8092.D	7/2/95	0023
09	26801MSD	26801MSD	B8093.D	7/2/95	0114
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

DFTPP

Data File : C:\HPCHEM\1\DATA2\B8084.D
Acq On : 1 Jul 95 6:03 pm
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: 312

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	57.8	2131	PASS
68	69	0	2	0.0	0	PASS
69	198	0	100	68.2	2511	PASS
70	69	0	2	0.0	0	PASS
127	198	40	60	47.7	1759	PASS
197	198	0	1	0.0	0	PASS
198	198	100	100	100.0	3684	PASS
199	198	5	9	7.1	260	PASS
275	198	10	30	20.1	741	PASS
365	198	1	100	2.0	75	PASS
441	443	0	100	80.9	242	PASS
442	198	40	100	40.1	1477	PASS
443	442	17	23	20.2	299	PASS

B8084.D BNACLP.M Sat Jul 01 17:15:21 1995 BNA

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
3[illegible].00	127	56.00	75	78.05	127	92.95	187
3[illegible].95	69	57.00	182	78.95	150	93.95	16
3[illegible].00	221	61.00	25	79.95	105	98.05	163
[illegible]90	8	63.00	63	80.95	150	99.05	122
[illegible]00	17	65.10	28	81.95	36	100.05	12
4[illegible].95	98	69.00	2511	82.95	31	101.05	62
49.10	19	73.10	15	84.95	29	102.95	25
5[illegible].00	589	74.00	186	85.95	35	103.95	46
5[illegible].00	2131	75.00	310	86.95	15	104.95	37
52.00	93	76.05	80	91.05	26	107.05	520
55.10	21	77.05	1766	92.05	27	107.95	81

a[illegible]e of 6.003 to 6.023 min.: B8084.D

[illegible]/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
0[illegible].95	1141	129.95	56	156.05	60	177.05	34
11.05	165	135.05	47	160.05	22	178.95	129
.1[illegible].05	26	137.05	19	161.05	31	180.05	74
.1[illegible].05	375	140.95	70	164.95	33	180.95	34
.18.05	25	141.95	25	166.05	24	185.15	52
.2[illegible].95	32	142.95	20	167.05	174	186.05	481
.2[illegible].05	51	146.05	15	168.05	72	187.05	110
.2[illegible].95	24	147.05	47	172.05	19	188.95	27
.27.05	1759	147.95	76	174.05	32	192.05	30
.2[illegible].05	147	153.05	29	175.05	44	193.05	31
.2[illegible].95	819	155.05	39	176.05	18	196.05	145

:age of 6.003 to 6.023 min.: B8084.D

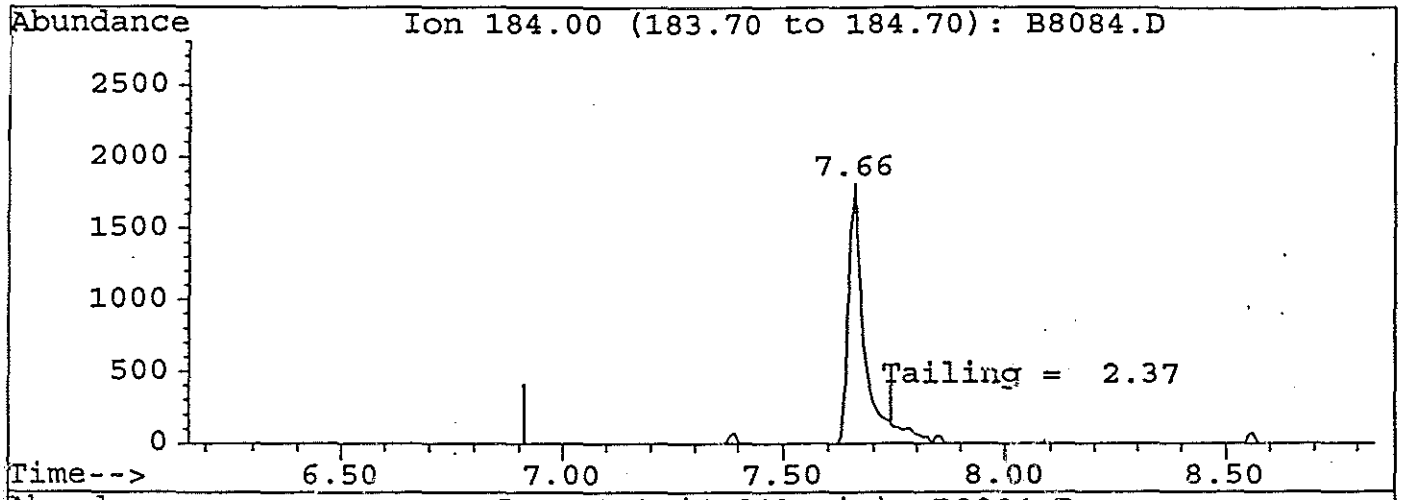
[illegible]/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
[illegible].05	3684	211.15	29	237.00	10	259.10	15
1[illegible].05	260	216.05	17	243.10	22	265.00	35
200.05	16	217.05	228	244.10	336	273.00	48
201.55	22	218.05	27	245.10	40	274.10	130
2[illegible].05	113	221.05	274	245.90	12	275.10	741
2[illegible].05	182	223.15	46	246.10	58	276.10	103
206.15	793	224.10	463	249.00	11	277.10	50
2[illegible].15	112	225.00	109	255.10	1681	296.10	179
2[illegible].15	22	227.00	210	256.10	253	297.00	24
210.15	16	228.00	21	257.10	18	323.10	45
21[illegible].45	18	229.10	32	258.10	92	334.20	32

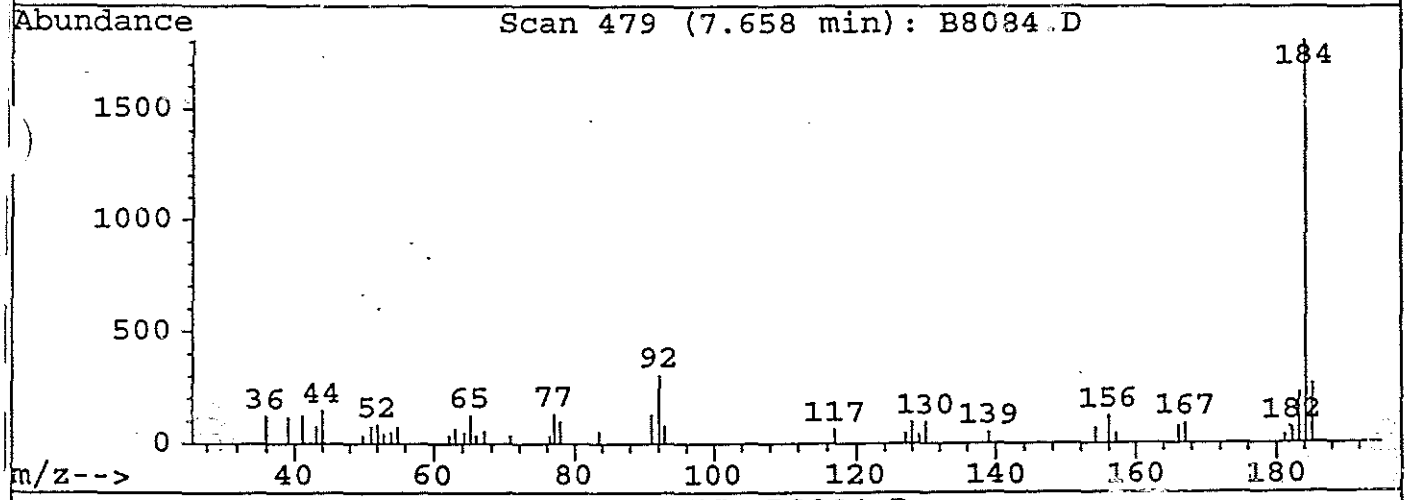
r[illegible]ge of 6.003 to 6.023 min.: B8084.D

[illegible]m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
3[illegible].10	75						
423.15	81						
4[illegible].15	13						
4[illegible].15	242						
442.15	1477						
44[illegible].15	299						
4[illegible].15	18						

Data File : C:\HPCHEM\1\DATA2\B8084.D Vial: 1
Acq On : 1 Jul 95 6:03 pm Operator: SCOTTV
Sample : DFTPP..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jul 1 17:14 1995

Method : C:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Thu Jun 29 16:02:59 1995
Response via : Multiple Level Calibration





TIC: B8084.D

(2) Benzidine
7.66min 14.93ug/ml
response 4588

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

Data File : C:\HPCHEM\1\DATA2\B8085.D Vial: 2
Acq On : 1 Jul 95 6:24 pm Operator: SCOTTV SUP
Sample : 50 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\BNACLP.M
File : CLP BNA Calibration
Last Update : Thu Jun 29 16:02:59 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)
T		1,4-Dichlorobenzene-d4	1.000	1.000	0.0	131	0.10
		2-Fluorophenol	1.023	1.011	1.2	136	0.08
S		Phenol-d5	1.669	1.652	1.0	137	0.10
M		N-nitrosodimethylamine	0.430	0.468	-8.9	142	0.06
		Pyridine	2.414	0.000#	100.0#	.0#	-1.62#
	M	Phenol	1.534	1.598	-4.2	136	0.10
MT		bis(2-Chloroethyl)ether	1.998	2.090	-4.6	136	0.10
		2-Chlorophenol	1.211	1.249	-3.1	137	0.10
	T	1,3-Dichlorobenzene	1.382	1.424	-3.1	133	0.10
CM		1,4-Dichlorobenzene	1.425	1.470	-3.1	134	0.10
M		1,2-Dichlorobenzene	1.360	1.406	-3.4	131	0.10
		2-Methylphenol	1.126	1.178	-4.6	139	0.10
M		bis(2-chloroisopropyl)ether	1.772	1.868	-5.4	143	0.10
T		4-Methylphenol	1.235	1.286	-4.1	142	0.10
	M	N-Nitroso-Di-n-propylamine	1.207	1.316	-9.0	146	0.12
		Hexachloroethane	0.720	0.740	-2.8	133	0.10
I		Naphthalene-d8	1.000	1.000	0.0	135	0.10
S		Nitrobenzene-d5	0.401	0.406	-1.1	144	0.10
M		Nitrobenzene	0.391	0.392	-0.2	132	0.10
M		Isophorone	0.824	0.780	5.3	139	0.10
MC		2-Nitrophenol	0.194	0.192	1.1	137	0.10
M		2,4-Dimethylphenol	0.373	0.377	-1.0	139	0.10
M		bis(2-Chloroethoxy)methane	0.396	0.393	0.7	141	0.10
MC		2,4-Dichlorophenol	0.297	0.289	2.6	131	0.12
M		1,2,4-Trichlorobenzene	0.320	0.318	0.6	131	0.10
M		Naphthalene	0.983	0.982	0.1	136	0.12
T		4-Chloroaniline	0.434	0.421	3.2	134	0.10
MC		Hexachlorobutadiene	0.182	0.179	1.8	125	0.12
MC		4-Chloro-3-methylphenol	0.342	0.353	-3.2	142	0.12
M		2-Chloronaphthalene	0.710	0.701	1.4	132	0.12
T		2-Methylnaphthalene	0.939	0.957	-1.9	135	0.12
I		Acenaphthene-d10	1.000	1.000	0.0	135	0.12
P		Hexachlorocyclopentadiene	0.246	0.224	8.7	134	0.12
MC		2,4,6-Trichlorophenol	0.356	0.355	0.2	137	0.12
T		2,4,5-Trichlorophenol	0.365	0.372	-1.8	132	0.12
S		2-Fluorobiphenyl	1.195	1.194	0.1	133	0.10
T		2-Nitroaniline	0.458	0.462	-0.9	141	0.14
M		Dimethylphthalate	1.302	1.320	-1.3	133	0.12
M		Acenaphthylene	1.722	1.767	-2.6	137	0.12
		2,6-Dinitrotoluene	0.265	0.297	-12.2	142	0.12

(#) = Out of Range

Data File : C:\HPCHEM\1\DATA2\B8085.D Vial: 2
Acq On : 1 Jul 95 6:24 pm 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 29 16:02:59 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)
T	3-Nitroaniline	0.309	0.291	5.7	140	0.12
M	Acenaphthene	1.051	1.078	-2.5	139	0.14
P	2,4-Dinitrophenol	0.140	0.149	-6.2	158#	0.14
PM	4-Nitrophenol	0.142	0.134	5.3	127	0.14
	Dibenzofuran	1.526	1.505	1.4	135	0.12
	2,4-Dinitrotoluene	0.319	0.340	-6.4	127	0.14
M	Diethylphthalate	1.457	1.296	11.0	119	0.12
M	Fluorene	1.224	1.198	2.2	133	0.14
	4-Chlorophenyl-phenylether	0.588	0.592	-0.6	134	0.12
	Phenanthrene-d10	1.000	1.000	0.0	136	0.14
	4-Nitroaniline	0.162	0.148	8.4	107	0.12
C	4,6-Dinitro-2-methylphenol	0.107	0.106	0.7	121	0.12
T	n-Nitrosodiphenylamine	0.478	0.495	-3.5	138	0.12
	2,4,6-Tribromophenol	0.086	0.084	2.6	135	0.14
	1,2-Diphenylhydrazine (as a	1.124	1.152	-2.5	137	0.12
	4-Bromophenyl-phenylether	0.193	0.196	-1.6	137	0.14
	Hexachlorobenzene	0.188	0.164	13.0	132	0.14
M	Pentachlorophenol	0.136	0.124	8.8	128	0.14
M	Phenanthrene	1.045	1.051	-0.5	134	0.14
M	Anthracene	0.919	0.912	0.8	122	0.14
	Carbazole	0.837	0.736	12.1	113	0.14
M	Di-n-butylphthalate	1.451	1.546	-6.6	125	0.14
MC	Fluoranthene	1.043	1.069	-2.5	128	0.16
	Chrysene-d12	1.000	1.000	0.0	85	0.16
	Benzidine	0.270	0.283	-4.7	82	-4.21#
M	Pyrene	1.423	1.605	-12.8	113	0.16
S	Terphenyl-d14	0.988	1.063	-7.6	109	0.16
M	Butylbenzylphthalate	0.908	0.913	-0.5	90	0.14
M	Benzo[a]anthracene	1.226	1.210	1.3	92	0.18
M	3,3'-Dichlorobenzidine	0.374	0.336	10.2	78	0.16
M	Chrysene	1.095	0.995	9.1	82	0.18
M	bis(2-Ethylhexyl)phthalate	1.363	1.300	4.7	87	0.15
I	Perylene-d12	1.000	1.000	0.0	66	0.17
MC	Di-n-octylphthalate	4.351	3.996	8.2	76	0.15
M	Benzo[b]fluoranthene	1.443	1.567	-8.6	72	0.17
m	Benzo[k]fluoranthene	1.324	1.406	-6.2	72	0.17
mc	Benzo[a]pyrene	1.240	1.216	1.9	70	0.17
m	Indeno[1,2,3-cd]pyrene	0.434	0.402	7.4	85	0.19
	Dibenz[a,h]anthracene	0.483	0.495	-2.6	108	0.19

(#) = Out of Range

175

Data File : C:\HPCHEM\1\DATA2\B8085.D Vial: 2
Acq On : 1 Jul 95 6:24 pm 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 29 16:02:59 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)
M	Benzo[g,h,i]perylene	0.444	0.466	-4.9	97	0.21
	1-Methyl naphthalene	0.000	0.000#	0.0	0#	-13.11#
	7,12-Dimethylbenz(a)anthrac	0.000	0.000#	0.0	63	0.17
	Quinoline	0.000	0.000#	0.0	136	0.10
	Thiophenol	0.000	0.000#	0.0	0#	-5.47#
	4-Methyl chrysene	0.000	0.000#	0.0	84	0.16
	Dibenz(a,j)acridine	0.000	0.000#	0.0	101	0.15
	Indene	0.000	0.000#	0.0	0#	-9.03#
	Benzyl alcohol	0.000	0.000#	0.0	138	0.10
	Benzoic acid	0.000	0.000#	0.0	198#	0.16

(#) = Out of Range SPCC's out = 0 CCC's out = 0

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: EMSL ANALYTICAL Contract: _____

Project No. _____ Site: _____ Location: _____ Group: _____

Instrument ID: ABNA Calibration Date: 7/1/95 Time: 1824

Lab File ID: B8085.D Init. Calib. Date(s): 7/1/95 1/0/00

Init. Calib. Times: 1824 0000

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
Phenol	1.534	1.598		-4.2	30.0
bis(2-Chloroethyl)ether	1.998	2.090		-4.6	
2-Chlorophenol	1.211	1.249		-3.1	
1,3-Dichlorobenzene	1.382	1.424		-3.0	
1,4-Dichlorobenzene	1.425	1.470		-3.2	30.0
1,2-Dichlorobenzene	1.360	1.406		-3.4	
2-Methylphenol	1.126	1.178		-4.6	
bis(2-chloroisopropyl)ether	1.772	1.868		-5.4	
4-Methylphenol	1.235	1.286		-4.1	
N-Nitroso-Di-n-propylamine	1.207	1.316	0.050	-9.0	
Hexachloroethane	0.720	0.740		-2.8	
Nitrobenzene	0.391	0.392		-0.3	
Isophorone	0.824	0.780		5.3	
2-Nitrophenol	0.194	0.192		1.0	30.0
2,4-Dimethylphenol	0.373	0.377		-1.1	
bis(2-Chloroethoxy)methane	0.396	0.393		0.8	
2,4-Dichlorophenol	0.297	0.289		2.7	30.0
1,2,4-Trichlorobenzene	0.320	0.318		0.6	
Naphthalene	0.983	0.982		0.1	
4-Chloroaniline	0.434	0.421		3.0	
Hexachlorobutadiene	0.182	0.179		1.6	30.0
4-Chloro-3-methylphenol	0.342	0.353		-3.2	30.0
2-Methylnaphthalene	0.939	0.957		-1.9	
Hexachlorocyclopentadiene	0.246	0.224	0.050	8.9	
2,4,6-Trichlorophenol	0.356	0.355		0.3	30.0
2,4,5-Trichlorophenol	0.365	0.372		-1.9	
2-Chloronaphthalene	0.710	0.701		1.3	
2-Nitroaniline	0.458	0.462		-0.9	
Dimethylphthalate	1.302	1.320		-1.4	
Acenaphthylene	1.722	1.767		-2.6	
2,6-Dinitrotoluene	0.265	0.297		-12.1	
3-Nitroaniline	0.309	0.291		5.8	
Acenaphthene	1.051	1.078		-2.6	30.0
2,4-Dinitrophenol	0.140	0.149	0.050	-6.4	
4-Nitrophenol	0.142	0.134	0.050	5.6	
Dibenzofuran	1.526	1.505		1.4	
2,4-Dinitrotoluene	0.319	0.340		-6.6	

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: 7/1/95 Time: 1824

Lab File ID: B8085.D Init. Calib. Date(s): 7/1/95 1/0/00

Init. Calib. Times: 1824 0000

COMPOUND	RRF	RRF50	MIN RRF	%D	MAX %D
Diethylphthalate	1.457	1.296		11.1	
Fluorene	1.224	1.198		2.1	
4-Chlorophenyl-phenylether	0.588	0.592		-0.7	
4-Nitroaniline	0.162	0.148		8.6	
4,6-Dinitro-2-methylphenol	0.107	0.106		0.9	30.0
n-Nitrosodiphenylamine	0.478	0.495		-3.6	
4-Bromophenyl-phenylether	0.193	0.196		-1.6	
Hexachlorobenzene	0.188	0.164		12.8	
Pentachlorophenol	0.136	0.124		8.8	30.0
Phenanthrene	1.045	1.051		-0.6	
Anthracene	0.919	0.912		0.8	
Carbazole	0.837	0.736		12.1	
Di-n-butylphthalate	1.451	1.546		-6.5	
Fluoranthene	1.043	1.069		-2.5	30.0
Pyrene	1.423	1.605		-12.8	
Butylbenzylphthalate	0.908	0.913		-0.6	
Benzo[a]anthracene	1.226	1.210		1.3	
3,3'-Dichlorobenzidine	0.374	0.336		10.2	
Chrysene	1.095	0.995		9.1	
bis(2-Ethylhexyl)phthalate	1.363	1.300		4.6	
Di-n-octylphthalate	4.351	3.996		8.2	30.0
Benzo[b]fluoranthene	1.443	1.567		-8.6	
Benzo[k]fluoranthene	1.324	1.406		-6.2	
Benzo[a]pyrene	1.240	1.216		1.9	30.0
Indeno[1,2,3-cd]pyrene	0.434	0.402		7.4	
Dibenz[a,h]anthracene	0.483	0.495		-2.5	
Benzo[g,h,i]perylene	0.444	0.466		-5.0	
2-Fluorophenol	1.023	1.011		1.2	
Phenol-d5	1.669	1.652		1.0	
Nitrobenzene-d5	0.401	0.406		-1.2	
2-Fluorobiphenyl	1.195	1.194		0.1	
2,4,6-Tribromophenol	0.086	0.084		2.3	
Terphenyl-d14	0.988	1.063		-7.6	

All other compounds must meet a minimum RRF of 0.010.

Data File : c:\hpchem\1\data2\b8085.d Vial: 2
Acq On : 1 Jul 95 6:24 pm Operator: SCOTTV
Sample : 50 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jul 5 11:34 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Thu Jun 29 16:02:59 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.91	152	18999	40.00	ug/mL	0.10
17) Naphthalene-d8	12.63	136	80329	40.00	ug/mL	0.10
32) Acenaphthene-d10	17.94	164	55183	40.00	ug/mL	0.12
50) Phenanthrene-d10	22.44	188	91908	40.00	ug/ml	0.14
64) Chrysene-d12	30.53	240	55310	40.00	ug/mL	0.16
73) Perylene-d12	34.52	264	25030	40.00	ug/mL	0.17
System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	5.37	112	24000	49.41	ug/mL	49.41%
3) Phenol-d5	8.31	99	39236	49.48	ug/mL	49.48%
18) Nitrobenzene-d5	10.58	82	40719	50.56	ug/mL	50.56%
36) 2-Fluorobiphenyl	16.09	172	82390	49.96	ug/mL	49.96%
54) 2,4,6-Tribromophenol	20.38	330	9658	48.70	ug/mL	48.70%
67) Terphenyl-d14	27.58	244	73526	53.80	ug/mL	53.80%
Target Compounds						Qvalue
4) N-nitrosodimethylamine	2.23	74	11115	54.43	ug/mlm	100
6) Phenol	8.35	94	37956	52.09	ug/mL	100
7) bis(2-Chloroethyl)ether	12.32	93	49642	52.30	ug/mL	98
8) 2-Chlorophenol	8.35	128	29661	51.55	ug/mL#	86
9) 1,3-Dichlorobenzene	8.72	146	33822	51.53	ug/mL	98
10) 1,4-Dichlorobenzene	8.97	146	34909	51.57	ug/mL	99
11) 1,2-Dichlorobenzene	9.35	146	33389	51.68	ug/mL	100
12) 2-Methylphenol	10.05	108	27981	52.30	ug/mLm	65
13) bis(2-chloroisopropyl)ethe	10.01	45	44368	52.72	ug/mL#	65
14) 4-Methylphenol	10.55	108	30540	52.05	ug/mL	98
15) N-Nitroso-Di-n-propylamine	10.39	70	31246	54.50	ug/mL	93
16) Hexachloroethane	10.32	117	17572	51.39	ug/mL	99
19) Nitrobenzene	10.64	77	39326	50.08	ug/mL#	75
20) Isophorone	11.45	82	78319	47.33	ug/mL	98
21) 2-Nitrophenol	11.59	139	19281	49.46	ug/mL	87
22) 2,4-Dimethylphenol	10.55	107	37819	50.52	ug/mL#	32
23) bis(2-Chloroethoxy)methane	8.04	93	39444	49.63	ug/mL#	42
24) 2,4-Dichlorophenol	12.41	162	29052	48.69	ug/mL	94
25) 1,2,4-Trichlorobenzene	12.53	180	31901	49.70	ug/mL	98
26) Naphthalene	12.70	128	98588	49.94	ug/mL#	91
27) 4-Chloroaniline	13.05	127	42225	48.41	ug/mL	100
28) Hexachlorobutadiene	13.22	225	17932	49.09	ug/mL	97
29) 4-Chloro-3-methylphenol	14.80	107	35449	51.60	ug/mL#	79
30) 2-Chloronaphthalene	16.28	162	70358	49.31	ug/ml	95
31) 2-Methylnaphthalene	14.84	142	96060	50.93	ug/mL	98
33) Hexachlorocyclopentadiene	15.36	237	15468	45.66	ug/mL	98
34) 2,4,6-Trichlorophenol	15.82	196	24471	49.88	ug/mL	100
35) 2,4,5-Trichlorophenol	15.94	196	25653	50.88	ug/mL	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data2\b8085.d Vial: 2
Acq On : 1 Jul 95 6:24 pm Operator: SCOTTV
Sample : 50 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jul 5 11:34 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Thu Jun 29 16:02:59 1995
Response via : Multiple Level Calibration

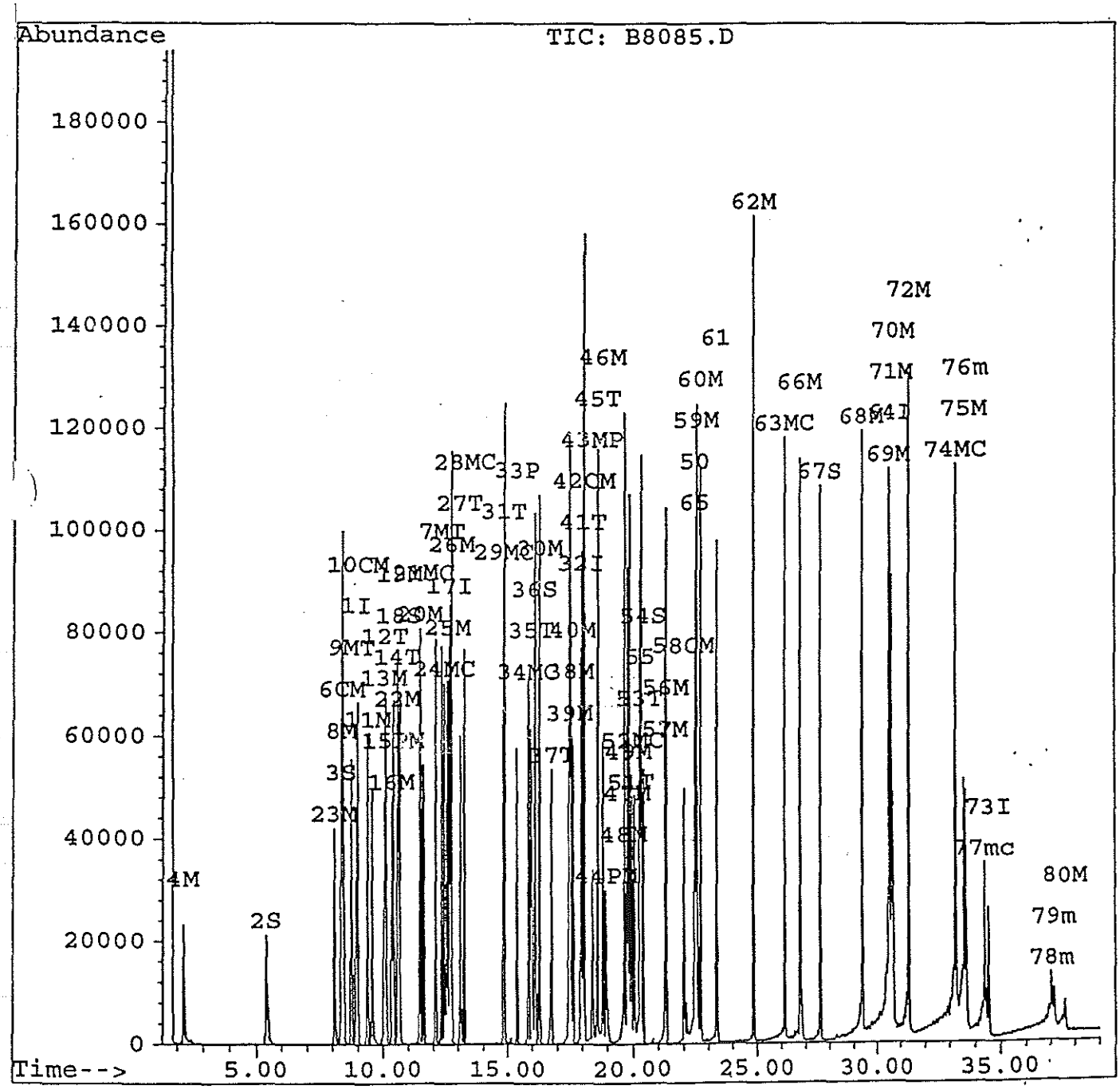
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
37)	2-Nitroaniline	16.76	65	31885	50.43	ug/mL#	100
38)	Dimethylphthalate	17.53	163	91019	50.66	ug/mL	100
39)	Acenaphthylene	17.48	152	121880	51.32	ug/mL	99
40)	2,6-Dinitrotoluene	17.61	165	20520	56.08	ug/mL	98
41)	3-Nitroaniline	18.03	138	20100	47.17	ug/mL	96
42)	Acenaphthene	18.05	153	74336	51.26	ug/mL	99
43)	2,4-Dinitrophenol	18.38	184	10274	53.12	ug/mL#	85
44)	4-Nitrophenol	18.92	109	9268	47.37	ug/mL	87
45)	Dibenzofuran	18.59	168	103798	49.29	ug/mL	93
46)	2,4-Dinitrotoluene	18.80	165	23432	53.19	ug/mLm	38
47)	Diethylphthalate	19.75	149	89403	44.49	ug/mL	99
48)	Fluorene	19.63	166	82633	48.92	ug/mL	99
49)	4-Chlorophenyl-phenylether	19.83	204	40804	50.30	ug/mL	98
51)	4-Nitroaniline	19.90	138	17007	45.79	ug/mL	98
52)	4,6-Dinitro-2-methylphenol	20.00	198	12203	49.64	ug/mL	100
53)	n-Nitrosodiphenylamine	20.23	169	56864	51.75	ug/mL#	1
55)	1,2-Diphenylhydrazine (as	20.29	77	132359	51.23	ug/ml	100
56)	4-Bromophenyl-phenylether	21.29	248	22516	50.82	ug/mL	95
57)	Hexachlorobenzene	21.25	284	18798	43.50	ug/mL#	76
58)	Pentachlorophenol	21.98	266	14241	45.58	ug/mL	98
59)	Phenanthrene	22.50	178	120699	50.26	ug/mL	99
60)	Anthracene	22.66	178	104727	49.61	ug/mLm	100
61)	Carbazole	23.31	167	84542	43.96	ug/ml	99
62)	Di-n-butylphthalate	24.83	149	177656	53.28	ug/mL	99
63)	Fluoranthene	26.12	202	122801	51.23	ug/mLm	93
65)	Benzidine	22.44	184	19562	52.33	ug/mlm	100
66)	Pyrene	26.76	202	110937	56.39	ug/mL	92
68)	Butylbenzylphthalate	29.36	149	63134	50.26	ug/mL	92
69)	Benzo[a]anthracene	30.51	228	83662	49.34	ug/mL	100
70)	3,3'-Dichlorobenzidine	30.67	252	23205	44.88	ug/mL#	96
71)	Chrysene	30.61	228	68797	45.45	ug/mLm	98
72)	bis(2-Ethylhexyl)phthalate	31.32	149	89873	47.67	ug/mL	97
74)	Di-n-octylphthalate	33.23	149	125017	45.91	ug/mL	98
75)	Benzo[b]fluoranthene	33.56	252	49023	54.28	ug/mLm	98
76)	Benzo[k]fluoranthene	33.63	252	43997	53.11	ug/mLm	97
77)	Benzo[a]pyrene	34.37	252	38061	49.04	ug/mLm	92
78)	Indeno[1,2,3-cd]pyrene	37.04	276	12581	46.30	ug/mLm	85
79)	Dibenz[a,h]anthracene	37.16	278	15499	51.32	ug/mLm	97
80)	Benzo[g,h,i]perylene	37.60	276	14592	52.47	ug/mLm	90

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data2\b8085.d Vial: 2
Acq On : 1 Jul 95 6:24 pm Operator: SCOTTV
Sample : 50 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jul 5 11:34 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Thu Jun 29 16:02:59 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: B8107.D DFTPP Injection Date: 7/5/95

Instrument ID: ABNA DFTPP Injection Time: 1617

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
51	30.0 - 80.0% of mass 198	57.6
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	68.0
70	Less than 2.0% of mass 69	0.0 (0.0)1
127	25.0 - 75.0% of mass 198	49.5
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	7.1
275	10.0 - 30.0% of mass 198	20.7
365	Greater than 0.75% of mass 198	2.4
441	Present, but less than mass 443	7.5
442	40.0 - 110.0% of mass 198	46.6
443	15.0 - 24.0% of mass 442	8.8 (19.0)2

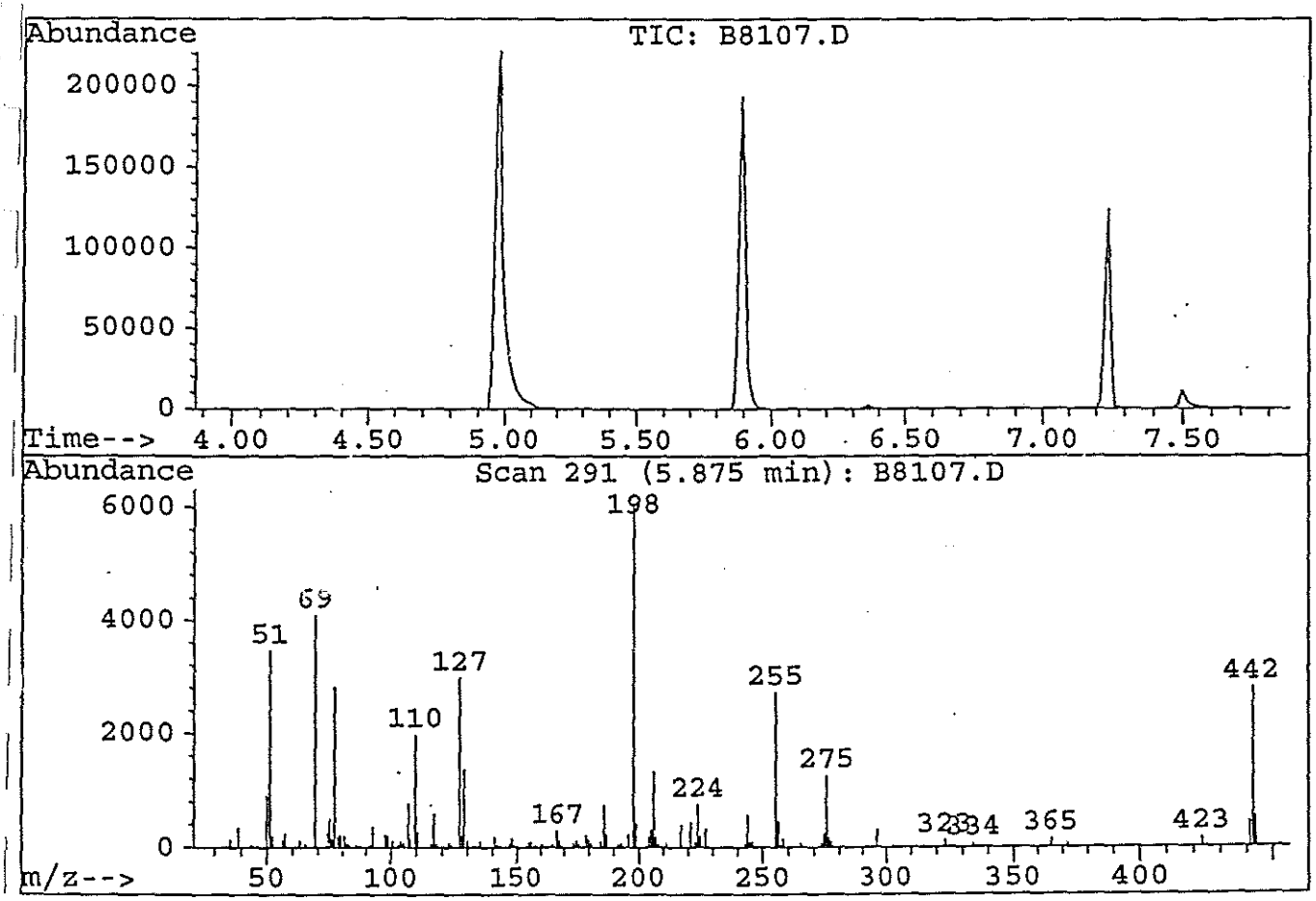
1-Value is % mass 69 2-Value is % mass 442

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	B8108.D	7/5/95	1649
02	SBLK02	BLANK2	B8109.D	7/5/95	1746
03	9529205B	9529205B	B8110.D	7/5/95	1842
04	9529206B	9529206B	B8111.D	7/5/95	1937
05	9529207B	9529207B	B8112.D	7/5/95	2031
06	29206MS	29206MS	B8113.D	7/5/95	2125
07	29206MSD	29206MSD	B8114.D	7/5/95	2218
08	SBLK01	BLANK1	B8115.D	7/5/95	2311
09	9526806B	9526806B	B8116.D	7/6/95	0003
10	9526807B	9526807B	B8117.D	7/6/95	0056
11	9526808B	9526808B	B8118.D	7/6/95	0149
12	9526809B	9526809B	B8119.D	7/6/95	0241
13	9526810B	9526810B	B8120.D	7/6/95	0334
14	9526811B	9526811B	B8121.D	7/6/95	0426
15					
16					
17					
18					
19					
20					
21					
22					

Data File : C:\HPCHEM\1\DATA2\B8107.D Vial: 1
Acq On : 5 Jul 95 4:17 pm 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: 291

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	57.6	3462	PASS
68	69	0	2	0.0	0	PASS
69	198	0	100	68.0	4088	PASS
70	69	0	2	0.0	0	PASS
127	198	40	60	49.5	2979	PASS
197	198	0	1	0.0	0	PASS
198	198	100	100	100.0	6015	PASS
199	198	5	9	7.1	425	PASS
275	198	10	30	20.7	1248	PASS
365	198	1	100	2.4	144	PASS
441	443	0	100	84.9	451	PASS
442	198	40	100	46.6	2801	PASS
443	442	17	23	19.0	531	PASS

B8107.D BNACLP.M Wed Jul 05 16:33:07 1995 BNA

291 (5.875 min): B8107.D
..... Converted from RTE data file >B8107::D5

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
3 .00	129	69.00	4088	85.95	57	107.95	149
3 .00	347	74.00	256	87.05	31	109.95	1979
44.00	39	75.00	498	91.95	65	110.95	275
.00	901	76.05	141	92.95	368	116.05	64
.00	3462	77.05	2822	97.95	219	116.95	591
52.10	197	78.05	187	98.95	200	117.95	51
56.00	121	79.05	225	100.95	112	122.95	91
5 .00	232	79.95	181	102.85	40	123.95	40
6 .10	42	81.05	210	103.95	96	127.05	2979
63.00	121	81.95	68	105.05	66	128.05	213
6 .10	60	82.95	56	107.05	777	128.95	1371

291 (5.875 min): B8107.D
..... Converted from RTE data file >B8107::D5

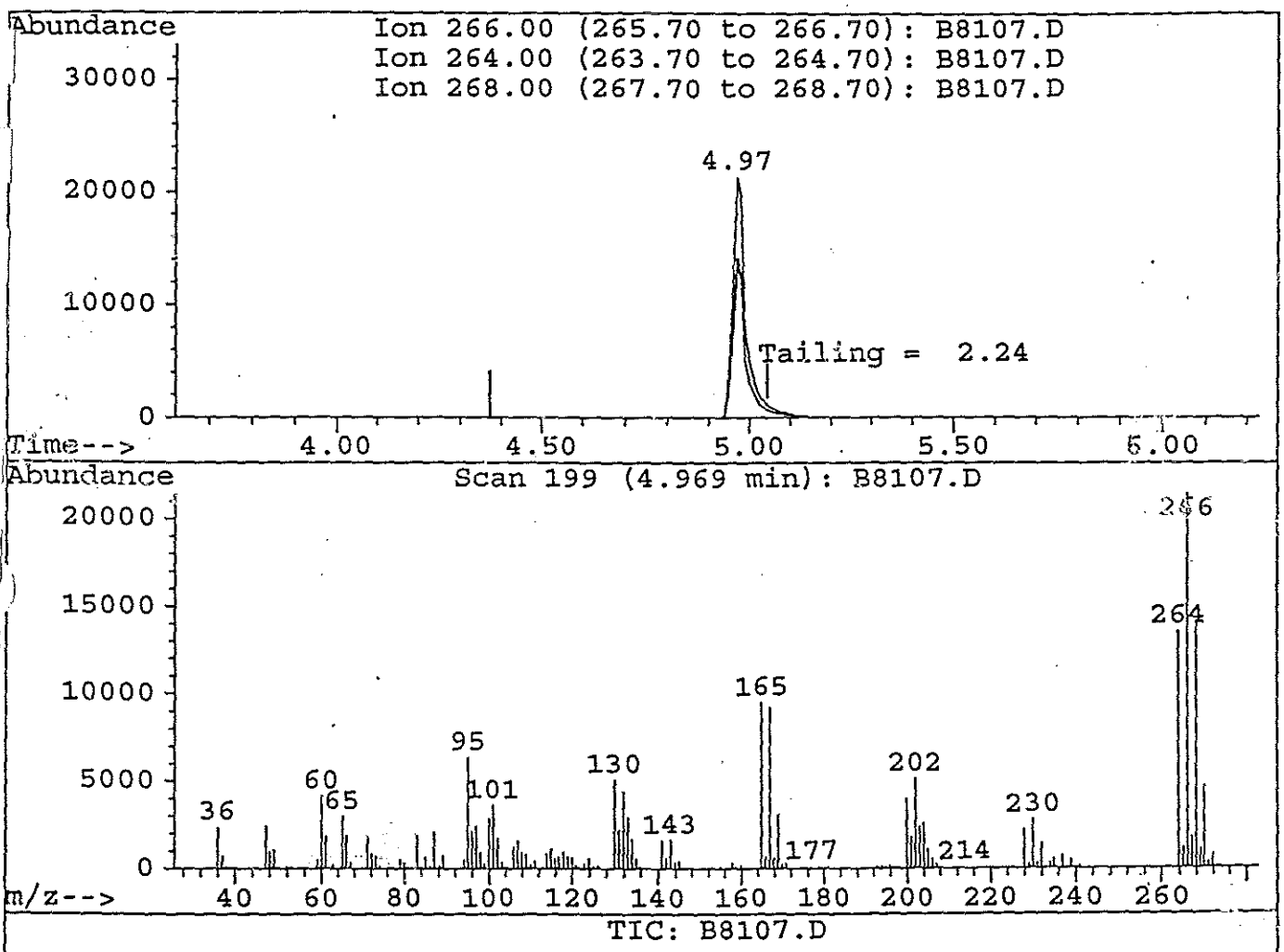
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
129.95	112	157.95	38	180.05	137	204.05	192
135.05	92	160.05	46	181.05	64	205.05	322
1 1.05	176	160.95	59	185.05	108	206.05	1330
1 2.05	47	165.05	60	186.05	742	207.15	179
142.95	38	167.05	299	187.05	230	208.05	59
1 7.05	66	168.05	123	191.95	59	211.25	64
1 8.05	156	169.05	36	193.05	59	217.05	389
148.95	35	173.95	63	196.05	223	221.05	426
1 4.05	37	175.05	109	198.05	6015	223.05	99
1 5.05	88	176.15	50	199.05	425	224.05	755
156.05	105	179.05	202	203.05	34	225.10	197

291 (5.875 min): B8107.D
..... Converted from RTE data file >B8107::D5

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
7.00	332	273.10	72	372.20	62		
8.00	39	274.10	238	423.15	160		
243.10	62	275.10	1248	441.15	451		
4.10	567	276.00	168	442.15	2801		
5.00	89	277.00	100	443.15	531		
246.00	89	296.10	300				
255.00	2718	303.10	39				
6.00	457	315.10	39				
257.00	40	323.20	119				
258.00	142	334.20	65				
5.10	63	365.20	144				

Data File : C:\HPCHEM\1\DATA2\B8107.D Vial: 1
Acq On : 5 Jul 95 4:17 pm Operator: SCOTTV
Sample : DFTPP..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jul 5 16:31 1995

Method : C:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Thu Jun 29 16:02:59 1995
Response via : Multiple Level Calibration



TIC: B8107.D

(1) Pentachlorophenol (CM)

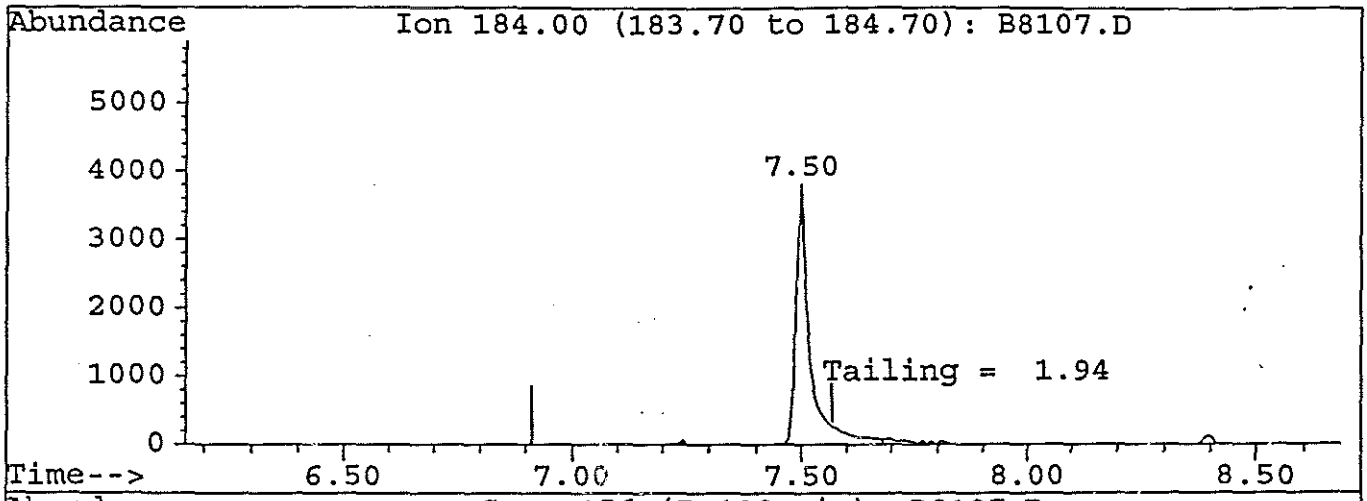
4.97min 151.27ug/mL

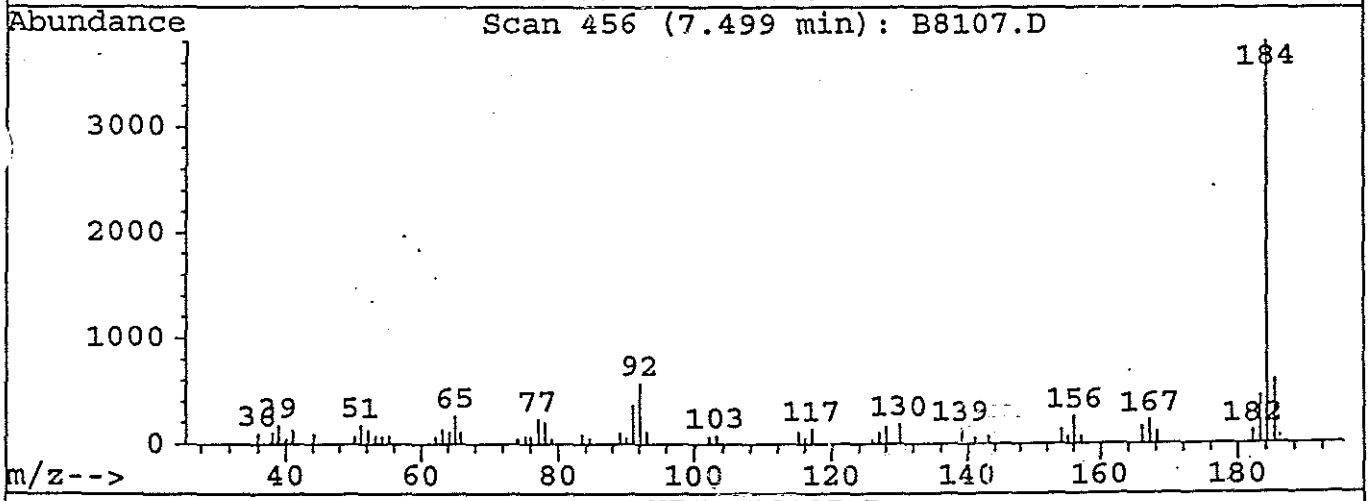
response 49964

Ion	Exp%	Act%
266.00	100	100
264.00	64.30	63.24
268.00	64.70	66.26
0.00	0.00	0.00

Data File : C:\HPCHEM\1\DATA2\B8107.D Vial: 1
Acq On : 5 Jul 95 4:17 pm Operator: SCOTTV
Sample : DFTPP..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jul 5 16:31 1995

Method : C:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Thu Jun 29 16:02:59 1995
Response via : Multiple Level Calibration





TIC: B8107.D

(2) Benzidine
7.50min 27.17ug/ml
response 8347

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: 7/5/95 Time: 1649

Lab File ID: B8108.D Init. Calib. Date(s): 7/5/95 1/0/00

Init. Calib. Times: 1649 0000

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
N-nitrosodimethylamine	0.430	0.361		16.0	
Phenol	1.534	1.634		-6.5	30.0
bis(2-Chloroethyl)ether	1.998	2.101		-5.2	
2-Chlorophenol	1.211	1.239		-2.3	
1,3-Dichlorobenzene	1.382	1.419		-2.7	
1,4-Dichlorobenzene	1.425	1.456		-2.2	30.0
1,2-Dichlorobenzene	1.360	1.388		-2.1	
bis(2-chloroisopropyl)ether	1.772	1.974		-11.4	
N-Nitroso-Di-n-propylamine	1.207	1.294	0.050	-7.2	
Hexachloroethane	0.720	0.770		-6.9	
Nitrobenzene	0.391	0.433		-10.7	
Isophorone	0.824	0.826		-0.2	
2-Nitrophenol	0.194	0.193		0.5	30.0
2,4-Dimethylphenol	0.373	0.387		-3.8	
bis(2-Chloroethoxy)methane	0.396	0.416		-5.1	
2,4-Dichlorophenol	0.297	0.280		5.7	30.0
1,2,4-Trichlorobenzene	0.320	0.304		5.0	
Naphthalene	0.983	1.015		-3.3	
Hexachlorobutadiene	0.182	0.165		9.3	30.0
4-Chloro-3-methylphenol	0.342	0.369		-7.9	30.0
Hexachlorocyclopentadiene	0.246	0.211	0.050	14.2	
2,4,6-Trichlorophenol	0.356	0.321		9.8	30.0
2-Chloronaphthalene	0.710	0.693		2.4	
Dimethylphthalate	1.302	1.310		-0.6	
Acenaphthylene	1.722	1.744		-1.3	
2,6-Dinitrotoluene	0.265	0.299		-12.8	
Acenaphthene	1.051	1.028		2.2	30.0
2,4-Dinitrophenol	0.140	0.150	0.050	-7.1	
4-Nitrophenol	0.142	0.156	0.050	-9.9	
2,4-Dinitrotoluene	0.319	0.347		-8.8	
Diethylphthalate	1.457	1.378		5.4	
Fluorene	1.224	1.206		1.5	
4-Chlorophenyl-phenylether	0.588	0.558		5.1	
4,6-Dinitro-2-methylphenol	0.107	0.124		-15.9	30.0
n-Nitrosodiphenylamine	0.478	0.497		-4.0	
1,2-Diphenylhydrazine(as azo)	0.000	0.000			
4-Bromophenyl-phenylether	0.193	0.178		7.8	

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: 7/5/95 Time: 1649

Lab File ID: B8108.D Init. Calib. Date(s): 7/5/95 1/0/00

Init. Calib. Times: 1649 0000

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
Hexachlorobenzene	0.188	0.145		22.9	
Pentachlorophenol	0.136	0.119		12.5	30.0
Phenanthrene	1.045	1.071		-2.5	
Anthracene	0.919	0.983		-7.0	
Di-n-butylphthalate	1.451	1.700		-17.2	
Fluoranthene	1.043	1.116		-7.0	30.0
Benzidine	0.270	0.285		-5.6	
Pyrene	1.423	1.478		-3.9	
Butylbenzylphthalate	0.908	1.035		-14.0	
Benzo[a]anthracene	1.226	1.204		1.8	
3,3'-Dichlorobenzidine	0.374	0.354		5.3	
Chrysene	1.095	1.055		3.7	
bis(2-Ethylhexyl)phthalate	1.363	1.527		-12.0	
Di-n-octylphthalate	4.351	4.367		-0.4	30.0
Benzo[b]fluoranthene	1.443	1.426		1.2	
Benzo[k]fluoranthene	1.324	1.555		-17.4	
Benzo[a]pyrene	1.240	1.262		-1.8	30.0
Indeno[1,2,3-cd]pyrene	0.434	0.447		-3.0	
Dibenz[a,h]anthracene	0.483	0.466		3.5	
Benzo[g,h,i]perylene	0.444	0.423		4.7	
2-Fluorophenol	1.023	1.036		-1.3	
Phenol-d5	1.669	1.720		-3.1	
Nitrobenzene-d5	0.401	0.442		-10.2	
2-Fluorobiphenyl	1.195	1.095		8.4	
2,4,6-Tribromophenol	0.086	0.067		22.1	
Terphenyl-d14	0.988	0.911		7.8	

All other compounds must meet a minimum RRF of 0.010.

Data File : C:\HPCHEM\1\DATA2\B8108.D Vial: 2
Acq On : 5 Jul 95 4:49 pm 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 29 16:02:59 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	121	0.00
2	S	2-Fluorophenol	1.023	1.036	-1.3	130	-0.01
3	S	Phenol-d5	1.669	1.720	-3.0	133	0.03
4	M	N-nitrosodimethylamine	0.430	0.361	16.1	102	0.00
5		Pyridine	2.414	0.000#	100.0#	0#	-1.62#
6	CM	Phenol	1.534	1.634	-6.5	129	0.00
7	MT	bis(2-Chloroethyl)ether	1.998	2.101	-5.1	127	0.00
8	M	2-Chlorophenol	1.211	1.239	-2.3	126	0.00
9	MT	1,3-Dichlorobenzene	1.382	1.419	-2.7	123	0.00
0	CM	1,4-Dichlorobenzene	1.425	1.456	-2.2	124	0.00
1	M	1,2-Dichlorobenzene	1.360	1.388	-2.0	120	0.00
2	T	2-Methylphenol	1.126	1.299	-15.4	143	0.51#
3	M	bis(2-chloroisopropyl)ether	1.772	1.974	-11.4	141	0.00
4	T	4-Methylphenol	1.235	1.299	-5.2	134	0.00
5	PM	N-Nitroso-Di-n-propylamine	1.207	1.294	-7.2	134	0.03
	M	Hexachloroethane	0.720	0.770	-6.9	129	-0.01
	I	Naphthalene-d8	1.000	1.000	0.0	123	0.00
8	S	Nitrobenzene-d5	0.401	0.442	-10.3	143	0.00
9	M	Nitrobenzene	0.391	0.433	-10.9	132	0.00
0	M	Isophorone	0.824	0.826	-0.2	133	0.03
1	MC	2-Nitrophenol	0.194	0.193	0.5	126	0.00
2	M	2,4-Dimethylphenol	0.373	0.387	-3.9	130	0.00
3	M	bis(2-Chloroethoxy)methane	0.396	0.416	-5.1	135	0.00
4	MC	2,4-Dichlorophenol	0.297	0.280	5.6	115	0.00
5	M	1,2,4-Trichlorobenzene	0.320	0.304	4.8	114	0.00
6	M	Naphthalene	0.983	1.015	-3.2	128	0.00
7	T	4-Chloroaniline	0.434	0.425	2.2	123	0.03
8	MC	Hexachlorobutadiene	0.182	0.165	9.1	105	0.03
9	MC	4-Chloro-3-methylphenol	0.342	0.369	-7.9	135	0.03
0	M	2-Chloronaphthalene	0.710	0.693	2.5	118	0.00
1	T	2-Methylnaphthalene	0.939	0.978	-4.1	125	0.00
2	I	Acenaphthene-d10	1.000	1.000	0.0	124	0.03
3	P	Hexachlorocyclopentadiene	0.246	0.211	14.2	116	0.03
4	MC	2,4,6-Trichlorophenol	0.356	0.321	9.7	114	0.03
5	T	2,4,5-Trichlorophenol	0.365	0.351	4.0	114	0.00
6	S	2-Fluorobiphenyl	1.195	1.095	8.4	112	0.00
7	T	2-Nitroaniline	0.458	0.511	-11.6	143	0.03
8	M	Dimethylphthalate	1.302	1.310	-0.6	121	0.03
9	M	Acenaphthylene	1.722	1.744	-1.3	124	0.03
	M	2,6-Dinitrotoluene	0.265	0.299	-12.6	131	0.03

(#) = Out of Range

ata File : C:\HPCHEM\1\DATA2\B8108.D Vial: 2
Acq On : 5 Jul 95 4:49 pm Operator: SCOTTV SUP
ample : 50 STD..... Converted from RTE d Inst : ABNA
isc : BT Multiplr: 1.00

ethod : C:\HPCHEM\1\METHODS\BNACLP.M
tle : CLP BNA Calibration
ast Update : Thu Jun 29 16:02:59 1995
Response via : Multiple Level Calibration

in. 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)
T	3-Nitroaniline	0.309	0.315	-2.0	139	0.03
M	Acenaphthene	1.051	1.028	2.2	122	0.03
P	2,4-Dinitrophenol	0.140	0.150	-7.2	146	0.03
PM	4-Nitrophenol	0.142	0.156	-9.7	136	0.03
	Dibenzofuran	1.526	1.503	1.5	124	0.03
	2,4-Dinitrotoluene	0.319	0.347	-8.6	120	0.03
M	Diethylphthalate	1.457	1.378	5.4	116	0.03
M	Fluorene	1.224	1.206	1.5	124	0.03
	4-Chlorophenyl-phenylether	0.588	0.558	5.2	116	0.03
	Phenanthrene-d10	1.000	1.000	0.0	121	0.03
	4-Nitroaniline	0.162	0.180	-11.1	116	0.03
MC	4,6-Dinitro-2-methylphenol	0.107	0.124	-16.0	126	0.03
T	n-Nitrosodiphenylamine	0.478	0.497	-3.9	124	0.03
	2,4,6-Tribromophenol	0.086	0.067	22.3	96	0.03
	1,2-Diphenylhydrazine (as a	1.124	1.313	-16.7	139	0.03
	4-Bromophenyl-phenylether	0.193	0.178	7.9	111	0.03
	Hexachlorobenzene	0.188	0.145	23.0	104	0.03
M	Pentachlorophenol	0.136	0.119	12.3	110	0.03
M	Phenanthrene	1.045	1.071	-2.5	122	0.03
M	Anthracene	0.919	0.983	-7.0	118	0.03
	Carbazole	0.837	0.881	-5.3	121	0.03
M	Di-n-butylphthalate	1.451	1.700	-17.2	122	0.03
MC	Fluoranthene	1.043	1.116	-7.0	119	0.05
	Chrysene-d12	1.000	1.000	0.0	99	0.05
	Benzidine	0.270	0.285	-5.5	96	-4.32#
M	Pyrene	1.423	1.478	-3.9	122	0.05
S	Terphenyl-d14	0.988	0.911	7.9	109	0.05
M	Butylbenzylphthalate	0.908	1.035	-14.0	119	0.03
M	Benzo[a]anthracene	1.226	1.204	1.8	107	0.05
M	3,3'-Dichlorobenzidine	0.374	0.354	5.4	96	0.03
M	Chrysene	1.095	1.055	3.6	101	0.05
M	bis(2-Ethylhexyl)phthalate	1.363	1.527	-12.0	118	0.05
	Perylene-d12	1.000	1.000	0.0	94	0.04
MC	Di-n-octylphthalate	4.351	4.367	-0.4	118	0.04
M	Benzo[b]fluoranthene	1.443	1.426	1.2	93	0.06
m	Benzo[k]fluoranthene	1.324	1.555	-17.4	114	0.06
mc	Benzo[a]pyrene	1.240	1.262	-1.8	104	0.06
m	Indeno[1,2,3-cd]pyrene	0.434	0.447	-2.9	134	0.06
n	Dibenz[a,h]anthracene	0.483	0.466	3.5	145	0.06

(#) = Out of Range

Evaluate Continuing Calibration ...

Data File : C:\HPCHEM\1\DATA2\B8108.D Vial: 2
Acq On : 5 Jul 95 4:49 pm 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 29 16:02:59 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)
0	M	Benzo[g,h,i]perylene	0.444	0.423	4.8	125	0.06
1		1-Methyl naphthalene	0.000	0.000#	0.0	273#	0.03
2		7,12-Dimethylbenz(a)anthrac	0.000	0.000#	0.0	95	0.04
3		Quinoline	0.000	0.000#	0.0	125	0.03
4		Thiophenol	0.000	0.000#	0.0	0#	-5.47#
5		4-Methyl chrysene	0.000	0.000#	0.0	108	0.05
6		Dibenz(a,j)acridine	0.000	0.000#	0.0	95	0.03
7		Indene	0.000	0.000#	0.0	0#	-9.03#
8		Benzyl alcohol	0.000	0.000#	0.0	137	0.00
9		Benzoic acid	0.000	0.000#	0.0	190#	0.10

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Data File : c:\hpchem\1\data2\b8108.d Vial: 2
Acq On : 5 Jul 95 4:49 pm Operator: SCOTTV
Sample : 50 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jul 6 13:38 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Thu Jun 29 16:02:59 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.82	152	17670	40.00	ug/mL	0.00
17) Naphthalene-d8	12.54	136	72906	40.00	ug/mL	0.00
32) Acenaphthene-d10	17.85	164	50752	40.00	ug/mL	0.03
50) Phenanthrene-d10	22.34	188	82017	40.00	ug/ml	0.03
64) Chrysene-d12	30.42	240	64451	40.00	ug/mL	0.05
73) Perylene-d12	34.39	264	35607	40.00	ug/mL	0.04
System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	5.28	112	22875	50.64	ug/mL	50.64%
3) Phenol-d5	8.24	99	37996	51.52	ug/mL	51.52%
18) Nitrobenzene-d5	10.50	82	40326	55.17	ug/mL	55.17%
36) 2-Fluorobiphenyl	16.00	172	69481	45.81	ug/mL	45.81%
54) 2,4,6-Tribromophenol	20.28	330	6873	38.84	ug/mL	38.84%
67) Terphenyl-d14	27.48	244	73364	46.07	ug/mL	46.07%
Target Compounds						Qvalue
4) N-nitrosodimethylamine	2.18	74	7964	41.93	ug/mlm	100
6) Phenol	8.26	94	36098	53.27	ug/mL	100
7) bis(2-Chloroethyl)ether	12.23	93	46402	52.57	ug/mL	98
8) 2-Chlorophenol	8.26	128	27367	51.14	ug/mL#	85
9) 1,3-Dichlorobenzene	8.63	146	31348	51.35	ug/mL#	96
10) 1,4-Dichlorobenzene	8.88	146	32160	51.08	ug/mL	99
11) 1,2-Dichlorobenzene	9.26	146	30652	51.01	ug/mL	98
12) 2-Methylphenol	10.46	108	28699	57.68	ug/mL	68
13) bis(2-chloroisopropyl)ethe	9.92	45	43597	55.70	ug/mL#	67
14) 4-Methylphenol	10.46	108	28699	52.59	ug/mL	100
15) N-Nitroso-Di-n-propylamine	10.30	70	28576	53.59	ug/mL	95
16) Hexachloroethane	10.21	117	16999	53.46	ug/mL	87
19) Nitrobenzene	10.55	77	39504	55.43	ug/mL#	76
20) Isophorone	11.38	82	75280	50.12	ug/mL	97
21) 2-Nitrophenol	11.50	139	17611	49.77	ug/mL	88
22) 2,4-Dimethylphenol	10.46	107	35308	51.97	ug/mL#	32
23) bis(2-Chloroethoxy)methane	7.95	93	37890	52.53	ug/mL#	42
24) 2,4-Dichlorophenol	12.30	162	25547	47.18	ug/mL	99
25) 1,2,4-Trichlorobenzene	12.44	180	27740	47.61	ug/mL	98
26) Naphthalene	12.59	128	92480	51.61	ug/mL#	89
27) 4-Chloroaniline	12.98	127	38728	48.92	ug/mL	97
28) Hexachlorobutadiene	13.13	225	15069	45.45	ug/mL	98
29) 4-Chloro-3-methylphenol	14.71	107	33628	53.93	ug/mL#	57
30) 2-Chloronaphthalene	16.17	162	63130	48.75	ug/ml	99
31) 2-Methylnaphthalene	14.73	142	89101	52.05	ug/mL	97
33) Hexachlorocyclopentadiene	15.27	237	13371	42.92	ug/mL	99
34) 2,4,6-Trichlorophenol	15.73	196	20373	45.16	ug/mL	98
35) 2,4,5-Trichlorophenol	15.83	196	22264	48.01	ug/mL	99

(#) = qualifier out of range (m) = manual integration

Data File : c:\hpchem\1\data2\b8108.d Vial: 2 192
Acq On : 5 Jul 95 4:49 pm Operator: SCOTTV
Sample : 50 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jul 6 13:38 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Thu Jun 29 16:02:59 1995
Response via : Multiple Level Calibration

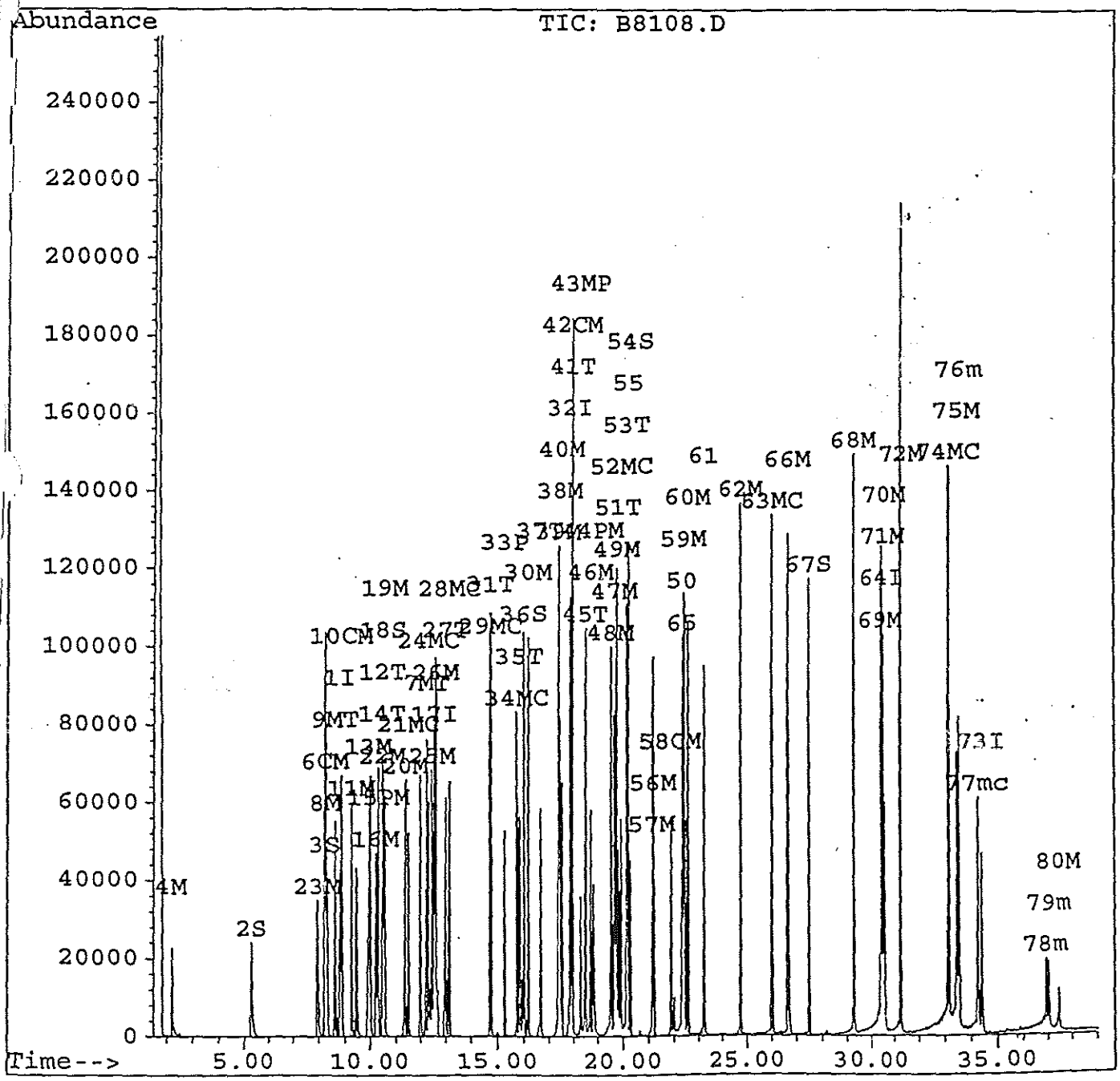
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
37)	2-Nitroaniline	16.66	65	32440	55.78	ug/mL#	100
38)	Dimethylphthalate	17.44	163	83102	50.29	ug/mL	99
39)	Acenaphthylene	17.39	152	110634	50.65	ug/mL	98
40)	2,6-Dinitrotoluene	17.52	165	18950	56.31	ug/mL	97
41)	3-Nitroaniline	17.95	138	19986	51.00	ug/mL	98
42)	Acenaphthene	17.95	153	65198	48.88	ug/mL	99
43)	2,4-Dinitrophenol	18.27	184	9537	53.61	ug/mL	96
44)	4-Nitrophenol	18.81	109	9868	54.84	ug/mL	83
45)	Dibenzofuran	18.50	168	95375	49.25	ug/mL	96
46)	2,4-Dinitrotoluene	18.70	165	22004	54.31	ug/mLm	39
47)	Diethylphthalate	19.66	149	87396	47.28	ug/mL	98
48)	Fluorene	19.52	166	76532	49.27	ug/mL	100
49)	4-Chlorophenyl-phenylether	19.74	204	35378	47.42	ug/mL#	86
51)	4-Nitroaniline	19.81	138	18410	55.55	ug/mL	97
52)	4,6-Dinitro-2-methylphenol	19.91	198	12726	58.01	ug/mL	100
53)	n-Nitrosodiphenylamine	20.14	169	50914	51.93	ug/mL#	1
55)	1,2-Diphenylhydrazine (as	20.20	77	134560	58.36	ug/ml	100
56)	4-Bromophenyl-phenylether	21.18	248	18208	46.05	ug/mL	95
57)	Hexachlorobenzene	21.14	284	14850	38.50	ug/mLm	57
58)	Pentachlorophenol	21.87	266	12224	43.84	ug/mL	99
59)	Phenanthrene	22.39	178	109847	51.26	ug/mL	99
60)	Anthracene	22.55	178	100799	53.51	ug/mLm	99
61)	Carbazole	23.20	167	90319	52.63	ug/ml	99
62)	Di-n-butylphthalate	24.72	149	174335	58.58	ug/mLm	98
63)	Fluoranthene	26.01	202	114436	53.50	ug/mLm	83
65)	Benzidine	22.34	184	22977	52.75	ug/mlm	100
66)	Pyrene	26.65	202	119108	51.96	ug/mL	100
68)	Butylbenzylphthalate	29.25	149	83402	56.98	ug/mL	94
69)	Benzo[a]anthracene	30.38	228	97037	49.11	ug/mL	99
70)	3,3'-Dichlorobenzidine	30.54	252	28486	47.28	ug/mL#	97
71)	Chrysene	30.48	228	85017	48.20	ug/mLm	99
72)	bis(2-Ethylhexyl)phthalate	31.23	149	123001	55.99	ug/mL	97
74)	Di-n-octylphthalate	33.12	149	194355	50.18	ug/mL	98
75)	Benzo[b]fluoranthene	33.45	252	63456	49.39	ug/mL#	88
76)	Benzo[k]fluoranthene	33.52	252	69192	58.71	ug/mLm	92
77)	Benzo[a]pyrene	34.25	252	56188	50.90	ug/mLm	95
78)	Indeno[1,2,3-cd]pyrene	36.91	276	19888	51.45	ug/mLm	81
79)	Dibenz[a,h]anthracene	37.03	278	20727	48.24	ug/mLm	91
80)	Benzo[g,h,i]perylene	37.45	276	18824	47.58	ug/mLm	91

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data2\b8108.d Vial: 2
Acq On : 5 Jul 95 4:49 pm Operator: SCOTTV
Sample : 50 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jul 6 13:38 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Thu Jun 29 16:02:59 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): B8085.D Date Analyzed: 7/1/95

Instrument ID: ABNA Time Analyzed: 1824

		IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
	12 HOUR STD	18999	8.91	80329	12.63	55183	17.94
	UPPER LIMIT	37998	9.41	160658	13.13	110366	18.44
	LOWER LIMIT	9500	8.41	40165	12.13	27592	17.44
	SAMPLE NO.						
01	SBLK01	19737	8.91	81014	12.62	53790	17.93
02	9526798B	25062	8.91	101173	12.62	69102	17.93
03	9526799B	23805	8.91	98829	12.62	68214	17.93
04	9526800B	23435	8.91	97051	12.62	65424	17.93
05	9526801B	19454	8.91	80134	12.62	53128	17.93
06	9526802B	25151	8.91	103588	12.62	69051	17.93
07	26801MS	25675	8.91	107550	12.63	75674	17.96
08	26801MSD	28689	8.91	119571	12.65	79587	17.94
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): B8085.D Date Analyzed: 7/1/95

Instrument ID: ABNA Time Analyzed: 1824

		IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
	12 HOUR STD	91908	22.44	55310	30.53	25030	34.52
	UPPER LIMIT	183816	22.94	110620	31.03	50060	35.02
	LOWER LIMIT	45954	21.94	27655	30.03	12515	34.02
	SAMPLE NO.						
01	SBLK01	84369	22.43	87435	30.51	47173	34.53
02	9526798B	107565	22.43	108481	30.53	38571	34.53
03	9526799B	109033	22.43	93779	30.51	46528	34.54
04	9526800B	99285	22.44	79220	30.51	44545	34.52
05	9526801B	86929	22.44	77081	30.52	40271	34.52
06	9526802B	109199	22.43	108580	30.51	45039	34.53
07	26801MS	106707	22.45	64565	30.54	31777	34.52
08	26801MSD	131036	22.45	90984	30.54	34000	34.51
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.

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Lab File ID (Standard): B8108.D Date Analyzed: 7/5/95

Instrument ID: ABNA Time Analyzed: 1649

		IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
	12 HOUR STD	17670	8.82	72906	12.54	50752	17.85
	UPPER LIMIT	35340	9.32	145812	13.04	101504	18.35
	LOWER LIMIT	8835	8.32	36453	12.04	25376	17.35
	SAMPLE NO.						
01	SBLK02	16742	8.82	71374	12.53	42389	17.84
02	9529205B	20301	8.82	82971	12.53	57459	17.84
03	9529206B	23356	8.82	93095	12.53	66423	17.84
04	9529207B	22553	8.82	92224	12.53	63716	17.84
05	29206MS	21908	8.82	89645	12.55	64057	17.85
06	29206MSD	24662	8.82	102269	12.54	73359	17.85
07	SBLK01	27170	8.82	109553	12.53	76083	17.84
08	9526806B	23108	8.82	94910	12.53	65947	17.84
09	9526807B	24436	8.82	102402	12.53	71384	17.84
10	9526808B	24542	8.82	100569	12.53	70238	17.84
11	9526809B	28240	8.82	112994	12.53	79417	17.84
12	9526810B	21999	8.82	88173	12.53	62390	17.84
13	9526811B	24738	8.83	143963	12.54	90931	17.85
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): B8108.D Date Analyzed: 7/5/95

Instrument ID: ABNA Time Analyzed: 1649

		IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
	12 HOUR STD	82017	22.34	64451	30.42	35607	34.39
	UPPER LIMIT	164034	22.84	128902	30.92	71214	34.89
	LOWER LIMIT	41009	21.84	32226	29.92	17804	33.89
	SAMPLE NO.						
01	SBLK02	75919	22.33	78228	30.40	70873	34.41
02	9529205B	95812	22.32	94469	30.40	69948	34.40
03	9529206B	110846	22.32	103612	30.41	67002	34.40
04	9529207B	104386	22.32	114931	30.40	34664	34.40
05	29206MS	109404	22.34	62485	30.41	35222	34.41
06	29206MSD	125307	22.32	69259	30.42	37889	34.40
07	SBLK01	130877	22.32	120939	30.41	39740	34.41
08	9526806B	113398	22.32	95422	30.40	58892	34.40
09	9526807B	118816	22.32	120037	30.41	50970	34.39
10	9526808B	118481	22.32	123770	30.40	53318	34.41
11	9526809B	136315	22.32	120902	30.40	32037	34.41
12	9526810B	106897	22.32	112810	30.40	61013	34.40
13	9526811B	127794	22.34	111077	30.41	61046	34.40
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 ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

9526798B
FB

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Matrix: (soil/water) WATER Lab Sample ID: 9526798B

Sample wt/vol: 1000.0 (g/mL ML Lab File ID: B8087.D

Level: (low/med) _____ Date Received: 6/16/95

% Moisture: _____ decanted: (Y/N): N Date Extracted: 6/23/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 7/1/95

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
108-95-2	Phenol	3	JB
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	bis(2-chloroisopropyl)ether	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO. 9526798B FB

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Matrix: (soil/water) WATER Lab Sample ID: 9526798B

Sample wt/vol: 1000.0 (g/mL ML Lab File ID: B8087.D

Level: (low/med) _____ Date Received: 6/16/95

% Moisture: _____ decanted: (Y/N): N Date Extracted: 6/23/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 7/1/95

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
51-28-5	2,4-Dinitrophenol	25	U
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
86-73-7	Fluorene	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	n-Nitrosodiphenylamine	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-08	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
56-55-3	Benzo[a]anthracene	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	10	U
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo[b]fluoranthene	10	U
207-08-9	Benzo[k]fluoranthene	10	U
50-32-8	Benzo[a]pyrene	10	U
193-39-5	Indeno[1,2,3-cd]pyrene	10	U
53-70-3	Dibenz[a,h]anthracene	10	U
191-24-2	Benzo[g,h,i]perylene	10	U

1F-

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.
9526798B
FB

200

Lab Name: EMSL ANALYTICAL Contract:

Project No.: Site: Location: Group:

Matrix: (soil/water) WATER Lab Sample ID: 9526798B

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: B8087.D

Level: (low/med) Date Received: 6/16/95

% Moisture: decanted: (Y/N) N Date Extracted: 6/23/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 7/1/95

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\b8087.d Vial: 4
Acq On : 1 Jul 95 8:06 pm Operator: SCOTTV
Sample : 26798..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jul 6 12:51 1995

Method : C:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Thu Jun 29 16:02:59 1995
Response via : Multiple Level Calibration

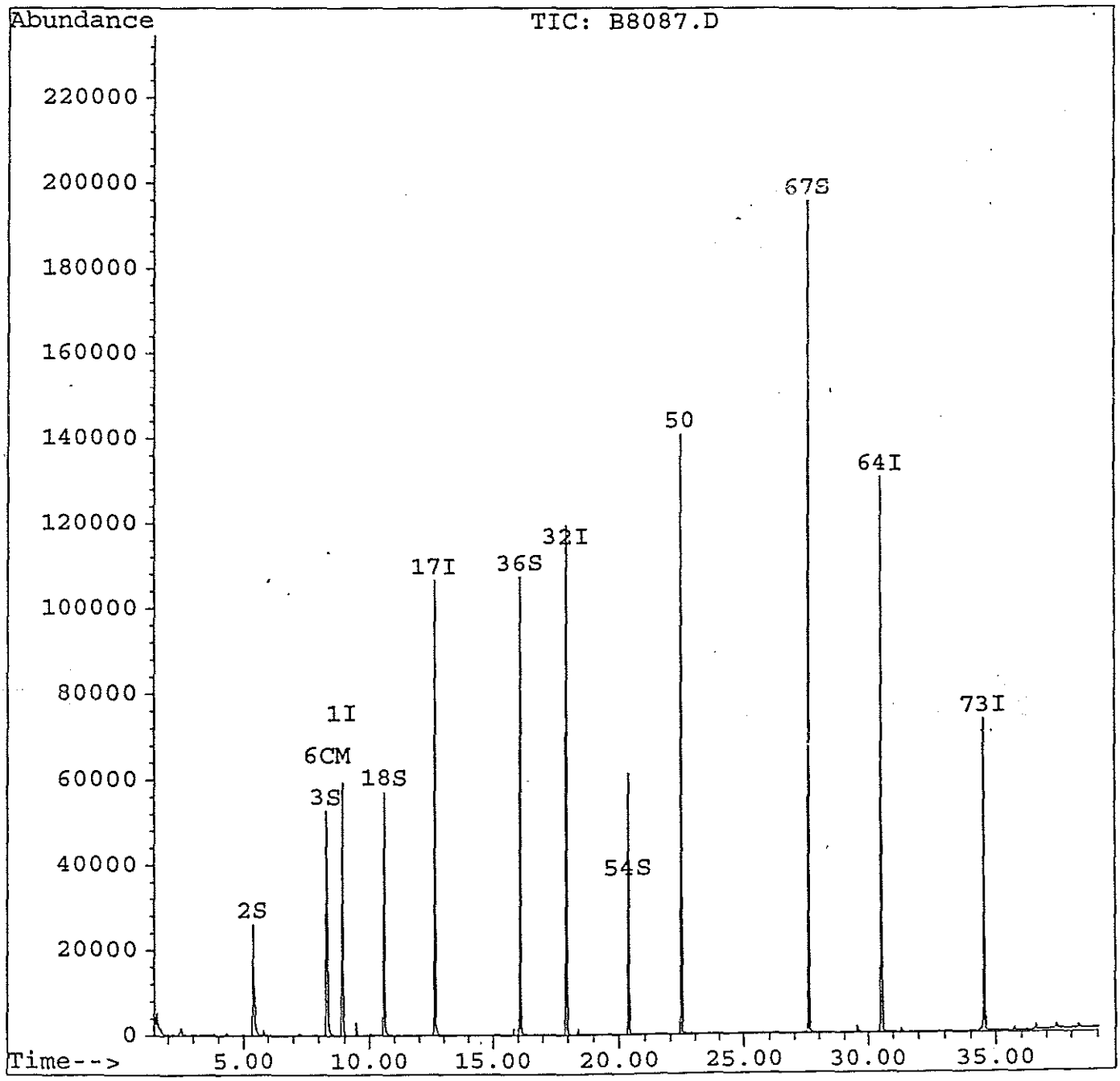
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.91	152	25062	40.00	ug/mL	0.10
17) Naphthalene-d8	12.62	136	101173	40.00	ug/mL	0.09
32) Acenaphthene-d10	17.93	164	69102	40.00	ug/mL	0.11
50) Phenanthrene-d10	22.43	188	107565	40.00	ug/ml	0.13
64) Chrysene-d12	30.53	240	108481	40.00	ug/mL	0.16
73) Perylene-d12	34.53	264	38571	40.00	ug/mL	0.18
System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	5.37	112	26014	40.60	ug/mL	40.60%
3) Phenol-d5	8.29	99	45643	43.64	ug/mL	43.64%
18) Nitrobenzene-d5	10.58	82	42654	42.05	ug/mL	42.05%
36) 2-Fluorobiphenyl	16.08	172	78790	38.15	ug/mL	38.15%
54) 2,4,6-Tribromophenol	20.35	330	11930	51.40	ug/mL	51.40%
67) Terphenyl-d14	27.59	244	149169	55.65	ug/mL	55.65%
Target Compounds						Qvalue
6) Phenol	8.33	94	2997	3.12	ug/mL	100

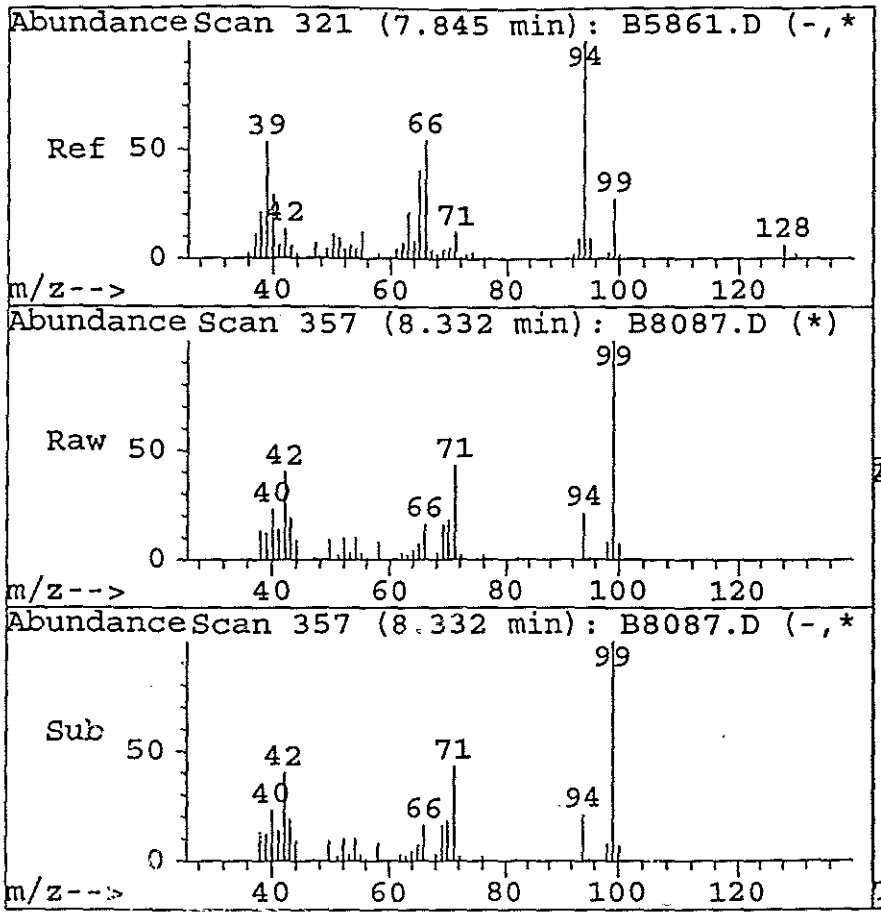
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data2\b8087.d Vial: 4
Acq On : 1 Jul 95 8:06 pm Operator: SCOTTV
Sample : 26798..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jul 5 11:42 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Thu Jun 29 16:02:59 1995
Response via : Multiple Level Calibration

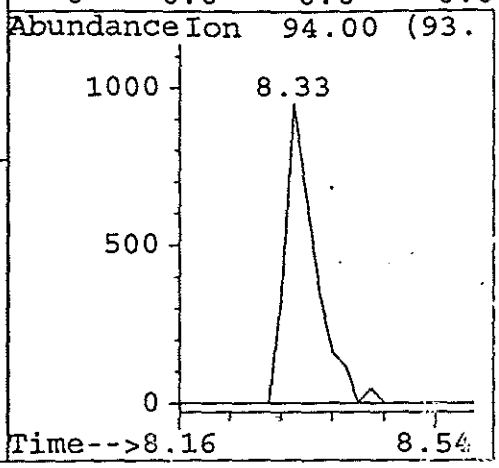




#6
Phenol
Concen: 3.12 ug/mL
RT: 8.33 min Scan# 357
Delta R.T. 0.08 min
Lab File: b8087.d
Acq: 1 Jul 95 8:06 pm

Tgt Ion:94 Resp: 2997

Ion	Ratio	Lower	Upper
94	100		
0	0.0	0.0	0.0
0	0.0	0.0	0.0
0	0.0	0.0	0.0



Data File : c:\hpchem\1\data2\b8087.d Vial: 4
Acq On : 1 Jul 95 8:06 pm Operator: SCOTTV
Sample : 26798..... 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

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

Rdg 647
9526799B
MWI-2931776

205

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Matrix: (soil/water) WATER Lab Sample ID: 9526799B

Sample wt/vol: 1000.0 (g/mL ML Lab File ID: B8088.D

Level: (low/med) _____ Date Received: 6/16/95

% Moisture: _____ decanted: (Y/N): N Date Extracted: 6/23/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 7/1/95

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
108-95-2	Phenol	3	JB
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	bis(2-chloroisopropyl)ether	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

Boilers 697
9526799B
MW1-2431776

206

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Matrix: (soil/water) WATER Lab Sample ID: 9526799B

Sample wt/vol: 1000.0 (g/mL ML Lab File ID: B8088.D

Level: (low/med) _____ Date Received: 6/16/95

% Moisture: _____ decanted: (Y/N): N Date Extracted: 6/23/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 7/1/95

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
51-28-5	2,4-Dinitrophenol	25	U
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
86-73-7	Fluorene	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	n-Nitrosodiphenylamine	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-08	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
56-55-3	Benzo[a]anthracene	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	10	U
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo[b]fluoranthene	10	U
207-08-9	Benzo[k]fluoranthene	10	U
50-32-8	Benzo[a]pyrene	10	U
193-39-5	Indeno[1,2,3-cd]pyrene	10	U
53-70-3	Dibenz[a,h]anthracene	10	U
191-24-2	Benzo[g,h,i]perylene	10	U

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.
Builders 197
9526799B
MB1-293176

207

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Matrix: (soil/water) WATER Lab Sample ID: 9526799B

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: B8088.D

Level: (low/med) _____ Date Received: 6/16/95

% Moisture: _____ decanted: (Y/N) N Date Extracted: 6/23/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 7/1/95

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: _____

Number TICs found: 3 Concentration Units: (ug/L or ug/Kg) ug/L

CAS Number	Compound Name	RT	Est. Conc	Q
1. 2733-88-2	15-Tetracosenoic acid, methy	24.70	36	J
2. 112-80-1	Oleic Acid	24.82	12	J
3. 57-10-3	Hexadecanoic acid	24.95	7	J
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\b8088.d Vial: 5
Acq On : 1 Jul 95 8:57 pm Operator: SCOTTV
Sample : 26799..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jul 5 11:43 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Thu Jun 29 16:02:59 1995
Response via : Multiple Level Calibration

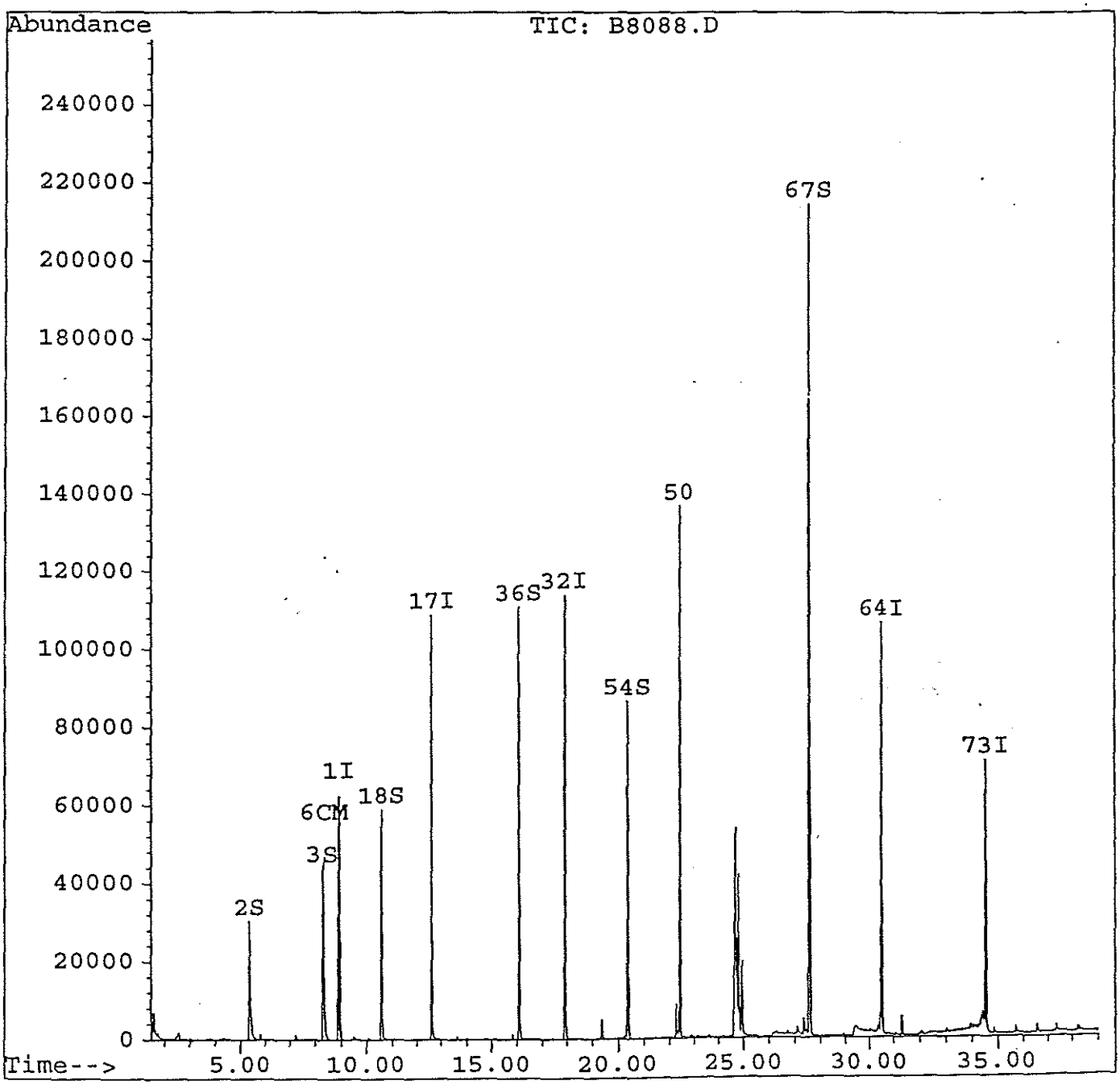
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.91	152	23805	40.00	ug/mL	0.10
17) Naphthalene-d8	12.62	136	98829	40.00	ug/mL	0.09
32) Acenaphthene-d10	17.93	164	68214	40.00	ug/mL	0.11
50) Phenanthrene-d10	22.43	188	109033	40.00	ug/ml	0.13
64) Chrysene-d12	30.51	240	93779	40.00	ug/mL	0.15
73) Perylene-d12	34.54	264	46528	40.00	ug/mL	0.18
System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	5.37	112	26370	43.33	ug/mL	43.33%
3) Phenol-d5	8.29	99	44973	45.27	ug/mL	45.27%
18) Nitrobenzene-d5	10.58	82	42162	42.55	ug/mL	42.55%
36) 2-Fluorobiphenyl	16.08	172	80166	39.32	ug/mL	39.32%
54) 2,4,6-Tribromophenol	20.37	330	17094	72.66	ug/mL	72.66%
67) Terphenyl-d14	27.59	244	171571	74.04	ug/mL	74.04%
Target Compounds						Qvalue
6) Phenol	8.33	94	2319	2.54	ug/mL	100

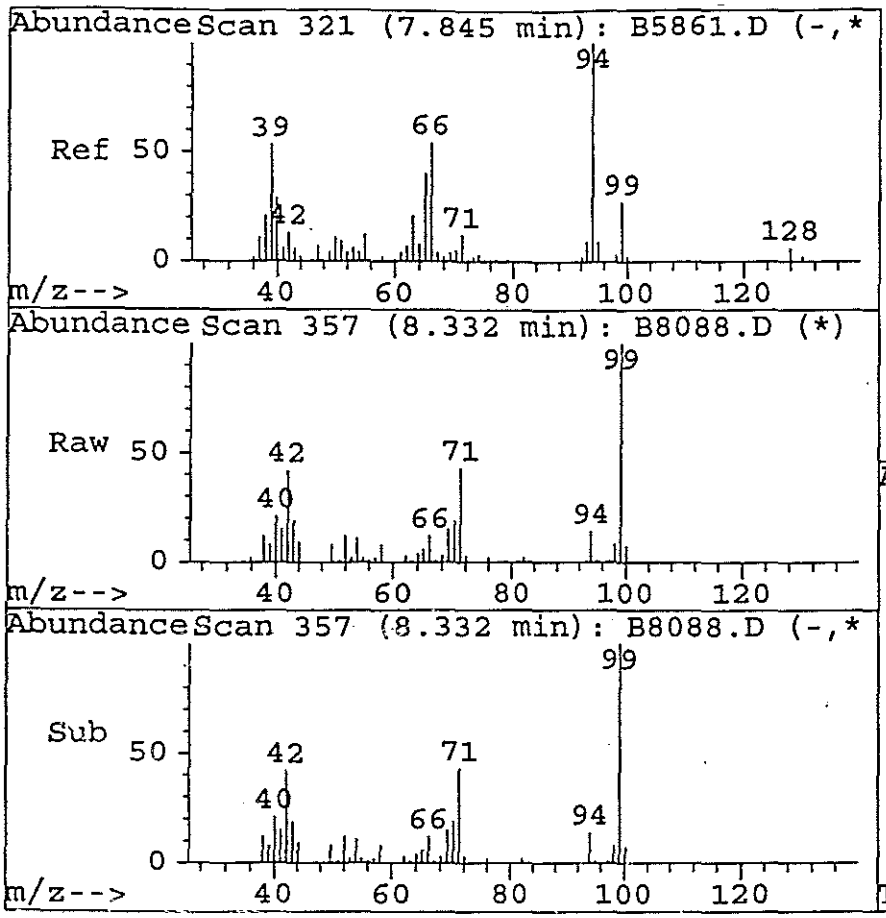
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data2\b8088.d Vial: 5
Acq On : 1 Jul 95 8:57 pm Operator: SCOTTV
Sample : 26799..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jul 5 11:43 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Thu Jun 29 16:02:59 1995
Response via : Multiple Level Calibration

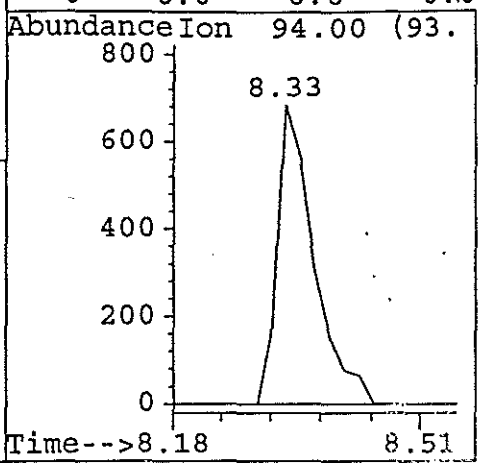




#6
Phenol
Concen: 2.54 ug/mL
RT: 8.33 min Scan# 357
Delta R.T. 0.08 min
Lab File: b8088.d
Acq: 1 Jul 95 8:57 pm

Tgt Ion:94 Resp: 2319

Ion	Ratio	Lower	Upper
94	100		
0	0.0	0.0	0.0
0	0.0	0.0	0.0
0	0.0	0.0	0.0



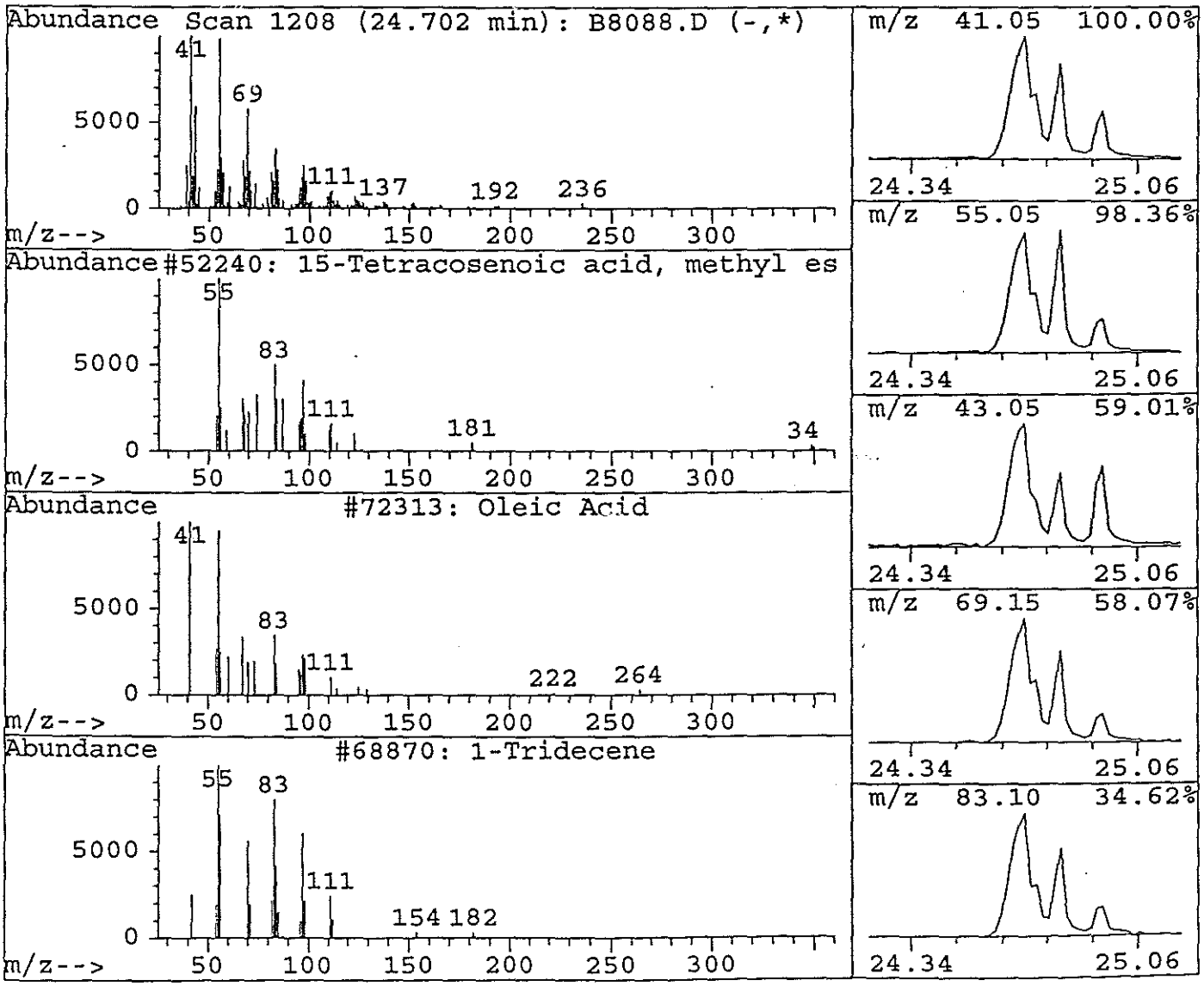
Library Search Compound Report

Data File : c:\hpchem\1\data2\b8088.d
Acq On : 1 Jul 95 8:57 pm
Sample : 26799.....
Misc :
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
Library : C:\DATABASE\NBS75K.L

R.T.	Conc	Area	Relative to ISTD	R.T.
24.70	36.43 ug/ml	280337	Phenanthrene-d10	22.43

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	15-Tetracosenoic acid, methyl ester	52240	002733-88-2	80
2	Oleic Acid	72313	000112-80-1	72
3	1-Tridecene	68870	002437-56-1	52
4	Cyclopentadecanone, 2-hydroxy-	32022	004727-18-8	50
5	Cyclotetradecane	69525	000295-17-0	46



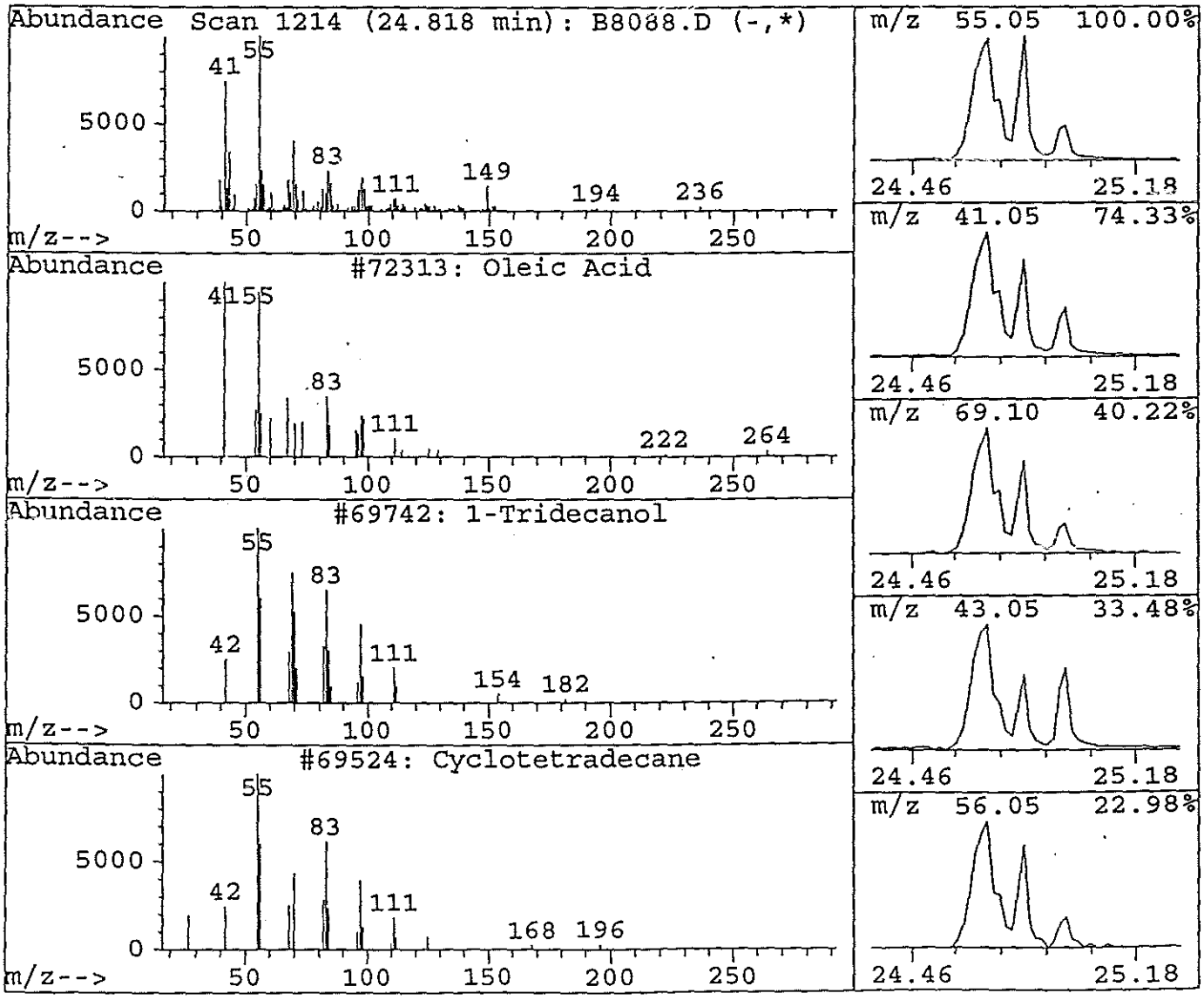
Library Search Compound Report

Data File : c:\hpchem\1\data2\b8088.d Vial: 5
Acq On : 1 Jul 95 8:57 pm Operator: SCOTTV
Sample : 26799..... 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.
24.82	12.04 ug/ml	92624	Phenanthrene-d10	22.43

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Oleic Acid	72313	000112-80-1	64
2	1-Tridecanol	69742	000112-70-9	49
3	Cyclotetradecane	69524	000295-17-0	47
4	1-Dodecene	68113	000112-41-4	43
5	Cyclododecane	68127	000294-62-2	43



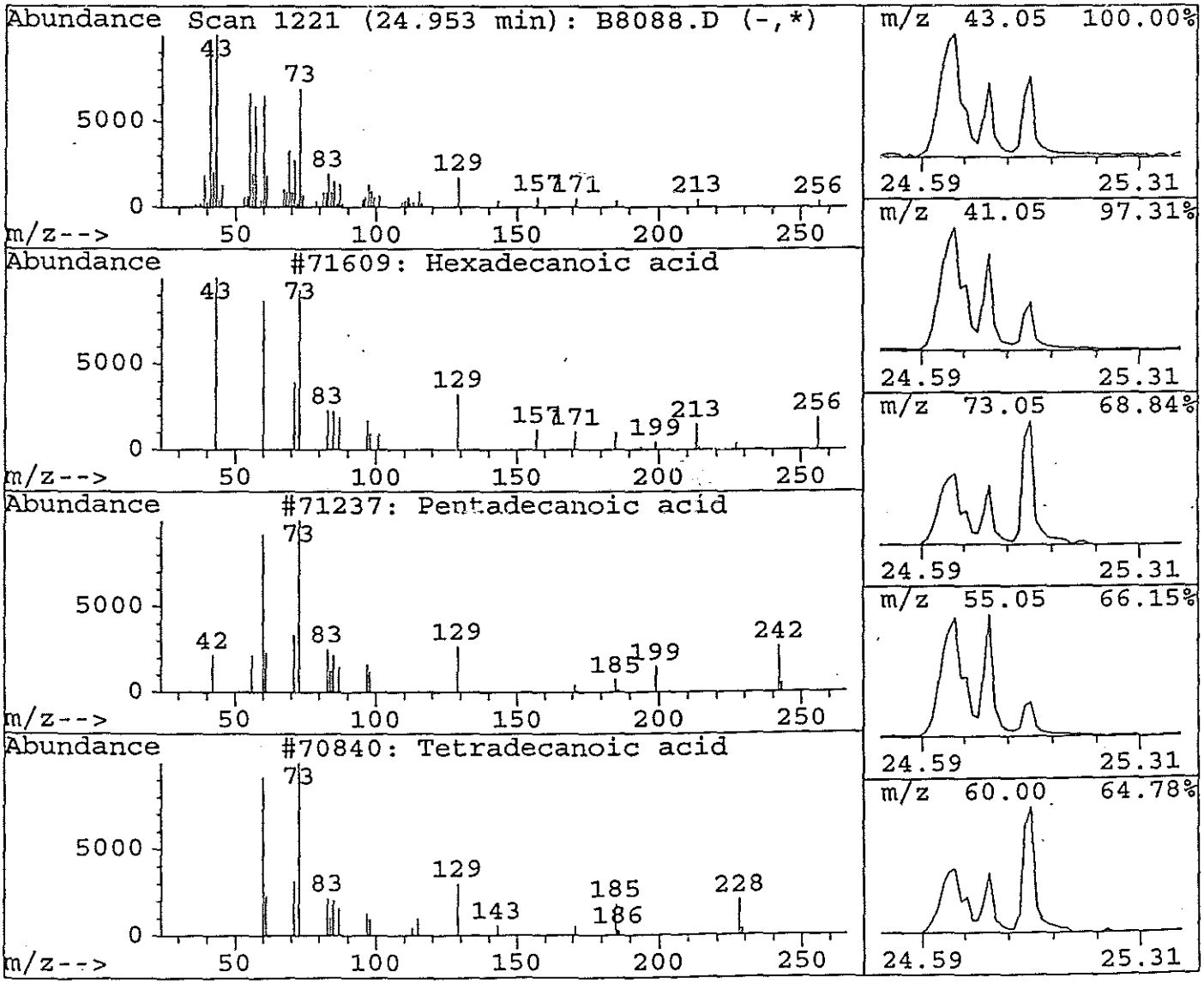
Library Search Compound Report

Data File : c:\hpchem\1\data2\b8088.d Vial: 5
Acq On : 1 Jul 95 8:57 pm Operator: SCOTTV
Sample : 26799..... 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.
24.95	7.10 ug/ml	54656	Phenanthrene-d10	22.43

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Hexadecanoic acid	71609	000057-10-3	97
2	Pentadecanoic acid	71237	001002-84-2	91
3	Tetradecanoic acid	70840	000544-63-8	83
4	Tridecanoic acid	70343	000638-53-9	72
5	Dodecanamide, N,N-bis(2-hydroxyethy	40673	000120-40-1	64



2C

WATER SEMIVOLATILE SURROGATE RECOVERY

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

	SAMPLE NO.	S1 (2FP) #	S2 (PHL) #	S3 (NBZ) #	S4 (FBP) #	S5 (TBP) #	S6 (TPH) #	#	#	TOT OUT
01	SBLK01	37	39	35	30	40	63			
02	9526798B	41	44	42	38	51	56			
03	9526799B	43	45	43	39	73	74			
04	9526800B	43	49	44	36	98	96			
05	268 1B	8	10	49	51	18	79			
06	9526802B			56	52		81			
07	26801MS	29	40	39	41	70	107			
08	26801MSD	62	50	72	57	78	108			
09										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23										
24										
25										
26										
27										
28										
29										
30										

	QC LIMITS
S1 (2FP) = 2-Fluorophenol	(4-106)
S2 (PHL) = Phenol-d5	(5-87)
S3 (NBZ) = Nitrobenzene-d5	(22-101)
S4 (FBP) = 2-Fluorobiphenyl	(20-94)
S5 (TBP) = 2,4,6-Tribromophenol	(17-126)
S6 (TPH) = Terphenyl-d14	(35-127)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogate diluted out

WATER SEMIVOLATILE SURROGATE RECOVERY

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

	SAMPLE NO.	S1 (2FP) #	S2 (PHL) #	S3 (NBZ) #	S4 (FBP) #	S5 (TBP) #	S6 (TPH) #	#	#	TOT OUT
01	SBLK02	12	8	24	20	32	59			
02	9529205B	12	8	22	23	55	65			
03	9529206B	19	12	32	28	61	60			
04	9529207B	13	9	26	24	45	62			
05	29206MS	27	26	54	48	65	82			
06	29206MSD	24	24	46	47	67	86			
07										
08										
09										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23										
24										
25										
26										
27										
28										
29										
30										

	QC LIMITS
S1 (2FP) = 2-Fluorophenol	(4-106)
S2 (PHL) = Phenol-d5	(5-87)
S3 (NBZ) = Nitrobenzene-d5	(22-101)
S4 (FBP) = 2-Fluorobiphenyl	(20-94)
S5 (TBP) = 2,4,6-Tribromophenol	(17-126)
S6 (TPH) = Terphenyl-d14	(35-127)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogate diluted out

SEMIVOLATILE METHOD BLANK SUMMARY

SAMPLE NO.

SBLK01

216

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Lab File ID: B8086.D Lab Sample ID: BLANK

Instrument ID: ABNA Date Extracted: 6/23/95

Matrix: (soil/water) WATER Date Analyzed: 7/1/95

Level: (low/med) _____ Time Analyzed: 1915

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	9526798B	9526798B	B8087.D	07/01/95
02	9526799B	9526799B	B8088.D	07/01/95
03	9526800B	9526800B	B8089.D	07/01/95
04	9526801B	9526801B	B8090.D	07/01/95
05	9526802B	9526802B	B8091.D	07/01/95
06	26801MS	26801MS	B8092.D	07/02/95
07	26801MSD	26801MSD	B8093.D	07/02/95
08				
09				
10				
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

Lab Name: EMSL ANALYTICAL Contract:

Project No.: Site: Location: Group:

Matrix: (soil/water) WATER Lab Sample ID: BLANK

Sample wt/vol: 1000.0 (g/mL ML Lab File ID: B8086.D

Level: (low/med) Date Received: 6/16/95

% Moisture: decanted: (Y/N): N Date Extracted: 6/23/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 7/1/95

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
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl)ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	bis(2-chloroisopropyl)ether	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-Di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	10	U

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

SBLK01

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Matrix: (soil/water) WATER Lab Sample ID: BLANK

Sample wt/vol: 1000.0 (g/mL ML Lab File ID: B8086.D

Level: (low/med) _____ Date Received: 6/16/95

% Moisture: _____ decanted: (Y/N): N Date Extracted: 6/23/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 7/1/95

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
51-28-5	2,4-Dinitrophenol	25	U
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
86-73-7	Fluorene	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	n-Nitrosodiphenylamine	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-08	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
56-55-3	Benzo[a]anthracene	10	U
91-94-1	3,3'-Dichlorobenzidine	20	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	10	U
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo[b]fluoranthene	10	U
207-08-9	Benzo[k]fluoranthene	10	U
50-32-8	Benzo[a]pyrene	10	U
193-39-5	Indeno[1,2,3-cd]pyrene	10	U
53-70-3	Dibenz[a,h]anthracene	10	U
191-24-2	Benzo[g,h,i]perylene	10	U

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.
SBLK01

219

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Matrix: (soil/water) WATER Lab Sample ID: BLANK

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: B8086.D

Level: (low/med) _____ Date Received: 6/16/95

% Moisture: _____ decanted: (Y/N) N Date Extracted: 6/23/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 7/1/95

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\b8086.d Vial: 3
Acq On : 1 Jul 95 7:15 pm Operator: SCOTTV
Sample : BLANK..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jul 6 12:55 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Thu Jun 29 16:02:59 1995
Response via : Multiple Level Calibration

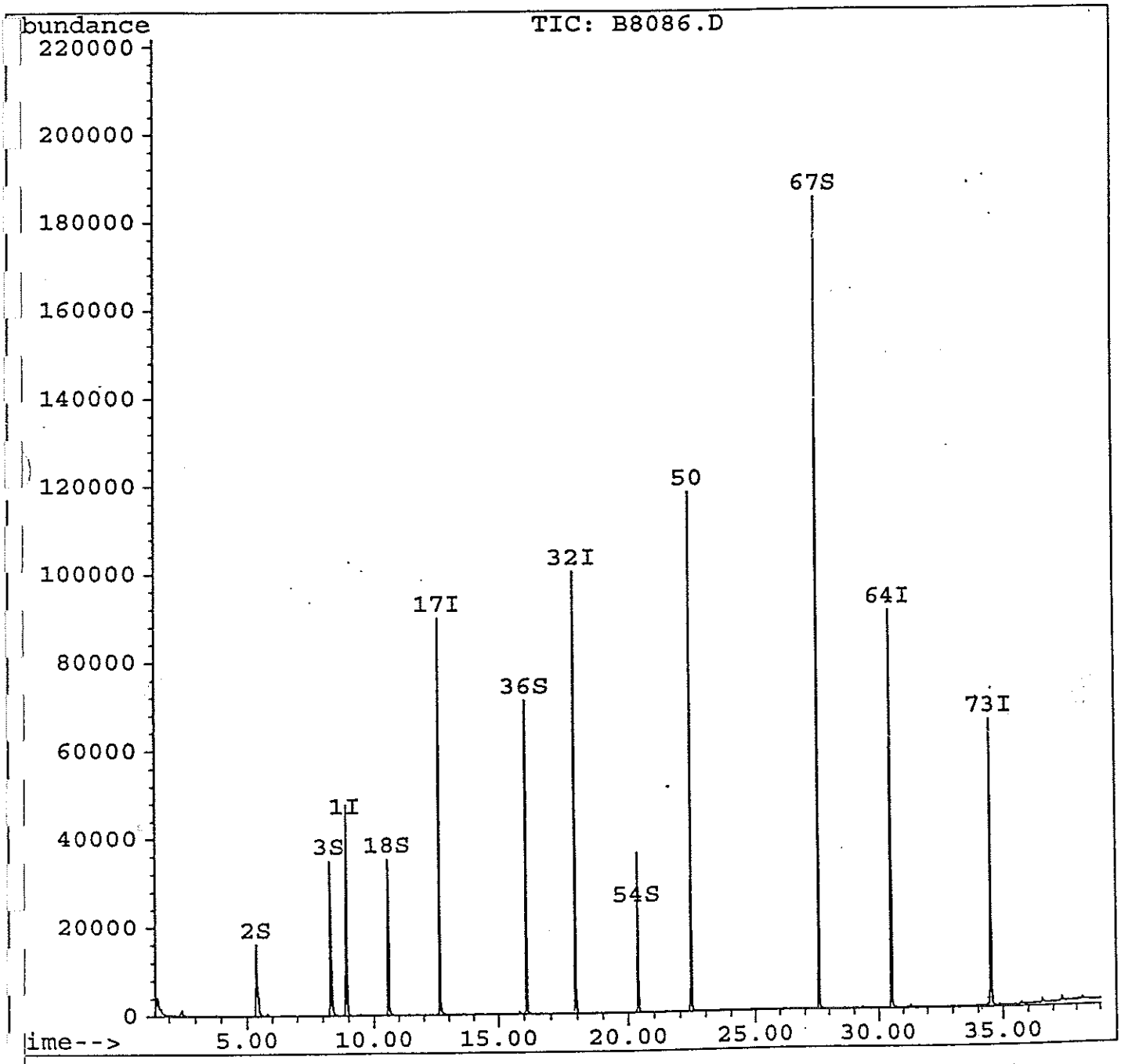
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.91	152	19737	40.00	ug/mL	0.10
17) Naphthalene-d8	12.62	136	81014	40.00	ug/mL	0.09
32) Acenaphthene-d10	17.93	164	53790	40.00	ug/mL	0.11
50) Phenanthrene-d10	22.43	188	84369	40.00	ug/ml	0.13
64) Chrysene-d12	30.51	240	87435	40.00	ug/mL	0.14
73) Perylene-d12	34.53	264	47173	40.00	ug/mL	0.18
System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	5.37	112	18733	37.13	ug/mL	37.13%
3) Phenol-d5	8.29	99	32166	39.05	ug/mL	39.05%
18) Nitrobenzene-d5	10.56	82	28181	34.70	ug/mL	34.70%
36) 2-Fluorobiphenyl	16.08	172	47599	29.61	ug/mL	29.61%
54) 2,4,6-Tribromophenol	20.35	330	7360	40.43	ug/mL	40.43%
67) Terphenyl-d14	27.59	244	135496	62.72	ug/mL	62.72%
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration

Data File : c:\hpchem\1\data2\b8086.d
Acq On : 1 Jul 95 7:15 pm
Sample : BLANK..... Converted from RTE d
Misc :
Quant Time: Jul 6 12:55 1995

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 29 16:02:59 1995
Response via : Multiple Level Calibration



Data File : c:\hpchem\1\data2\b8086.d
Acq On : 1 Jul 95 7:15 pm
Sample : BLANK..... Converted from RTE d
Misc :

Vial: 3
Operator: SCOTTV
Inst : ABNA
BT Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Library : NBS75K.L

222

No Library Search Compounds Detected

4B

SEMIVOLATILE METHOD BLANK SUMMARY

SAMPLE NO.

SBLK02

223

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Lab File ID: B8109.D Lab Sample ID: BLANK2

Instrument ID: ABNA Date Extracted: 7/3/95

Matrix: (soil/water) WATER Date Analyzed: 7/5/95

Level: (low/med) _____ Time Analyzed: 1746

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	9529205B	9529205B	B8110.D	07/05/95
02	9529206B	9529206B	B8111.D	07/05/95
03	9529207B	9529207B	B8112.D	07/05/95
04	29206MS	29206MS	B8113.D	07/05/95
05	29206MSD	29206MSD	B8114.D	07/05/95
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:

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SBLK02

224

Lab Name: EMSL ANALYTICAL Contract:

Project No.: Site: Location: Group:

Matrix: (soil/water) WATER Lab Sample ID: BLANK2

Sample wt/vol: 1000.0 (g/mL ML Lab File ID: B8109.D

Level: (low/med) Date Received: 6/29/95

% Moisture: 0 decanted: (Y/N): N Date Extracted: 7/3/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 7/5/95

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.

SBLK02

225

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Matrix: (soil/water) WATER Lab Sample ID: BLANK2

Sample wt/vol: 1000.0 (g/mL ML Lab File ID: B8109.D

Level: (low/med) _____ Date Received: 6/29/95

% Moisture: 0 decanted: (Y/N): N Date Extracted: 7/3/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 7/5/95

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	40	
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

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.
SBLK02

Lab Name: EMSL ANALYTICAL Contract: _____

Project No.: _____ Site: _____ Location: _____ Group: _____

Matrix: (soil/water) WATER Lab Sample ID: BLANK2

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: B8109.D

Level: (low/med) _____ Date Received: 6/29/95

% Moisture: 0 decanted: (Y/N) N Date Extracted: 7/3/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 7/5/95

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\b8109.d Vial: 3
Acq On : 5 Jul 95 5:46 pm Operator: SCOTTV
Sample : BLANK..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jul 12 14:41 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Thu Jun 29 16:02:59 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.82	152	16742	40.00	ug/mL	0.00
17) Naphthalene-d8	12.53	136	71374	40.00	ug/mL	0.00
32) Acenaphthene-d10	17.84	164	42389	40.00	ug/mL	0.02
50) Phenanthrene-d10	22.33	188	75919	40.00	ug/ml	0.02
64) Chrysene-d12	30.40	240	78228	40.00	ug/mL	0.04
73) Perylene-d12	34.41	264	70873	40.00	ug/mL	0.05
System Monitoring Compounds						**%Recovery**
2) 2-Fluorophenol	5.28	112	5140	12.01	ug/mL	12.01%
3) Phenol-d5	8.23	99	5240	7.50	ug/mL	7.50%
18) Nitrobenzene-d5	10.48	82	16833	23.52	ug/mL	23.52%
36) 2-Fluorobiphenyl	16.00	172	25843	20.40	ug/mL	20.40%
54) 2,4,6-Tribromophenol	20.27	330	5284	32.26	ug/mL	32.26%
67) Terphenyl-d14	27.48	244	114834	59.41	ug/mL	59.41%
Target Compounds						**Qvalue**
62) Di-n-butylphthalate	24.73	149	109039	39.59	ug/mL	100

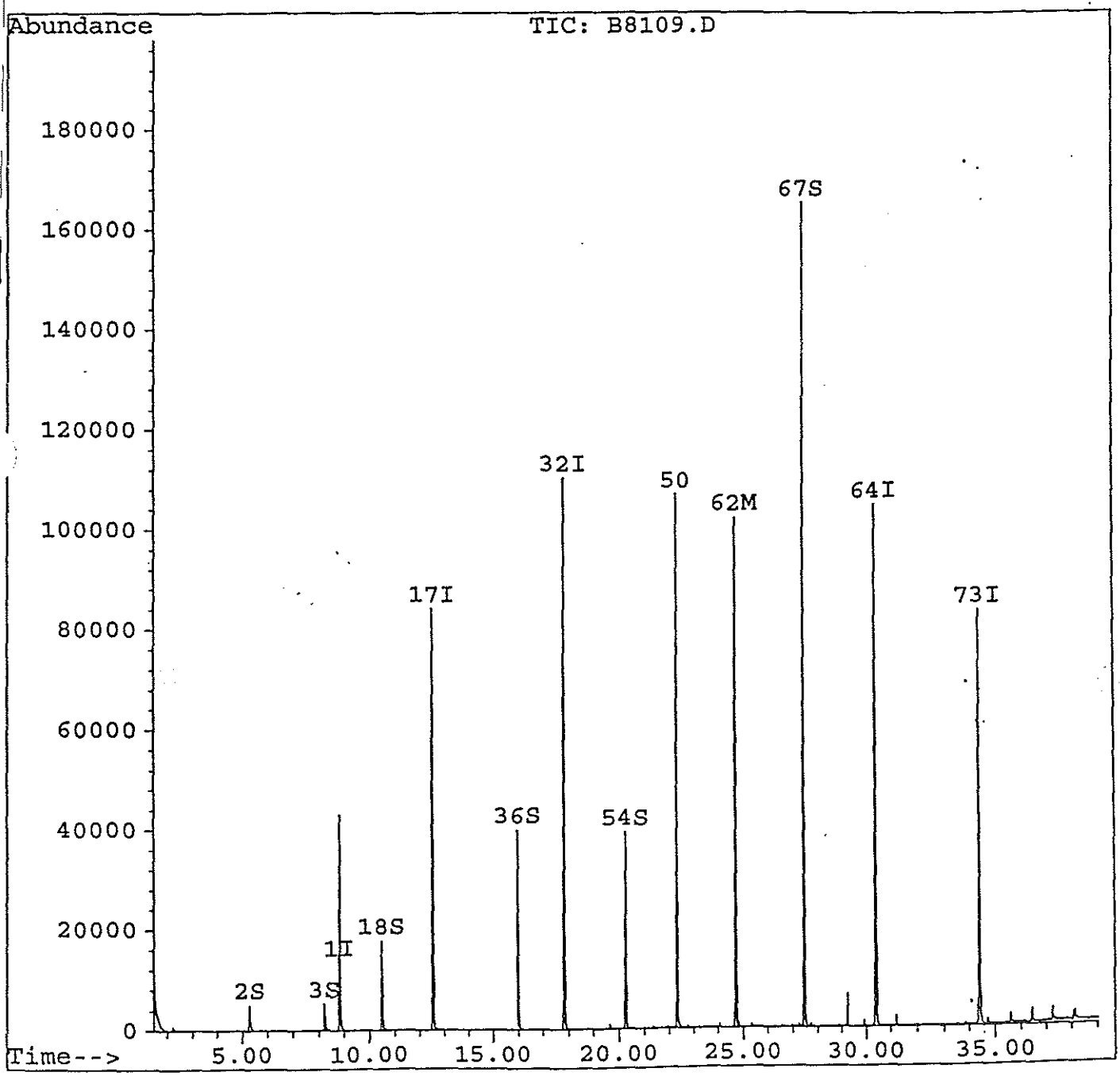
(#) = qualifier out of range (m) = manual integration

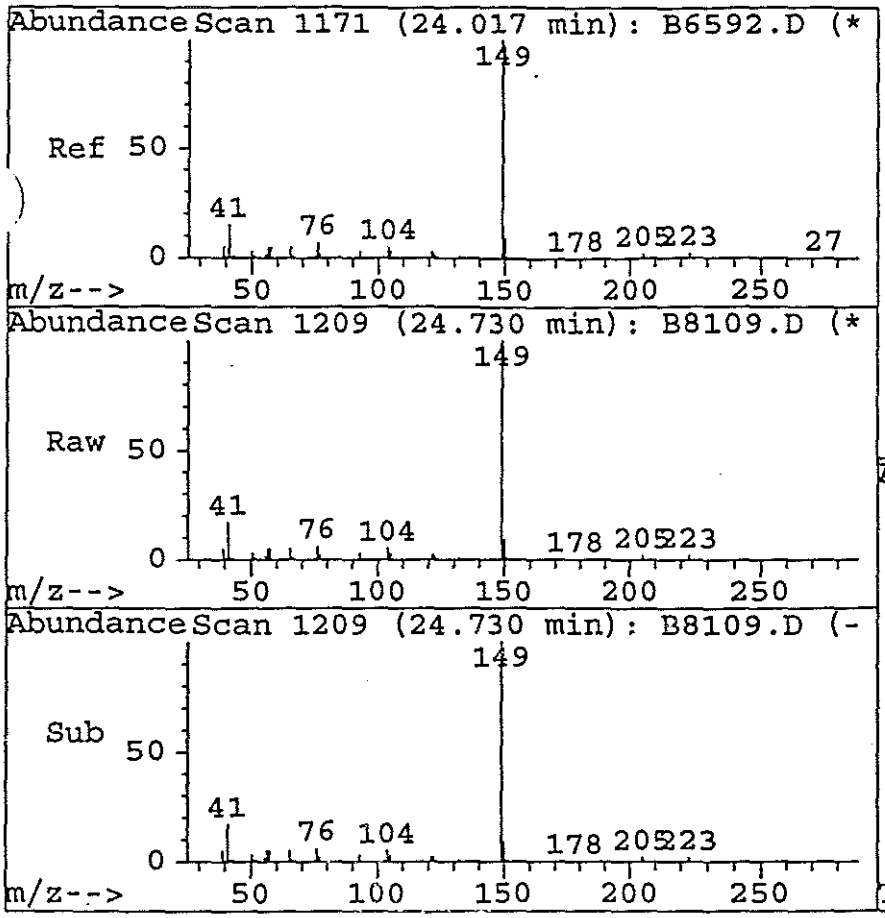
Quantitation Report

Data File : c:\hpchem\1\data2\b8109.d
Acq On : 5 Jul 95 5:46 pm
Sample : BLANK..... Converted from RTE d
Misc :
Quant Time: Jul 12 13:22 1995

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 29 16:02:59 1995
Response via : Multiple Level Calibration

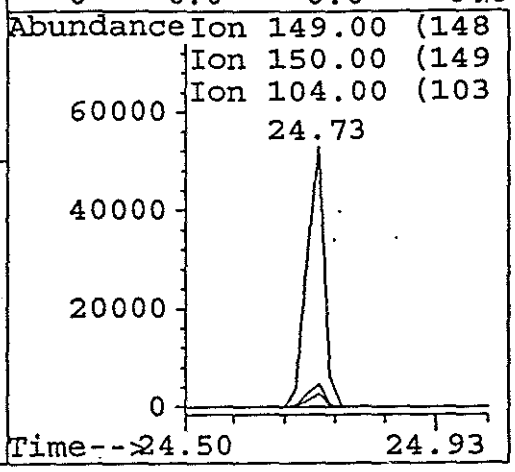




#62
Di-n-butylphthalate
Concen: 39.59 ug/mL
RT: 24.73 min Scan# 1209
Delta R.T. 0.04 min
Lab File: b8109.d
Acq: 5 Jul 95 5:46 pm

Tgt Ion:149 Resp: 109039

Ion	Ratio	Lower	Upper
149	100		
150	8.6	6.9	10.3
104	5.0	3.9	5.8
0	0.0	0.0	0.0



Library Search Compound Report

Data File : c:\hpchem\1\data2\b8109.d Vial: 3
Acq On : 5 Jul 95 5:46 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 : NBS75K.L

No Library Search Compounds Detected

Spike Recovery and RPD Summary Report - WATER

ethod : C:\HPCHEM\1\METHODS\BNACLP.M
itle : CLP BNA Calibration
a t Update : Thu Jun 29 16:02:59 1995
e ponse via : Initial Calibration

)piked Sample: B8111.D

	Spike Sample	Spike Duplicate Sample
ile ID :	B8113.D	B8114.D
ample :	29206MS.....	Converted from RTE data file >B8113::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	42	35	42	35	16	100	1-300
henol	0.0	100	23	21	23	21	10	23	5-112
i (2-Chloroethyl)et	0.0	100	53	48	53	48	10	55	12-158
2-Chlorophenol	0.0	100	38	33	38	33	13	29	23-134
,3-Dichlorobenzene	0.0	100	23	24	23	24	5	42	1-172
,4-Dichlorobenzene	0.0	100	24	25	24	25	3	32	20-124
,2-Dichlorobenzene	0.0	100	53	43	53	43	19	31	32-129
bis(2-chloroisopropy	0.0	100	85	72	85	72	17	46	36-166
N- itroso-Di-n-propy	0.0	100	59	55	59	55	7	55	1-230
Hexachloroethane	0.0	100	46	43	46	43	7	25	40-113
Nitrobenzene	0.1	100	49	41	49	40	18	39	35-180
Isophorone	0.0	100	55	51	55	51	7	63	21-196
2 itrophenol	0.0	100	54	44	54	44	20	35	29-182
Dimethylphenol	0.0	100	42	44	42	44	5	26	32-119
(2-Chloroethoxy)m	0.0	100	35	35	35	35	0	35	33-184
2, -Dichlorophenol	0.0	100	46	41	46	41	12	26	39-135
1, ,4-Trichlorobenze	0.0	100	49	45	49	45	9	28	44-142
Naphthalene	0.0	100	44	37	44	37	16	30	21-133
Hexachlorobutadiene	0.0	100	32	28	32	28	12	26	24-116
4 hloro-3-methylphe	0.0	100	61	62	61	62	2	37	22-147
2-Chloronaphthalene	0.0	100	93	87	93	87	6	13	60-118
2, ,4,6-Trichloropheno	0.0	100	40	40	40	40	2	32	37-144
D methylphthalate	0.0	100	17	21	17	21	20	23	1-112
Acenaphthylene	0.0	100	44	45	44	45	2	40	33-145
2,6-Dinitrotoluene	0.0	100	73	78	73	78	6	30	50-158
A naphthene	0.0	100	61	59	61	59	3	28	47-145
2, -Dinitrophenol	0.0	100	46	49	46	49	5	50	1-191
4-Nitrophenol	0.0	100	19	18	19	18	6	47	1-132
2 -Dinitrotoluene	0.0	100	73	66	73	66	10	22	39-139
D ethylphthalate	0.1	100	31	31	31	31	1	27	1-114
Fluorene	0.8	100	63	63	62	62	1	21	59-121
4 Chlorophenyl-pheny	0.0	100	60	61	60	61	2	33	25-158
4 6-Dinitro-2-methyl	0.0	100	38	37	38	37	2	93	1-181
4-Bromophenyl-phenyl	0.0	100	61	65	61	65	6	23	53-127
Hexachlorobenzene	0.0	100	73	76	73	76	5	25	1-152
P ntachlorophenol	0.0	100	35	33	35	33	4	49	14-176
P enanthrene	0.0	100	58	57	57	57	0	21	54-120
Anthracene	0.0	100	70	69	70	69	0	32	52-115
n-butylphthalate	21.1	100	114	108	93	87	6	17	1-118
oranthene	0.1	100	61	62	61	62	2	33	26-137
Pyrene	0.1	100	78	82	78	82	5	25	52-115
B tylbenzylphthalate	15.5	100	78	90	62	74	17	23	1-152
B nzo[a]anthracene	0.4	100	73	77	72	76	5	28	33-143
3,3'-Dichlorobenzidi	0.0	100	18	25	18	25	34	71	1-262

Chrysene	0.4	100	80	83	79	82	4	48	17-168
Bis(2-Ethylhexyl)pht	0.0	100	80	84	80	84	4	41	8-158
Di-n-octylphthalate	0.1	100	72	70	72	70	4	31	4-146
Benzo[b]fluoranthene	0.1	100	73	80	73	80	8	39	24-159
Benzo[k]fluoranthene	0.1	100	80	87	80	87	8	32	11-162
Benzo[a]pyrene	0.1	100	82	85	81	85	4	39	17-163
Indeno[1,2,3-cd]pyre	0.0	100	47	53	47	53	12	45	1-171
Dibenz[a,h]anthracen	0.0	100	52	54	52	54	2	70	1-227
Benzo[g,h,i]perylene	0.0	100	46	51	46	51	12	59	1-219

Quantitation Report

Data File : c:\hpchem\1\data2\b8113.d Vial: 7
Acq On : 5 Jul 95 9:25 pm Operator: SCOTTV
Sample : 29206MS..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jul 12 15:11 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Thu Jun 29 16:02:59 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.82	152	21908	40.00	ug/mL	0.00
17) Naphthalene-d8	12.55	136	89645	40.00	ug/mL	0.02
32) Acenaphthene-d10	17.85	164	64057	40.00	ug/mL	0.03
50) Phenanthrene-d10	22.34	188	109404	40.00	ug/ml	0.03
64) Chrysene-d12	30.41	240	62485	40.00	ug/mL	0.05
73) Perylene-d12	34.41	264	35222	40.00	ug/mL	0.05
System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	5.28	112	14988	26.76	ug/mL	26.76%
3) Phenol-d5	8.22	99	24160	26.42	ug/mL	26.42%
18) Nitrobenzene-d5	10.51	82	48628	54.11	ug/mL	54.11%
36) 2-Fluorobiphenyl	16.00	172	92744	48.45	ug/mL	48.45%
54) 2,4,6-Tribromophenol	20.28	330	15349	65.02	ug/mL	65.02%
67) Terphenyl-d14	27.48	244	125905	81.55	ug/mL	81.55%
Target Compounds						Qvalue
4) N-nitrosodimethylamine	2.18	74	9820	41.70	ug/ml	100
6) Phenol	8.26	94	19548	23.27	ug/mL	100
7) bis(2-Chloroethyl)ether	12.22	93	58151	53.13	ug/mL	95
8) 2-Chlorophenol	8.26	128	25132	37.88	ug/mL#	85
9) 1,3-Dichlorobenzene	8.63	146	17623	23.29	ug/mL	96
10) 1,4-Dichlorobenzene	8.88	146	18793	24.08	ug/mL	97
11) 1,2-Dichlorobenzene	9.26	146	39124	52.51	ug/mLm	99
13) bis(2-chloroisopropyl)ethe	9.90	45	82618	85.13	ug/mL#	64
15) N-Nitroso-Di-n-propylamine	10.30	70	39109	59.16	ug/mL	94
16) Hexachloroethane	10.22	117	18054	45.79	ug/mLm	97
19) Nitrobenzene	10.55	77	42718	48.75	ug/mL#	69
20) Isophorone	11.36	82	100863	54.62	ug/mL	96
21) 2-Nitrophenol	11.49	139	23338	53.64	ug/mL	87
22) 2,4-Dimethylphenol	11.97	107	34711	41.55	ug/mLm	1
23) bis(2-Chloroethoxy)methane	8.32	93	30814	34.74	ug/mL	98
24) 2,4-Dichlorophenol	12.30	162	30436	45.71	ug/mL	97
25) 1,2,4-Trichlorobenzene	12.44	180	35009	48.87	ug/mLm	98
26) Naphthalene	12.61	128	96047	43.59	ug/mL#	91
27) 4-Chloroaniline	12.61	127	12206	12.54	ug/mL#	11
28) Hexachlorobutadiene	13.13	225	13008	31.91	ug/mL	98
29) 4-Chloro-3-methylphenol	14.71	107	46712	60.92	ug/mL	98
30) 2-Chloronaphthalene	16.17	162	147568	92.68	ug/mlm	98
31) 2-Methylnaphthalene	14.71	142	35689	16.95	ug/mL#	18
33) Hexachlorocyclopentadiene	15.27	237	13563	34.49	ug/mL	99
34) 2,4,6-Trichlorophenol	15.73	196	23029	40.44	ug/mL	98
35) 2,4,5-Trichlorophenol	15.73	196	23029	39.35	ug/mL	100
37) 2-Nitroaniline	17.44	65	1827	2.49	ug/mL#	100
38) Dimethylphthalate	17.44	163	36269	17.39	ug/mL#	99

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data2\b8113.d Vial: 7
Acq On : 5 Jul 95 9:25 pm Operator: SCOTTV
Sample : 29206MS..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jul 12 15:11 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Thu Jun 29 16:02:59 1995
Response via : Multiple Level Calibration

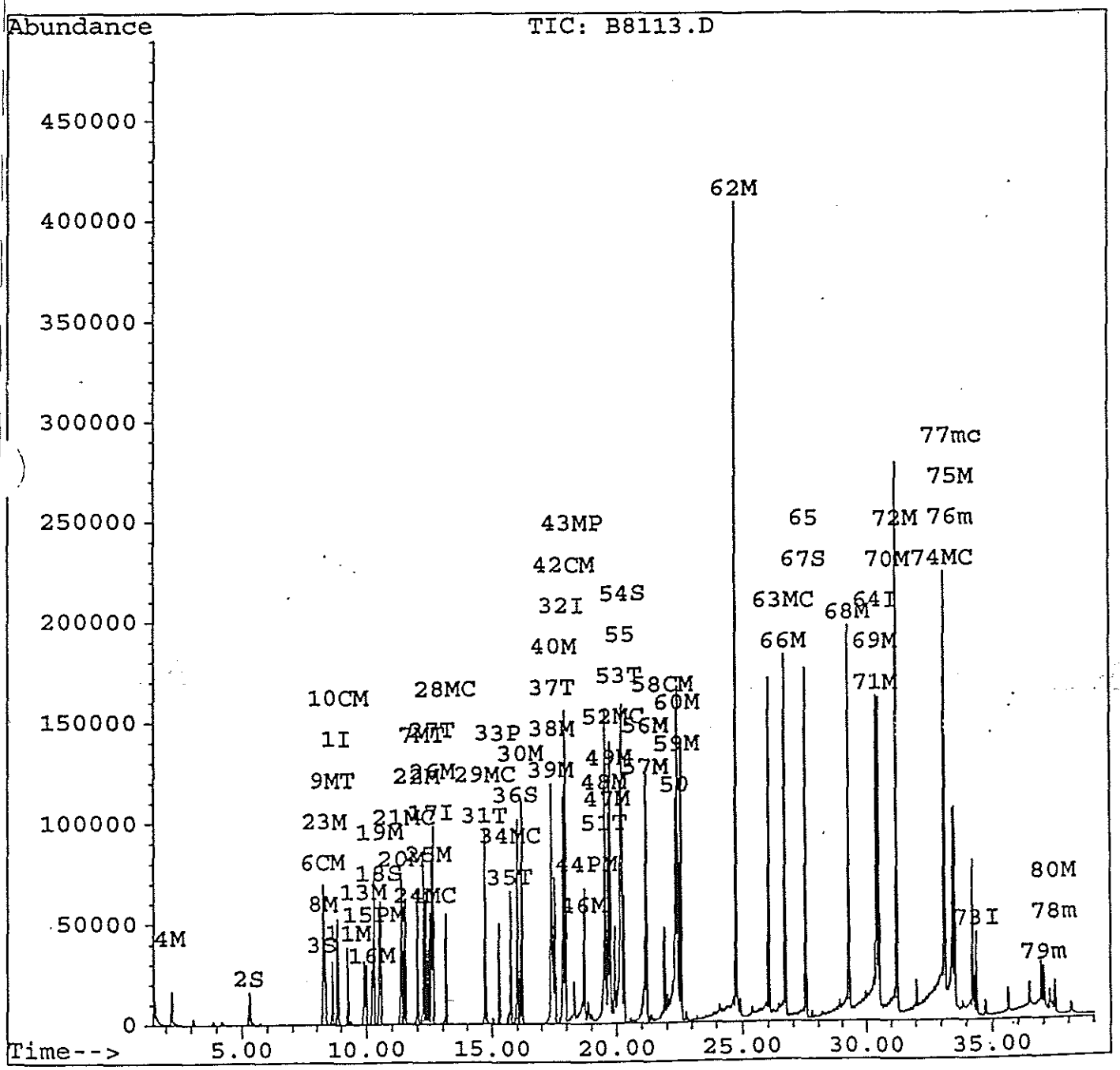
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
39)	Acenaphthylene	17.38	152	120202	43.60	ug/mL	98
40)	2,6-Dinitrotoluene	17.52	165	31123	73.28	ug/mL	99
42)	Acenaphthene	17.94	153	101925	60.55	ug/mL	99
43)	2,4-Dinitrophenol	18.27	184	10440	46.50	ug/mL	92
44)	4-Nitrophenol	18.83	109	4356	19.18	ug/mL	82
46)	2,4-Dinitrotoluene	18.69	165	37332	73.01	ug/mLm	39
47)	Diethylphthalate	19.66	149	71793	30.77	ug/mL	98
48)	Fluorene	19.54	166	123004	62.74	ug/mL	98
49)	4-Chlorophenyl-phenylether	19.73	204	56409	59.91	ug/mL	93
51)	4-Nitroaniline	19.54	138	1309	2.96	ug/mL#	23
52)	4,6-Dinitro-2-methylphenol	19.91	198	11132	38.04	ug/mL	100
53)	n-Nitrosodiphenylamine	20.14	169	73903	56.50	ug/mL#	1
55)	1,2-Diphenylhydrazine (as	20.20	77	197161	64.11	ug/ml	100
56)	4-Bromophenyl-phenylether	21.18	248	32230	61.11	ug/mL	96
57)	Hexachlorobenzene	21.16	284	37364	72.63	ug/mL#	44
58)	Pentachlorophenol	21.87	266	13020	35.01	ug/mL	97
59)	Phenanthrene	22.42	178	164387	57.50	ug/mL	99
60)	Anthracene	22.42	178	175399	69.80	ug/mL	98
62)	Di-n-butylphthalate	24.76	149	452621	114.03	ug/mLm	99
63)	Fluoranthene	26.65	202	173456	60.79	ug/mL	94
65)	Benzidine	27.48	184	1793	4.25	ug/ml	100
66)	Pyrene	26.65	202	173108	77.89	ug/mL	92
68)	Butylbenzylphthalate	29.26	149	110507	77.87	ug/mL	94
69)	Benzo[a]anthracene	30.40	228	139371	72.75	ug/mL	99
70)	3,3'-Dichlorobenzidine	30.92	252	10257	17.56	ug/mLm	80
71)	Chrysene	30.40	228	135956	79.50	ug/mL	99
72)	bis(2-Ethylhexyl)phthalate	31.22	149	171292	80.43	ug/mL	99
74)	Di-n-octylphthalate	33.13	149	276673	72.21	ug/mL	99
75)	Benzo[b]fluoranthene	33.44	252	93300	73.41	ug/mL	97
76)	Benzo[k]fluoranthene	33.44	252	93300	80.03	ug/mL	99
77)	Benzo[a]pyrene	33.52	252	89072	81.56	ug/mL#	94
78)	Indeno[1,2,3-cd]pyrene	37.45	276	17841	46.66	ug/mL	88
79)	Dibenz[a,h]anthracene	37.03	278	22243	52.34	ug/mL	96
80)	Benzo[g,h,i]perylene	37.45	276	17841	45.59	ug/mL	95

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data2\b8113.d Vial: 7
Acq On : 5 Jul 95 9:25 pm Operator: SCOTTV
Sample : 29206MS..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jul 12 15:11 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Thu Jun 29 16:02:59 1995
Response via : Multiple Level Calibration



Quantitation Report

Data File : c:\hpchem\1\data2\b8114.d Vial: 8
Acq On : 5 Jul 95 10:18 pm Operator: SCOTTV
Sample : 29206MSD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jul 12 15:11 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Thu Jun 29 16:02:59 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	8.82	152	24662	40.00	ug/mL	0.00
17) Naphthalene-d8	12.54	136	102269	40.00	ug/mL	0.00
32) Acenaphthene-d10	17.85	164	73359	40.00	ug/mL	0.03
50) Phenanthrene-d10	22.32	188	125307	40.00	ug/ml	0.02
64) Chrysene-d12	30.42	240	69259	40.00	ug/mL	0.06
73) Perylene-d12	34.40	264	37889	40.00	ug/mL	0.04
System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	5.28	112	15350	24.35	ug/mL	24.35%
3) Phenol-d5	8.23	99	24341	23.65	ug/mL	23.65%
18) Nitrobenzene-d5	10.50	82	47408	46.24	ug/mL	46.24%
36) 2-Fluorobiphenyl	16.00	172	102489	46.75	ug/mL	46.75%
54) 2,4,6-Tribromophenol	20.28	330	18187	67.26	ug/mL	67.26%
67) Terphenyl-d14	27.47	244	146321	85.50	ug/mL	85.50%
Target Compounds						Qvalue
4) N-nitrosodimethylamine	2.20	74	9374	35.36	ug/ml	100
6) Phenol	8.26	94	19981	21.13	ug/mL	100
7) bis(2-Chloroethyl)ether	12.23	93	59015	47.90	ug/mL	97
8) 2-Chlorophenol	8.24	128	24840	33.26	ug/mL	95
9) 1,3-Dichlorobenzene	8.63	146	20849	24.47	ug/mL#	94
10) 1,4-Dichlorobenzene	8.88	146	21869	24.89	ug/mL	99
11) 1,2-Dichlorobenzene	9.26	146	36335	43.32	ug/mLm	99
13) bis(2-chloroisopropyl)ethe	9.92	45	78780	72.11	ug/mL#	64
15) N-Nitroso-Di-n-propylamine	10.28	70	41229	55.40	ug/mL	98
16) Hexachloroethane	10.21	117	18969	42.74	ug/mLm	83
19) Nitrobenzene	10.55	77	40528	40.54	ug/mL#	77
20) Isophorone	11.36	82	106779	50.68	ug/mL	97
21) 2-Nitrophenol	11.50	139	21678	43.68	ug/mL	88
22) 2,4-Dimethylphenol	11.98	107	41562	43.61	ug/mLm	1
23) bis(2-Chloroethoxy)methane	8.32	93	35208	34.80	ug/mLm	98
24) 2,4-Dichlorophenol	12.31	162	30858	40.62	ug/mL	99
25) 1,2,4-Trichlorobenzene	12.44	180	36609	44.80	ug/mLm	98
26) Naphthalene	12.60	128	93192	37.08	ug/mL#	89
27) 4-Chloroaniline	12.60	127	12016	10.82	ug/mL#	1
28) Hexachlorobutadiene	13.11	225	13217	28.42	ug/mL	98
29) 4-Chloro-3-methylphenol	14.71	107	54205	61.97	ug/mL	99
30) 2-Chloronaphthalene	16.18	162	158345	87.17	ug/mlm	99
31) 2-Methylnaphthalene	14.69	142	41058	17.10	ug/mL#	19
33) Hexachlorocyclopentadiene	15.27	237	14579	32.37	ug/mL	98
34) 2,4,6-Trichlorophenol	15.73	196	25828	39.61	ug/mL	97
35) 2,4,5-Trichlorophenol	15.73	196	25828	38.53	ug/mL	98
37) 2-Nitroaniline	17.43	65	2263	2.69	ug/mL#	100
38) Dimethylphthalate	17.43	163	50610	21.19	ug/mL	98

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data2\b8114.d Vial: 8
Acq On : 5 Jul 95 10:18 pm Operator: SCOTTV
Sample : 29206MSD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jul 12 15:11 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Thu Jun 29 16:02:59 1995
Response via : Multiple Level Calibration

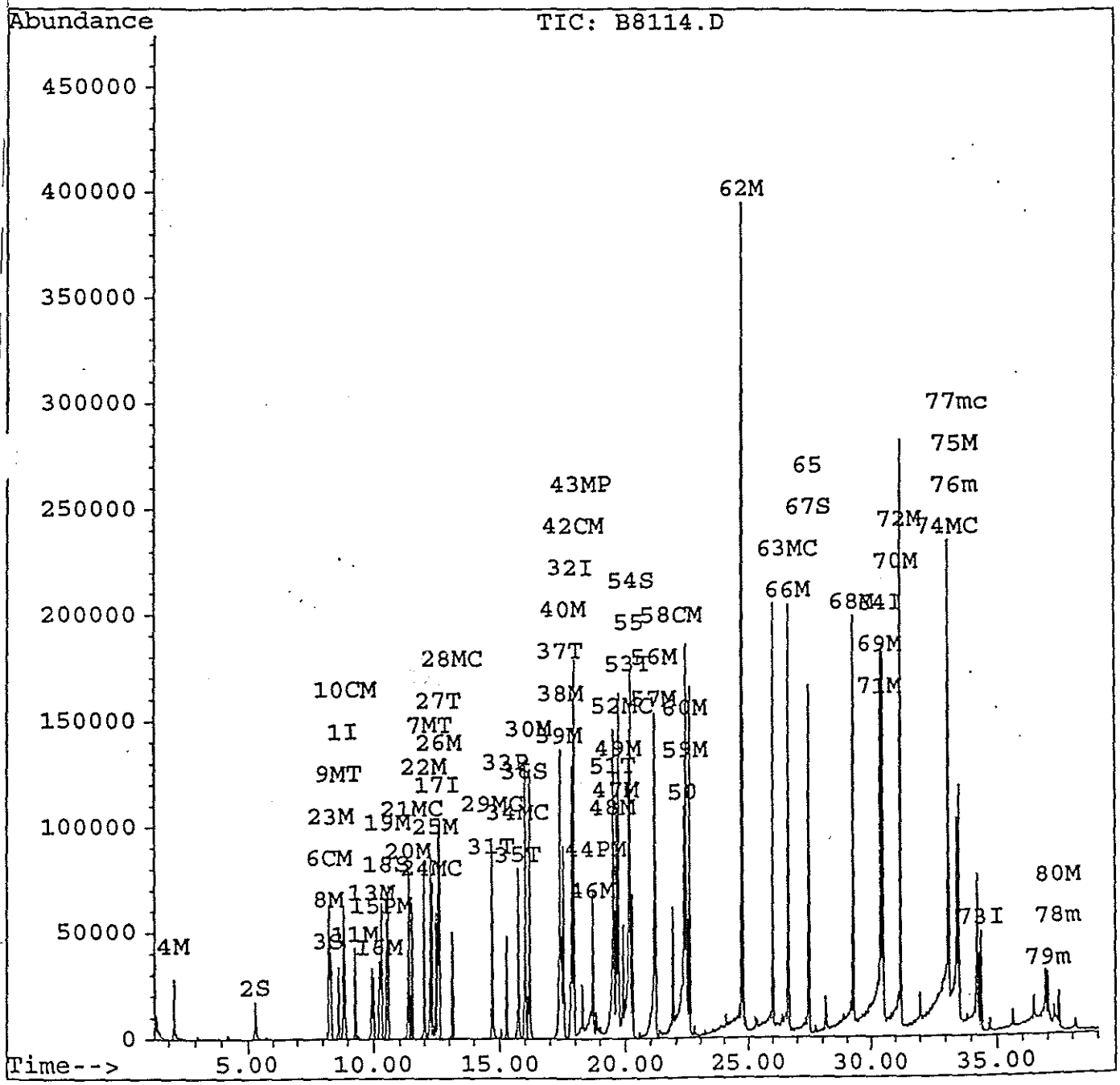
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
39)	Acenaphthylene	17.39	152	140950	44.64	ug/mL	99
40)	2,6-Dinitrotoluene	17.52	165	37936	77.99	ug/mL	99
42)	Acenaphthene	17.95	153	113560	58.90	ug/mL	99
43)	2,4-Dinitrophenol	18.27	184	12514	48.67	ug/mL	95
44)	4-Nitrophenol	18.83	109	4703	18.08	ug/mL	87
46)	2,4-Dinitrotoluene	18.70	165	38490	65.73	ug/mLm	37
47)	Diethylphthalate	19.66	149	83286	31.17	ug/mL	97
48)	Fluorene	19.53	166	142008	63.25	ug/mL	98
49)	4-Chlorophenyl-phenylether	19.74	204	66008	61.21	ug/mL#	87
51)	4-Nitroaniline	19.55	138	1659	3.28	ug/mL#	23
52)	4,6-Dinitro-2-methylphenol	19.91	198	12438	37.11	ug/mL	100
53)	n-Nitrosodiphenylamine	20.15	169	49327	32.93	ug/mL#	1
55)	1,2-Diphenylhydrazine (as	20.20	77	225342	63.97	ug/ml	100
56)	4-Bromophenyl-phenylether	21.19	248	39041	64.63	ug/mL	99
57)	Hexachlorobenzene	21.17	284	44997	76.37	ug/mL#	36
58)	Pentachlorophenol	21.88	266	14271	33.50	ug/mL	97
59)	Phenanthrene	22.40	178	187363	57.22	ug/mL	99
60)	Anthracene	22.40	178	200023	69.49	ug/mL	99
62)	Di-n-butylphthalate	24.75	149	492753	108.38	ug/mLm	100
63)	Fluoranthene	26.66	202	202081	61.83	ug/mL#	89
65)	Benzidine	27.47	184	2163	4.62	ug/ml	100
66)	Pyrene	26.66	202	202050	82.02	ug/mL	95
68)	Butylbenzylphthalate	29.25	149	140908	89.58	ug/mL	99
69)	Benzo[a]anthracene	30.39	228	162750	76.65	ug/mL	99
70)	3,3'-Dichlorobenzidine	31.06	252	15962	24.65	ug/mLm	0
71)	Chrysene	30.39	228	156404	82.51	ug/mL	98
72)	bis(2-Ethylhexyl)phthalate	31.22	149	197832	83.80	ug/mL	100
74)	Di-n-octylphthalate	33.12	149	287178	69.67	ug/mL	99
75)	Benzo[b]fluoranthene	33.43	252	109041	79.75	ug/mL	98
76)	Benzo[k]fluoranthene	33.43	252	109041	86.95	ug/mL	97
77)	Benzo[a]pyrene	33.53	252	99650	84.83	ug/mL	96
78)	Indeno[1,2,3-cd]pyrene	37.44	276	21624	52.58	ug/mL	100
79)	Dibenz[a,h]anthracene	37.02	278	24508	53.61	ug/mL	99
80)	Benzo[g,h,i]perylene	37.44	276	21624	51.37	ug/mL	97

(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data2\b8114.d Vial: 8
Acq On : 5 Jul 95 10:18 pm Operator: SCOTTV
Sample : 29206MSD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jul 12 15:11 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Thu Jun 29 16:02:59 1995
Response via : Multiple Level Calibration



EMSL

PESTICIDE/PCB DATA PACKAGE

9

PESTICIDE/PCB STANDARDS SUMMARY

Lab Name: EMSL ANALYTICAL Contract: _____

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

Instrument ID: HP5890/SERP GC Column ID: DB5

DATE(S) OF ANALYSIS FROM: 6-26-95 TO: 16:50

TIME(S) OF ANALYSIS FROM: 6-26-95 TO: 22:01

DATE OF ANALYSIS 6-27-95

TIME OF ANALYSIS 21:14

EPA SAMPLE NO. (STANDARD) 119426

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR	RT	CALIBRATION FACTOR	QNT Y/N	%D
alpha-BHC	5:56	5:51	5:61	1557				
beta-BHC	6:25	6:20	6:30	1289				
delta-BHC	7:03	6:98	7:08	1346				
gamma-BHC	6:40	6:35	6:45	1723				
Heptaclor	8:43	8:38	8:48	2399				
Aldrin	9:47	9:42	9:52	2002				
Hept. epoxide	10:75	10:70	10:80	2160				
Endosulfan I	11:89	11:8	11:96	2210				
Dieldrin	12:74	12:67	12:81	2015				
4,4'-DDE	12:89	12:82	12:96	2118				
Endrin	13:41	13:34	13:48	1845				
Endosulfan II	13:73	13:66	13:80	2124				
4,4'-DDD	14:26	14:19	14:33	1386				
Endo.sulfate	15:18	15:11	15:25	1845				
4,4'-DDT	15:50	15:43	15:57	1379				
Methoxychlor	17:55	17:48	17:62	850				
Endrin ketone	16:63	16:56	16:70	2303				
a. Chlordane	12:02	11:95	12:09	2419				
g. Chlordane	11:62	11:45	11:59	2466				
Toxaphene	18:40	15:33	15:47	39283				
Aroclor-1016	8:02	7:95	8:09	231326	8:02	221612	Y	4
Aroclor-1221	5:58	5:51	5:65	88583				
Aroclor-1232	8:02	7:95	8:09	82663				
Aroclor-1242	8:02	7:95	8:09	183580				
Aroclor-1248	8:02	7:95	8:09	122492				
Aroclor-1254	13:08	13:01	13:15	179815				
Aroclor-1260	17:89	17:82	17:96	372656	17:89	365567	Y	2
Endrin Aldehyde	14:38	14:31	14:45	1845				

Under QNT Y/N: enter Y if quantitation was performed, N if not performed. %D must be less than or equal to 15.0% for quantitation, and less than or equal to 20.0% for confirmation.

Note: Determining that no compounds were found above the CRQL is a form of quantitation, and therefore at least one column must meet the 15.0% criteria.

For multicomponent analytes, the single largest peak that is characteristic of the component should be used to establish retention time and %D. Identification of such analytes is based primarily on pattern recognition

9

PESTICIDE/PCB STANDARDS SUMMARY

Lab Name: EMSL ANALYTICAL Contract: _____

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

Instrument ID: HP5890/SIEP GC Column ID: DB1701

DATE(S) OF ANALYSIS FROM: 6-26-95 TO: 16:50

TIME(S) OF ANALYSIS FROM: 6-26-95 TO: 22:01

DATE OF ANALYSIS 6-27-95

TIME OF ANALYSIS 21:14

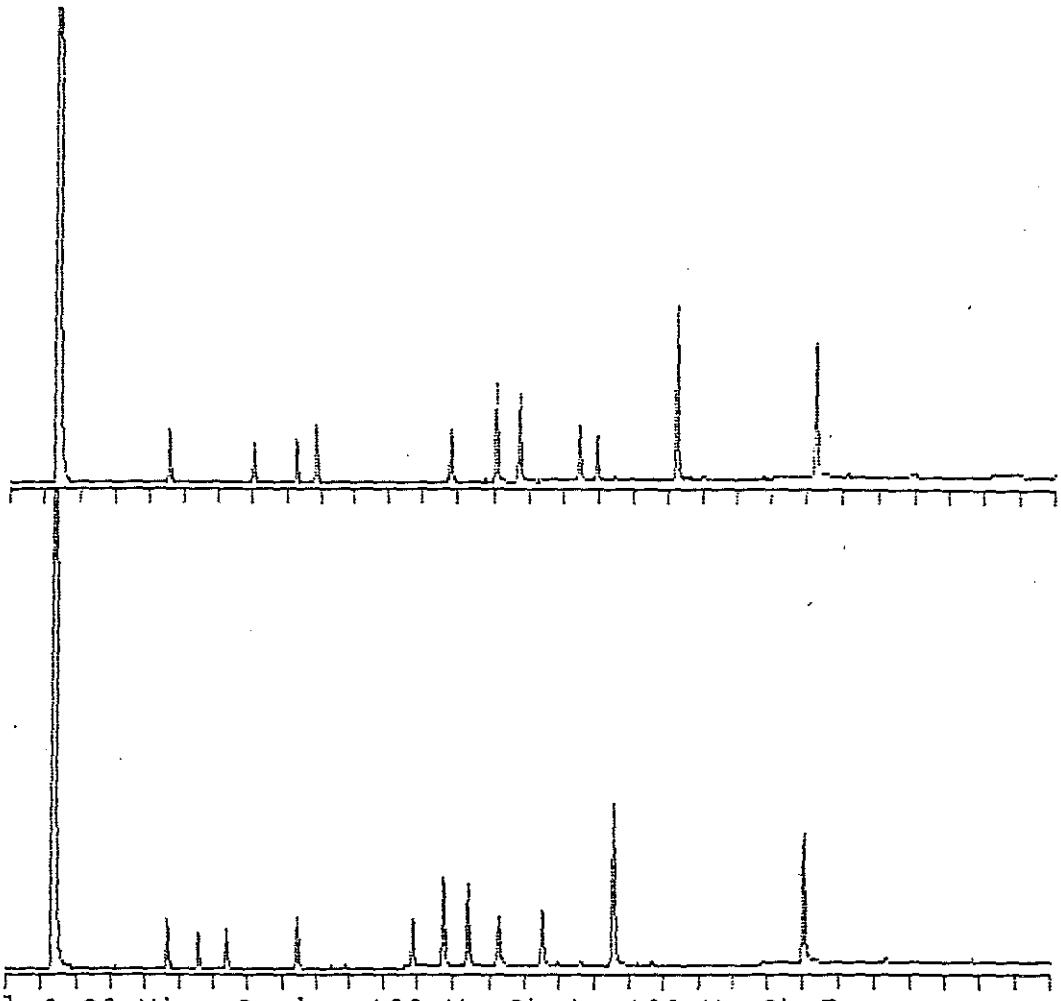
EPA SAMPLE NO. (STANDARD) 1194261

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR	RT	CALIBRATION FACTOR	QNT Y/N	%D
alpha-BHC	7:05	7:00	7:10	1612				
beta-BHC	10:92	10:87	10:98	1408				
delta-BHC	11:87	11:82	11:62	1429				
gamma-BHC	8:28	8:23	8:33	1719				
Heptaclor	8:85	8:80	8:90	2369				
Aldrin	9:65	9:60	9:70	2040				
Hept. epoxide	12:01	11:96	12:06	2312				
Endosulfan I	12:83	12:76	12:90	2306				
Dieldrin	14:06	13:99	14:13	2071				
4,4'-DDE	13:76	13:69	13:83	2044				
Endrin	14:71	14:64	14:78	1913				
Endosulfan II	16:42	16:35	16:49	2191				
4,4'-DDD	16:43	16:36	16:50	1344				
Endo.sulfate	18:89	18:82	18:96	1898				
4,4'-DDT	16:95	16:88	17:02	1045				
Methoxychlor	19:24	19:17	19:31	808				
Endrin ketone	20:04	19:97	20:11	2111				
a. Chlordane	13:36	13:29	13:43	2488				
g. Chlordane	13:09	13:02	13:16	2533				
Toxaphene	18:64	18:57	18:71	20967				
Aroclor-1016	8:60	8:53	8:67	213992	8:60	193784	Y	9
Aroclor-1221	6:06	5:99	6:13	82927				
Aroclor-1232	8:60	8:53	8:67	87045				
Aroclor-1242	8:60	8:53	8:67	164431				
Aroclor-1248	8:60	8:53	8:67	109514				
Aroclor-1254	14:03	13:96	14:10	174261				
Aroclor-1260	18:69	18:62	18:76	336857	18:69	303602	Y	8
Endrin Aldehyde	17:80	17:73	17:87	1748				

Under QNT Y/N: enter Y if quantitation was performed, N if not performed. %D must be less than or equal to 15.0% for quantitation, and less than or equal to 20.0% for confirmation.

Note: Determining that no compounds were found above the CRQL is a form of quantitation, and therefore at least one column must meet the 15.0% criteria.

For multicomponent analytes, the single largest peak that is characteristic of the component should be used to establish retention time and %D. Identification of such analytes is based primarily on pattern recognition



[Interface 1] 0-30 Min Scale: 100 Mv Ch.A, 100 Mv Ch.B
INDA Processed: 06-26-1995 17:24:34, segment 4, cycle 4
RAW DATA SAVED IN FILE E:JU26E4.PTS Second Channel Stored in E:KU26E4.PTS

***** EXTERNAL STANDARD TABLE *****

********** 06-26-1995 17:24:46 Version 5.1.5 **********
* Sample Name: INDA Data File: E:JU26E4 *
* Date: 06-26-1995 16:54:15 Method: M:APES-G 03-08-1995 15:02:41 # 359 *
* Interface: 1 Cycle#: 4 Operator JJK Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 10 Area Threshold: 1000 *
****
* Instrument Type: Perkin-Elmer 8500 Column Type: RTx-5 30m,.35mm *
* Solvent Description: 1.0u df *
* Conditions: 180 for 4.0min then 4.0deg/min to 240. hold 30min *
* Detector 0: Detector 1: ECD *
* Misc. Information: *
****

Starting Delay: 0.00 Ending retention time: 30.00
Area reject: 1000 One sample per 1.002 sec.
Amount injected: 1.00 Dilution Factor: 1.00
Sample Weight: 1.00000

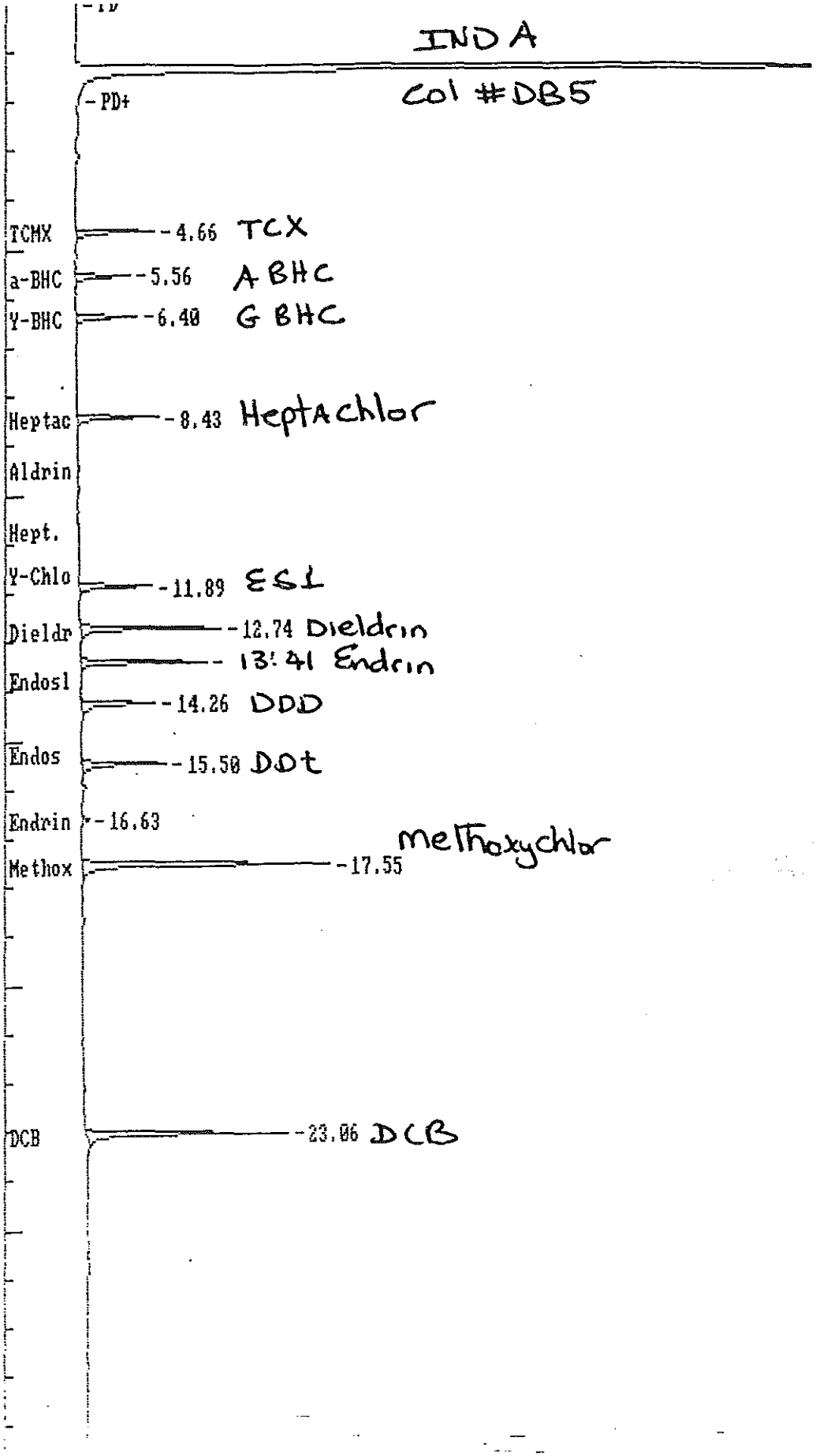
PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT RL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	4.659	TCMX	24.3272	5.3580%	46637	10453	4.5 : 1	0	-.3571	5.2163E-04
2	5.561	a-BHC	18.9715	4.1784%	31140	7262	4.3 : 1	0	-.2994	6.0923E-04
3	6.396	Y-BHC	18.8662	4.1552%	34450	8129	4.2 : 1	0	-.2604	5.4764E-04
4	9.432	Heptachlor	21.0357	4.6330%	47966	10830	4.4 : 1	0	-.3941	4.3837E-04

8	12.742	Dieldrin	32.1501	7.0788%	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	13.410	Endrin	35.8105	7.8872%	73802	16685	4.4 1	0	-.1864	4.8522E-04
	14.262	4'4-ODD	32.9008	7.2463%	55425	9818	5.6 1	0	-.1169	5.9361E-04
9	15.498	DDT	32.6391	7.1887%	55173	11143	5.0 1	0	-.1076	5.9158E-04
	16.633	Endrin ket.	2.1154	0.4659%	5005	913	5.5 1	0	-.1003	4.2265E-04
	17.552	Methoxychlor	174.1857	38.3639%	169947	33155	5.1 1	0	0	1.0249E-03
12	23.063	DCB	41.8959	9.2275%	143061	26927	5.3 1	0	-.1446	2.9285E-04

TOTAL AMOUNT = 454.0353

GROUP NUMBER GROUP AMOUNT GROUP PERCENT

reas, times, and heights stored in: E:JU26E4.ATB
ata File = E:JU26E4.PTS Printed on 06-26-1995 at 17:24:56
art time: 0.00 min. Stop time: 30.00 min. Offset: 1 mv.
ll Range: 100 millivolts



***** EXTERNAL STANDARD TABLE *****

********** 06-26-1995 17:25:07 Version 5.1.5 **********

Sample Name: INDA Data File: E:KU26E4

Date: 06-26-1995 16:54:15 Method: M:BPES-G 03-31-1995 14:31:59 # 358

Interface: 1 Cycle#: 4 Operator JJK Channel#: 1 Vial#: N.A.

Starting Peak Width: 10 Threshold: 10 Area Threshold: 500

Instrument Type: Perkin-Elmer 8500 Column Type: RTx-5 30m,.35mm

Solvent Description: 1.0u df

Conditions: 180 for 4.0min then 4.0deg/min to 240, hold 30min

Detector 0: Detector 1: ECD

Misc. Information:

Starting Delay: 0.00 Ending retention time: 30.00

rea reject: 500 One sample per 1.002 sec.

mount injected: 1.00 Dilution factor: 1.00

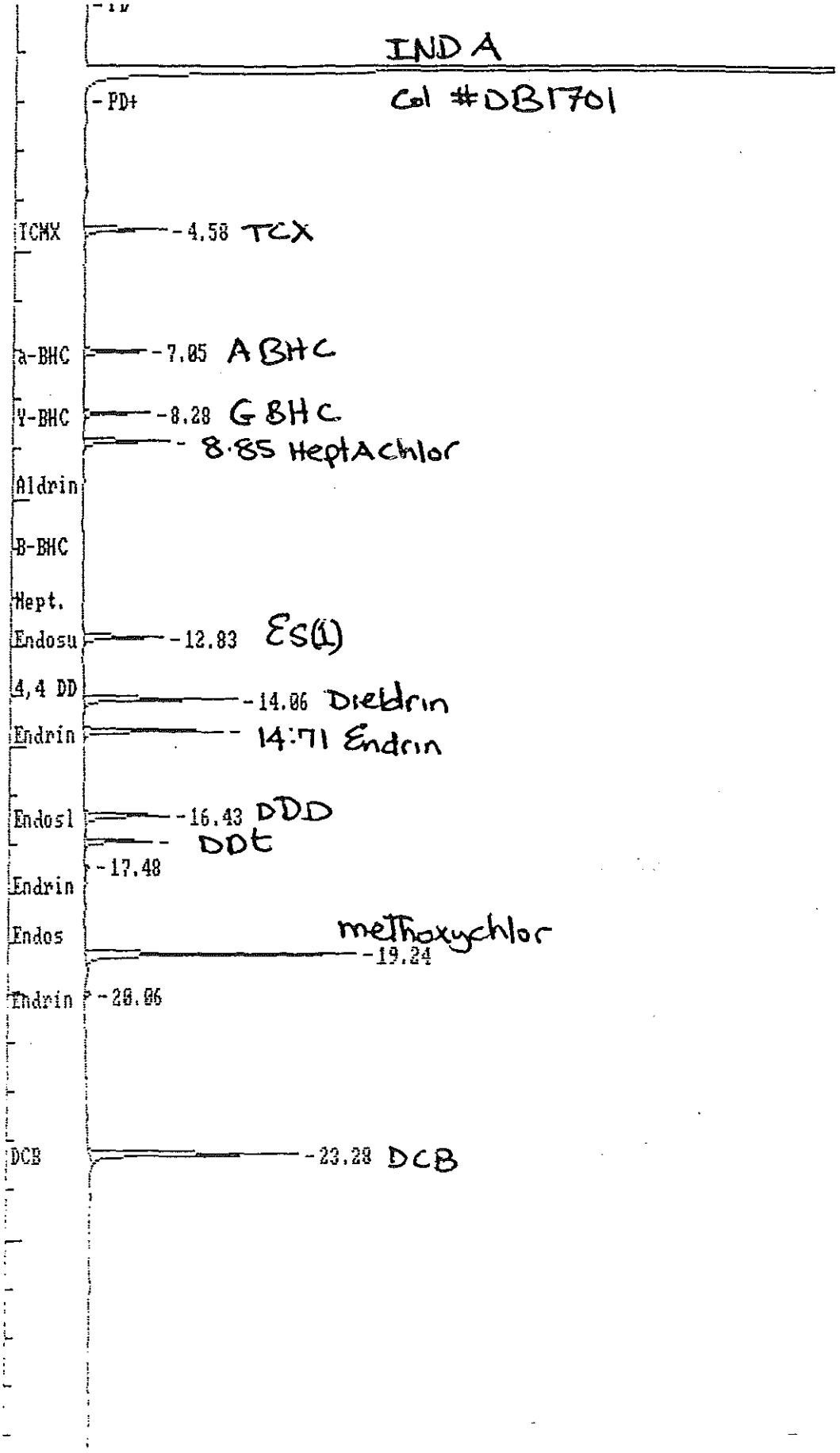
Sample Weight: 1.00000

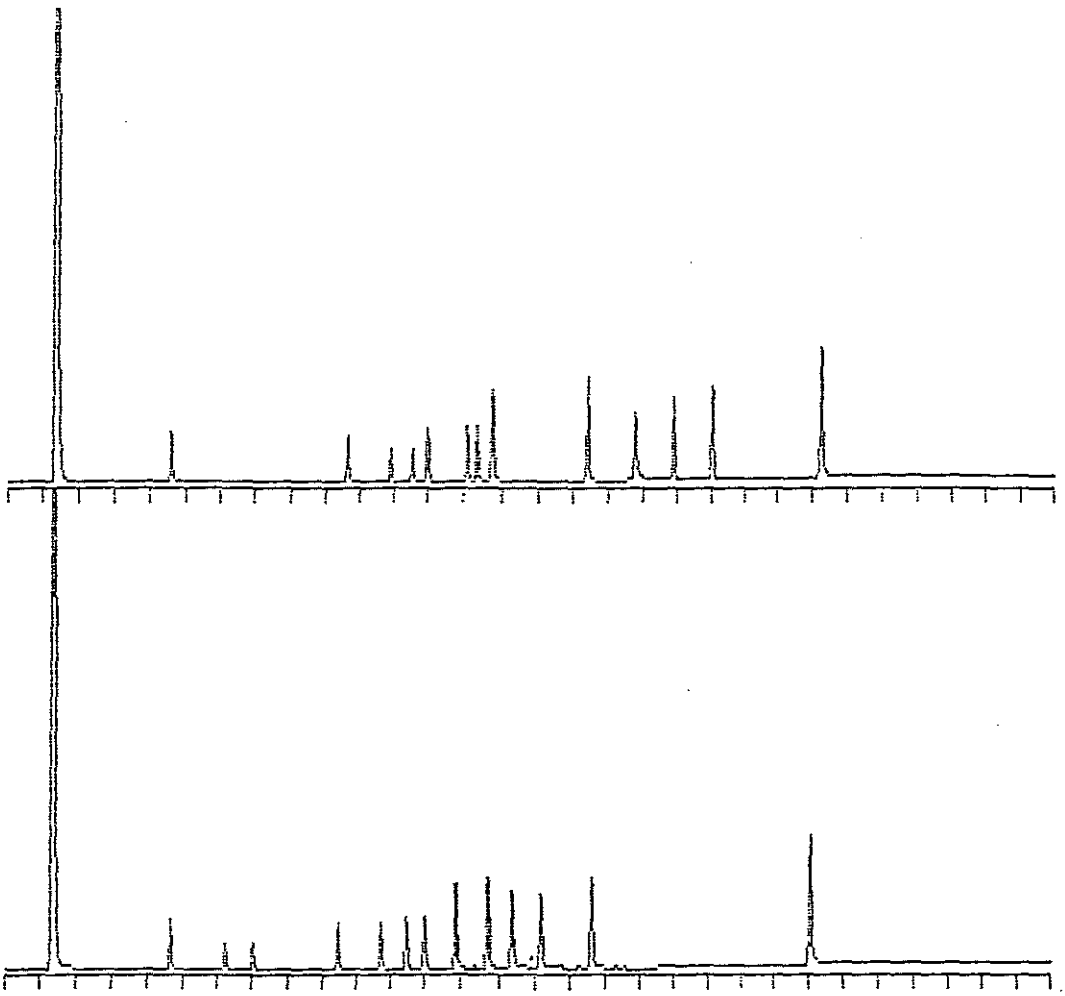
EAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	4.576	TCMX	26.1115	4.2118%	46872	10862	4.3	1	0	-.3636	5.5709E-04
2	7.047	a-BHC	20.2621	3.2683%	32230	8225	3.9	1	0	-.4716	6.2867E-04
3	8.283	Y-BHC	19.8698	3.2050%	34381	8738	3.9	1	0	-.6012	5.7793E-04
4	8.851	Heptachlor	24.9018	4.0167%	47378	11439	4.1	1	0	-.3759	5.2560E-04
5	12.826	Endosulf I	23.5065	3.7916%	46111	10525	4.4	1	0	-.2597	5.0978E-04
)	14.061	Dieldrin	43.5916	7.0314%	82822	20174	4.1	1	0	-.3550	5.2633E-04
/	14.713	Endrin	80.1224	12.9238%	76529	18315	4.2	1	0	-.3393	1.0470E-03
8	16.433	~~Endoclfll~~ DDD	28.9576	4.6709%	53768	11198	4.8	1	0	-.2534	5.3856E-04
9	16.950	4,4 DDT	35.9358	5.7965%	41815	8900	4.7	1	0	-.2946	8.5939E-04
10	17.485		0.0000	0.0000%	2465	563	4.4	1			1.0000E-09
11	19.238	Methoxychl	250.6595	40.4317%	161605	35690	4.5	1	0	-.2597	1.5511E-03
12	20.057	Endrin ket	2.5972	0.4189%	3977	804	4.9	1	0	-.2491	6.5298E-04
13	23.280	DCB	63.4425	10.2333%	138277	27629	5.0	1	0	-.2147	4.5881E-04

TOTAL AMOUNT = 619.9581

GROUP NUMBER GROUP AMOUNT GROUP PERCENT

reas, times, and heights stored in: E:KU26E4.ATB
ata File = E:KU26E4.PTS Printed on 06-26-1995 at 17:25:17
Start time: 0.00 min. Stop time: 30.00 min. Offset: 1 mv.
ll Range: 100 millivolts





[Interface 1] 0-30 Min Scale: 100 Mv Ch.A, 100 Mv Ch.B
INDB Processed: 06-26-1995 17:58:40, segment 5, cycle 5
RAW DATA SAVED IN FILE E:JU26E5.PTS Second Channel Stored in E:KU26E5.PTS

***** EXTERNAL STANDARD TABLE *****

********** 06-26-1995 17:58:51 Version 5.1.5 **********

Sample Name: INDB Data File: E:JU26E5

Date: 06-26-1995 17:28:20 Method: M:APES-G 03-08-1995 15:02:41 # 359

Interface: 1 Cycle#: 5 Operator JJK Channel#: 0 Vial#: N.A.

Starting Peak Width: 10 Threshold: 10. Area Threshold: 1000

Instrument Type: Perkin-Elmer 8500 Column Type: RTx-5 30m,.35mm

Solvent Description: 1.0u df

Conditions: 180 for 4.0min then 4.0deg/min to 240, hold 30min

Detector 0: Detector 1: ECD

Misc. Information:

Starting Delay: 0.00 Ending retentior time: 30.00
Area reject: 1000 One sample per 1.002 sec.
Amount injected: 1.00 Dilution factor: 1.00
Sample Weight: 1.00000

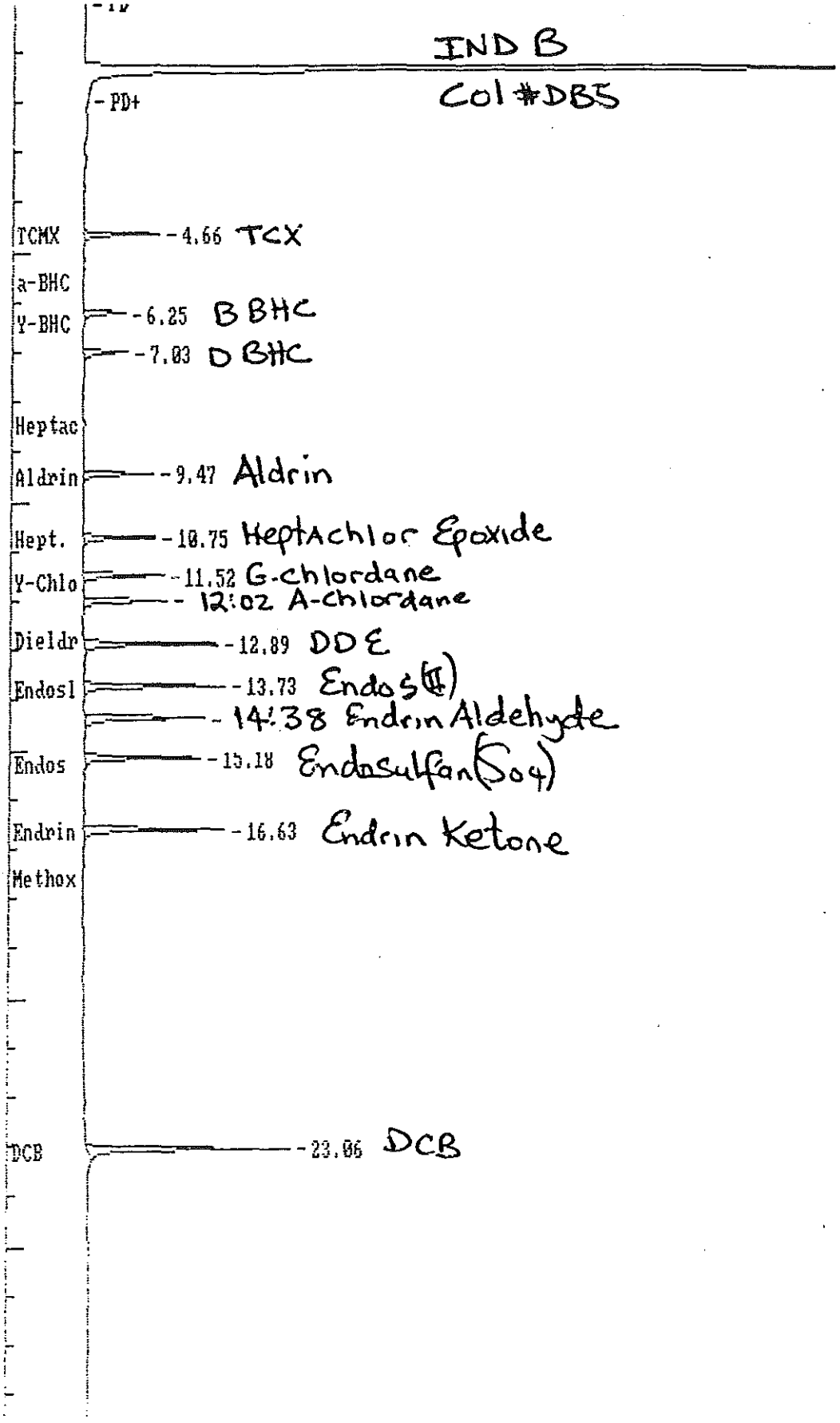
NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT RL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	4.659	TCMX	22.6615	6.1187%	43444	9996	4.3 1	0	-.3571	5.2163E-04
2	6.246	B-BHC	20.8632	5.6332%	25730	5388	4.8 1	0	0	8.0926E-04
3	7.031	D-BHC	21.9111	5.9161%	26926	5779	4.7 1	0	-.2969	8.1376E-04
4	8.469	Aldrin	17.9442	4.8456%	22039	9115	2.4 1	0	-.1340	8.1414E-04

7	12.024	a-Chlordane	18.4486	4.9812%	48385	10905	4.4	1	0	-.2770	3.8129E-04
8	12.892	4,4-DDE	33.2787	8.9854%	84720	17579	4.8	1	0	-.1293	3.9281E-04
9	13.727	Endoslf II	35.9959	9.7191%	84969	18611	4.6	1	0	-.2427	4.2364E-04
10	14.379	Endrin ald	40.0188	10.8053%	80473	15756	5.1	1	0	-.1739	4.9730E-04
11	15.180	Endos sulf	40.9327	11.0521%	73798	15299	4.8	1	0	-.6557	5.5466E-04
12	16.633	Endrin ket.	38.9378	10.5134%	92127	18605	5.0	1	0	-.1003	4.2265E-04
13	23.063	DCB	41.2304	11.1325%	140788	26793	5.3	1	0	-.1446	2.9285E-04

TOTAL AMOUNT = 370.3618

GROUP NUMBER GROUP AMOUNT GROUP PERCENT

reas, times, and heights stored in: E:JU26E5.ATB
ata File = E:JU26E5.PTS Printed on 06-26-1995 at 17:59:01
Start time: 0.00 min. Stop time: 30.00 min. Offset: 1 mv.
ll Range: 100 millivolts



***** EXTERNAL STANDARD TABLE *****

********** 06-26-1995 17:59:12 Version 5.1.5 **********

Sample Name: IND8 Data File: E:KU26E5

Date: 06-26-1995 17:28:20 Method: M:BPES-G 03-31-1995 14:31:59 # 358

Interface: 1 Cycle#: 5 Operator JJK Channel#: 1 Vial#: N.A.

Starting Peak Width: 10 Threshold: 10 Area Threshold: 500

Instrument Type: Perkin-Elmer 8500 Column Type: RTx-5 30m,.35mm

Solvent Description: 1.0u df

Conditions: 180 for 4.0min then 4.0deg/min to 240, hold 30min

Detector 0: Detector 1: ECD

Misc. Information:

Starting Delay: 0.00 Ending retention time: 30.00

Area reject: 500 One sample per 1.002 sec.

Amount injected: 1.00 Dilution factor: 1.00

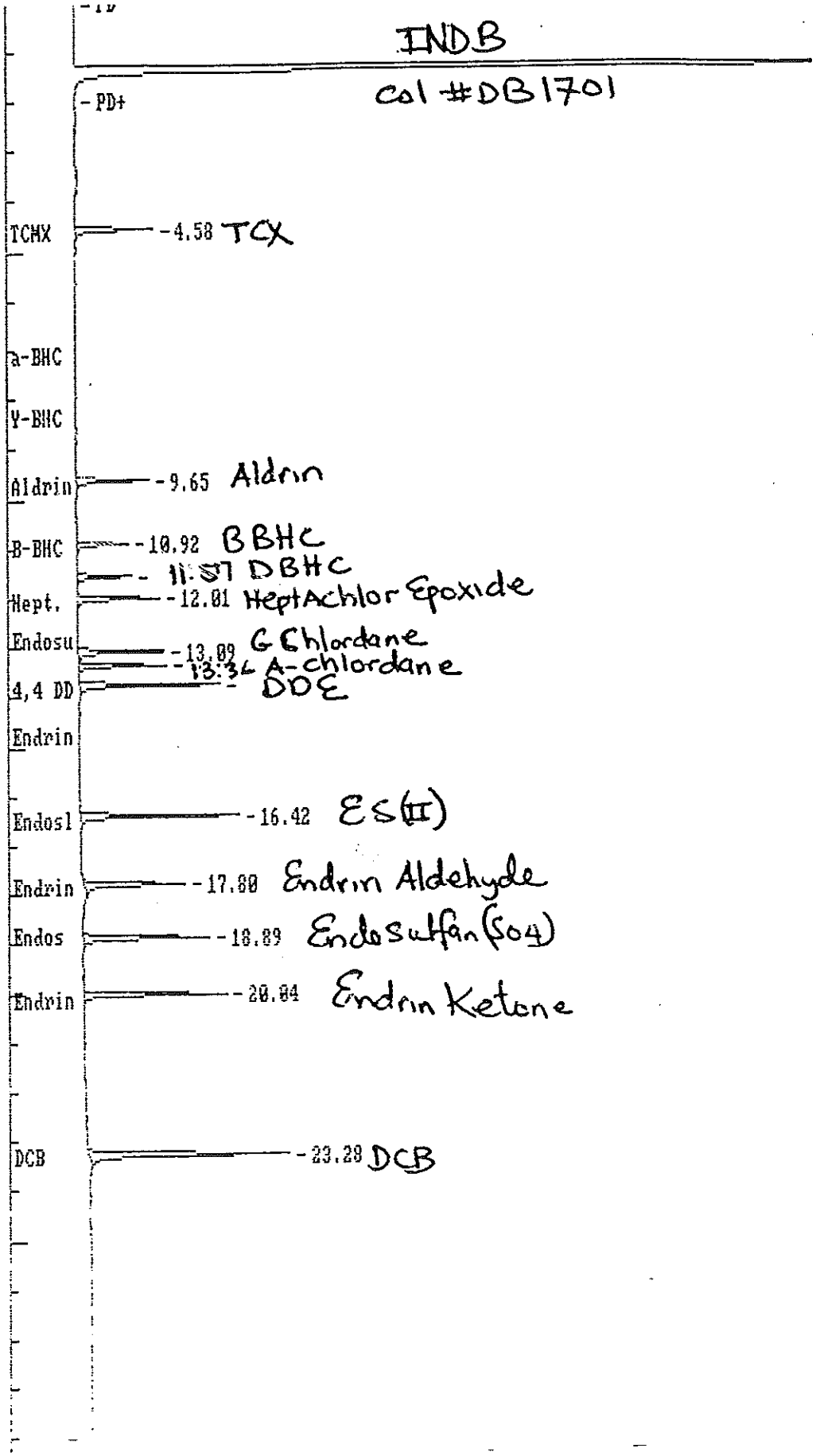
Sample Weight: 1.00000

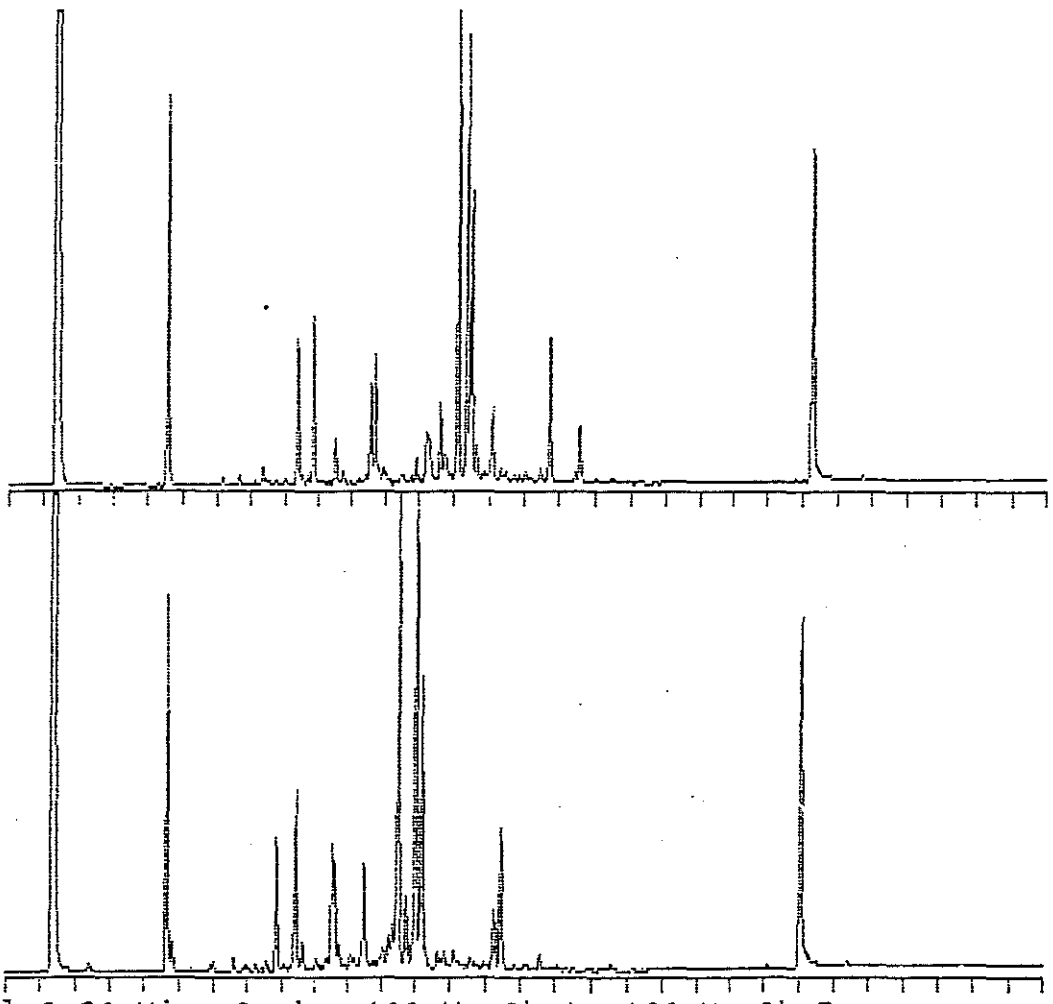
PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	4.576	TCMX	24.3866	5.1502%	43775	10436	4.2	1	0	-.3636	5.5709E-04
2	9.653	Aldrin	21.8883	4.6226%	40800	9651	4.2	1	0	-.3448	5.3647E-04
3	10.922	B-BHC	22.6820	4.7902%	28167	6833	4.1	1	0	-.4566	8.0526E-04
4	11.573	d-BHC	25.2282	5.3279%	28575	7220	4.0	1	0	-.4310	8.8288E-04
5	12.007	Hept. epox.	24.0080	5.0702%	46244	10939	4.2	1	0	-.4155	5.1916E-04
	13.093	Y-Chlordane	24.0032	5.0692%	50655	11534	4.4	2	0	-.3811	4.7386E-04
7	13.360	a-Chlordane	23.4445	4.9512%	49747	11778	4.2	2	0	-.3736	4.7127E-04
8	13.761	4,4 DDE	42.4885	8.9731%	81748	18951	4.3	1	0	-.3024	5.1975E-04
9	16.416	EndoslfII	47.2023	9.9686%	87645	21290	4.1	1	0	-.3547	5.3856E-04
10	17.802	Endrin ald	49.1887	10.3881%	69927	13644	5.1	1	0	-.3272	7.0343E-04
11	18.888	Endos sulf	51.0056	10.7718%	75921	16903	4.5	1	0	.2659	6.7183E-04
12	20.040	Endrin ket	55.1422	11.6454%	84448	19216	4.4	1	0	-.3322	6.5298E-04
13	23.280	DCB	62.8412	13.2714%	136966	27000	5.1	1	0	-.2147	4.5881E-04

TOTAL AMOUNT = 473.5093

GROUP NUMBER	GROUP AMOUNT	GROUP PERCENT

reas, times, and heights stored in: E:KU26E5.ATB
ata File = E:KU26E5.PTS Printed on 06-26-1995 at 17:59:22
Start time: 0.00 min. Stop time: 30.00 min. Offset: 1 mv.
ull Range: 100 millivolts





[Interface 1] 0-30 Min Scale: 100 Mv Ch.A, 100 Mv Ch.B
CHLORDANE Processed: 06-26-1995 18:32:55, segment 6, cycle 6
RAW DATA SAVED IN FILE E:JU26E6.PTS Second Channel Stored in E:KU26E6.PTS

***** EXTERNAL STANDARD TABLE *****

********** 06-26-1995 18:33:07 Version 5.1.5 **********

* Sample Name: CHLORDANE 1PPM Data File: E:JU26E6 *
* Date: 06-26-1995 18:02:33 Method: M:APES-G 03-08-1995 15:02:41 # 359 *
* Interface: 1 Cycle#: 6 Operator JJK Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 10 Area Threshold: 1000 *

* Instrument Type: Perkin-Elmer 8500 Column Type: RTx-5 30m,.35mm *
* Solvent Description: 1.0u df *
* Conditions: 180 for 4.0min then 4.0deg/min to 240, hold 30min *
* Detector 0: Detector 1: ECD *
* Misc. Information: *

Starting Delay: 0.00 Ending retention time: 30.00
Area reject: 1000 One sample per 1.002 sec.
Amount injected: 1.00 Dilution factor: 1.00
Sample Weight: 1.00000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	2.405		0.0000	0.0000%	5691	1108	5.1	1			1.0000E-09
2	4.659	TCMX	158.5488	18.2365%	303950	78235	3.9	3	0	-.3571	5.2163E-04
3	4.826		0.0000	0.0000%	2496	5554	4.4	3			1.0000E-09
4	5.228		0.0000	0.0000%	3655	1035	3.5	1			1.0000E-09

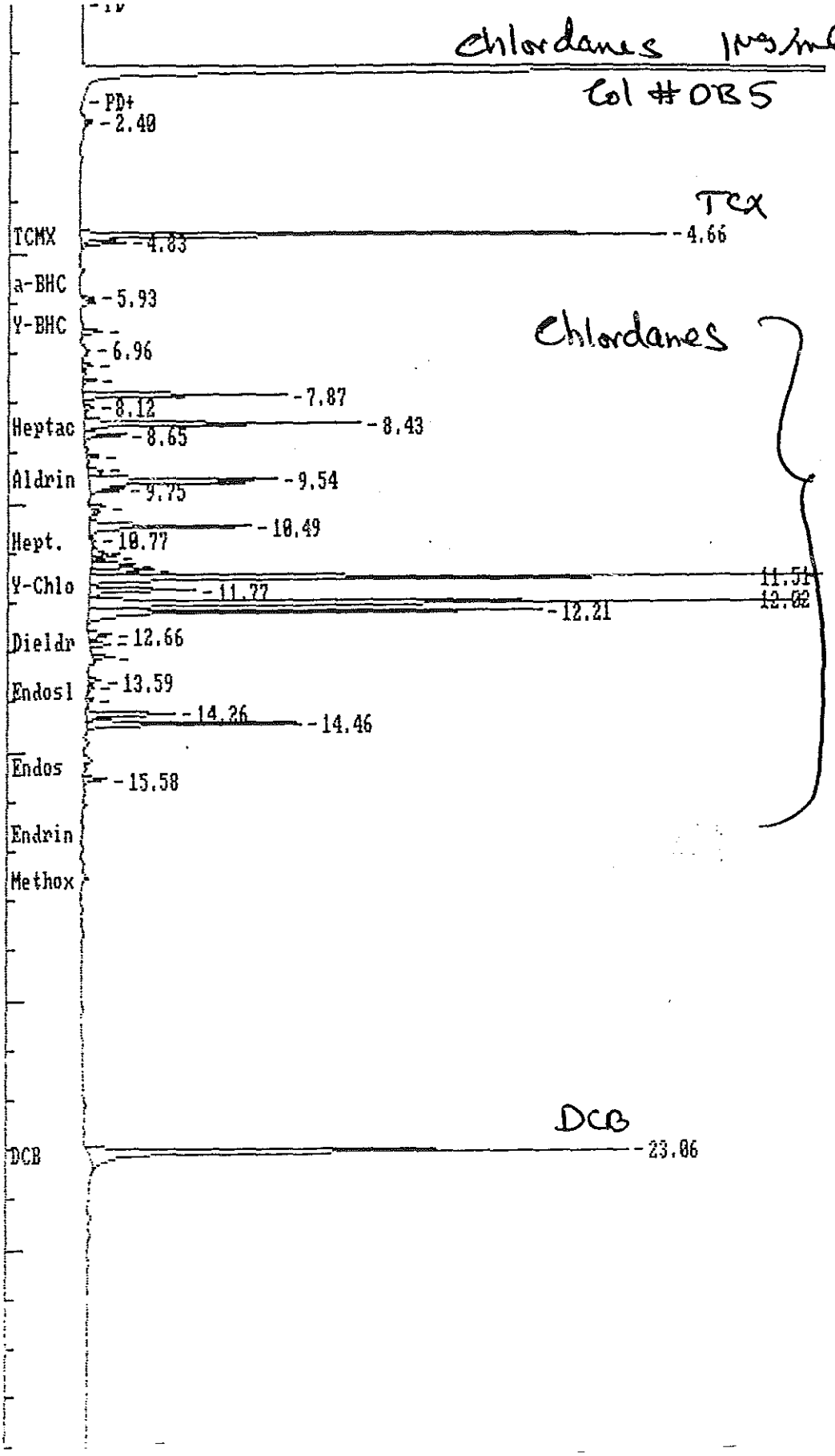
7	7.265		0.0000	0.0000%	6846	1385	4.9 1			1.0000E-09
8	7.565		0.0000	0.0000%	7218	1662	4.3 1			1.0000E-09
9	7.866		0.0001	0.0000%	102224	27186	3.8 2			1.0000E-09
0	8.116		0.0000	0.0000%	6462	1307	4.9 2			1.0000E-09
1	8.433	Heptachlor	68.7203	7.9043%	156762	37002	4.2 2	0	-.3944	4.3837E-04
2	8.651		0.0000	0.0000%	26130	5435	4.8 2			1.0000E-09
3	9.068		0.0000	0.0000%	7492	1620	4.6 1			1.0000E-09
4	9.369		0.0000	0.0000%	14279	2042	7.0 2			1.0000E-09
5	9.536	Aldrin	88.4659	10.1755%	197397	25078	7.9 3	0	.5281	4.4816E-04
6	9.753		0.0000	0.0000%	13858	3420	4.1 4			1.0000E-09
7	10.103		0.0000	0.0000%	7609	1686	4.5 1			1.0000E-09
8	10.488		0.0001	0.0000%	103764	21300	4.9 1			1.0000E-09
9	10.771	Hept. epox.	1.1169	0.1285%	2515	688	3.7 1	0	0	4.4420E-04
0	10.989		0.0000	0.0000%	7734	1600	4.8 2			1.0000E-09
1	11.089		0.0000	0.0000%	13741	3170	4.3 2			1.0000E-09
2	11.256		0.0000	0.0000%	34168	5774	5.9 2			1.0000E-09
3	11.356		0.0000	0.0000%	43909	8310	5.3 2			1.0000E-09
4	11.506	Y-Chlordane	156.0132	17.9448%	405953	97712	4.2 2	0	-1.005	3.8431E-04
5	11.773		0.0001	0.0000%	68144	14062	4.8 2			1.0000E-09
6	12.024	a-Chlordane	156.0992	17.9547%	409402	94023	4.4 2	0	-.2770	3.8129E-04
7	12.208		0.0003	0.0000%	272175	60149	4.5 2			1.0000E-09
8	12.659		0.0000	0.0000%	15607	3118	5.0 2			1.0000E-09
9	12.859	4,4-DDE	6.3758	0.7334%	16231	2709	6.0 2	0	-.3881	3.9281E-04
0	13.126		0.0000	0.0000%	10841	2713	4.0 1			1.0000E-09
1	13.594	Endrin	3.4677	0.3989%	7147	1655	4.3 2	0	1.180	4.8522E-04
2	13.727	Endslf II	1.5874	0.1826%	3747	738	5.1 2	0	-.2427	4.2364E-04
3	13.978		0.0000	0.0000%	3875	851	4.6 1			1.0000E-09
4	14.262	4'4-DDD	38.4294	4.4202%	64738	11806	5.5 2	0	-.1169	5.9361E-04
5	14.462	Endrin ald	62.7579	7.2185%	126198	28691	4.4 2	0	.4057	4.9730E-04
6	15.581	DDT	9.2820	1.0676%	15690	3123	5.0 1	0	.4305	5.9158E-04
7	23.063	DCB	116.7316	13.4266%	398600	71993	5.5 1	0	-.1446	2.9285E-04

Sm 7/14/95

TOTAL AMOUNT = 869.4055

GROUP NUMBER	GROUP AMOUNT	GROUP PERCENT

Areas, times, and heights stored in: E:JU26E6.ATB
Data File = E:JU26E6.PTS Printed on 06-26-1995 at 18:33:22
Start time: 0.00 min. Stop time: 30.00 min. Offset: 1 mv.
Full Range: 100 millivolts



**** EXTERNAL STANDARD TABLE *****

********** 06-26-1995 18:34:08 Version 5.1.5 **********

Sample Name: CHLORDANE 1PPM Data File: E:KU26E6

Date: 06-26-1995 18:02:33 Method: M:BPES-G 03-31-1995 14:31:59 # 358

Interface: 1 Cycle#: 6 Operator JJK Channel#: 1 Vial#: N.A.

Starting Peak Width: 10 Threshold: 10 Area Threshold: 500

Instrument Type: Perkin-Elmer 8500 Column Type: RTx-5 30m,.35mm

Solvent Description: 1.0u df

Conditions: 180 for 4.0min then 4.0deg/min to 240, hold 30min

Detector 0: Detector 1: ECD

Misc. Information:

Starting Delay: 0.00 Ending retention time: 30.00

Area reject: 500 One sample per 1.002 sec.

Amount injected: 1.00 Dilution factor: 1.00

Sample Weight: 1.00000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	4.576	TCMX	165.5441	18.0127%	297161	81063	3.7	1	0	-.3636	5.5709E-04
2	6.179		0.0000	0.0000%	8709	1928	4.5	1			1.0000E-09
3	6.663		0.0000	0.0000%	9074	2009	4.5	1			1.0000E-09
	7.148	a-BHC	1.6706	0.1818%	2657	621	4.3	1	0	.9433	6.2867E-04
	7.348		0.0000	0.0000%	16029	3399	4.7	1			1.0000E-09
6	7.749		0.0000	0.0000%	3729	788	4.7	1			1.0000E-09
7	8.033		0.0000	0.0000%	4796	1242	3.9	1			1.0000E-09
8	8.383	Y-BHC	59.4619	6.4700%	102888	29731	3.5	1	0	.6012	5.7793E-04
9	8.701		0.0000	0.0000%	6628	1716	3.9	2			1.0000E-09
10	8.851	Heptachlor	66.5715	7.2436%	126657	35184	3.6	2	0	-.3759	5.2560E-04
11	9.519		0.0000	0.0000%	43577	9246	4.7	2			1.0000E-09
12	9.753	Aldrin	6.5808	0.7161%	12267	2599	4.7	2	0	.6896	5.3647E-04
13	10.220		0.0000	0.0000%	2484	666	3.7	1			1.0000E-09
14	10.438		0.0000	0.0000%	8398	1721	4.9	2			1.0000E-09
15	10.571		0.0001	0.0000%	80629	20602	3.9	2			1.0000E-09
16	10.705		0.0001	0.0000%	127731	26934	4.7	3			1.0000E-09
17	10.955	B-BHC	22.3584	2.4328%	27765	2932	9.5	4	0	-.1522	8.0526E-04
18	11.506	d-BHC	12.3509	1.3439%	13989	1800	7.8	1	0	-1.005	8.8288E-04
19	11.807		0.0000	0.0000%	4833	1117	4.3	2			1.0000E-09
20	11.957	Hept. epox.	11.7337	1.2767%	22601	4700	4.8	2	0	-.8310	5.1916E-04
21	12.258		0.0001	0.0000%	93691	10128	9.3	1			1.0000E-09
22	12.625		0.0001	0.0000%	62145	15403	4.0	2			1.0000E-09
23	12.759	Endosulf I	12.2716	1.3353%	24072	4548	5.3	2	0	-.7792	5.0978E-04
24	13.093	Y-Chlordane	172.2548	18.7428%	363518	98270	3.7	2	0	-.3811	4.7386E-04
25	13.360	a-Chlordane	156.9413	17.0766%	333017	92339	3.6	2	0	-.3736	4.7127E-04
26	13.494		0.0002	0.0000%	236304	59838	3.9	2			1.0000E-09
27	13.661		0.0000	0.0000%	28567	6825	4.2	3			1.0000E-09
28	13.878	4,4 DDE	4.0359	0.4391%	7765	1351	5.7	4	0	.5444	5.1975E-04
29	14.111	Dieldrin	42.5929	4.6345%	80925	15507	5.2	2	0	0	5.2633E-04
30	14.345		0.0000	0.0000%	12988	2525	5.1	2			1.0000E-09
31	14.479		0.0000	0.0000%	8840	1610	5.5	2			1.0000E-09
32	14.729	Endrin	6.7173	0.7309%	6416	1031	6.2	2	0	-.2262	1.0470E-03
33	14.880		0.0000	0.0000%	3829	1014	3.8	2			1.0000E-09
34	15.063		0.0000	0.0000%	6008	1672	4.8	1			1.0000E-09
35	15.481		0.0000	0.0000%	13208	2755	4.8	2			1.0000E-09
36	15.731		0.0001	0.0000%	138515	30124	4.2	2			1.0000E-09

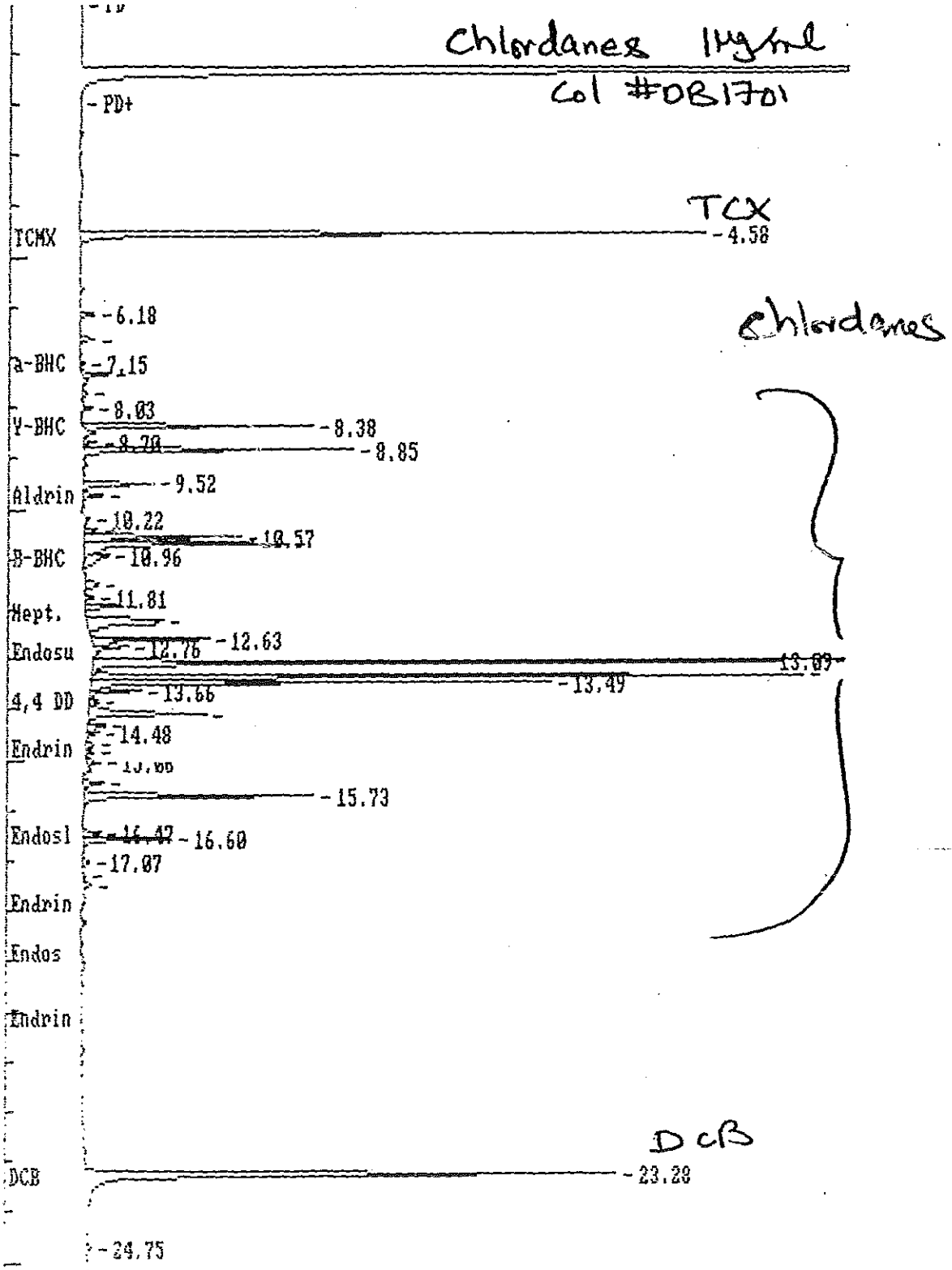
7/14/95

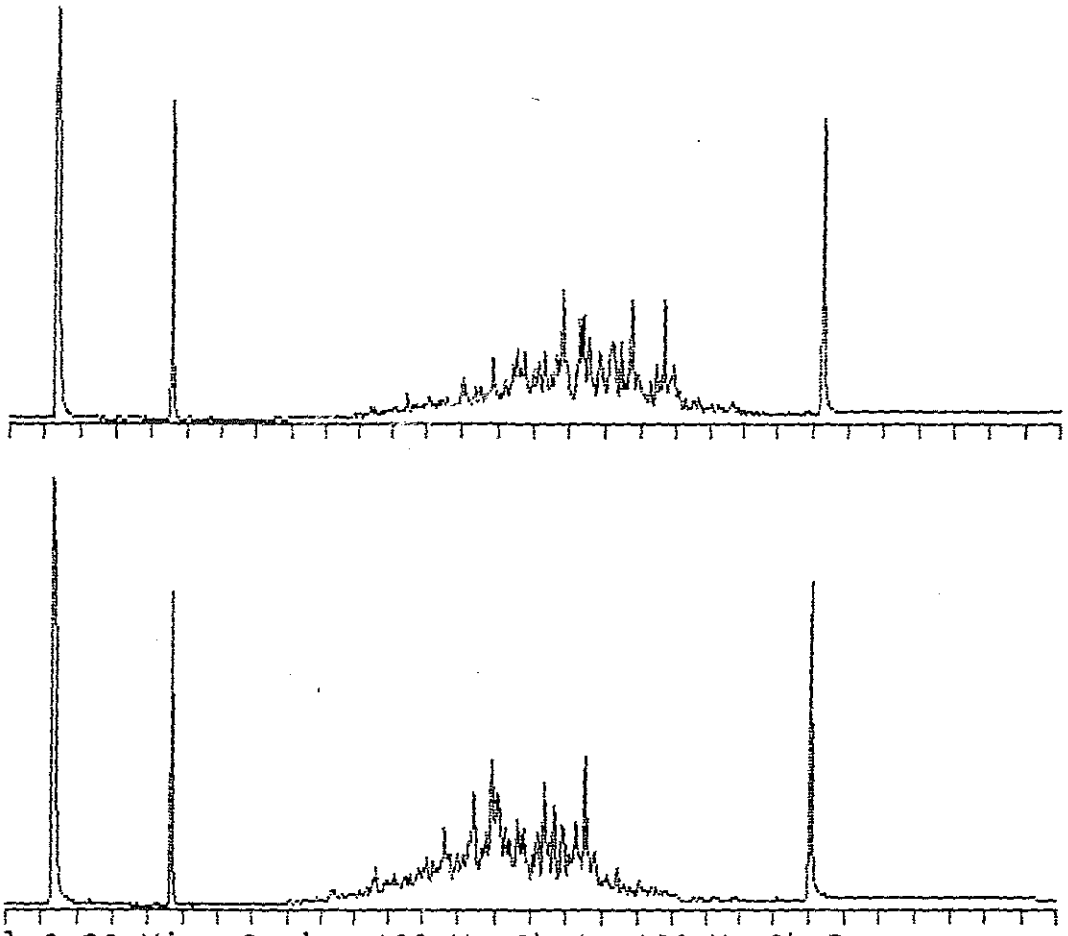
39	17.067 4,4 DDT	4.8997	0.5331%	5701	855	6.7	1	0		
40	17.335	0.0000	0.0000%	1860	435	4.3	2			1.0000E-09
41	17.502	0.0000	0.0000%	4429	959	4.6	2			1.0000E-09
42	23.280 DCB	167.0713	18.1788%	364143	68656	5.3	1	0	-.2147	4.5881E-04
43	24.749	0.0000	0.0000%	2806	520	5.4	1			1.0000E-09

TOTAL AMOUNT = 919.0435

GROUP NUMBER GROUP AMOUNT GROUP PERCENT

reas, times, and heights stored in: E:KU26E6.ATB
ta File = E:KU26E6.PTS Printed on 06-26-1995 at 18:34:55
art time: 0.00 min. Stop time: 30.00 min. Offset: 1 mv.
ull Range: 100 millivolts





[Interface 1] 0-30 Min Scale: 100 Mv Ch.A, 100 Mv Ch.B
TOXAPHENE Processed: 06-26-1995 19:07:02, segment 7, cycle 7
RAW DATA SAVED IN FILE E:JU26E7.PTS Second Channel Stored in E:KU26E7.PTS

***** EXTERNAL STANDARD TABLE *****

********** 06-26-1995 19:07:14 Version 5.1.5 **********
* Sample Name: TOXAPHENE 2.5 PPM Data File: E:JU26E7 *
* Date: 06-26-1995 18:36:41 Method: M:APES-G 03-08-1995 15:02:41 # 359 *
* Interface: 1 Cycle#: 7 Operator JJK Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 10 Area Threshold: 1000 *
****
* Instrument Type: Perkin-Elmer 8500 Column Type: RTx-5 30m,.35mm *
* Solvent Description: 1.0u df *
* Conditions: 180 for 4.0min then 4.0deg/min to 240, hold 30min *
* Detector 0: Detector 1: ECD *
* Misc. Information: *
****

Starting Delay: 0.00 Ending retention time: 30.00
Area reject: 1000 One sample per 1.002 sec.
Amount injected: 1.00 Dilution factor: 1.00
Sample Weight: 1.00000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	4.659	TCMX	131.4227	22.3456%	251947	64903	3.9	1	0	-.3571	5.2163E-04
2	8.884		0.0000	0.0000%	2107	467	4.5	1			1.0000E-09
									0	-1.760	4.4815E-04

	10.655	Hept. epox.	13.9094	2.4602%	31314	4748	6.6	1	0	-1.085	[illegible]
	10.922		0.0000	0.0000%	3024	807	3.7	1			1.0000E-09
	11.206		0.0000	0.0000%	10390	2057	5.1	1			1.0000E-09
	11.540		0.0000	0.0000%	14139	2133	6.6	2			1.0000E-09
	11.673	Y-Chlordane	3.2395	0.5730%	8429	2160	3.9	2	0	.4310	3.8431E-04
	11.941	Endosulfan I	10.1426	1.7940%	23406	2855	8.2	2	0	.2805	4.3333E-04
	12.158	a-Chlordane	12.1003	2.1403%	31735	4285	7.4	2	0	.8310	3.8129E-04
3	12.325		0.0000	0.0000%	14643	3008	4.9	1			1.0000E-09
4	12.642	Dieldrin	30.7739	5.4432%	77194	9111	8.5	1	0	-.9162	3.9866E-04
5	12.993	4,4-DDE	9.9928	1.7675%	25439	4350	5.8	2	0	.6468	3.9281E-04
6	13.160		0.0000	0.0000%	28480	4332	6.6	2			1.0000E-09
7	13.293		0.0000	0.0000%	38889	6842	5.7	2			1.0000E-09
8	13.443	Endrin	48.9240	8.6535%	100828	16710	6.0	2	0	0	4.8522E-04
9	13.677		0.0000	0.0000%	24254	4646	5.2	2			1.0000E-09
20	13.777	Endosulf II	17.9824	3.1807%	42448	7601	5.6	2	0	.1213	4.2364E-04
21	13.945		0.0001	0.0000%	133599	22645	5.9	2			1.0000E-09
22	14.095		0.0001	0.0000%	140316	15514	9.0	2			1.0000E-09
23	14.312	4'4-DDD	21.8173	3.8590%	36753	7734	4.8	2	0	.2339	5.9361E-04
24	14.412	Endrin ald	12.5694	2.2232%	25275	5621	4.5	2	0	.0579	4.9730E-04
25	14.646		0.0001	0.0000%	62992	9884	6.4	2			1.0000E-09
26	14.813		0.0001	0.0000%	59990	9058	6.6	2			1.0000E-09
27	15.080		0.0000	0.0000%	22384	5036	4.4	2			1.0000E-09
28	15.214	Endos sulf	33.3924	5.9063%	60204	9939	6.1	2	0	-.4371	5.5466E-04
29	15.397		0.0001	0.0000%	98207	20187	4.9	2			1.0000E-09
30	15.514	DDT	24.9098	4.4060%	42107	8258	5.1	2	0	0	5.9158E-04
31	15.681		0.0001	0.0000%	80319	15490	5.2	2			1.0000E-09
32	15.915		0.0001	0.0000%	89238	12009	7.4	2			1.0000E-09
33	16.115		0.0000	0.0000%	43335	6305	6.9	2			1.0000E-09
34	16.299		0.0001	0.0000%	131577	12941	10.2	2			1.0000E-09
35	16.550	Endrin ket.	74.6078	13.1964%	176522	26956	6.5	2	0	-.6018	4.2265E-04
36	16.834		0.0001	0.0000%	61480	7394	8.3	2			1.0000E-09
	17.168		0.0000	0.0000%	32922	3026	10.9	2			1.0000E-09
38	17.435		0.0000	0.0000%	28094	5115	5.5	2			1.0000E-09
39	17.618	Methoxychlor	10.4555	1.8493%	10201	1685	6.1	2	0	.2851	1.0249E-03
40	17.819		0.0000	0.0000%	7572	1120	6.8	1			1.0000E-09
41	18.053		0.0000	0.0000%	13203	2079	6.3	1			1.0000E-09
42	18.437		0.0000	0.0000%	3235	964	3.4	1			1.0000E-09
43	18.554		0.0000	0.0000%	2784	856	3.3	1			1.0000E-09
44	23.063	DCB	103.1791	18.2500%	352322	65204	5.4	1	0	-.1446	2.9285E-04

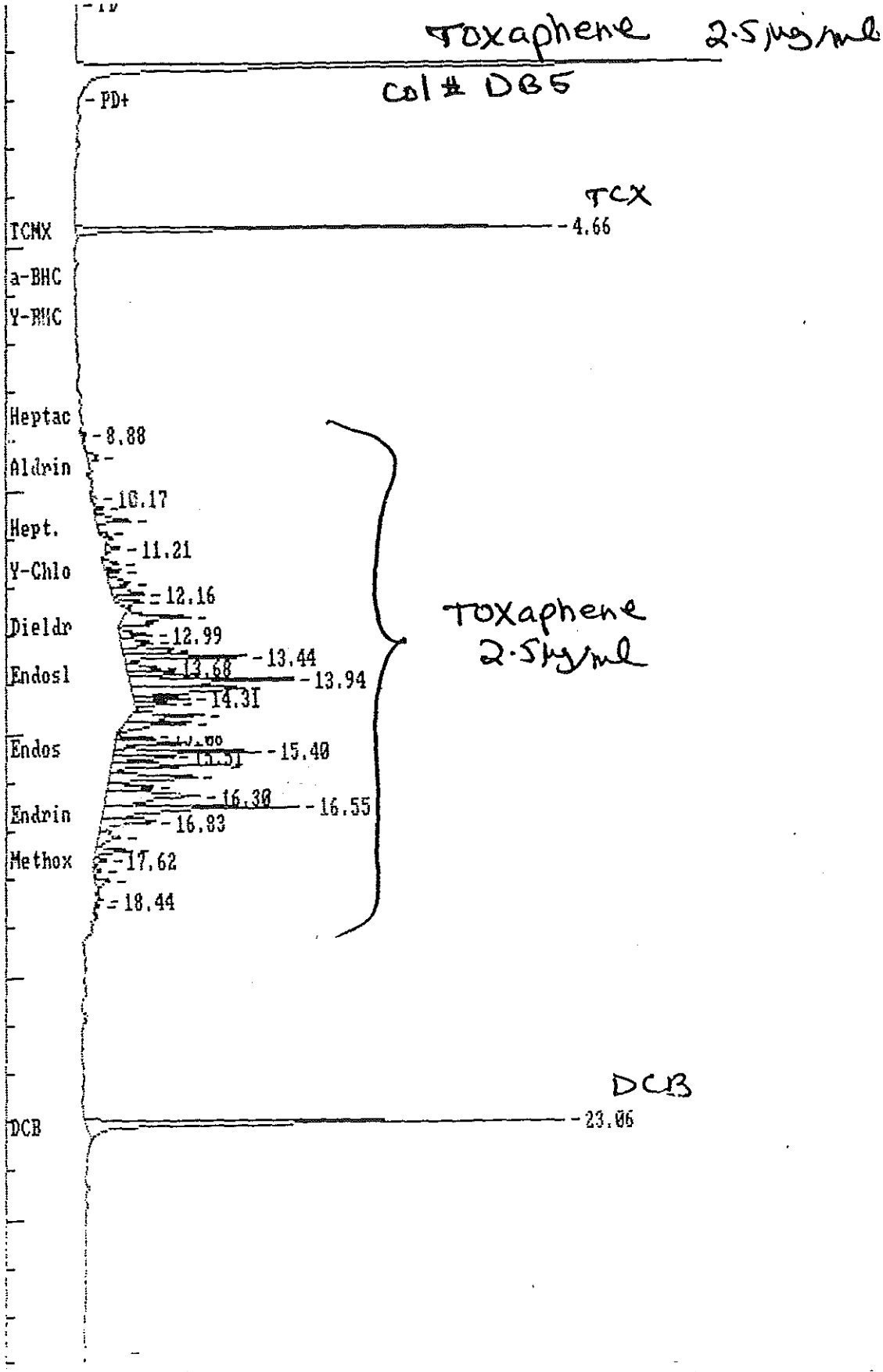
TOTAL AMOUNT = 565.3659

GROUP NUMBER GROUP AMOUNT GROUP PERCENT

SOM 7/14/95

259

Areas, times, and heights stored in: E:JU26E7.ATB
Data File = E:JU26E7.PTS Printed on 06-26-1995 at 19:07:28
Start time: 0.00 min. Stop time: 30.00 min. Offset: 1 mv.
Full Range: 100 millivolts



***** EXTERNAL STANDARD TABLE *****

********** 06-26-1995 19:08:03 Version 5.1.5 **********

Sample Name: TOXAPHENE 2.5 PPM Data File: E:KU26E7

Date: 06-26-1995 18:36:41 Method: M:BPES-G 03-31-1995 14:31:59 # 358

Interface: 1 Cycle#: 7 Operator JJK Channel#: 1 Vial#: N.A.

Starting Peak Width: 10 Threshold: 10 Area Threshold: 500

Instrument Type: Perkin-Elmer 8500 Column Type: RTx-5 30m,.35mm

Solvent Description: 1.0u df

Conditions: 180 for 4.0min then 4.0deg/min to 240, hold 30min

Detector 0: Detector 1: ECD

Misc. Information:

Starting Delay: 0.00 Ending retention time: 30.00

Area reject: 500 One sample per 1.002 sec.

Amount injected: 1.00 Dilution factor: 1.00

Sample Weight: 1.00000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	4.576	TCMX	136.9548	15.0189%	265842	66729	3.7	1	0	-.3636	5.5709E-04
2	8.784	Heptachlor	1.4172	0.1554%	2696	496	5.4	1	0	-1.127	5.2560E-04
3	10.204		0.0000	0.0000%	2842	526	5.4	2			1.0000E-09
	10.354		0.0000	0.0000%	7631	1592	4.8	2			1.0000E-09
5	10.454		0.0000	0.0000%	7812	1510	5.2	2			1.0000E-09
6	10.688		0.0000	0.0000%	3353	679	4.9	2			1.0000E-09
7	10.822		0.0000	0.0000%	4024	620	6.5	2			1.0000E-09
8	11.122	B-BHC	6.2589	0.6864%	7773	1146	6.8	1	0	1.369	8.0526E-04
9	11.456		0.0000	0.0000%	12130	2893	4.2	1			1.0000E-09
10	11.623	d-BHC	3.4012	0.3730%	3852	914	4.2	2	0	0	8.8288E-04
11	11.757		0.0000	0.0000%	2860	708	4.0	2			1.0000E-09
12	11.941		0.0000	0.0000%	2103	491	4.3	2			1.0000E-09
13	12.074	Hept. epox.	5.2841	0.5795%	10178	1717	5.9	2	0	.1385	5.1916E-04
14	12.358		0.0000	0.0000%	6210	1353	4.6	2			1.0000E-09
15	12.492		0.0000	0.0000%	6814	1428	4.8	2			1.0000E-09
16	12.592		0.0000	0.0000%	8692	2014	4.3	2			1.0000E-09
17	13.043	Y-Chlordane	23.8643	2.6170%	50362	5541	9.1	2	0	-.7623	4.7386E-04
18	13.377	a-Chlordane	9.6450	1.0577%	20466	3504	5.8	2	0	-.2490	4.7127E-04
19	13.544		0.0000	0.0000%	24292	3691	6.6	2			1.0000E-09
20	13.861	4,4 DDE	50.5076	5.5368%	97176	9735	10.0	2	0	.4234	5.1975E-04
21	14.212	Dieldrin	17.8437	1.9568%	33902	5376	6.3	2	0	.7100	5.2633E-04
22	14.429		0.0001	0.0000%	58922	8506	6.9	2			1.0000E-09
23	14.529		0.0001	0.0000%	100275	12021	8.3	2			1.0000E-09
24	14.746	Endrin	95.2287	10.4431%	90958	11732	7.8	2	0	-.1131	1.0470E-03
25	15.013		0.0001	0.0000%	61130	7980	7.7	2			1.0000E-09
26	15.147		0.0001	0.0000%	64237	9684	6.6	2			1.0000E-09
27	15.297		0.0001	0.0000%	80919	11733	7.7	2			1.0000E-09
28	15.498		0.0000	0.0000%	33378	6550	5.1	2			1.0000E-09
29	15.631		0.0001	0.0000%	65012	10658	6.1	2			1.0000E-09
30	15.815		0.0002	0.0000%	243256	24474	9.9	2			1.0000E-09
31	16.199		0.0000	0.0000%	38465	7740	5.0	2			1.0000E-09
32	16.282		0.0001	0.0000%	93973	18874	4.9	2			1.0000E-09
33	16.399	Endosulfan II	53.4942	5.8663%	99328	19551	5.1	2	0	-.4561	5.3856E-04
34	16.566	4,4 DDD	98.9833	10.8548%	132773	14368	9.2	2	0	.4024	7.4551E-04
35	16.867	4,4 DDT	103.4877	11.3488%	120420	12167	9.9	2	0	-.7858	8.5939E-04
					153632	13695	11.3	2			1.0000E-09

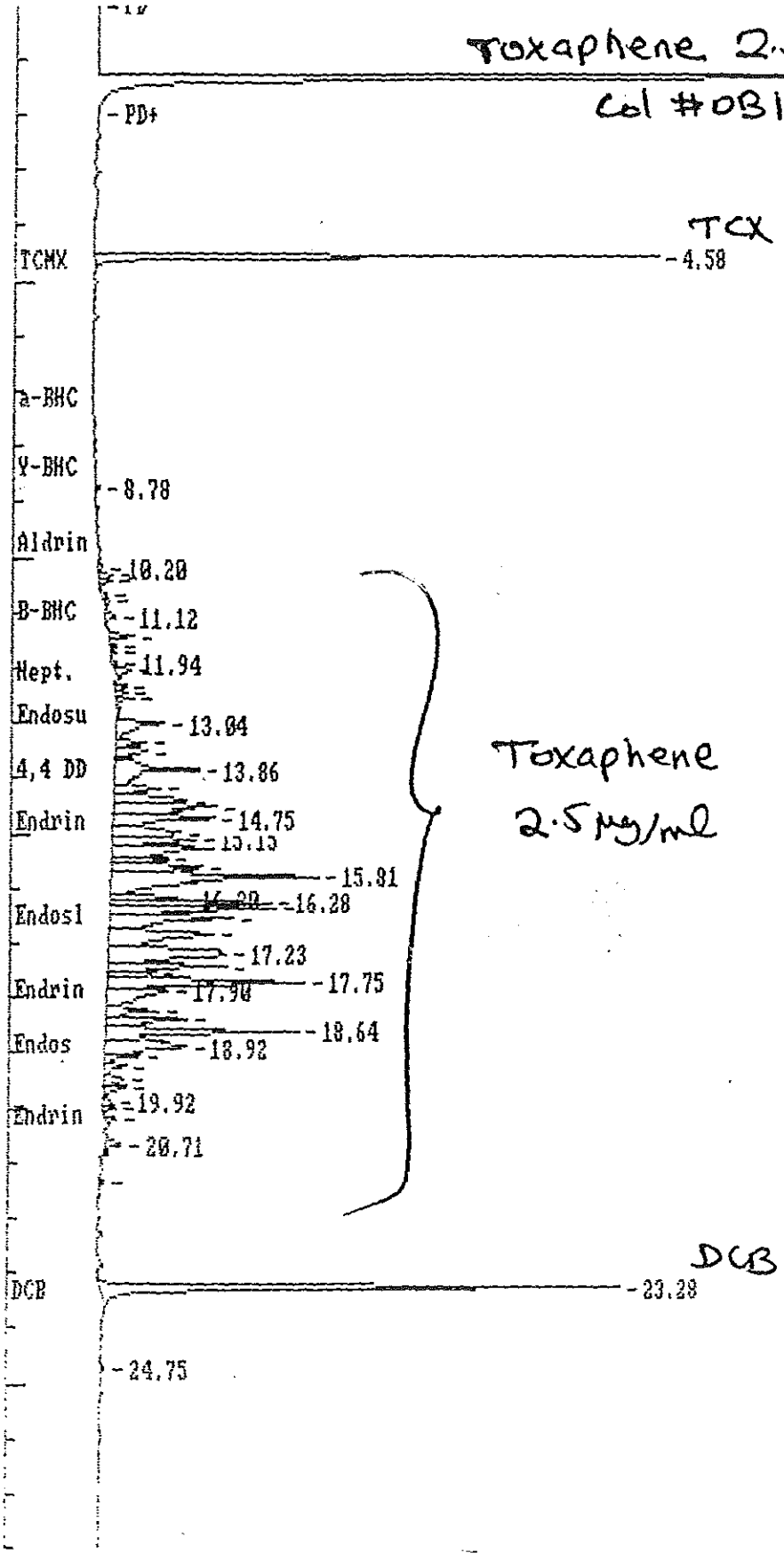
7/14/96

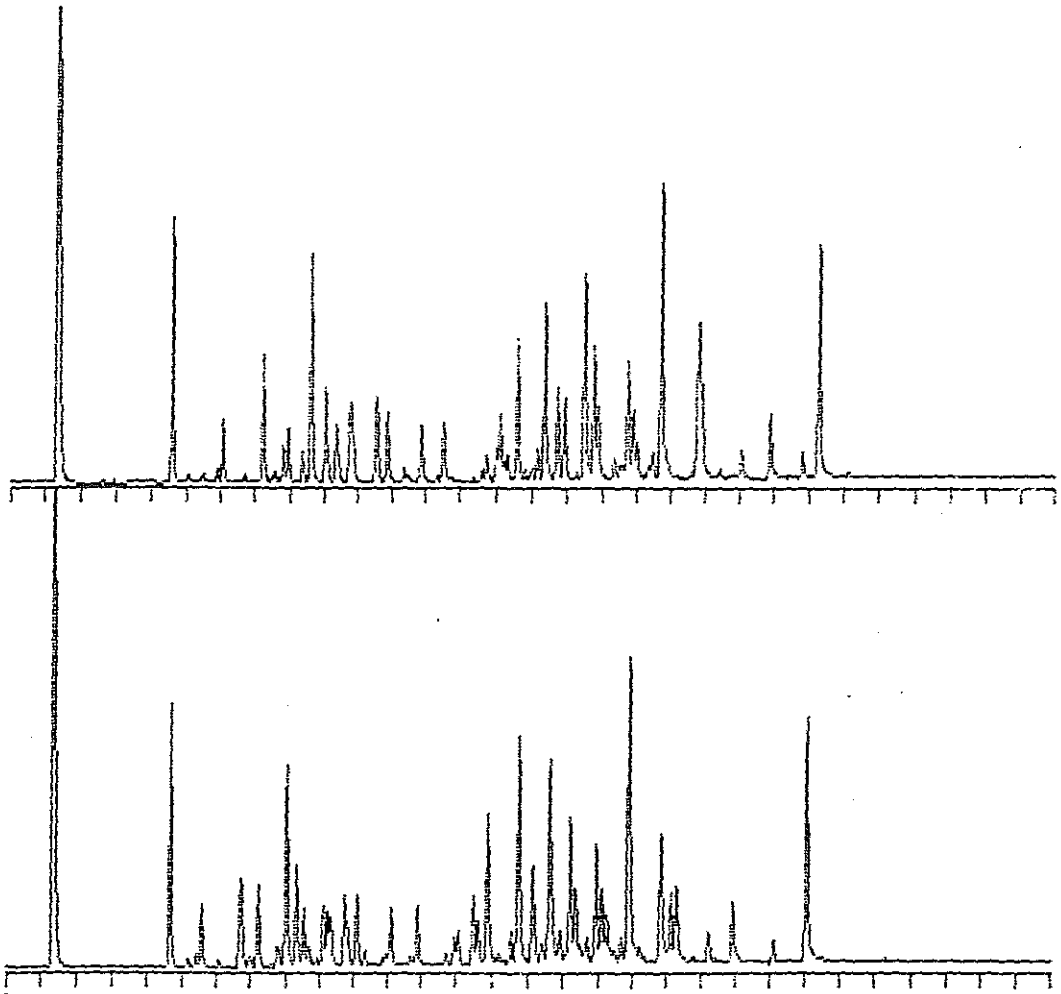
7.752		0.0002	0.0000%	167956	23226	7.2	2			
7.902	Endrin ald	58.4144	6.4059%	83042	7094	11.7	2	0	.2337	7.0343E-04
18.270		0.0000	0.0000%	37450	6048	6.2	2			1.0000E-09
18.420		0.0001	0.0000%	52417	9389	5.6	2			1.0000E-09
18.637		0.0001	0.0000%	128011	22718	5.6	2			1.0000E-09
18.921	Endos sulf	71.5297	7.8442%	106470	9436	11.3	2	0	.4432	6.7183E-04
19.071		0.0000	0.0000%	20618	4101	5.0	2			1.0000E-09
19.272	Methoxychl	24.9898	2.7405%	16111	2548	6.3	2	0	0	1.5511E-03
19.522		0.0000	0.0000%	17120	2310	7.4	2			1.0000E-09
19.656		0.0000	0.0000%	17821	2617	6.8	2			1.0000E-09
19.923		0.0000	0.0000%	7088	1029	6.9	2			1.0000E-09
20.040	Endrin ket	4.5138	0.4950%	6913	1486	4.7	2	0	-.3322	6.5298E-04
20.240		0.0000	0.0000%	6021	1274	4.7	1			1.0000E-09
20.708		0.0000	0.0000%	12224	1838	6.7	1			1.0000E-09
21.393		0.0000	0.0000%	2350	520	4.5	1			1.0000E-09
23.280	DCB	146.0619	16.0176%	318351	61372	5.2	1	0	-.2147	4.5881E-04
24.749		0.0000	0.0000%	2314	434	5.3	1			1.0000E-09

TOTAL AMOUNT = 911.8820

GROUP NUMBER GROUP AMOUNT GROUP PERCENT

eas, times, and heights stored in: E:KU26E7.ATB
a File = E:KU26E7.PTS Printed on 06-26-1995 at 19:09:09
rt time: 0.00 min. Stop time: 30.00 min. Offset: 1 mv.
ll Range: 100 millivolts





[Interface 1] 0-30 Min Scale: 100 Mv Ch.A, 100 Mv Ch.B
A1660 1PPM Processed: 06-26-1995 19:41:13, segment 8, cycle 8
RAW DATA SAVED IN FILE E:JU26E8.PTS Second Channel Stored in E:KU26E8.PTS

***** EXTERNAL STANDARD TABLE *****

********** 06-26-1995 19:41:24 Version 5.1.5 **********

* Sample Name: A1660 1PPM Data File: E:JU26E8 *
* Date: 06-26-1995 19:10:52 Method: M:APES-G 03-08-1995 15:02:41 # 359 *
* Interface: 1 Cycle#: 8 Operator JJK Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 10 Area Threshold: 1000 *

* Instrument Type: Perkin-Elmer 8500 Column Type: RTx-5 30m,.35mm *
* Solvent Description: 1.0u df *
* Conditions: 180 for 4.0min then 4.0deg/min to 240, hold 30min *
* Detector 0: Detector 1: ECD *
* Misc. Information: *

Starting Delay: 0.00 Ending retention time: 30.00
Area reject: 1000 One sample per 1.002 sec.
Amount injected: 1.00 Dilution factor: 1.00
Sample Weight: 1.00000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT BL	REF PEAK	% DELTA RET TIME	[illegible] AREA
1	4.659	TCMX	115.7669	27.3803%	233851	54682	4.1 1	0	-.357%	2163E-04
2	5.191		0.0000	0.0000%	9105	1848	4.9 2			3000E-09
										3000E-09

	6.713		0.0001	0.0000%	131407	18384	7.1	2			1.0000E-09
	6.997	d-BHC	9.3010	2.1810%	11430	2276	5.0	2	0	-.7109	8.1376E-04
	7.214		0.0001	0.0000%	78285	16977	4.6	1			1.0000E-09
	7.766		0.0000	0.0000%	31376	4201	7.5	2			1.0000E-09
	8.016		0.0002	0.0001%	231326	41188	5.6	2			1.0000E-09
	8.317		0.0001	0.0000%	103879	20661	5.0	2			1.0000E-09
	8.534	Heptachlor	25.9762	6.0911%	59256	11871	5.0	2	0	.7889	4.3837E-04
	8.684		0.0000	0.0000%	20030	3859	5.2	2			1.0000E-09
	8.934		0.0000	0.0000%	5387	1258	4.3	1			1.0000E-09
	9.101		0.0000	0.0000%	39019	9937	3.9	1			1.0000E-09
	9.235		0.0000	0.0000%	20229	5517	3.7	1			1.0000E-09
	9.719		0.0001	0.0000%	111126	14247	7.8	2			1.0000E-09
	10.103		0.0001	0.0000%	76976	14095	5.5	2			1.0000E-09
	10.354		0.0000	0.0000%	13735	2693	5.1	2			1.0000E-09
	10.872	Hept. epox.	2.7106	0.6356%	6102	1260	4.8	2	0	.9302	4.4420E-04
	11.005		0.0000	0.0000%	9663	2102	4.6	2			1.0000E-09
	11.122		0.0001	0.0000%	57529	11235	5.1	2			1.0000E-09
3	11.723	Y-Chlordane	3.1315	0.7343%	8148	1321	6.2	2	0	.8620	3.8431E-04
4	11.907	Endosulfan I	25.9154	6.0768%	59805	12023	5.0	2	0	0	4.3333E-04
5	12.759	Dieldrin	4.0713	0.9547%	10213	2038	5.0	2	0	0	3.9866E-04
6	12.959	4,4-DDE	10.6960	2.5081%	27230	5402	5.0	2	0	.3880	3.9281E-04
7	13.076		0.0000	0.0000%	32538	6492	5.0	2			1.0000E-09
8	13.494	Endrin	33.7684	7.9183%	69594	14284	4.9	2	0	.4350	4.8522E-04
9	13.644	Endosulf II	19.6958	4.6184%	46492	8747	5.3	2	0	-.8495	4.2364E-04
30	13.894		0.0002	0.0000%	164709	30536	5.4	2			1.0000E-09
31	14.212	4'4-DDD	3.4906	0.8185%	5880	1405	4.2	1	0	-.4678	5.9361E-04
32	14.529	Endrin ald	15.6734	3.6752%	31517	6230	5.1	2	0	.8695	4.9730E-04
33	14.729		0.0003	0.0001%	276764	46808	5.9	2			1.0000E-09
34	15.147		0.0001	0.0000%	120033	19781	6.1	2			1.0000E-09
35	15.414	DDT	14.7177	3.4511%	24879	3991	6.2	2	0	-.6458	5.9158E-04
	15.615		0.0003	0.0001%	258183	41571	6.2	2			1.0000E-09
	15.915		0.0000	0.0000%	39067	6312	6.2	2			1.0000E-09
38	16.199		0.0002	0.0000%	159488	30000	5.3	2			1.0000E-09
39	16.366		0.0001	0.0000%	101734	15125	6.7	2			1.0000E-09
40	16.683	Endrin ket.	10.2936	2.4137%	24355	4455	5.5	2	0	.2005	4.2265E-04
41	16.950		0.0001	0.0000%	126402	24506	5.2	2			1.0000E-09
42	17.117		0.0001	0.0000%	76595	14731	5.2	2			1.0000E-09
43	17.268		0.0001	0.0000%	65792	9564	6.9	3			1.0000E-09
44	17.502	Methoxychlor	11.4708	2.6898%	11192	1950	5.7	4	0	-.3802	1.0249E-03
45	17.685		0.0000	0.0000%	25114	4473	5.6	2			1.0000E-09
46	17.886		0.0004	0.0001%	372656	63090	5.9	3			1.0000E-09
47	18.236		0.0000	0.0000%	11114	1992	5.6	4			1.0000E-09
48	18.821		0.0002	0.0000%	162994	25990	6.3	2			1.0000E-09
49	19.121		0.0001	0.0000%	74482	13888	5.4	2			1.0000E-09
50	19.305		0.0001	0.0000%	86387	15082	5.7	2			1.0000E-09
51	20.240		0.0000	0.0000%	36380	6397	5.7	1			1.0000E-09
52	20.925		0.0001	0.0000%	77205	12330	6.3	1			1.0000E-09
53	22.111		0.0000	0.0000%	24657	4399	5.6	1			1.0000E-09
54	23.063	DCB	79.9223	18.7409%	272910	50387	5.4	1	0	-.1446	2.9365E-04

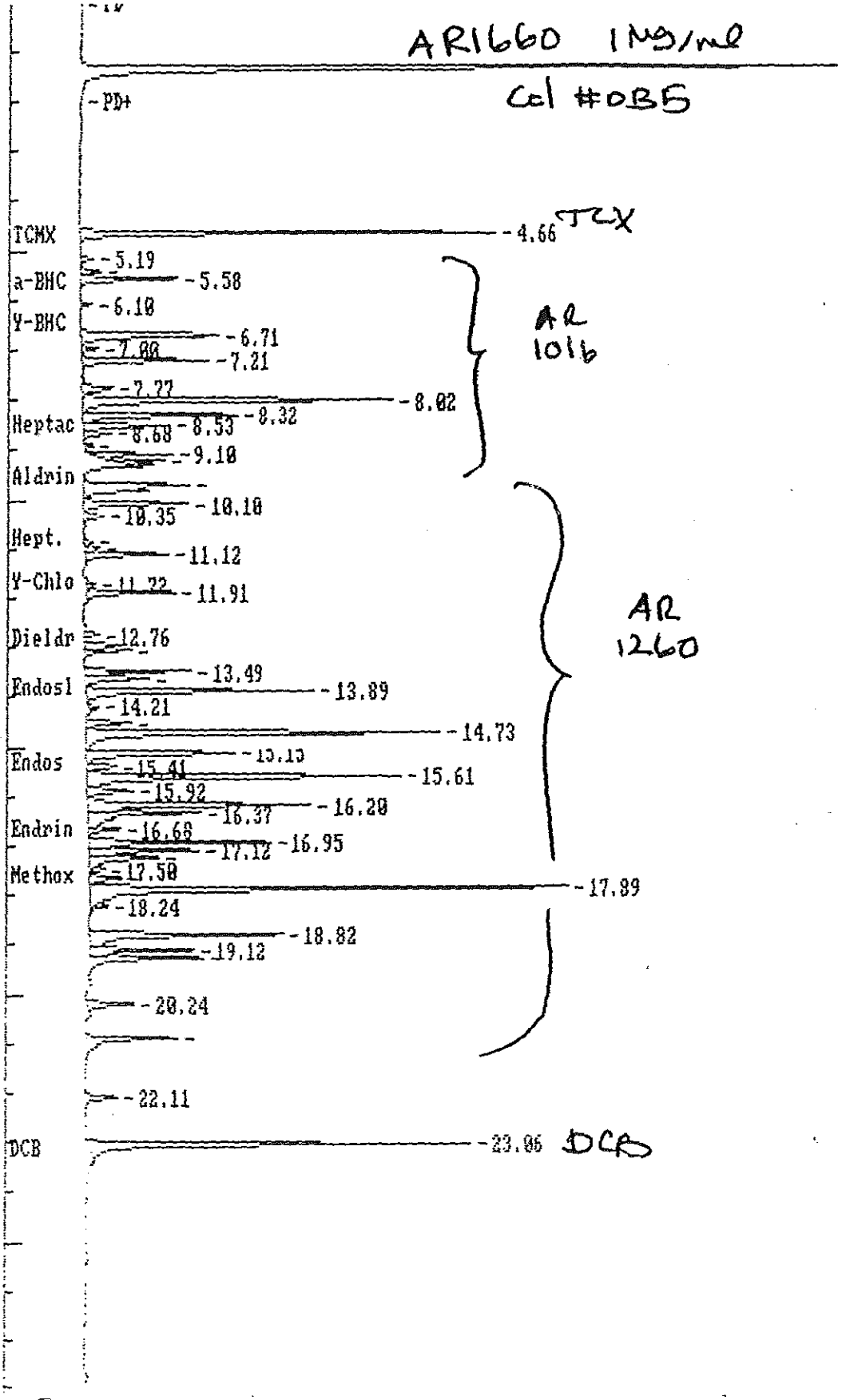
TOTAL AMOUNT = 426.4627

GROUP NUMBER GROUP AMOUNT GROUP PERCENT

265

SOM 7/14/95

eas, times, and heights stored in: E:JU26E8.ATB
ta File = E:JU26E8.PTS Printed on 06-26-1995 at 19:41:42
tart time: 0.00 min. Stop time: 30.00 min. Offset: 1 mv.
ull Range: 100 millivolts



***** EXTERNAL STANDARD TABLE *****

********** 06-26-1995 19:42:59 Version 5.1.5 **********

Sample Name: A1660 1PPM Data File: E:KU26E8

Date: 06-26-1995 19:10:52 Method: M:BPES-G 03-31-1995 14:31:59 # 358

Interface: 1 Cycle#: 8 Operator JJK Channel#: 1 Vial#: N.A.

Starting Peak Width: 10 Threshold: 10 Area Threshold: 500

Instrument Type: Perkin-Elmer 8500 Column Type: RTx-5 30m,.35mm

Solvent Description: 1.0u df

Conditions: 180 for 4.0min then 4.0deg/min to 240, hold 30min

Detector 0: Detector 1: ECD

Misc. Information:

Starting Delay: 0.00 Ending retention time: 30.00

Area reject: 500 One sample per 1.002 sec.

Amount injected: 1.00 Dilution factor: 1.00

Sample Weight: 1.00000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	4.576	TCMX	117.3949	9.5164%	210731	55513	3.8	1	0	-.3636	5.5709E-04
2	5.060		0.0000	0.0000%	6171	1364	4.5	1			1.0000E-09
3	5.494		0.0000	0.0000%	8450	1778	4.8	1			1.0000E-09
	5.912		0.0000	0.0000%	12473	2752	4.5	2			1.0000E-09
5	6.062		0.0001	0.0000%	59869	13106	4.6	2			1.0000E-09
6	6.697		0.0000	0.0000%	7727	1642	4.7	1			1.0000E-09
7	7.231		0.0001	0.0000%	112829	26546	4.3	2			1.0000E-09
8	7.582		0.0000	0.0000%	18118	2567	7.1	2			1.0000E-09
9	7.816		0.0000	0.0000%	32805	7550	4.3	2			1.0000E-09
10	7.949		0.0000	0.0000%	48989	10869	4.5	2			1.0000E-09
11	8.367	Y-BHC	18.0061	1.4596%	31156	6107	5.1	2	0	.4008	5.7793E-04
12	8.600		0.0002	0.0000%	213992	47565	4.5	2			1.0000E-09
13	9.035	Heptachlor	53.2017	4.3127%	101220	19704	5.1	2	0	1.691	5.2560E-04
14	9.352		0.0001	0.0000%	68143	11714	5.8	2			1.0000E-09
15	9.786	Aldrin	80.6709	6.5394%	150373	16568	9.1	1	0	1.034	5.3647E-04
16	10.554		0.0001	0.0000%	96800	17541	5.5	2			1.0000E-09
17	10.872	B-BHC	62.6068	5.0751%	77747	13942	5.6	2	0	-.9132	8.0526E-04
18	11.389		0.0000	0.0000%	12933	2722	4.8	2			1.0000E-09
19	11.506	d-BHC	5.6046	0.4543%	6348	1371	4.6	2	0	-1.005	8.8288E-04
20	11.890	Hept. epox.	33.4691	2.7131%	64468	11541	5.6	1	0	-1.385	5.1916E-04
21	12.358		0.0000	0.0000%	6332	1486	4.3	1			1.0000E-09
22	12.525		0.0001	0.0000%	55559	11726	4.7	1			1.0000E-09
23	13.627	a-Chlordane	4.7575	0.3857%	10095	2105	4.8	2	0	1.618	4.7127E-04
24	13.761	4,4 DDE	13.3515	1.0823%	25688	5379	4.8	2	0	-.3024	5.1975E-04
25	14.028		0.0000	0.0000%	26468	6320	4.2	2			1.0000E-09
26	14.128	Dieldrin	43.0808	3.4923%	81852	14036	5.8	2	0	.1183	5.2633E-04
27	14.345		0.0000	0.0000%	27876	5424	5.1	2			1.0000E-09
28	14.596		0.0001	0.0000%	138910	29715	4.7	2			1.0000E-09
29	14.830	Endrin	12.3196	0.9987%	11767	2141	5.5	2	0	.4524	1.0470E-03
30	14.997		0.0000	0.0000%	11422	2012	5.7	2			1.0000E-09
31	15.164		0.0000	0.0000%	30181	6206	4.9	2			1.0000E-09
32	15.364		0.0002	0.0000%	186266	36959	5.0	2			1.0000E-09
33	15.715		0.0001	0.0000%	90533	18985	4.8	2			1.0000E-09
34	15.932		0.0001	0.0000%	82637	17304	4.8	2			1.0000E-09
35	16.299		0.0000	0.0000%	5152	1164	4.4	2			1.0000E-09

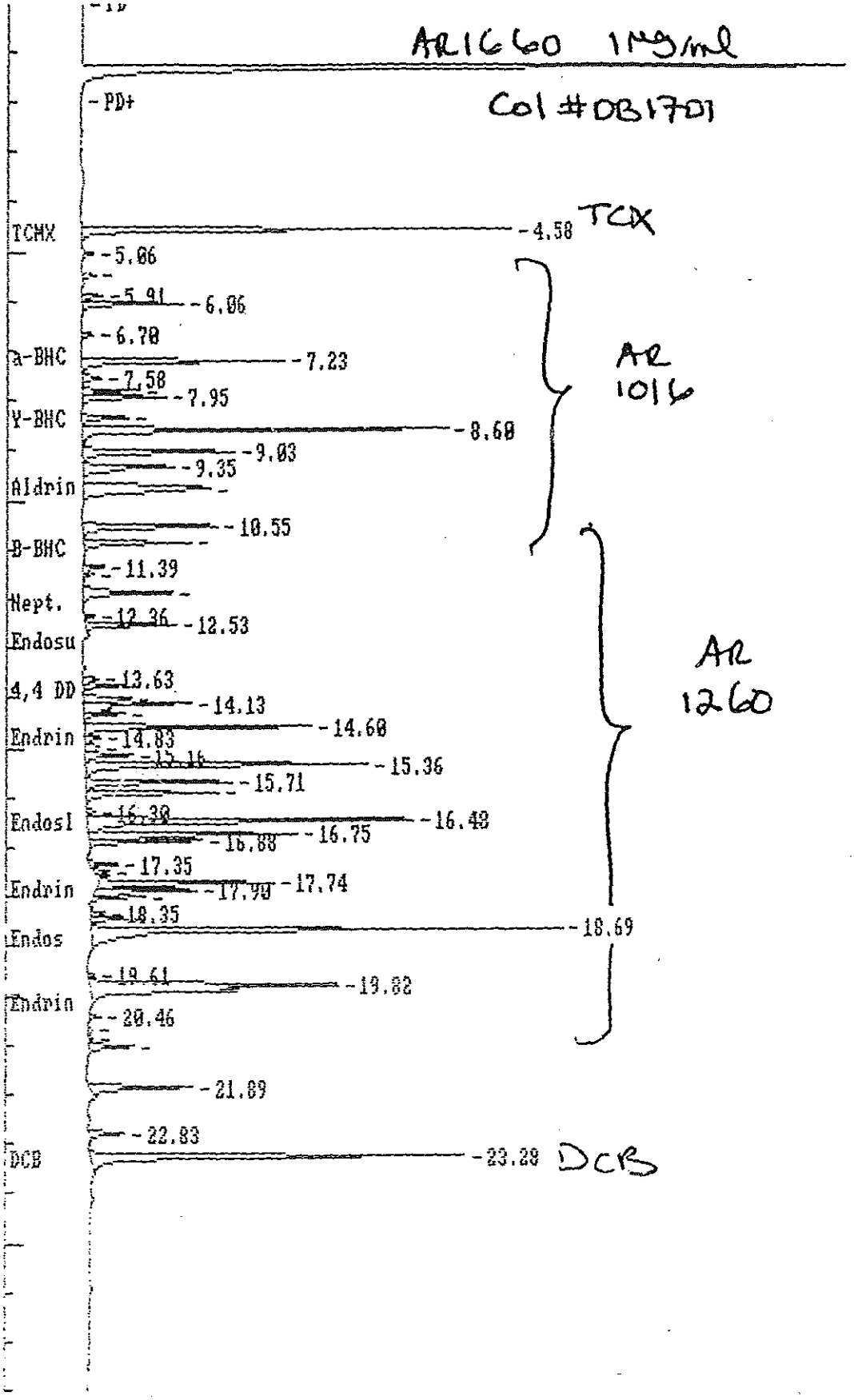
7/14/95

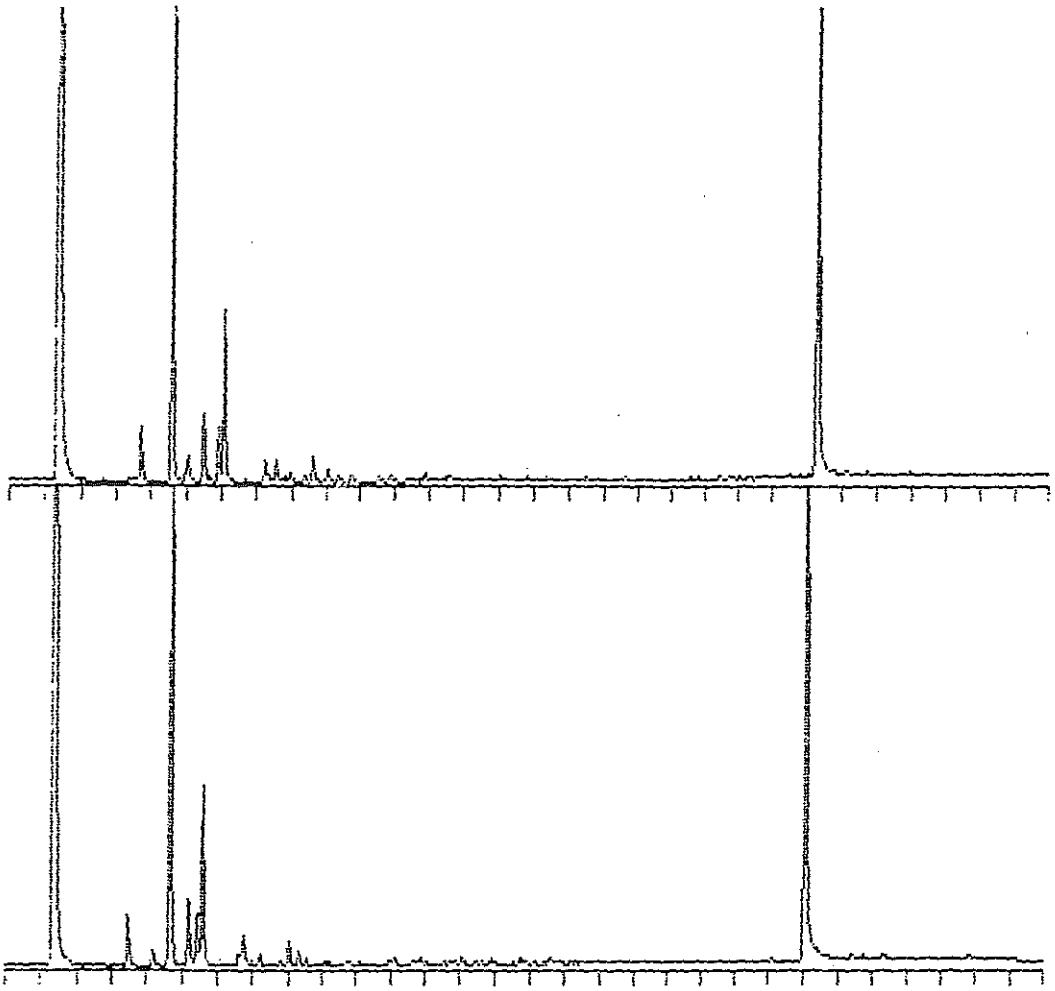
	17.351		0.0000	0.0000%	15571	3622	4.3	1		1.0000E-09
	17.518		0.0000	0.0000%	5823	1443	4.0	1		1.0000E-09
	17.735		0.0001	0.0000%	105115	22840	4.6	2		1.0000E-09
	17.902	Endrin ald	42.8347	3.4723%	60894	13186	4.6	2	0 .2337	7.0343E-04
	18.019		0.0000	0.0000%	32016	6858	4.7	2		1.0000E-09
	18.353		0.0000	0.0000%	8289	1819	4.6	2		1.0000E-09
	18.470		0.0000	0.0000%	22413	4737	4.7	2		1.0000E-09
	18.687	Endos sulf	226.3105	18.3455%	336857	61091	5.5	1	0 -.7978	6.7183E-04
	19.606	Methoxychl	6.9412	0.5627%	4475	912	4.9	2	0 1.645	1.5511E-03
3	19.823	Endrin ket	198.4263	16.0851%	303880	32413	9.4	2	0 -1.411	6.5298E-04
9	20.457		0.0000	0.0000%	7319	1494	4.9	1		1.0000E-09
0	20.725		0.0000	0.0000%	2942	492	6.0	2		1.0000E-09
1	20.892		0.0000	0.0000%	4052	713	5.7	2		1.0000E-09
2	21.059		0.0000	0.0000%	30652	5910	5.2	2		1.0000E-09
3	21.894		0.0001	0.0000%	66328	13193	5.0	1		1.0000E-09
4	22.829		0.0000	0.0000%	24962	4699	5.3	1		1.0000E-09
5	23.280	DCB	116.8708	9.4739%	254727	48430	5.3	1	0 -.2147	4.5881E-04

TOTAL AMOUNT = 1233.6038

GROUP NUMBER GROUP AMOUNT GROUP PERCENT

eas, times, and heights stored in: E:KU26E8.ATB
)a File = E:KU26E8.PTS Printed on 06-26-1995 at 19:43:37
art time: 0.00 min. Stop time: 30.00 min. Offset: 1 mv.
ll Range: 100 millivolts





[Interface 1] 0-30 Min Scale: 100 Mv Ch.A, 100 Mv Ch.B
A1221 2PPM Processed: 06-26-1995 20:15:25, segment 9, cycle 9
RAW DATA SAVED IN FILE E:JU26E9.PTS Second Channel Stored in E:KU26E9.PTS

EXTERNAL STANDARD TABLE

********** 06-26-1995 20:15:37 Version 5.1.5 **********

Sample Name: A1221 2PPM Data File: E:JU26E9

Date: 06-26-1995 19:44:59 Method: M:APES-G 03-08-1995 15:02:41 # 359

Interface: 1 Cycle#: 9 Operator JJK Channel#: 0 Vial#: N.A.

Starting Peak Width: 10 Threshold: 10 Area Threshold: 1000

Instrument Type: Perkin-Elmer 8500 Column Type: RTx-5 30m,.35mm

Solvent Description: 1.0u df

Conditions: 180 for 4.0min then 4.0deg/min to 240, hold 30min

Detector 0: Detector 1: ECD

Misc. Information:

Starting Delay: 0.00 Ending retention time: 30.00

Area reject: 1000 One sample per 1.002 sec.

Amount injected: 1.00 Dilution factor: 1.00

Sample Weight: 1.00000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	3.457		0.0001	0.0000%	54719	10371	5.3	:			1.0000E-09
					16348	2901	5.6	:			1.0000E-09

5.578	a-BHC	107.9344	17.1734%	177165	36991	4.8	2	0	0	6.0923E-04
6.613		0.0000	0.0000%	10249	2359	4.3	2			1.0000E-09
6.763		0.0000	0.0000%	42182	5997	7.0	2			1.0000E-09
7.231		0.0000	0.0000%	10931	2197	5.0	1			1.0000E-09
8.033		0.0000	0.0000%	25891	4575	5.7	1			1.0000E-09
8.317		0.0000	0.0000%	13687	2705	5.1	2			1.0000E-09
8.534	Heptachlor	2.5638	0.4079%	5849	1201	4.9	2	0	.7889	4.3837E-04
9.101		0.0000	0.0000%	3324	772	4.3	1			1.0000E-09
11.122		0.0000	0.0000%	4813	1047	4.6	1			1.0000E-09
11.907	Endosulfan I	1.8536	0.2949%	4278	974	4.4	1	0	0	4.3333E-04
13.076	4,4-DDE	2.1396	0.3404%	5447	1063	5.1	1	0	1.293	3.9281E-04
14.746		0.0000	0.0000%	4950	742	6.7	1			1.0000E-09
15.615	DDT	2.6802	0.4264%	4531	733	6.2	1	0	.6458	5.9158E-04
23.063	DCB	215.0443	34.2155%	734305	135912	5.4	1	0	-.1446	2.9285E-04
24.415		0.0000	0.0000%	4906	892	5.5	1			1.0000E-09
25.334		0.0000	0.0000%	5133	658	7.8	1			1.0000E-09

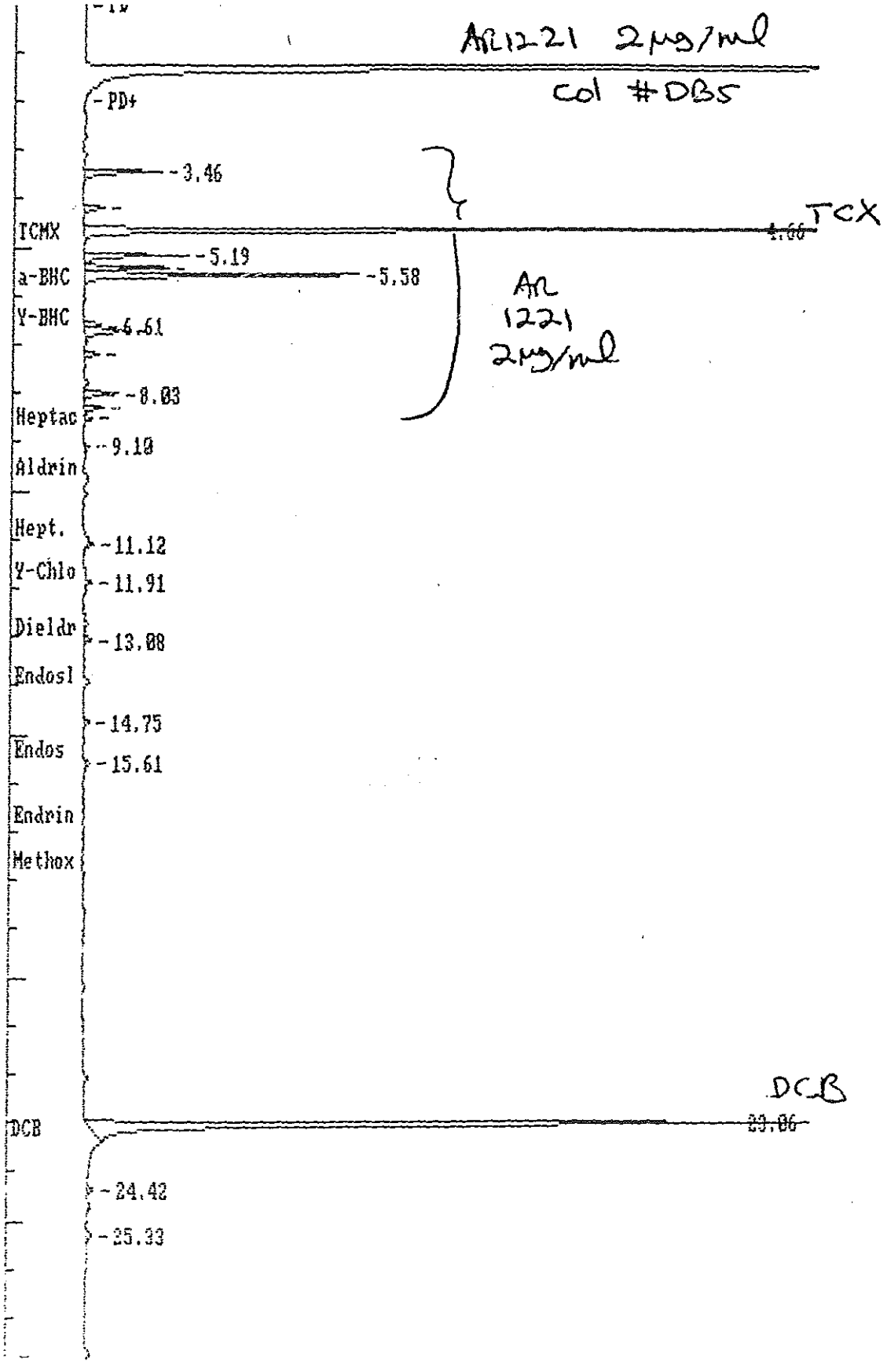
TOTAL AMOUNT = 628.4993

GROUP NUMBER GROUP AMOUNT GROUP PERCENT

SOP 7/14/95

271

as, times, and heights stored in: E:JU26E9.ATB
a File = E:JU26E9.PTS Printed on 06-26-1995 at 20:15:48
art time: 0.00 min. Stop time: 30.00 min. Offset: 1 mv.
ll Range: 100 millivolts



***** EXTERNAL STANDARD TABLE *****

********** 06-26-1995 20:16:03 Version 5.1.5 **********

Sample Name: A1221 2PPM Data File: E:KU26E9

Date: 06-26-1995 19:44:59 Method: M:BPES-G 03-31-1995 14:31:59 # 358

Interface: 1 Cycle#: 9 Operator JJK Channel#: 1 Vial#: N.A.

Starting Peak Width: 10 Threshold: 10 Area Threshold: 500

Instrument Type: Perkin-Elmer 8500 Column Type: RTx-5 30m,.35mm

Solvent Description: 1.0u df

Conditions: 180 for 4.0min then 4.0deg/min to 240, hold 30min

Detector 0: Detector 1: ECD

Misc. Information:

Starting Delay: 0.00 Ending retention time: 30.00

Area reject: 500 One sample per 1.002 sec.

Amount injected: 1.00 Dilution factor: 1.00

Sample Weight: 1.00000

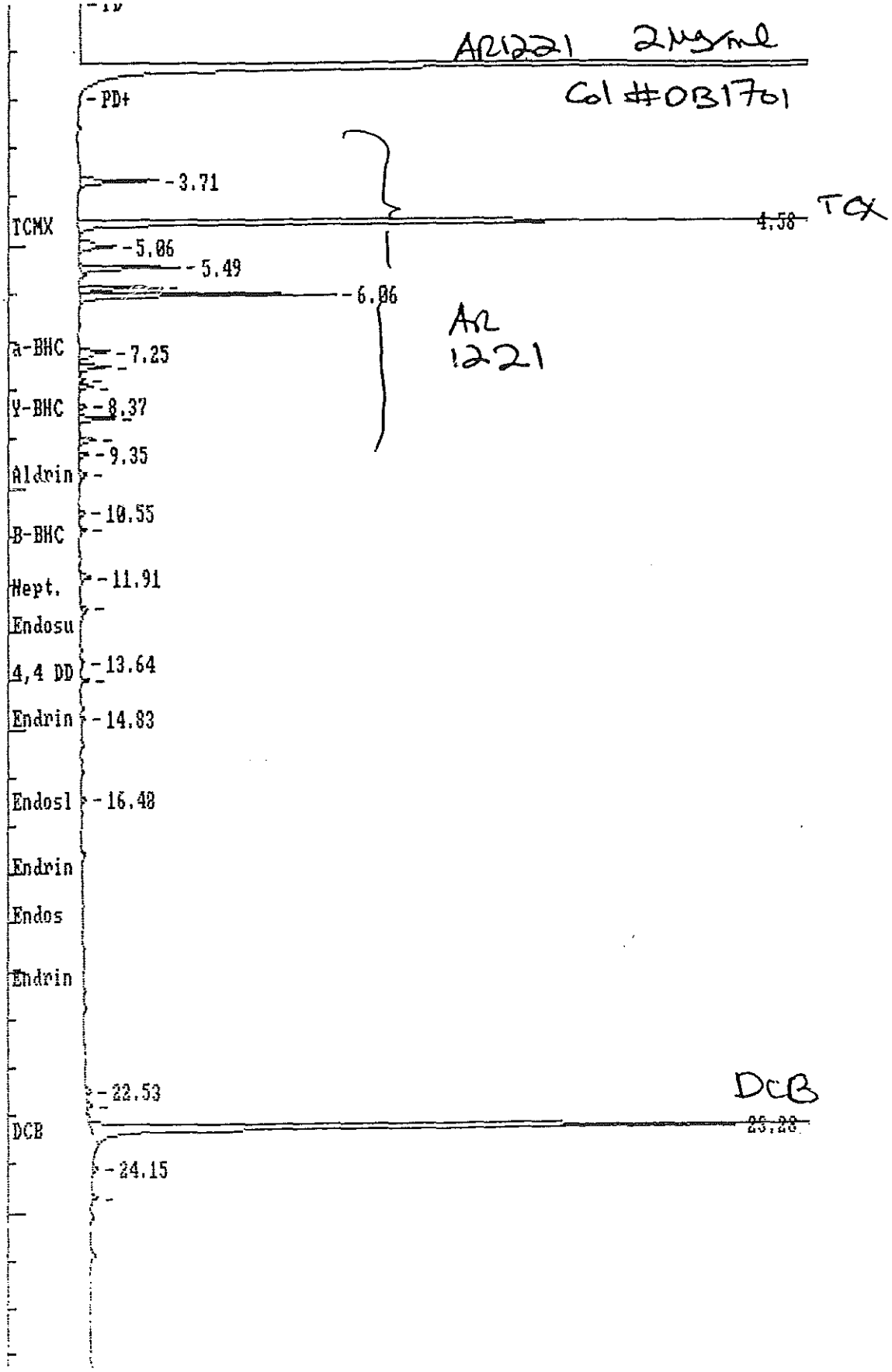
PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	3.707		0.0001	0.0000%	52261	10909	4.8	1			1.0000E-09
2	4.576	TCMX	284.5000	46.2489%	510694	128989	4.0	2	0	-.3636	5.5709E-04
3	5.060		0.0000	0.0000%	33382	4980	6.7	2			1.0000E-09
	5.494		0.0001	0.0000%	58957	13788	4.3	1			1.0000E-09
5	5.912		0.0000	0.0000%	48756	11496	4.2	2			1.0000E-09
6	6.062		0.0002	0.0000%	165853	35440	4.7	2			1.0000E-09
7	7.248		0.0000	0.0000%	28633	4158	6.9	2			1.0000E-09
8	7.548		0.0000	0.0000%	24714	4372	5.7	2			1.0000E-09
9	7.816		0.0000	0.0000%	3923	846	4.6	2			1.0000E-09
10	7.966		0.0000	0.0000%	9211	1856	5.0	2			1.0000E-09
11	8.367	Y-BHC	3.4612	0.5627%	5989	1145	5.2	1	0	.4008	5.7793E-04
12	8.600		0.0000	0.0000%	24715	5055	4.9	1			1.0000E-09
13	9.035	Heptachlor	6.4357	1.0462%	12244	2219	5.5	1	0	1.691	5.2560E-04
14	9.352		0.0000	0.0000%	6261	1292	4.8	1			1.0000E-09
15	9.753	Aldrin	3.6497	0.5933%	6803	947	7.2	1	0	.6896	5.3647E-04
16	10.554		0.0000	0.0000%	4369	769	5.7	1			1.0000E-09
17	10.888	B-BHC	4.4451	0.7226%	5520	910	6.1	1	0	-.7610	8.0526E-04
18	11.907	Hept. epox.	4.7551	0.7730%	9159	1378	6.6	1	0	-1.246	5.1916E-04
19	12.542		0.0000	0.0000%	3573	784	4.6	1			1.0000E-09
20	13.644	4,4'DDE	1.2103	0.1968%	2329	439	5.3	1	0	-1.149	5.1975E-04
21	14.028	Dieldrin	2.6691	0.4339%	5071	1034	4.9	1	0	-.5917	5.2633E-04
22	14.830	Endrin	2.8083	0.4565%	2682	528	5.1	1	0	.4524	1.0470E-03
23	16.483	EndosifII	1.9503	0.3170%	3621	636	5.7	1	0	0	5.3856E-04
24	22.528		0.0000	0.0000%	4047	627	6.5	1			1.0000E-09
25	22.829		0.0000	0.0000%	3858	732	5.3	1			1.0000E-09
26	23.280	DCB	299.2641	48.6490%	652265	122958	5.3	1	0	-.2147	4.5881E-04
27	24.148		0.0000	0.0000%	4994	766	6.5	1			1.0000E-09
28	24.749		0.0000	0.0000%	4874	697	5.4	1			1.0000E-09

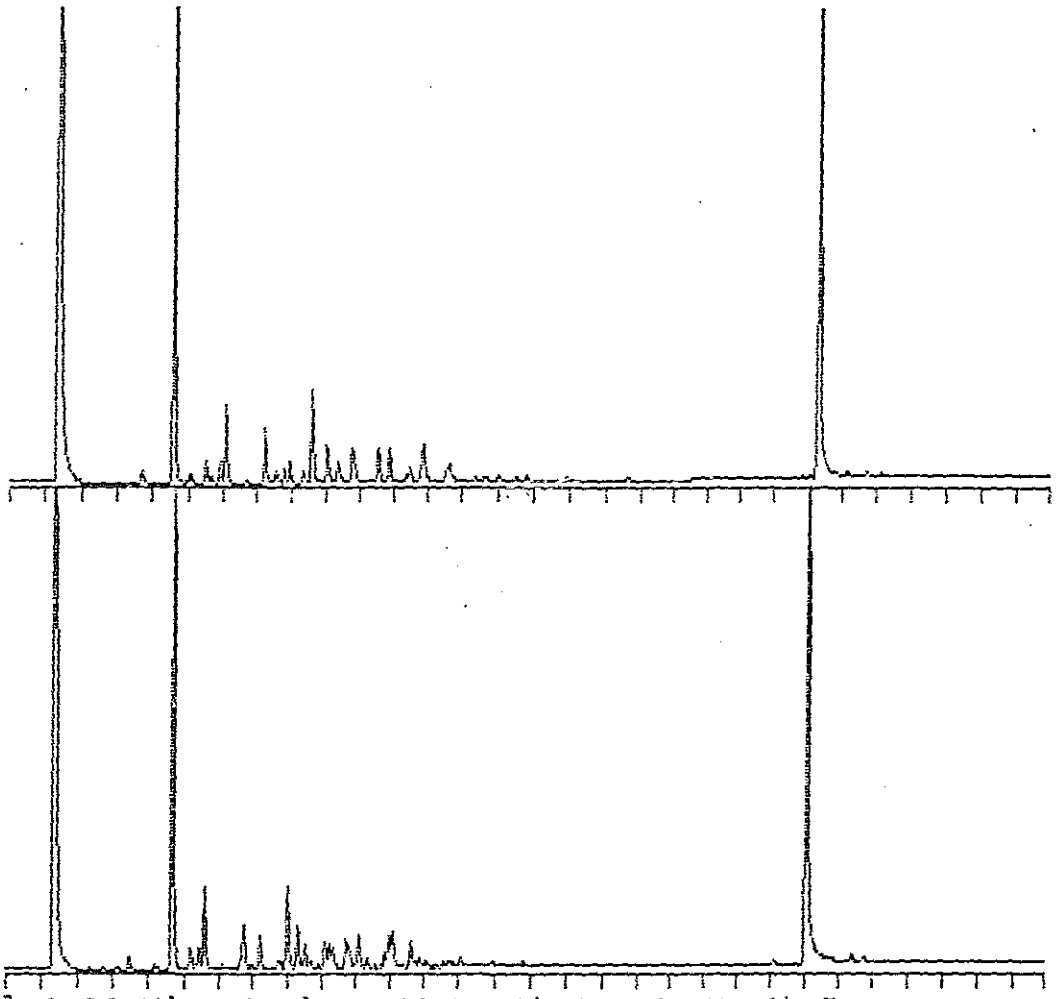
TOTAL AMOUNT = 615.1492

GROUP NUMBER GROUP AMOUNT GROUP PERCENT

SDM 7/14/95

Areas, times, and heights stored in: E:KU26E9.ATB
Data File = E:KU26E9.PTS Printed on 06-26-1995 at 20:16:54
Start time: 0.00 min. Stop time: 30.00 min. Offset: 1 mv.
Full Range: 100 millivolts





Interface 1] 0-30 Min Scale: 100 Mv Ch.A, 100 Mv Ch.B
A1232 1PPM Processed: 06-26-1995 20:49:32, segment 10, cycle 10
RAW DATA SAVED IN FILE E:JU26E10.PTS Second Channel Stored in E:KU26E10.PTS

***** EXTERNAL STANDARD TABLE *****

********** 06-26-1995 20:49:44 Version 5.1.5 **********

Sample Name: A1232 1PPM Data File: E:JU26E10

Date: 06-26-1995 20:19:06 Method: M:APES-G 03-08-1995 15:02:41 # 359

Interface: 1 Cycle#: 10 Operator JJK Channel#: 0 Vial#: N.A.

Starting Peak Width: 10 Threshold: 10 Area Threshold: 1000

Instrument Type: Perkin-Elmer 8500 Column Type: RTx-5 30m,.35mm

Solvent Description: 1.0u df

Conditions: 180 for 4.0min then 4.0deg/min to 240, hold 30min

Detector 0: Detector 1: ECD

Misc. Information:

Starting Delay: 0.00 Ending retention time: 30.00

Area reject: 1000 One sample per 1.002 sec.

Amount injected: 1.00 Dilution factor: 1.00

Sample Weight: 1.00000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	3.474		0.0000	0.0000%	13778	2513	5.5	1			1.0000E-09
			0.0000	0.0000%	4620	903	5.3	1			1.0000E-09

276

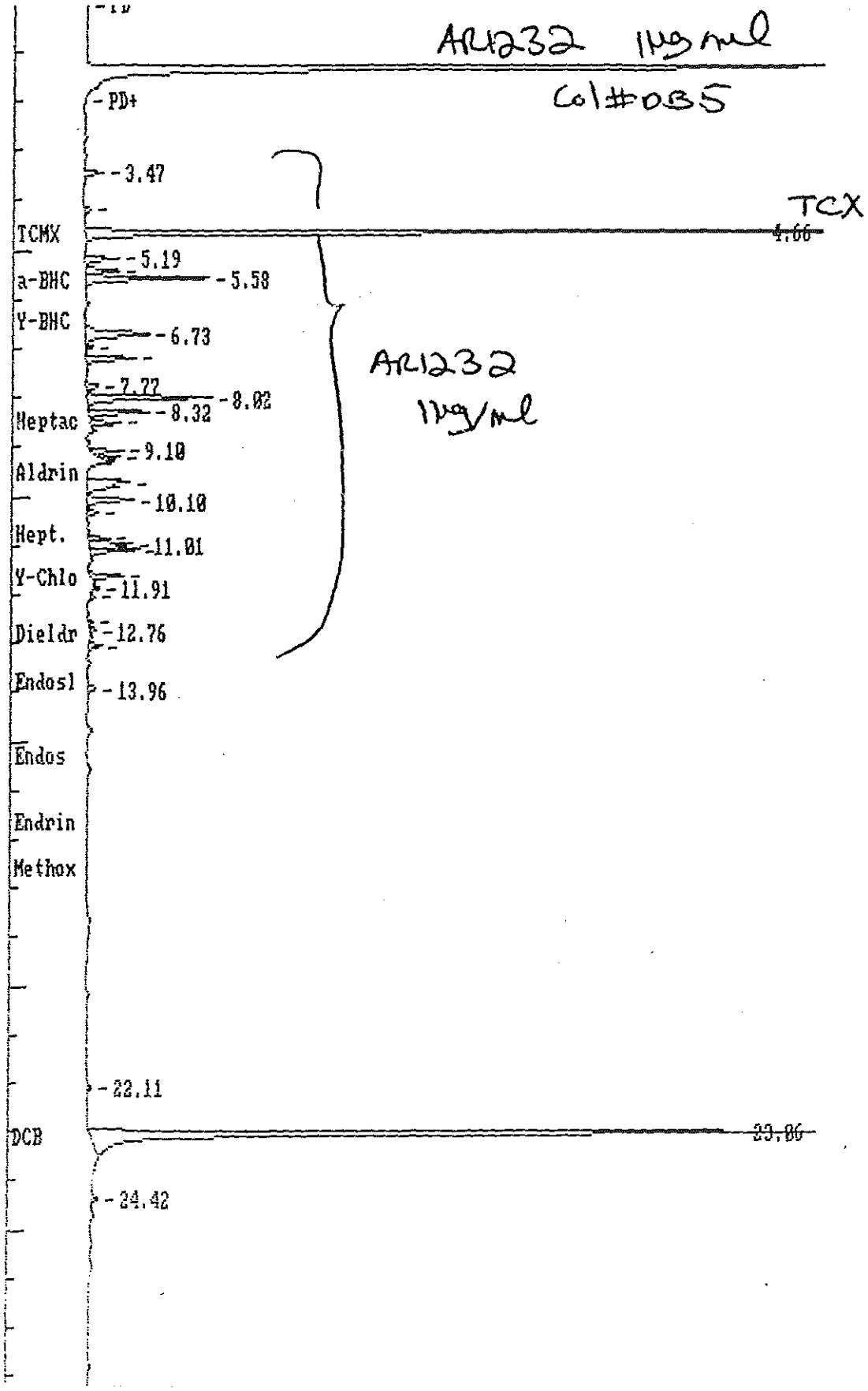
5.578	a-BHC	50.3608	7.9049%	82663	16745	4.9	2	0		0	6.0923E-04
6.730		0.0001	0.0000%	72187	8708	8.3	2				1.0000E-09
6.997	d-BHC	3.9884	0.6260%	4901	961	5.1	2	0		-.7109	8.1376E-04
7.231		0.0000	0.0000%	33251	6851	4.9	1				1.0000E-09
7.766		0.0000	0.0000%	12844	1678	7.7	2				1.0000E-09
8.016		0.0001	0.0000%	94039	16864	5.6	2				1.0000E-09
8.317		0.0000	0.0000%	40120	8291	4.8	2				1.0000E-09
8.534	Heptachlor	8.0255	1.2597%	18308	4059	4.5	2	0		.7889	4.3837E-04
9.101		0.0000	0.0000%	16401	4112	4.0	2				1.0000E-09
9.235		0.0000	0.0000%	7796	2212	3.5	2				1.0000E-09
9.736		0.0001	0.0000%	52132	5895	8.8	2				1.0000E-09
10.103		0.0000	0.0000%	35939	6389	5.6	2				1.0000E-09
10.354		0.0000	0.0000%	8233	1579	5.2	2				1.0000E-09
10.872	Hept. epox.	5.9039	0.9267%	13291	2961	4.5	2	0		.9302	4.4420E-04
11.005		0.0000	0.0000%	31667	5919	5.3	2				1.0000E-09
11.105		0.0000	0.0000%	35908	6749	5.3	2				1.0000E-09
11.640	Y-Chlordane	8.2450	1.2942%	21454	4349	4.9	1	0		.1436	3.8431E-04
11.907	Endosulfan I	1.9263	0.3024%	4445	1094	4.1	1	0		0	4.3333E-04
12.074	a-Chlordane	1.3960	0.2191%	3661	813	4.5	1	0		.1385	3.8129E-04
12.592		0.0000	0.0000%	3460	731	4.7	1				1.0000E-09
12.759	Dieldrin	1.5219	0.2389%	3818	881	4.3	1	0		0	3.9866E-04
13.076		0.0000	0.0000%	10319	1871	5.5	1				1.0000E-09
13.961	Endosulf II	2.5974	0.4077%	6131	1071	5.7	1	0		1.456	4.2364E-04
22.111		0.0000	0.0000%	3324	621	5.4	1				1.0000E-09
23.063	OCB	240.4679	37.7451%	821118	145117	5.7	1	0		-.1446	2.9285E-04
24.415		0.0000	0.0000%	5258	953	5.5	1				1.0000E-09

TOTAL AMOUNT = 637.0833

GROUP NUMBER GROUP AMOUNT GROUP PERCENT

Soon 7/14/95

reas, times, and heights stored in: E:JU26E10.ATB
ta File = E:JU26E10.PTS Printed on 06-26-1995 at 20:49:57
art time: 0.00 min. Stop time: 30.00 min. Offset: 1 mv.
ull Range: 100 millivolts



***** EXTERNAL STANDARD TABLE *****

********** 06-26-1995 20:50:22 Version 5.1.5 **********

Sample Name: A1232 1PPM Data File: E:KU26E10

Date: 06-26-1995 20:19:06 Method: M:8PES-G 03-31-1995 14:31:59 # 358

Interface: 1 Cycle#: 10 Operator JJK Channel#: 1 Vial#: N.A.

Starting Peak Width: 10 Threshold: 10 Area Threshold: 500

Instrument Type: Perkin-Elmer 8500 Column Type: RTx-5 30m,.35mm

Solvent Description: 1.0u df

Conditions: 180 for 4.0min then 4.0deg/min to 240, hold 30min

Detector 0: Detector 1: ECD

Misc. Information:

Starting Delay: 0.00 Ending retention time: 30.00

Area reject: 500 One sample per 1.002 sec.

Amount injected: 1.00 Dilution factor: 1.00

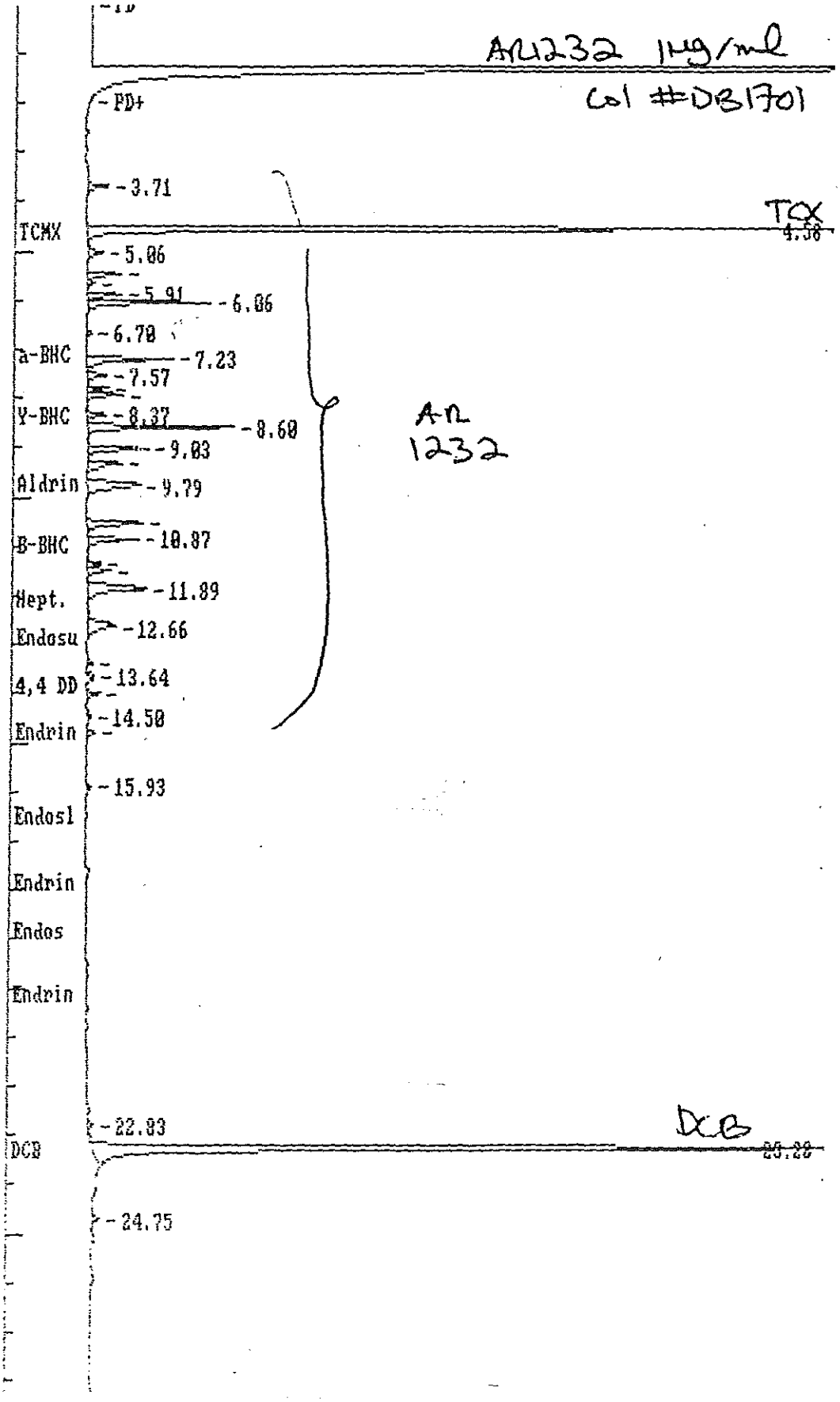
Sample Weight: 1.00000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	3.707		0.0000	0.0000%	13464	2623	5.1	1			1.0000E-09
2	4.576	TCMX	314.6076	38.7868%	564739	144810	3.9	2	0	-.3636	5.5709E-04
3	5.060		0.0000	0.0000%	12731	1968	6.5	2			1.0000E-09
4	5.494		0.0000	0.0000%	21586	4471	4.8	2			1.0000E-09
5	5.678		0.0000	0.0000%	4997	1026	4.9	2			1.0000E-09
6	5.912		0.0000	0.0000%	20059	4477	4.5	2			1.0000E-09
7	6.062		0.0001	0.0000%	77102	16210	4.8	2			1.0000E-09
8	6.697		0.0000	0.0000%	2818	598	4.7	1			1.0000E-09
9	7.231		0.0001	0.0000%	53695	11306	4.7	2			1.0000E-09
10	7.565		0.0000	0.0000%	16643	2561	6.5	2			1.0000E-09
11	7.816		0.0000	0.0000%	13495	2893	4.7	2			1.0000E-09
12	7.966		0.0000	0.0000%	22164	4693	4.7	2			1.0000E-09
13	8.367	Y-BHC	7.3431	0.9053%	12706	2472	5.1	2	0	.4008	5.7793E-04
14	8.600		0.0001	0.0000%	87045	19254	4.5	2			1.0000E-09
15	9.035	Heptachlor	21.5484	2.6566%	40998	7901	5.2	2	0	1.691	5.2560E-04
16	9.352		0.0000	0.0000%	26432	4511	5.9	2			1.0000E-09
17	9.786	Aldrin	33.1131	4.0824%	61724	6927	8.9	1	0	1.034	5.3647E-04
18	10.554		0.0000	0.0000%	41623	7407	5.6	1			1.0000E-09
19	10.872	B-BHC	31.1058	3.8349%	38628	6655	5.8	1	0	-.9132	8.0526E-04
20	11.389		0.0000	0.0000%	7985	1739	4.6	2			1.0000E-09
21	11.506	d-BHC	14.0106	1.7273%	15869	3086	5.1	2	0	-1.005	8.8288E-04
22	11.890	Hept. epox.	33.2672	4.1014%	64079	7730	8.3	2	0	-1.385	5.1916E-04
23	12.659	Endosulf I	19.6929	2.4279%	38630	3608	10.7	1	0	-1.558	5.0978E-04
24	13.393	a-Chlordane	1.9252	0.2374%	4035	841	4.9	1	0	-.1245	4.7727E-04
25	13.644	4,4 DDE	1.7629	0.2173%	3392	619	5.5	1	0	-1.149	5.1975E-04
26	14.028	Dieldrin	4.5344	0.5590%	8615	1732	5.0	1	0	-.5917	5.2633E-04
27	14.496		0.0000	0.0000%	1405	405	4.7	1			1.0000E-09
28	14.830	Endrin	5.9093	0.7285%	5644	1045	5.4	1	0	.4524	1.0470E-03
29	15.932		0.0000	0.0000%	3799	671	5.5	1			1.0000E-09
30	20.329		0.0000	0.0000%	3210	649	5.0	1			1.0000E-09
31	23.280	DCB	322.2993	39.7351%	702472	133443	5.3	1	0	-.2147	4.5881E-04
32	24.749		0.0000	0.0000%	5227	957	5.5	1			1.0000E-09

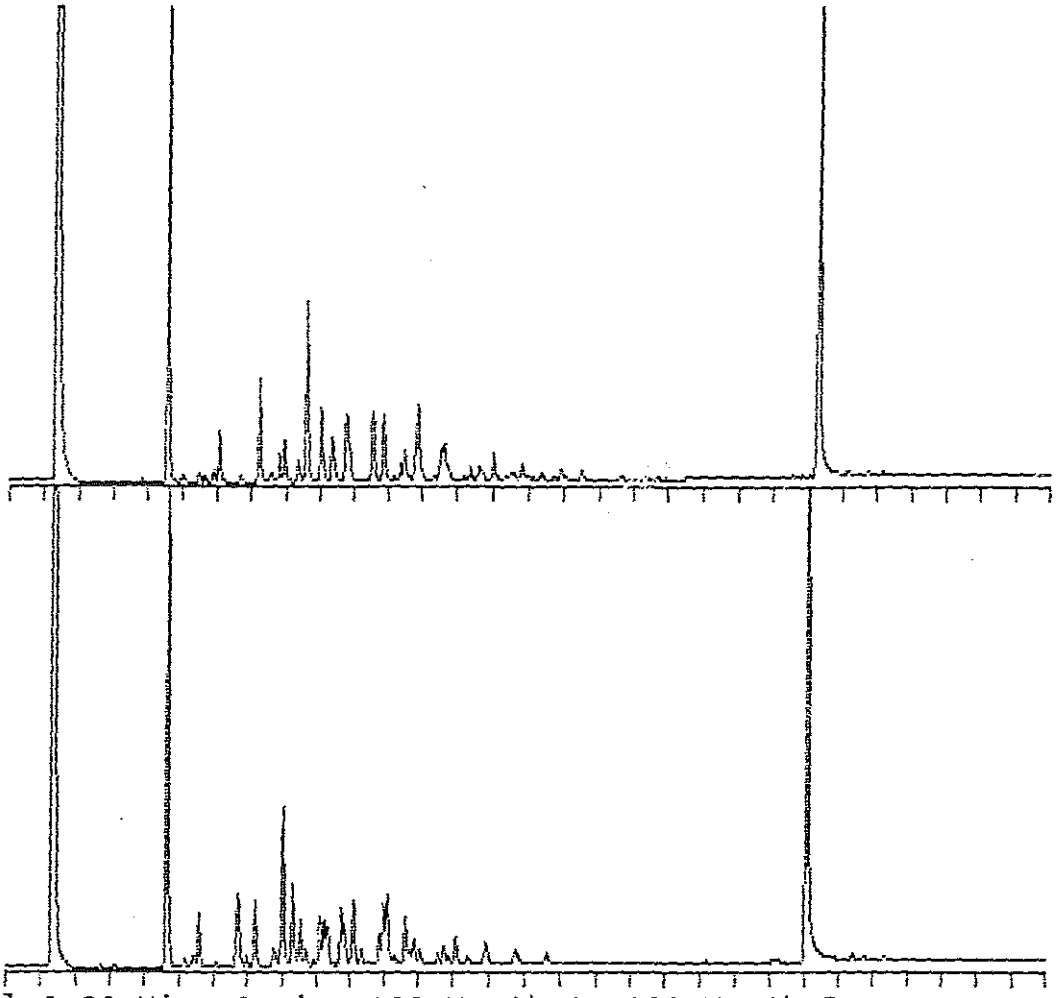
TOTAL AMOUNT = 811.1202

SM 7/14/95

as, times, and heights stored in: E:KU26E10.ATB
a File = E:KU26E10.PTS Printed on 06-26-1995 at 20:51:14
rt time: 0.00 min. Stop time: 30.00 min. Offset: 1 mv.
l Range: 100 millivolts



QUENCE RECORDED IN E:JU26E.SEQ



[Interface 1] 0-30 Min Scale: 100 Mv Ch.A, 100 Mv Ch.B
A1242 1PPM Processed: 06-26-1995 21:23:42, segment 11, cycle 11
RAW DATA SAVED IN FILE E:JU26E11.PTS Second Channel Stored in E:KU26E11.PTS

***** EXTERNAL STANDARD TABLE *****

********** 06-26-1995 21:23:54 Version 5.1.5 **********
* Sample Name: A1242 1PPM Data File: E:JU26E11 *
* Date: 06-26-1995 20:53:15 Method: M:APES-G 03-08-1995 15:02:41 # 359 *
* Interface: 1 Cycle#: 11 Operator JJK Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 10 Area Threshold: 1000 *
****
* Instrument Type: Perkin-Elmer 8500 Column Type: RTx-5 30m,.35mm *
* Solvent Description: 1.0u df *
* Conditions: 180 for 4.0min then 4.0deg/min to 240, hold 30min *
* Detector 0: Detector 1: ECD *
* Misc. Information: *
****

Starting Delay: 0.00 Ending retention time: 30.00
Area reject: 1000 One sample per 1.002 sec.
`mount injected: 1.00 Dilution factor: 1.00
ample Weight: 1.00000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	AREA/ HEIGHT	HEIGHT BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	4.459	TMX	284.3305	45.3571%	545083	133364	4.1 !	0	-.2571	5.2163E-04

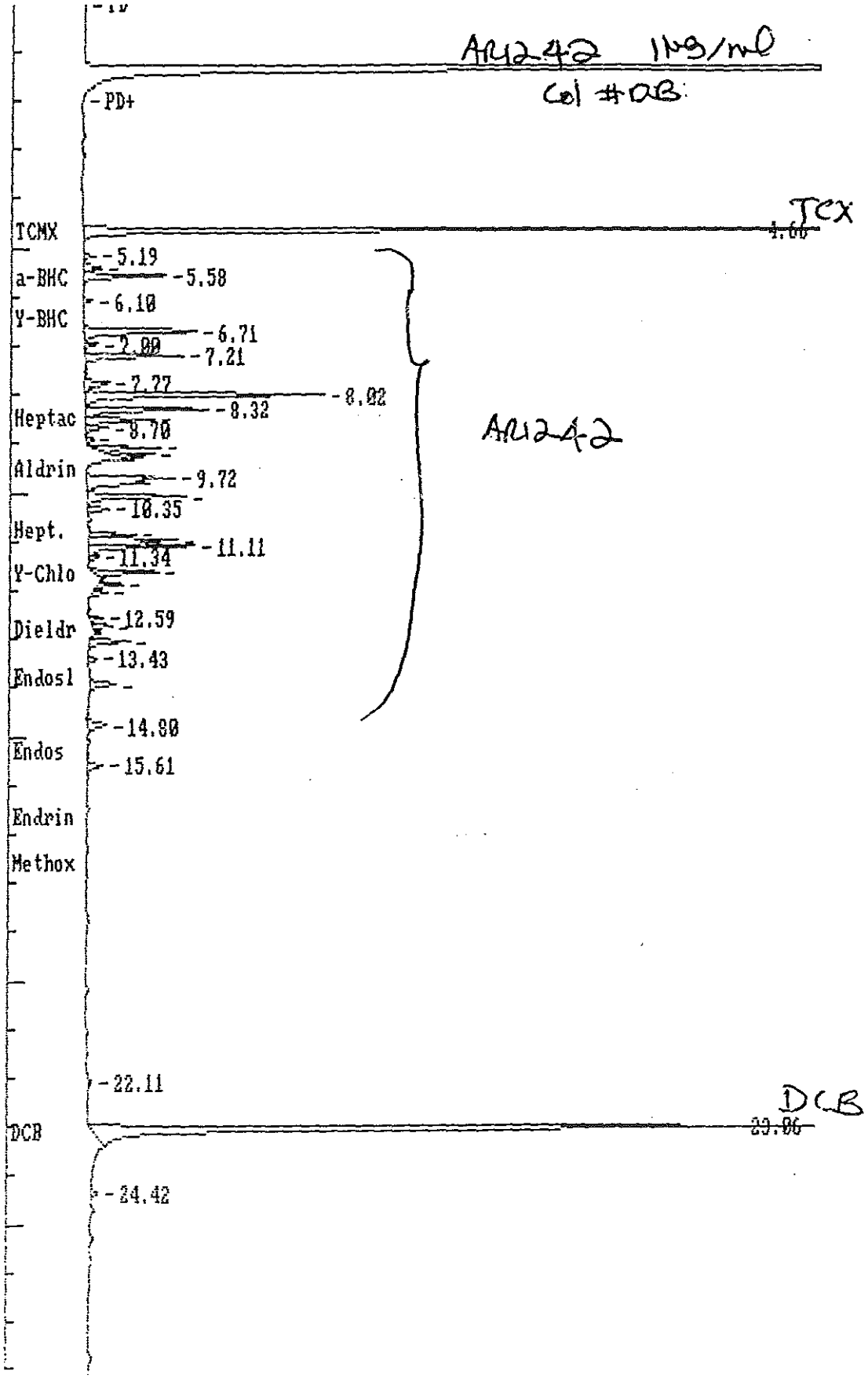
281

	6.095		0.0000	0.0000%	6304	1262	5.0	1		1.0000E-09
	6.713		0.0001	0.0000%	107031	15113	7.1	2		1.0000E-09
	6.997	d-BHC	7.3078	1.1658%	8980	1796	5.0	2	0 -.7109	8.1376E-04
	7.214		0.0001	0.0000%	62715	13298	4.7	1		1.0000E-09
	7.766		0.0000	0.0000%	24951	3297	7.6	2		1.0000E-09
	8.016		0.0002	0.0000%	183580	32846	5.6	2		1.0000E-09
	8.317		0.0001	0.0000%	83233	16578	5.0	2		1.0000E-09
	8.534	Heptachlor	20.4307	3.2592%	46606	9232	5.0	2	0 .7889	4.3837E-04
3	8.701		0.0000	0.0000%	15877	3008	5.3	2		1.0000E-09
4	8.934		0.0000	0.0000%	4150	972	4.3	1		1.0000E-09
5	9.101		0.0000	0.0000%	32320	8223	3.9	1		1.0000E-09
6	9.235		0.0000	0.0000%	16321	4600	3.5	1		1.0000E-09
7	9.719		0.0001	0.0000%	99635	11813	8.4	2		1.0000E-09
8	10.103		0.0001	0.0000%	72381	13352	5.4	2		1.0000E-09
19	10.354		0.0000	0.0000%	15395	3033	5.1	2		1.0000E-09
20	10.872	Hept. epox.	12.3541	1.9708%	27812	6273	4.4	2	0 .9302	4.4420E-04
21	10.989		0.0001	0.0000%	62725	11808	5.3	2		1.0000E-09
22	11.105		0.0001	0.0000%	78308	14278	5.5	3		1.0000E-09
23	11.339		0.0000	0.0000%	7477	1271	5.9	4		1.0000E-09
24	11.640	Y-Chlordane	15.3413	2.4473%	39919	8417	4.7	1	0 .1436	3.8431E-04
25	11.907	Endosulfan I	6.2018	0.9893%	14312	3521	4.1	1	0 0	4.3333E-04
26	12.074	a-Chlordane	3.6646	0.5846%	9611	2193	4.4	1	0 .1385	3.8129E-04
27	12.592		0.0000	0.0000%	8923	1916	4.7	1		1.0000E-09
28	12.759	Dieldrin	4.4807	0.7148%	11239	2588	4.3	1	0 0	3.9866E-04
29	13.076		0.0000	0.0000%	28244	5421	5.2	1		1.0000E-09
30	13.427	Endrin	3.5232	0.5620%	7261	1222	5.9	1	0 0	4.8522E-04
31	13.961	Endosulf II	10.4024	1.6594%	24555	3649	6.7	1	0 1.456	4.2364E-04
32	14.796		0.0000	0.0000%	21748	2551	8.5	1		1.0000E-09
33	15.615	DDT	7.9145	1.2625%	13379	2052	6.5	1	0 .6458	5.9158E-04
34	22.111		0.0000	0.0000%	3014	572	5.3	1		1.0000E-09
35	23.063	DCB	217.7445	34.7351%	743525	135681	5.5	1	0 -.1446	2.9285E-04
	24.415		0.0000	0.0000%	4896	890	5.5	1		1.0000E-09

TOTAL AMOUNT = 626.8715

GROUP NUMBER GROUP AMOUNT GROUP PERCENT

Areas, times, and heights stored in: E:JU26E11.ATB
Data File = E:JU26E11.PTS Printed on 06-26-1995 at 21:24:08
Start time: 0.00 min. Stop time: 30.00 min. Offset: 1 mv.
Full Range: 100 millivolts



**** EXTERNAL STANDARD TABLE ******

********** 06-26-1995 21:24:43 Version 5.1.5 **********

Sample Name: A1242 1PPM Data File: E:KU26E11

Date: 06-26-1995 20:53:15 Method: M:BPES-G 03-31-1995 14:31:59 # 358

Interface: 1 Cycle#: 11 Operator JJK Channel#: 1 Vial#: N.A.

Starting Peak Width: 10 Threshold: 10 Area Threshold: 500

Instrument Type: Perkin-Elmer 8500 Column Type: RTx-5 30m,.35mm

Solvent Description: 1.0u df

Conditions: 180 for 4.0min then 4.0deg/min to 240, hold 30min

Detector 0: Detector 1: ECD

Misc. Information:

Starting Delay: 0.00 Ending retention time: 30.00

Area reject: 500 One sample per 1.002 sec.

Amount injected: 1.00 Dilution factor: 1.00

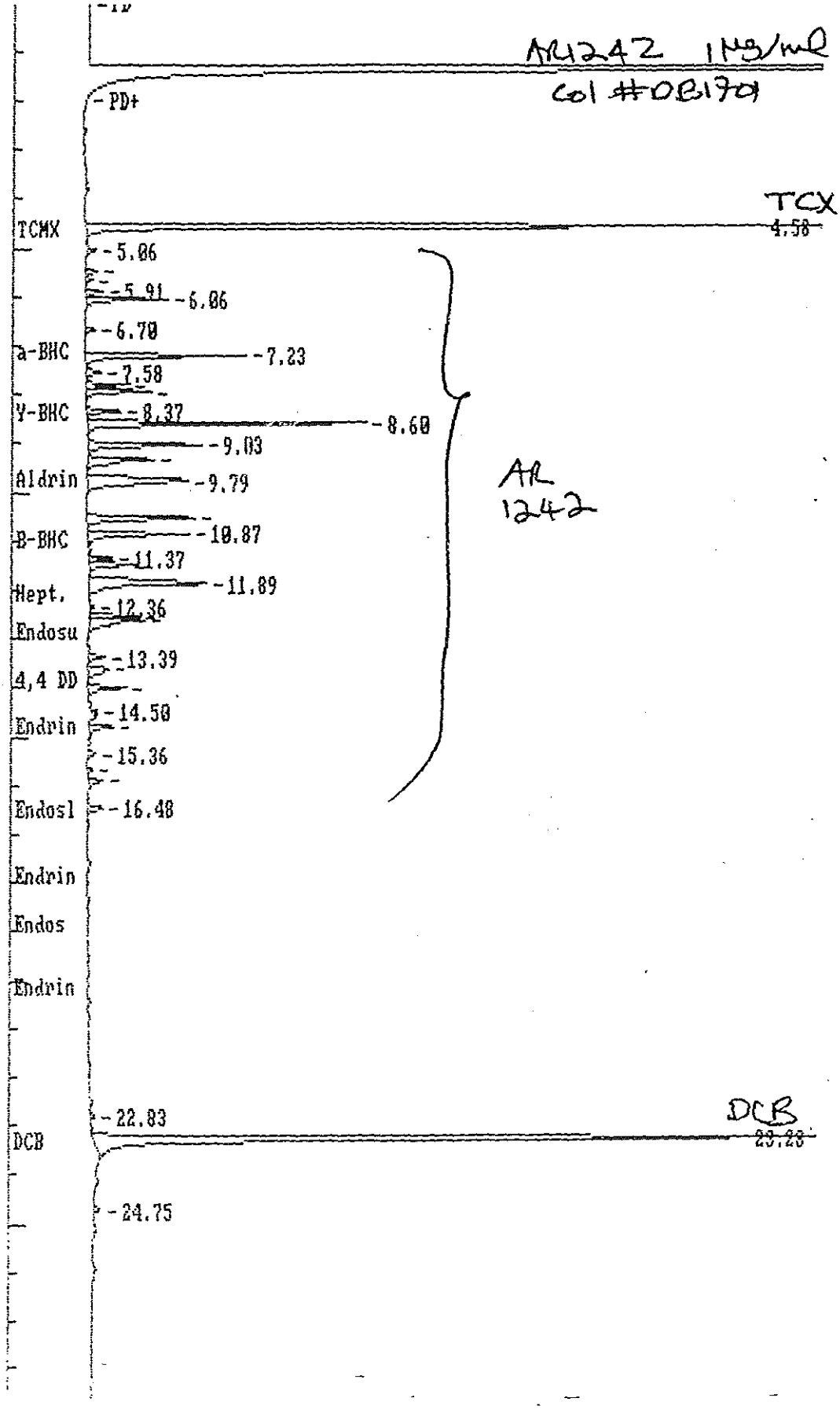
Sample Weight: 1.00000

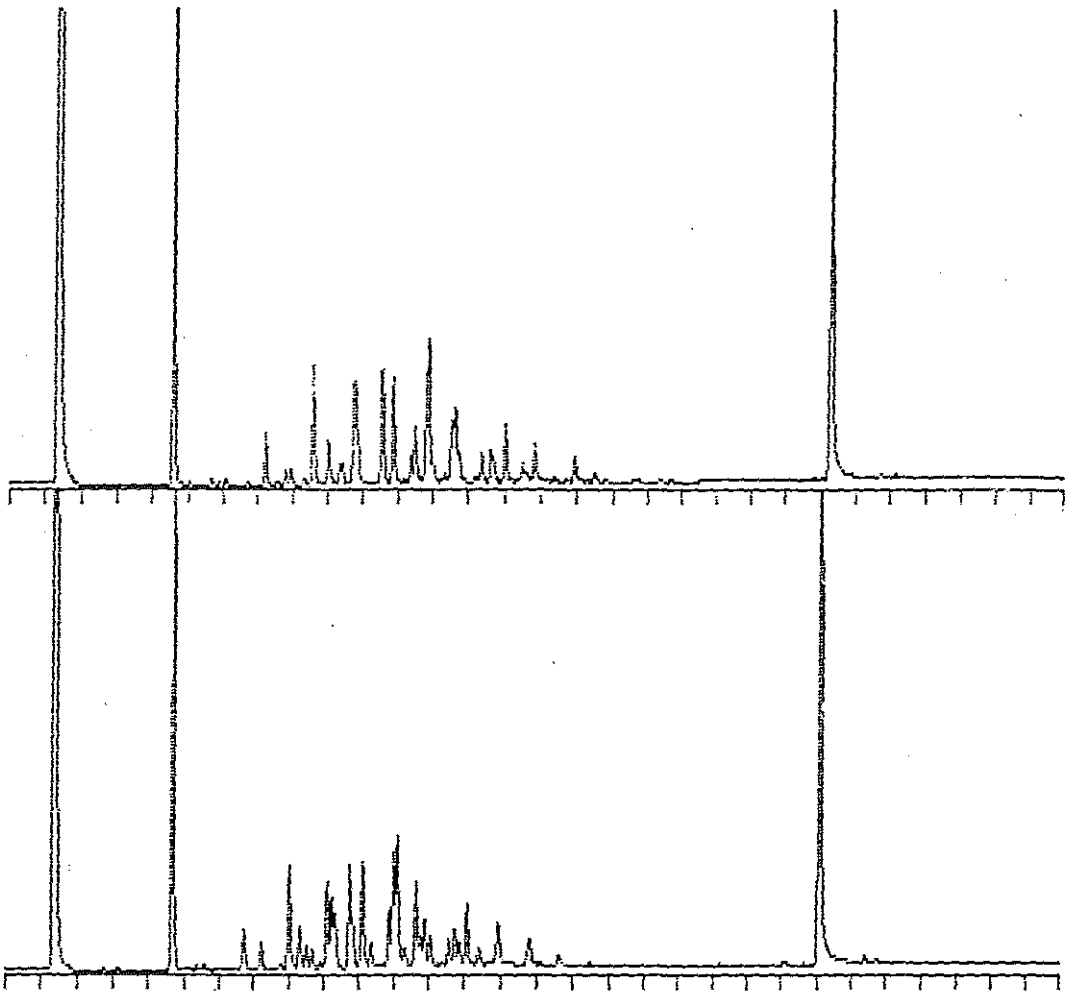
PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	4.576	TCMX	290.0257	30.6828%	520613	136436	3.8	1	0	-.3636	5.5709E-04
2	5.060		0.0000	0.0000%	5300	1136	4.7	1			1.0000E-09
3	5.511		0.0000	0.0000%	8035	1567	5.1	2			1.0000E-09
4	5.678		0.0000	0.0000%	4328	915	4.7	2			1.0000E-09
5	5.912		0.0000	0.0000%	10856	2361	4.6	2			1.0000E-09
6	6.062		0.0001	0.0000%	50627	10924	4.6	2			1.0000E-09
7	6.697		0.0000	0.0000%	5950	1258	4.7	1			1.0000E-09
8	7.231		0.0001	0.0000%	91553	21574	4.2	2			1.0000E-09
9	7.582		0.0000	0.0000%	14557	2044	7.1	2			1.0000E-09
10	7.816		0.0000	0.0000%	25730	5801	4.4	2			1.0000E-09
11	7.966		0.0000	0.0000%	40129	8680	4.6	2			1.0000E-09
12	8.367	Y-BHC	13.6474	1.4438%	23614	4679	5.0	2	0	.4008	5.7793E-04
13	8.600		0.0002	0.0000%	164431	37570	4.4	2			1.0000E-09
14	9.035	Heptachlor	40.2394	4.2571%	76559	15318	5.0	2	0	1.691	5.2560E-04
15	9.352		0.0001	0.0000%	51440	8918	5.8	2			1.0000E-09
16	9.786	Aldrin	65.4957	6.9290%	122086	13553	9.0	1	0	1.034	5.3647E-04
17	10.554		0.0001	0.0000%	80898	14675	5.5	2			1.0000E-09
18	10.872	B-BHC	62.1760	6.5778%	77212	13621	5.7	2	0	-.9132	8.0526E-04
19	11.373		0.0000	0.0000%	14775	3274	4.5	2			1.0000E-09
20	11.506	d-BHC	25.1342	2.6590%	28469	6220	4.6	2	0	-1.005	8.8288E-04
21	11.890	Hept. epox.	65.0654	6.8835%	125329	15772	7.9	1	0	-1.385	5.1916E-04
22	12.358		0.0000	0.0000%	2142	581	3.7	2			1.0000E-09
23	12.558		0.0000	0.0000%	33965	6697	5.1	2			1.0000E-09
24	12.642	Endosulf I	26.9049	2.8464%	52777	7464	7.1	2	0	-1.688	5.0979E-04
25	13.393	a-Chlordane	5.3506	0.5661%	11354	2304	4.9	1	0	-.1245	4.7127E-04
26	13.627	4,4 DDE	11.9910	1.2686%	23071	2838	8.1	1	0	-1.270	5.1975E-04
27	14.028	Dieldrin	13.8616	1.4665%	26237	5188	5.1	1	0	-.5917	5.2833E-04
28	14.496		0.0000	0.0000%	2372	651	3.6	1			1.0000E-09
29	14.830	Endrin	17.9372	1.8976%	17133	3238	5.3	1	0	.4524	1.0470E-03
30	15.364		0.0000	0.0000%	6195	1173	5.3	1			1.0000E-09
31	15.715		0.0000	0.0000%	3611	734	4.9	1			1.0000E-09
32	15.932		0.0000	0.0000%	11476	2055	5.6	1			1.0000E-09
33	16.483	EndoslfII	6.5178	0.6895%	12102	2009	6.0	1	0	0	5.3856E-04
34	22.829		0.0000	0.0000%	2983	599	5.0	1			1.0000E-09
35	23.280	DCB	300.8417	31.8323%	655813	125208	5.2	1	0	-.2147	4.5881E-04
			0.0001	0.0000%	4341	893	5.5	1			1.0000E-09

SDM 7/14/95

)UP NUMBER GROUP AMOUNT GROUP PERCENT

eas, times, and heights stored in: E:KU26E11.ATB
ta File = E:KU26E11.PTS Printed on 06-26-1995 at 21:25:33
art time: 0.00 min. Stop time: 30.00 min. Offset: 1 mv.
ll Range: 100 millivolts





[Interface 1] 0-30 Min Scale: 100 Mv Ch.A, 100 Mv Ch.B
A1248 1PPM Processed: 06-26-1995 21:57:48, segment 12, cycle 12
RAW DATA SAVED IN FILE E:JU26E12.PTS Second Channel Stored in E:KU26E12.PTS

EXTERNAL STANDARD TABLE

06-26-1995 21:58:00 Version 5.1.5

Sample Name: A1248 1PPM Data File: E:JU26E12

Date: 06-26-1995 21:27:21 Method: M:APES-G 03-08-1995 15:02:41 # 359

Interface: 1 Cycle#: 12 Operator JJK Channel#: 0 Vial#: N.A.

Starting Peak Width: 10 Threshold: 10 Area Threshold: 1000

Instrument Type: Perkin-Elmer 8500 Column Type: RTx-5 30m,.35mm

Solvent Description: 1.0u df

Conditions: 180 for 4.0min then 4.0deg/min to 240, hold 30min

Detector 0: Detector 1: ECD

Misc. Information:

Starting Delay: 0.00 Ending retention time: 30.00

Area reject: 1000 One sample per 1.002 sec.

Amount injected: 1.00 Dilution factor: 1.00

Sample Weight: 1.00000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC AREA
1	4.659	TCMX	295.7762	41.7371%	567025	140960	4.0	1	0	-.3571	5.2163E-04
2	5.377		0.0000	0.0000%	5439	929	5.8	2			1.0000E-09

6	7.766		0.0000	0.0000%	7522	1153	6.5	2			1.0000E-09
7	8.016		0.0001	0.0000%	122492	21628	5.7	2			1.0000E-09
8	8.317		0.0000	0.0000%	48459	8724	5.6	2			1.0000E-09
9	8.534	Heptachlor	12.4813	1.7612%	28472	4947	5.8	2	0	.7889	4.3837E-04
10	8.701		0.0000	0.0000%	18977	3752	5.1	2			1.0000E-09
11	8.934		0.0000	0.0000%	6928	1477	4.7	2			1.0000E-09
12	9.101		0.0001	0.0000%	82065	17650	4.6	2			1.0000E-09
13	9.235		0.0001	0.0000%	131215	14269	9.2	2			1.0000E-09
14	9.719		0.0001	0.0000%	148279	21261	7.0	2			1.0000E-09
15	10.103		0.0001	0.0000%	117697	21936	5.4	2			1.0000E-09
16	10.354		0.0000	0.0000%	25311	5054	5.0	2			1.0000E-09
17	10.872	Hept. epox.	25.8112	3.6422%	58108	11847	4.9	2	0	.9302	4.4420E-04
18	10.989		0.0001	0.0000%	110943	23782	4.7	2			1.0000E-09
19	11.105		0.0002	0.0000%	161710	26725	6.1	3			1.0000E-09
20	11.323		0.0000	0.0000%	16586	2837	5.8	4			1.0000E-09
21	11.640	Y-Chlordane	37.5100	5.2930%	97603	17483	5.6	2	0	.1436	3.8431E-04
22	11.790		0.0000	0.0000%	27724	5719	4.8	2			1.0000E-09
23	11.907	Endosulfan I	21.1125	2.9792%	48722	9389	5.2	2	0	0	4.3333E-04
24	12.074	a-Chlordane	12.4138	1.7517%	32558	6156	5.3	2	0	.1385	3.8129E-04
25	12.408		0.0000	0.0000%	3640	852	4.3	1			1.0000E-09
26	12.592		0.0000	0.0000%	26651	5145	5.2	2			1.0000E-09
27	12.759	Dieldrin	15.5975	2.2010%	39125	7475	5.2	2	0	0	3.9866E-04
28	12.876	4,4-DDE	9.8070	1.3839%	24967	4667	5.4	2	0	-.2587	3.9281E-04
29	13.076		0.0001	0.0000%	68436	12940	5.3	2			1.0000E-09
30	13.427	Endrin	9.0142	1.2720%	18577	3440	5.4	2	0	0	4.8522E-04
31	13.961	Endoslf II	20.3518	2.8719%	48041	7959	6.0	1	0	1.456	4.2364E-04
32	14.813		0.0000	0.0000%	42691	5561	7.7	1			1.0000E-09
33	15.615	DDT	7.8058	1.1015%	13195	2062	6.4	1	0	.6458	5.9158E-04
34	23.063	DCB	237.4050	33.5003%	810659	145353	5.6	1	0	-.1446	2.9285E-04
35	24.415		0.0000	0.0000%	5221	949	5.5	1			1.0000E-09

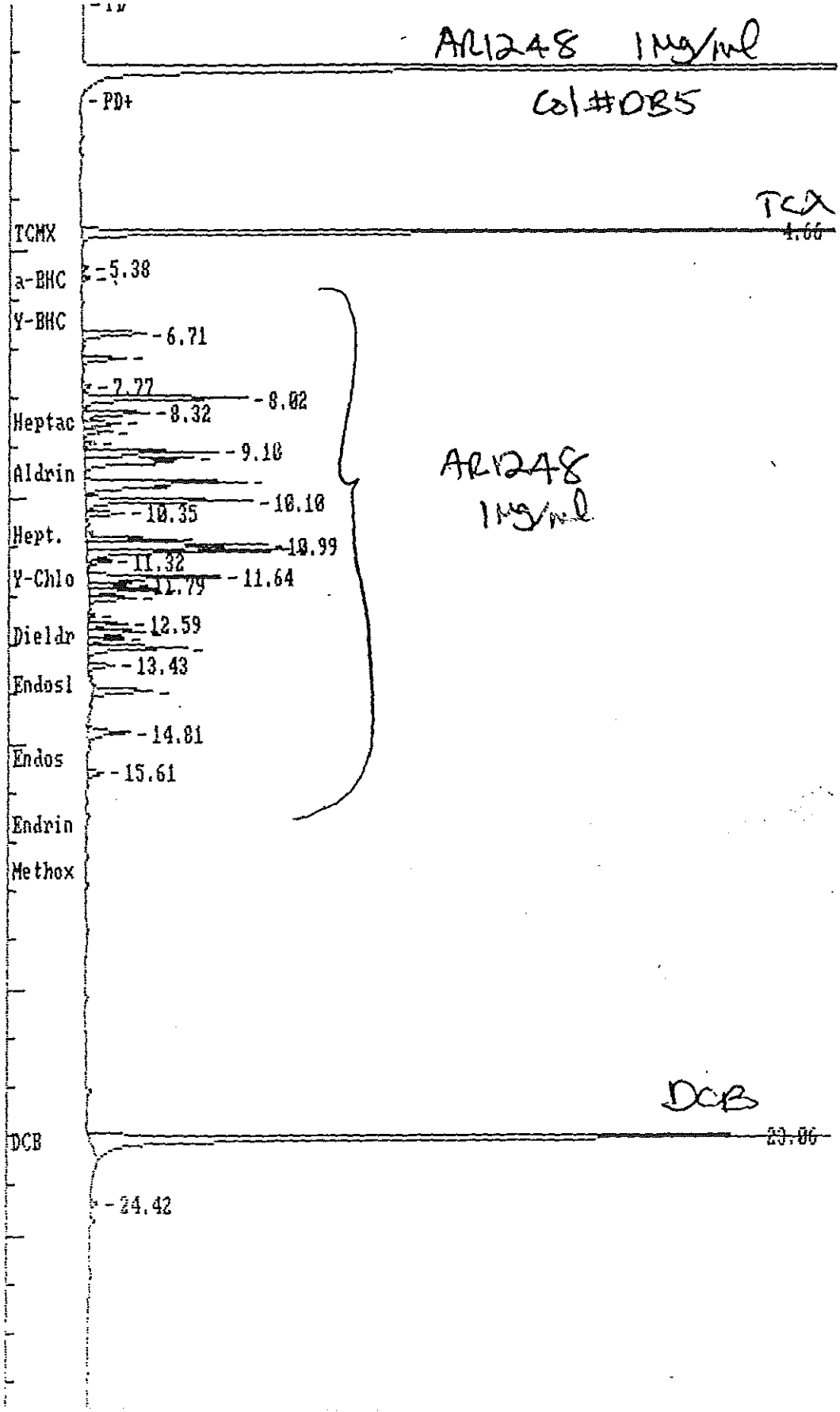
TOTAL AMOUNT = 708.6651

GROUP NUMBER	GROUP AMOUNT	GROUP PERCENT

286

SOP 7/14/95

eas, times, and heights stored in: E:JU26E12.ATB
ta File = E:JU26E12.PTS Printed on 06-26-1995 at 21:58:14
rt time: 0.00 min. Stop time: 30.00 min. Offset: 1 mv.
ll Range: 100 millivolts



**** EXTERNAL STANDARD TABLE *****

********** 06-26-1995 21:58:50 Version 5.1.5 **********

Sample Name: A1248 1PPM Data File: E:KU26E12

Date: 06-26-1995 21:27:21 Method: M:BPES-G 03-31-1995 14:31:59 # 358

Interface: 1 Cycle#: 12 Operator JJK Channel#: 1 Vial#: N.A.

Starting Peak Width: 10 Threshold: 10 Area Threshold: 500

Instrument Type: Perkin-Elmer 8500 Column Type: RTx-5 30m,.35mm

Solvent Description: 1.0u df

Conditions: 180 for 4.0min then 4.0deg/min to 240, hold 30min

Detector 0: Detector 1: ECD

Misc. Information:

Starting Delay: 0.00 Ending retention time: 30.00

Area reject: 500 One sample per 1.002 sec.

Amount injected: 1.00 Dilution factor: 1.00

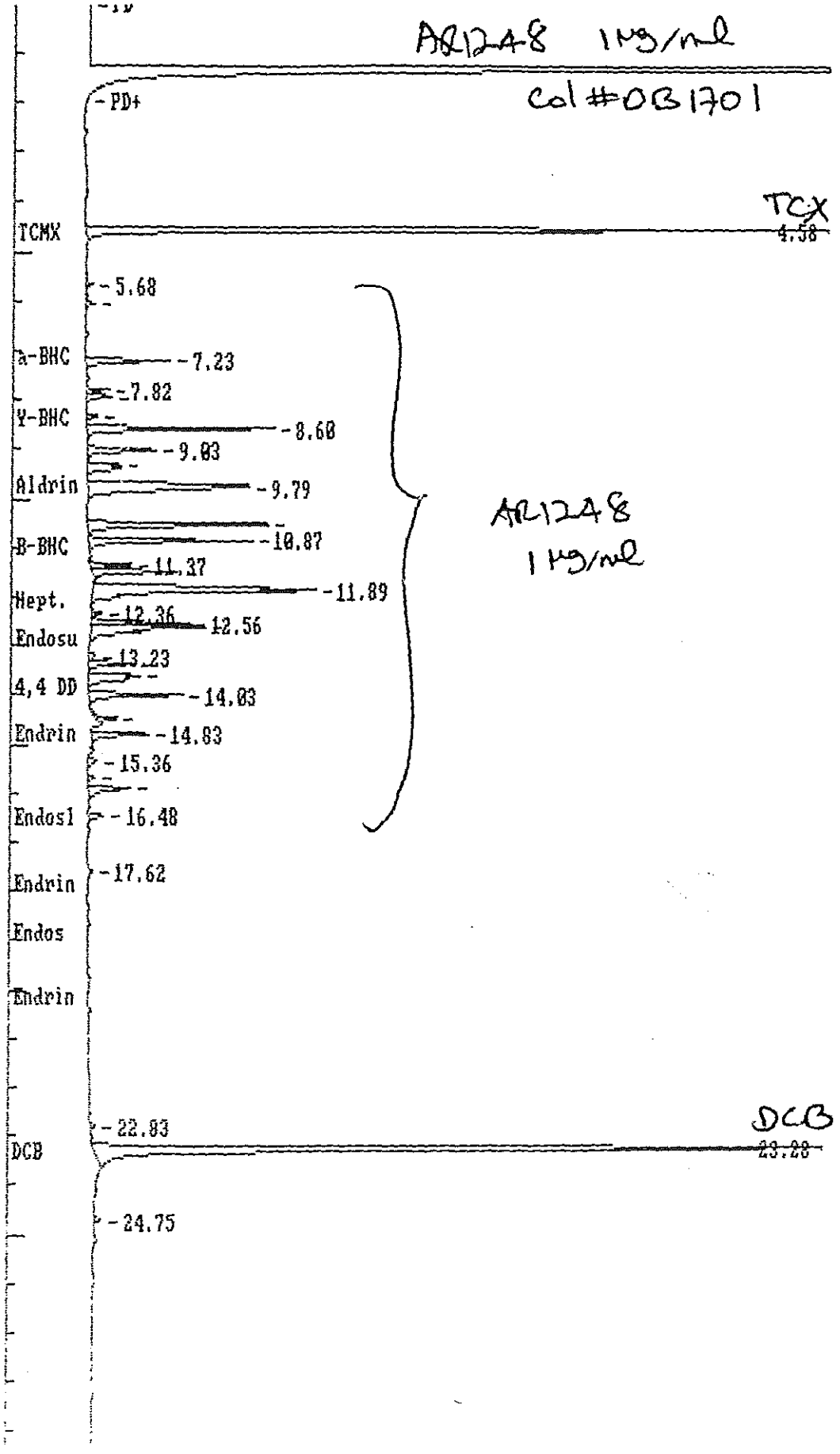
Sample Weight: 1.00000

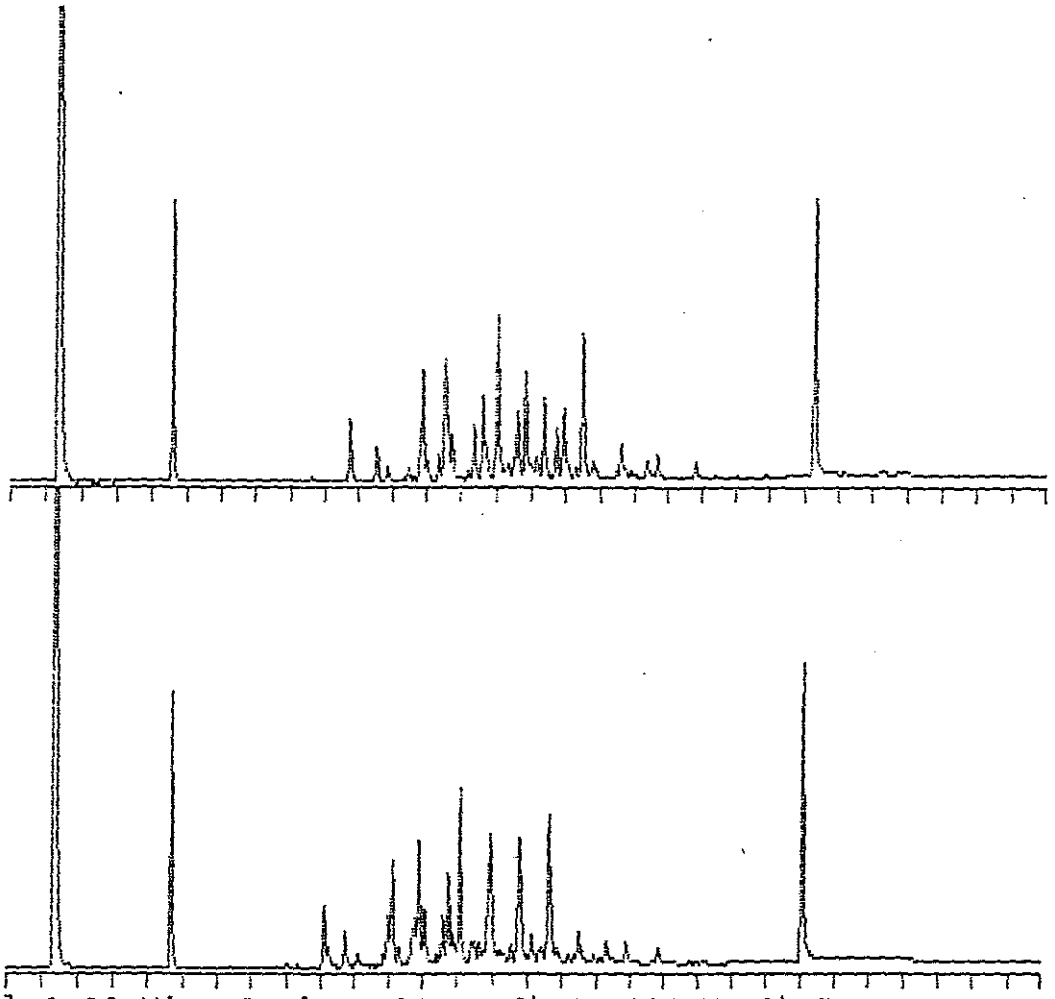
PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	4.576	TCMX	304.6069	25.4846%	546787	143066	3.8	1	0	-.3636	5.5709E-04
2	5.678		0.0000	0.0000%	4366	941	4.6	1			1.0000E-09
3	6.079		0.0000	0.0000%	5338	1122	4.8	1			1.0000E-09
4	7.231		0.0000	0.0000%	47325	11002	4.3	1			1.0000E-09
5	7.816		0.0000	0.0000%	13354	2938	4.5	2			1.0000E-09
6	7.966		0.0000	0.0000%	16387	3382	4.8	2			1.0000E-09
7	8.367	Y-BHC	4.1920	0.3507%	7253	1404	5.2	1	0	.4008	5.7793E-04
8	8.600		0.0001	0.0000%	109514	24602	4.5	1			1.0000E-09
9	9.035	Heptachlor	25.6658	2.1473%	48831	9078	5.4	2	0	1.691	5.2560E-04
10	9.352		0.0000	0.0000%	37311	4495	8.3	2			1.0000E-09
11	9.786	Aldrin	103.8407	8.6877%	193562	21154	9.2	1	0	1.034	5.3647E-04
12	10.554		0.0001	0.0000%	130383	23785	5.5	2			1.0000E-09
13	10.872	B-BHC	91.8910	7.6880%	114113	21492	5.3	2	0	-.9132	8.0526E-04
14	11.373		0.0000	0.0000%	24289	5495	4.4	2			1.0000E-09
15	11.506	d-BHC	43.6552	3.6524%	49447	11329	4.4	2	0	-1.005	8.8288E-04
16	11.890	Hept. epox.	122.6369	10.2603%	236224	29711	8.0	1	0	-1.385	5.1916E-04
17	12.358		0.0000	0.0000%	6405	1458	4.4	2			1.0000E-09
18	12.558		0.0001	0.0000%	68885	12794	5.4	2			1.0000E-09
19	12.642	Endosulf I	55.2954	4.6262%	108469	14974	7.2	2	0	-1.688	5.0976E-04
20	13.226	Y-Chlordane	2.2268	0.1863%	4699	930	5.1	2	0	.6353	4.7386E-04
21	13.393	a-Chlordane	14.6556	1.2261%	31098	5858	5.3	2	0	-.1245	4.7127E-04
22	13.627	4,4 DDE	28.5509	2.3887%	54932	6686	8.2	2	0	-1.270	5.1975E-04
23	14.028	Dieldrin	30.9234	2.5872%	58753	12235	4.8	1	0	-.5917	5.2633E-04
24	14.496		0.0000	0.0000%	11782	2575	4.6	1			1.0000E-09
25	14.830	Endrin	40.9812	3.4286%	39143	7436	5.3	1	0	.4524	1.0470E-03
26	15.364		0.0000	0.0000%	6569	1161	5.7	1			1.0000E-09
27	15.715		0.0000	0.0000%	4108	849	4.8	1			1.0000E-09
28	15.932		0.0000	0.0000%	32842	5396	6.1	1			1.0000E-09
29	16.483	Endosulfil	6.3640	0.5324%	11817	1993	5.9	1	0	0	5.3856E-04
30	17.618	Endrin ald	1.6535	0.1383%	2351	303	4.7	1	0	-1.355	7.0343E-04
31	22.829		0.0000	0.0000%	3253	651	5.0	1			1.0000E-09
32	23.280	OCS	318.1187	26.6151%	693360	132295	5.2	1	0	-.2147	4.5881E-04
33	24.749		0.0000	0.0000%	5187	952	5.5	1			1.0000E-09

TOTAL AMOUNT = 1195.2585

GROUP NUMBER GROUP AMOUNT GROUP PERCENT

eas, times, and heights stored in: E:KU26E12.ATB
ta File = E:KU26E12.PTS Printed on 06-26-1995 at 21:59:38
art time: 0.00 min. Stop time: 30.00 min. Offset: 1 mv.
ll Range: 100 millivolts





[Interface 1] 0-30 Min Scale: 100 Mv Ch.A, 100 Mv Ch.B
A1254 1PPM Processed: 06-26-1995 22:31:44, segment 13, cycle 13
RAW DATA SAVED IN FILE E:JU26E13.PTS Second Channel Stored in E:KU26E13.PTS

***** EXTERNAL STANDARD TABLE *****

********** 06-26-1995 22:31:56 Version 5.1.5 **********
* Sample Name: A1254 1PPM Data File: E:JU26E13 *
* Date: 06-26-1995 22:01:22 Method: M:APES-G 03-08-1995 15:02:41 # 359 *
* Interface: 1 Cycle#: 13 Operator JJK Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 10 Area Threshold: 1000 *
****
* Instrument Type: Perkin-Elmer 8500 Column Type: RTx-5 30m, .35mm *
* Solvent Description: 1.0u df *
* Conditions: 180 for 4.0min then 4.0deg/min to 240, hold 30min *
* Detector 0: Detector 1: ECD *
* Misc. Information: *
****

Starting Delay: 0.00 Ending retention time: 30.00
Area reject: 1000 One sample per 1.002 sec.
Amount injected: 1.00 Dilution factor: 1.00
Sample Weight: 1.00000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	4.659	TCMX	119.7896	25.8235%	229645	57346	4.0	1	0	-.3571	5.2163E-04
2	8.016		0.0000	0.0000%	2776	669	5.6	1			1.0000E-09
3	9.101		0.0000	0.0000%	45064	11385	4.0	1			1.0000E-09
4	9.715		0.0000	0.0000%	27270	5004	5.4	1			1.0000E-09

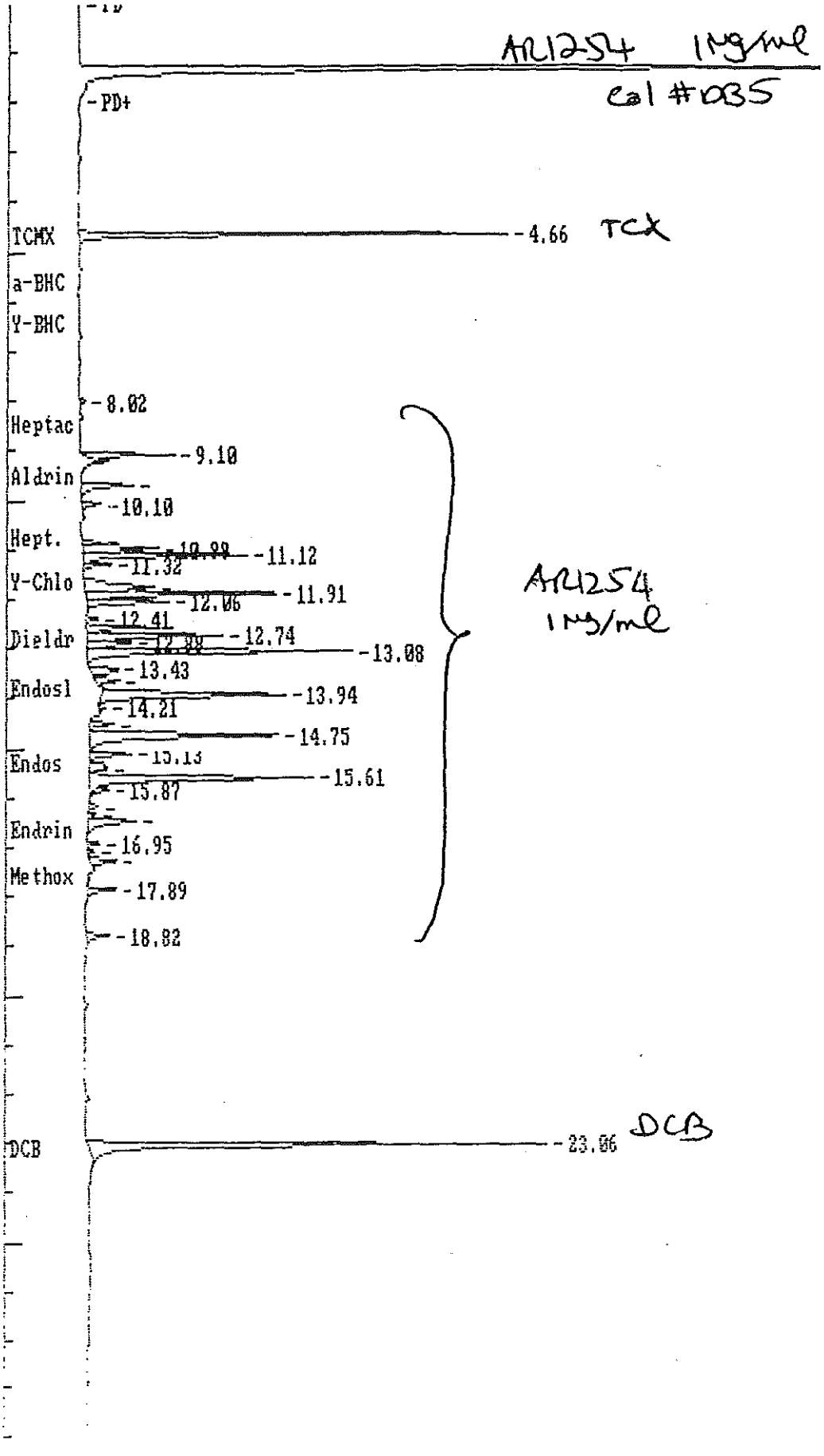
	11.323		0.0000	0.0000%	19513	3653	5.3	2			1.0000E-09
	11.790	Y-Chlordane	28.4838	6.1404%	74116	9264	8.0	2	0	1.436	3.8431E-04
	11.907	Endosulfan I	56.3063	12.1382%	129939	25445	5.1	2	0	0	4.3333E-04
	12.057	a-Chlordane	21.3720	4.6072%	56052	11012	5.1	2	0	0	3.8129E-04
	12.408		0.0000	0.0000%	6738	1527	4.4	2			1.0000E-09
	12.575		0.0000	0.0000%	47279	9348	5.1	2			1.0000E-09
	12.742	Dieldrin	35.7989	7.7173%	89799	18174	4.9	2	0	-.1308	3.9866E-04
	12.876	4,4-DDE	16.0692	3.4641%	40909	5914	6.9	2	0	-.2587	3.9281E-04
	13.076		0.0002	0.0000%	179815	35541	5.1	2			1.0000E-09
8	13.427	Endrin	14.6086	3.1492%	30107	3727	8.1	1	0	0	4.8522E-04
9	13.644	Endosulf II	6.1310	1.3217%	14472	3096	4.7	1	0	-.8495	4.2364E-04
0	13.945		0.0002	0.0000%	178888	24837	7.2	1			1.0000E-09
1	14.212	4'4-DDD	2.2121	0.4769%	3726	1028	3.6	1	0	-.4678	5.9361E-04
2	14.529	Endrin ald	7.5421	1.6259%	15166	3295	4.6	2	0	.8695	4.9730E-04
3	14.746		0.0002	0.0000%	198561	25316	7.8	2			1.0000E-09
4	15.130		0.0000	0.0000%	28759	5483	5.2	2			1.0000E-09
5	15.431	DDT	12.6545	2.7280%	21391	2465	8.7	2	0	-.5382	5.9158E-04
6	15.615		0.0002	0.0000%	189781	30042	6.3	3			1.0000E-09
7	15.865		0.0000	0.0000%	12595	2196	5.7	4			1.0000E-09
8	16.199		0.0000	0.0000%	5818	1350	4.3	1			1.0000E-09
9	16.366		0.0000	0.0000%	4677	1010	4.6	2			1.0000E-09
0	16.500	Endrin ket.	19.2205	4.1434%	45476	6373	7.1	2	0	-.9027	4.2265E-04
1	16.950		0.0000	0.0000%	8616	1728	5.0	2			1.0000E-09
2	17.117		0.0000	0.0000%	4160	959	4.3	2			1.0000E-09
3	17.301	Methoxychlor	21.1273	4.5545%	20613	3485	5.9	1	0	-1.520	1.0249E-03
4	17.886		0.0000	0.0000%	22171	3912	5.7	1			1.0000E-09
5	18.821		0.0000	0.0000%	18146	3032	6.0	1			1.0000E-09
6	23.063	DCB	97.5711	21.0338%	333173	61323	5.4	1	0	-.1446	2.9285E-04

SM 7/14/95

TOTAL AMOUNT = 463.8787

GROUP NUMBER GROUP AMOUNT GROUP PERCENT

Areas, times, and heights stored in: E:JU26E13.ATB
Data File = E:JU26E13.PTS Printed on 06-26-1995 at 22:32:09
Start time: 0.00 min. Stop time: 30.00 min. Offset: 1 mv.
Full Range: 100 millivolts



**** EXTERNAL STANDARD TABLE ****

********** 06-26-1995 22:32:42 Version 5.1.5 **********

ample Name: A1254 1PPM Data File: E:KU26E13

ate: 06-26-1995 22:01:22 Method: M:BPES-G 03-31-1995 14:31:59 # 358

Interface: 1 Cycle#: 13 Operator JJK Channel#: 1 Vial#: N.A.

Starting Peak Width: 10 Threshold: 10 Area Threshold: 500

Instrument Type: Perkin-Elmer 8500 Column Type: RTx-5 30m,.35mm

Solvent Description: 1.0u df

Conditions: 180 for 4.0min then 4.0deg/min to 240, hold 30min

Detector 0: Detector 1: ECD

Misc. Information:

arting Delay: 0.00 Ending retention time: 30.00

rea reject: 500 One sample per 1.002 sec.

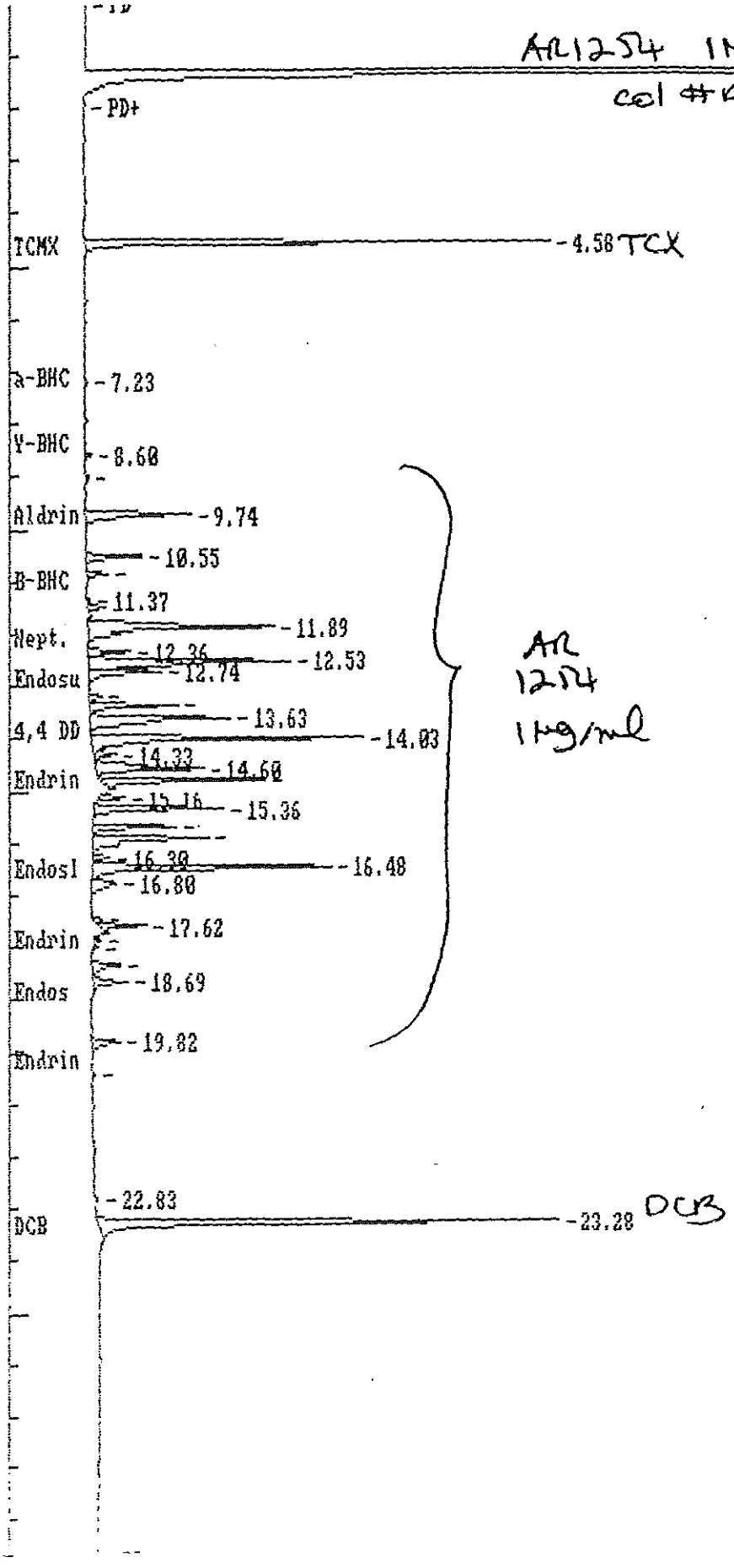
mount injected: 1.00 Dilution factor: 1.00

ample Weight: 1.00000

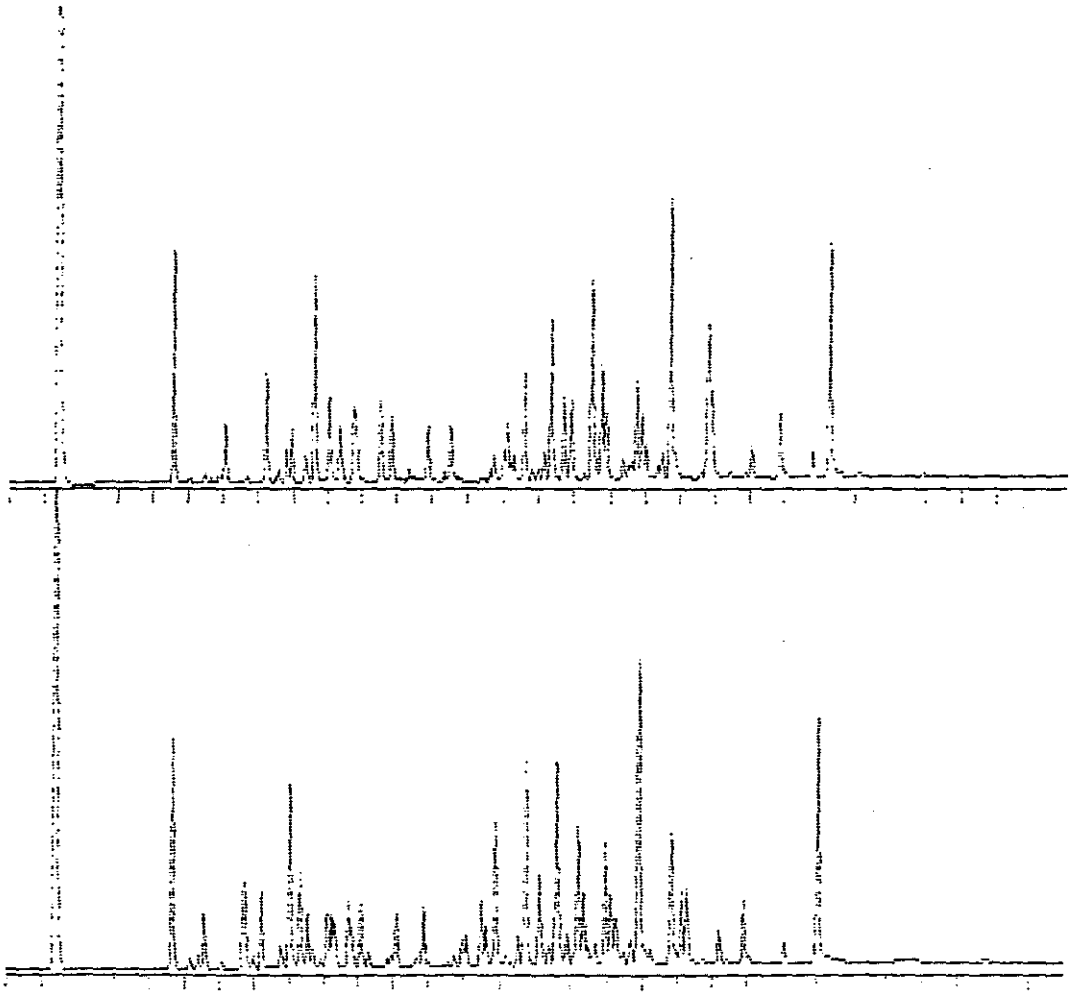
EAK UM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	4.576	TCMX	124.6041	14.4741%	223671	58539	3.8	1	0	-.3636	5.5709E-04
2	7.231		0.0000	0.0000%	1841	394	4.7	1			1.0000E-09
3	8.600		0.0000	0.0000%	3735	776	4.8	1			1.0000E-09
4	9.035	Heptachlor	1.1236	0.1305%	2138	401	5.3	1	0	1.691	5.2560E-04
5	9.736	Aldrin	39.2301	4.5570%	73126	13093	5.6	1	0	.5172	5.3647E-04
6	10.554		0.0000	0.0000%	33864	6923	4.9	1			1.0000E-09
	10.872	B-BHC	10.7984	1.2543%	13410	2670	5.0	1	0	-.9132	8.0526E-04
	11.373		0.0000	0.0000%	2198	463	4.7	2			1.0000E-09
9	11.506	d-BHC	8.9791	1.0430%	10170	2261	4.5	2	0	-1.005	8.8288E-04
0	11.890	Hept. epox.	82.3653	9.5676%	158652	23028	6.9	1	0	-1.385	5.1916E-04
11	12.358		0.0000	0.0000%	25440	5340	4.8	2			1.0000E-09
12	12.525		0.0002	0.0000%	172842	25218	6.9	2			1.0000E-09
13	12.742	Endosulf I	23.4108	2.7194%	45923	8948	5.1	2	0	-.9090	5.0978E-04
14	13.210	Y-Chlordane	3.7507	0.4357%	7915	1643	4.8	2	0	.5082	4.7386E-04
15	13.377	a-Chlordane	25.4299	2.9540%	53960	11038	4.9	2	0	-.2490	4.7127E-04
16	13.627	4,4 DDE	59.9149	6.9597%	115276	17418	6.6	2	0	-1.270	5.1975E-04
17	14.028	Dieldrin	91.7184	10.6540%	174261	34204	5.1	3	0	-.5917	5.2633E-04
18	14.329		0.0000	0.0000%	14377	2577	5.6	4			1.0000E-09
19	14.596		0.0001	0.0000%	84333	13275	6.4	2			1.0000E-09
20	14.830	Endrin	102.3413	11.8880%	97751	19975	4.9	1	0	.4524	1.0470E-03
21	15.164		0.0000	0.0000%	16619	3404	4.9	1			1.0000E-09
22	15.364		0.0001	0.0000%	79250	16058	4.9	1			1.0000E-09
23	15.715		0.0000	0.0000%	48102	10418	4.6	2			1.0000E-09
24	15.932		0.0001	0.0000%	89354	14411	6.2	2			1.0000E-09
25	16.299		0.0000	0.0000%	10670	2179	4.9	2			1.0000E-09
26	16.483	EndoslfII	92.7788	10.7772%	172271	29911	5.8	2	0	0	5.3856E-04
27	16.800	4,4 DDT	22.9968	2.6713%	26759	3037	8.8	2	0	-1.178	8.5939E-04
28	17.485		0.0000	0.0000%	3800	906	4.2	2			1.0000E-09
29	17.618		0.0000	0.0000%	24442	5548	4.4	2			1.0000E-09
30	17.902	Endrin ald	2.8120	0.3266%	3998	930	4.3	2	0	.2337	7.0343E-04
31	18.019		0.0000	0.0000%	3227	727	4.4	2			1.0000E-09
32	18.353		0.0000	0.0000%	24002	3588	6.7	2			1.0000E-09
3	18.687	Endos sulf	16.5902	1.9271%	24694	4198	5.9	2	0	-.2978	6.7183E-04
34	19.823	Endrin ket	13.5570	1.5748%	20762	3424	6.1	1	0	-1.411	6.5298E-04
35	20.457		0.0000	0.0000%	2227	455	4.9	1			1.0000E-09
36	22.829		0.0000	0.0000%	232:	4o2	5.0	1			1.0000E-09
37	23.280	DCB	136.4769	16.3853%	301313	57[illegible]	[illegible]	1	0	-.[illegible]	4.5881E-04

5000
7/14/95

as, times, and heights stored in: E:KU26E13.ATB
a File = E:KU26E13.PTS Printed on 06-26-1995 at 22:33:32
rt time: 0.00 min. Stop time: 30.00 min. Offset: 1 mv.
l Range: 100 millivolts



EQUENCE RECORDED IN E:JU26E SEQ



[Interface 1] 0-30 Min Scale: 100 Mv Ch.A, 100 Mv Ch.B
A1660 1PPM Processed: 06-27-1995 21:45:09, segment 1, cycle 25
nd of sequence file reached at cycle 25
AW DATA SAVED IN FILE E:JU26E25.PTS Second Channel Stored in E:

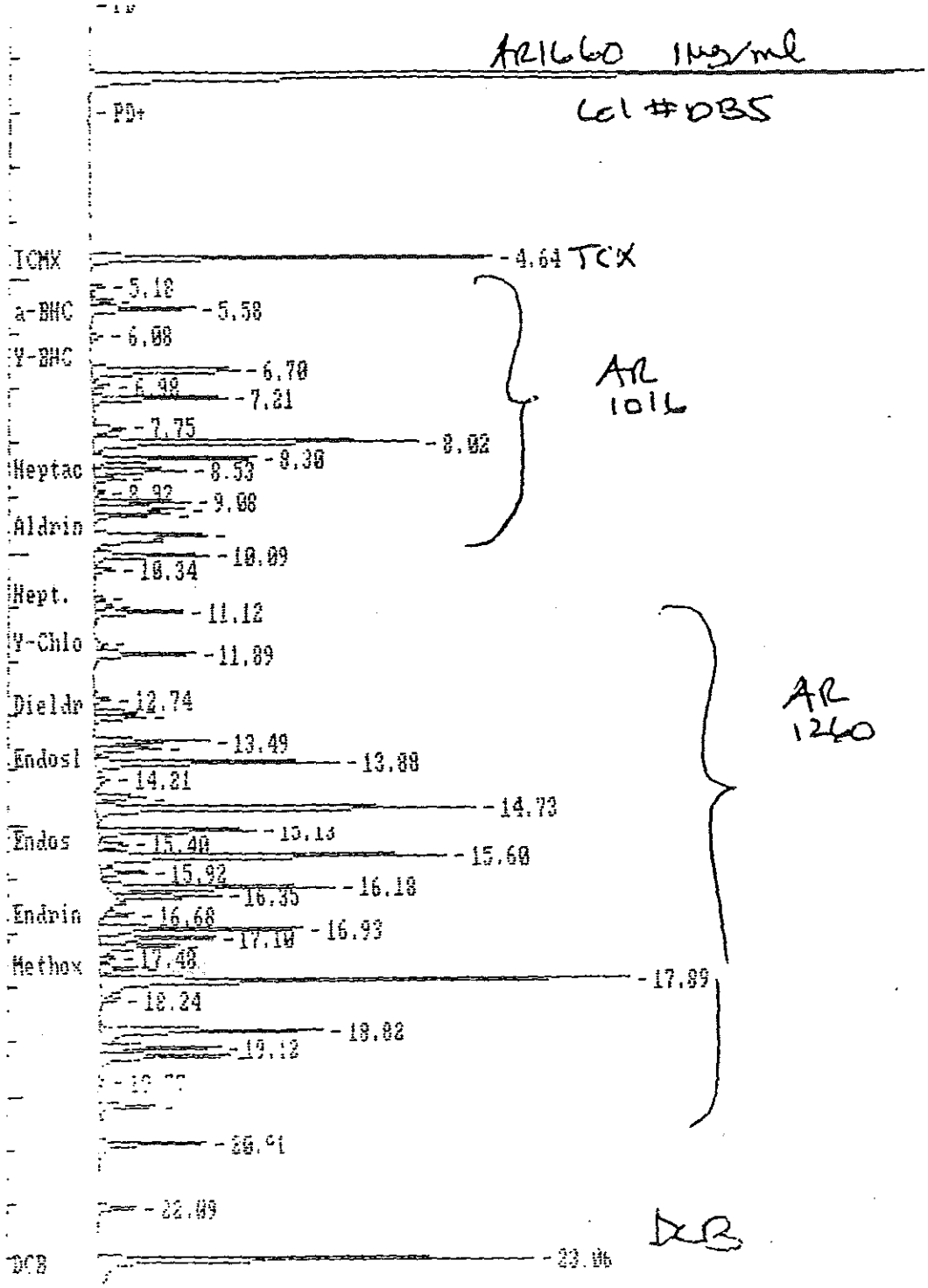
***** EXTERNAL STANDARD TABLE *****

****

	6.697		0.0001	0.0000%	127731	17841	7.1	2			
	6.981	d-BHC	8.7002	1.4011%	10591	2267	4.7	2	0	-.9479	3.1376E-04
	7.214		0.0001	0.0000%	75366	14209	4.6	1			1.0000E-09
	7.749		0.0000	0.0000%	23457	4064	7.2	2			1.0000E-09
	8.016		0.0002	0.0000%	221512	39113	5.7	2			1.0000E-09
	8.300		0.0001	0.0000%	98387	19690	5.0	2			1.0000E-09
)	8.534	Heptachlor	24.5514	3.9539%	5e30e	11147	5.0	2	0	.7884	4.3227E-04
	8.684		0.0000	0.0000%	19029	3780	5.0	2			1.0000E-09
	8.918		0.0000	0.0000%	6092	1355	4.5	2			1.0000E-09
	9.085		0.0001	0.0000%	53421	11478	4.7	2			1.0000E-09
	9.218		0.0001	0.0000%	53188	10868	4.9	2			1.0000E-09
	9.319	Aldrin	21.6957	3.4940%	43410	9171	5.3	2	0	-1.7e0	4.4816E-04
8	9.719		0.0001	0.0000%	10e515	13610	7.8	2			1.0000E-09
9	10.087		0.0001	0.0000%	70711	13779	5.4	2			1.0000E-09
0	10.337		0.0000	0.0000%	11360	2e0e	4.9	2			1.0000E-09
1	10.855	Hept. epox.	2.5812	0.4157%	9811	1255	4.6	1	0	*****	4.4420E-04
2	10.989		0.0000	0.0000%	10493	2156	4.9	2			1.0000E-09
3	11.122		0.0001	0.0000%	54209	10523	5.2	2			1.0000E-09
24	11.707	Y-Chlordane	2.5888	0.4169%	e736	1225	5.5	2	0	.7153	3.6431E-04
25	11.890	Endosulfan I	24.4979	3.9453%	56524	11900	4.9	1	0	-.1432	4.3333E-04
6	12.742	Dieldrin	3.9996	0.6441%	10033	2094	4.8	2	0	-.1358	3.9856E-04
27	12.959	4,4-DDE	9.9987	1.6102%	25454	5238	4.9	2	0	.3991	3.9281E-04
28	13.059		0.0000	0.0000%	31956	6286	5.1	2			1.0000E-09
9	13.494	Endrin	33.1000	5.3306%	88216	13851	4.9	2	0	.4350	4.3522E-04
0	13.627		0.0000	0.0000%	42382	8136	5.2	2			1.0000E-09
31	13.878	Endosulf II	67.7433	10.9097%	159909	29387	5.4	2	0	.8495	4.2364E-04
32	14.212	4'4-DDD	3.5325	0.5689%	5951	1448	4.1	1	0	-.4679	5.9361E-04
3	14.529	Endrin ald	14.9753	2.4117%	33113	6106	4.9	2	0	.8695	4.9730E-04
34	14.729		0.0003	0.0000%	259715	45167	5.8	2			1.0000E-09
35	15.130		0.0001	0.0000%	109813	19092	5.8	2			1.0000E-09
6	15.397	Endos sulf	10.7626	1.7333%	19404	3535	5.5	2	0	.7659	5.5456E-04
7	15.598	DDT	144.4375	23.2613%	244157	41406	5.9	2	0	.5983	5.9153E-04
38	15.915		0.0000	0.0000%	28554	5557	5.2	1			1.0000E-09
39	16.182		0.0001	0.0000%	133573	27323	4.8	1			1.0000E-09
40	16.349		0.0001	0.0000%	59029	12557	4.2	2			1.0000E-09
41	16.683	Endrin ket.	6.2784	1.0111%	14855	3568	4.2	1	0	.2035	4.2365E-04
42	16.934		0.0001	0.0000%	122162	24645	4.9	1			1.0000E-09
43	17.101		0.0001	0.0000%	72420	14014	5.2	1			1.0000E-09
44	17.251		0.0001	0.0000%	e1111	2546	6.4	2			1.0000E-09
45	17.485	Methoxychlor	12.5062	2.0141%	12202	1994	6.1	2	0	-.4752	1.0249E-03
46	17.669		0.0000	0.0000%	21953	4654	5.4	1			1.0000E-09
47	17.886		0.0001	0.0001%	355567	e2140	5.9	3			1.0000E-09
48	18.236		0.0000	0.0000%	11107	1992	5.1	1			1.0000E-09
49	18.821		0.0002	0.0000%	1e2e81	16902	6.0	1			1.0000E-09
50	19.121		0.0001	0.0000%	71e47	13752	5.6	1			1.0000E-09
51	19.286		0.0001	0.0000%	47442	10318	5.4	1			1.0000E-09
52	19.573		0.0000	0.0000%	4.2e	749	5.3	1			9.0000E-09
53	20.224		0.0000	0.0000%	45e84	e400	5.3	1			1.0000E-09
54	20.308		0.0001	0.0000%	77783	13072	5.9	1			1.0000E-09
55	20.844		0.0000	0.0000%	24774	4564	5.5	1			9.0000E-09
56	20.962	DCB	20.3175	3.4248%	17187	31429	5.3	1	0	-.1345	1.8550E-04

TOTAL AMOUNT = -35.9421

eas. times, and heights stored in: F:JU26E23.AT8
ta file = F:JU26E23.PTS Printed on 06-27-1995 at 21:45:05
art time: 0.00 min Stop time: 30.00 min. Offset: 1 mv.
ll Range: 100 millivolts



**** EXTERNAL STANDARD DATA ****

********** 06-27-1995 21:14:54 Version 5.1.5 **********

Sample Name: Aldrin 1PPM Data File: F:KUSE25

Date: 06-27-1995 21:14:49 Method: NEW 6-27-1995 21:59

Interface: 1 Cycle#: Detector JJK Channel#: 1 Vial#:

Starting Peak Width: 10 Threshold: 10 Threshold: 500

****

Instrument Type: Perkin-Elmer 3920 Column Type: RTx-5 30m, .25mm

Solvent used for std: 1.0 ul df

Conditions: 180 for 4.0min, 4deg/min to 240, hold 10min

Detector 0: Detector 1: ECD

Misc. Information:

****

Starting Delay: 0.00 Ending retention time: 30.00

Area reject: 500 One sample per 1.000 ml

Amount injected: 1.00 Dilution factor: 1.00

Sample Weight: 1.00

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA HEIGHT RATIO	BL	REF PEAK	% DELTA RET TIME	CONC AREA
1	4.576	TCMX	109.7342	10.8209%	1Fe361	49096	3.0	1	0	-.0026	5.8733E-04
2	5.077		0.0000	0.0000%	6026	1301	4.6	1			1.0000E-09
3	5.511		0.0000	0.0000%	8168	1763	4.6	1			1.0000E-09
4	5.926		0.0000	0.0000%	11577	2587	4.5	2			1.0000E-09
5	6.079		0.0001	0.0010%	5e121	12236	4.6	2			1.0000E-09
6	6.713		0.0000	0.0000%	7114	1510	4.7	1			1.0000E-09
7	7.231		3.0001	0.0300%	1.1700	23900	4.9	2			1.0000E-07
8	7.598		0.0000	0.0000%	15e82	2306	7.1	2			1.0000E-09
9	7.832		0.0000	0.0000%	82194	6907	4.8	2			1.0000E-09
10	7.964		0.0000	0.0000%	45816	10627	4.3	2			1.0000E-09
11	9.367	Y-BHC	15.6946	1.5469%	17501	5611	3.1	2	0	4006	8.3933E-05
12	8.630		0.0002	0.0020%	197784	42945	4.6	1			1.0000E-09
13	9.035	Heptachlor	47.0012	4.6334%	84424	17757	4.8	2	0	-.0e91	5.2e32E-04
14	9.352		0.0001	0.0100%	e1e59	1106	5.4	2			1.0000E-09
15	9.786	Aldrin	74.4136	7.3384%	133729	15269	8.8	1	0	1.004	1.3e47E-04
16	10.554		0.0001	0.0100%	19137	1e57	8.6				1.0000E-09
17	10.872	B-BHC	37.4519	3.6931%	71984	12e6	5.7	1	0	-.2192	6.6e-E-04
18	11.183		0.0003	0.0030%	10121	2741	3.7	1			1.0000E-09
19	11.50e	Delta-BHC	5.3e4	0.5e3%	9e04	221e	4.1	1	0	-0.1e6	9.9999E-1
20	11.90?	Aepti. epoxi.	9.477	.9e7%	1e4e3	11151	8.4	1	1	-0.1e4	1.6e3E-04
21	12.318		0.3005	0.0300%	7907	1e13	4.1	1			1.0e3E-07
22	12.542		0.0001	0.0100%	2 e93	11e71	4.8	1			1.0000E-09
23	13.541	4,4'-DDE	1.3e11	0.e7%	1e64	2851	4.7	1	1	1.7e1	1.3e7E-1
24	13.761	2,4'-DDE	11.0e1	1.e03%	11149	503	4.6	1	1	-.3e24	1.e77E-04
25	14.025		0.0004	0.0400%	11146	5036	7.3	1			1.0000E-09
26	14.128	Dieldrin	13.3e31	1.3e3%	4e977	11e73	4.1	1	1	1e4	1.2e15E-04
27	14.345		0.0030	0.0e3%	1e142	3921	4.1	1			1.0000E-09
28	14.596		0.0011	0.1e3%	11731	2e13	4.7	1			1.0000E-09
29	14.e3e	4,4'-DDD	11.1e3	1.e4%	1e	1e13	4.7	1	0	-.e1e	1.e7E-04
30	14.e17		0.0011	0.1e3%	1e11	3e3e	4.6	1			1.0000E-09
31	15.e49		0.1e11	0.e%	1.e14	3e7e	4.8	1			1.0000E-09
32	15.e35		1.4e11	0.13%	1e5e43	34e67	4.8	2			1.0000E-09
33	15.e43		0.0001	0.0%	1e1e4	7e7	4.8	1			1.0000E-09
34	16.e11		0.0001	0.0%	1e1e	e7e	4.8	1			1.0000E-09
35	16.e44		0.0001	0.0%	1e1e	e7e	4.8	1			1.0000E-09

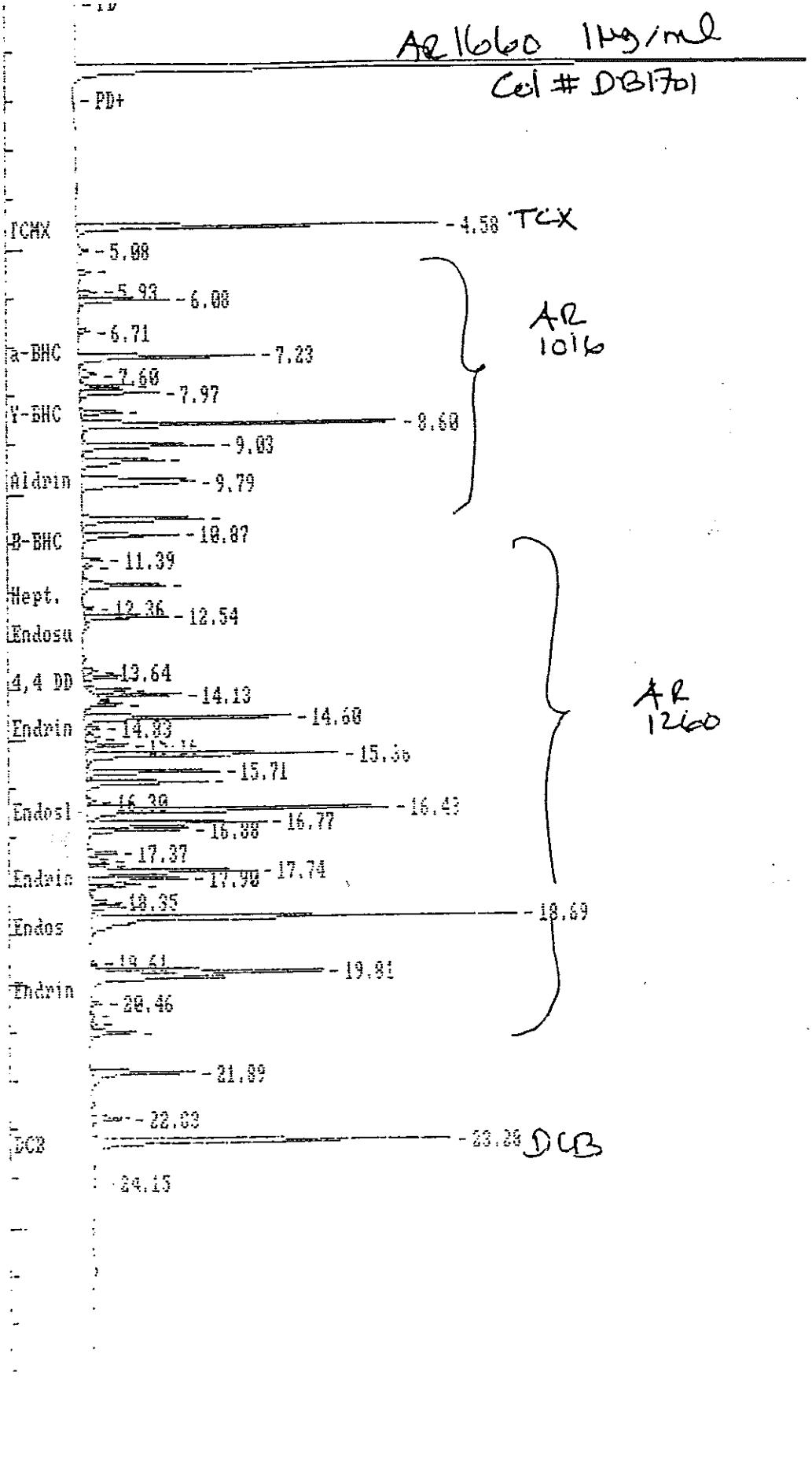
Sos
7/24/95

[illegible]	17.739		0.0001	0.0000%	111498	22820	4.9	2			[illegible]
49	17.902	Endrin ald	43.9141	4.3348%	63429	10266	4.7	1	0	.2337	7.0343E-04
4a	18.019		0.0000	0.0000%	33013	6933	4.8	2			1.0000E-09
5	18.353		0.0000	0.0000%	8690	1992	4.4	2			1.0000E-09
6	18.479		0.0000	0.0000%	21454	4671	4.6	2			1.0000E-09
[illegible]	18.687	Endos sulf	207.3280	20.4654%	308602	57824	5.3	1	0	-.7978	6.7183E-04
[illegible]	19.606	Methoxychl	6.2944	0.6213%	4056	896	4.5	1	0	1.545	1.5511E-03
9	19.806	Endrin ket	74.0605	7.3046%	113328	22530	5.0	1	0	-1.495	6.5298E-04
50	20.457		0.0000	0.0000%	7412	1538	4.8	1			1.0000E-09
51	20.725		0.0000	0.0000%	3185	540	5.9	2			1.0000E-09
52	20.875		0.0000	0.0000%	4382	819	5.4	2			1.0000E-09
53	21.059		0.0000	0.0000%	29928	6024	5.0	2			1.0000E-09
5a	21.894		0.0001	0.0000%	66466	13663	4.9	1			1.0000E-09
5	22.929		0.0000	0.0000%	24984	4860	5.1	1			1.0000E-09
56	23.290	DDE	110.2312	10.8813%	240236	48364	5.0	1	0	-.3147	4.5881E-04
57	24.148		0.0000	0.0000%	3435	501	6.9	1			1.0000E-09

TOTAL AMOUNT = 1013.0657

GROUP NUMBER GROUP AMOUNT GROUP PERCENT

reas, times, and heights stored in E:[illegible]
Data File = E:KU96E25.PTS Printed on [illegible] at [illegible]
Start time: 0.00 min. Stop time: [illegible] min. Offset: 1 mV
ll Range: 100 millivolts



9

PESTICIDE/PCB STANDARDS SUMMARY

Lab Name: EMSL ANALYTICAL Contract: _____

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

Instrument ID: HP5890/SEP GC Column ID: DB5

DATE(S) OF ANALYSIS FROM: 6-26-95 TO: 16:50
TIME(S) OF ANALYSIS FROM: 6-26-95 TO: 22:01

DATE OF ANALYSIS 6-27-95
TIME OF ANALYSIS 13:20
EPA SAMPLE NO. (STANDARD) 1194261

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR	RT	CALIBRATION FACTOR	QNT Y/N	%D
alpha-BHC	5:56	5:51	5:61	1567				
beta-BHC	6:25	6:20	6:30	1289				
delta-BHC	7:03	6:98	7:08	1346				
gamma-BHC	6:40	6:35	6:45	1723				
Heptaclor	8:43	8:38	8:48	2399				
Aldrin	9:47	9:42	9:52	2002				
Hept. epoxide	10:75	10:70	10:80	2160				
Endosulfan I	11:89	11:8	11:96	3210				
Dieldrin	12:74	12:67	12:81	3015				
4,4'-DDE	12:89	12:82	12:96	3118				
Endrin	13:41	13:34	13:48	1845				
Endosulfan II	13:73	13:66	13:80	8124				
4,4'-DDD	14:26	14:19	14:33	1386				
Endo.sulfate	15:18	15:11	15:25	1845				
4,4'-DDT	15:50	15:43	15:57	1379				
Methoxychlor	17:55	17:48	17:62	850				
Endrin ketone	16:63	16:56	16:70	2303				
a. Chlordane	12:02	11:95	12:09	2419				
g. Chlordane	11:52	11:45	11:59	2466				
Toxaphene	18:40	18:33	15:47	39283				
Aroclor-1016	8:02	7:95	8:09	231326	8:02	225329	Y	3
Aroclor-1221	5:58	5:51	5:65	88583				
Aroclor-1232	8:02	7:95	8:09	92663				
Aroclor-1242	8:02	7:95	8:09	183580				
Aroclor-1248	8:02	7:95	8:09	122492				
Aroclor-1254	13:08	13:01	13:15	179815				
Aroclor-1260	17:89	17:82	17:96	372656	17:89	379113	Y	2
Endrin Aldehyde	14:38	14:31	14:45	1845				

Under QNT Y/N: enter Y if quantitation was performed, N if not performed.
%D must be less than or equal to 15.0% for quantitation, and less than or equal to 20.0% for confirmation.

Note: Determining that no compounds were found above the CRQL is a form of quantitation, and therefore at least one column must meet the 15.0% criteria.

For multicomponent analytes, the single largest peak that is characteristic of the component should be used to establish retention time and %D. Identification of such analytes is based primarily on pattern recognition

9

PESTICIDE/PCB STANDARDS SUMMARY

ab Name: EMSL ANALYTICAL Contract: _____

lb Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

nstrument ID: HP5890/SIIP GC Column ID: DB1701

DATE(S) OF ANALYSIS FROM: 6-26-95 TO: 16:50
TIME(S) OF ANALYSIS FROM: 6-26-95 TO: 22:01

DATE OF ANALYSIS 6-27-95
TIME OF ANALYSIS 13:25
EPA SAMPLE NO. (STANDARD) 1194261

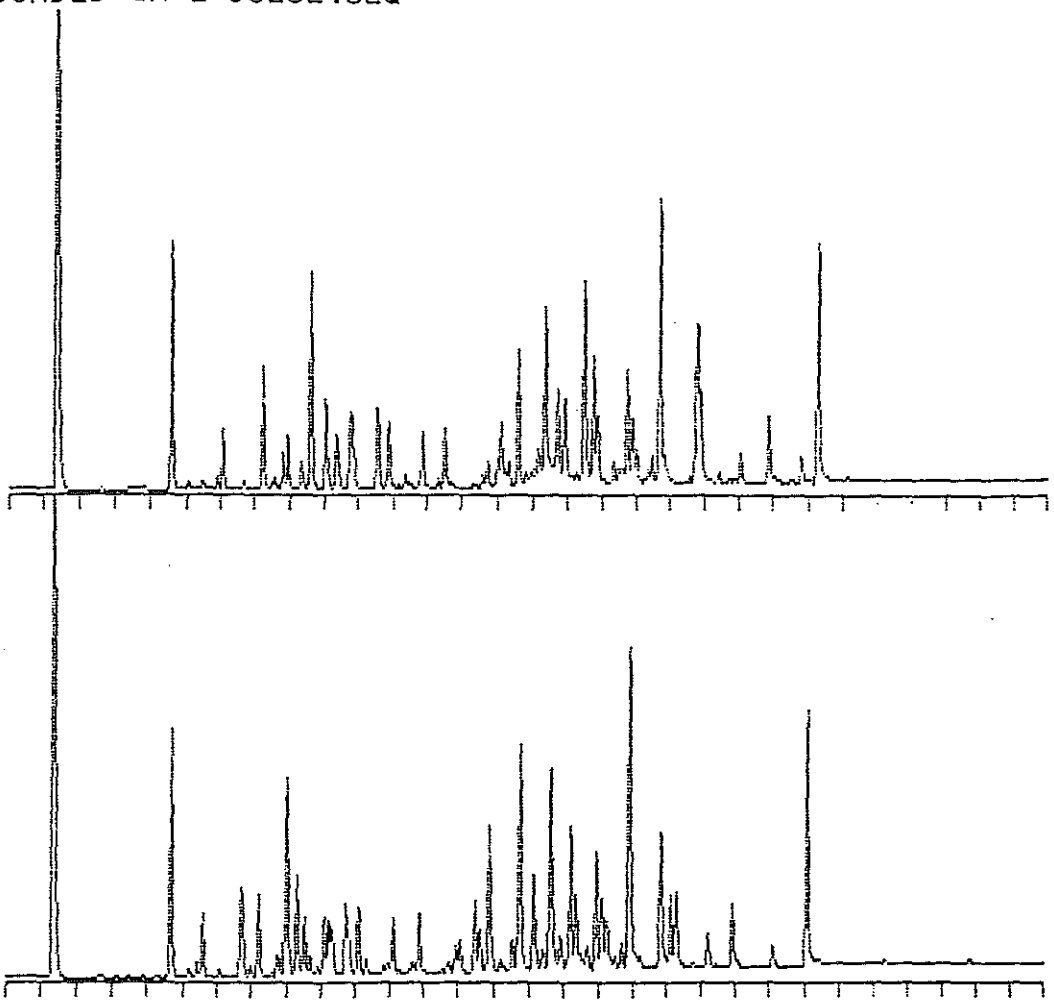
COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR	RT	CALIBRATION FACTOR	QNT Y/N	%D
alpha-BHC	7:05	7:00	7:10	1612				
beta-BHC	10:92	10:87	10:98	1408				
delta-BHC	11:57	11:52	11:62	1429				
gamma-BHC	8:28	8:23	8:33	1719				
Heptaclor	8:85	8:80	8:90	2369				
Aldrin	9:65	9:60	9:70	2040				
Hept. epoxide	12:01	11:96	12:06	2312				
Endosulfan I	12:83	12:76	12:90	2306				
Dieldrin	14:06	13:99	14:13	2071				
4,4'-DDE	13:76	13:69	13:83	2044				
Endrin	14:71	14:64	14:78	1913				
Endosulfan II	16:42	16:35	16:49	2191				
4,4'-DDD	16:43	16:36	16:50	1344				
Endo.sulfate	18:89	18:82	18:96	1998				
4,4'-DDT	16:95	16:88	17:02	1045				
Methoxychlor	19:24	19:17	19:31	808				
Endrin ketone	20:04	19:97	20:11	211				
a. Chlordane	13:36	13:29	13:43	2488				
g. Chlordane	13:09	13:02	13:16	2533				
Toxaphene	18:64	18:57	18:71	20967				
Aroclor-1016	8:60	8:53	8:67	213992	8:60	198648	Y	7
Aroclor-1221	6:06	5:99	6:13	82927				
Aroclor-1232	8:60	8:53	8:67	87045				
Aroclor-1242	8:60	8:53	8:67	164431				
Aroclor-1248	8:60	8:53	8:67	109514				
Aroclor-1254	14:03	13:96	14:10	174261				
Aroclor-1260	18:69	18:62	18:76	336857	18:69	318545	Y	5
Endrin Aldehyde	17:80	17:73	17:87	1748				

Under QNT Y/N: enter Y if quantitation was performed, N if not performed. %D must be less than or equal to 15.0% for quantitation, and less than or equal to 20.0% for confirmation.

Note: Determining that no compounds were found above the CRQL is a form of quantitation, and therefore at least one column must meet the 15.0% criteria.

For multicomponent analytes, the single largest peak that is characteristic of the component should be used to establish retention time and %D. Identification of such analytes is based primarily on pattern recognition

SEQUENCE RECORDED IN E:JU26E.SEQ



[Interface 1] 0-30 Min Scale: 100 Mv Ch.A, 100 Mv Ch.B
A1660 1PPM Processed: 06-27-1995 13:55:33, segment 3, cycle 19
RAW DATA SAVED IN FILE E:JU26E19.PTS Second Channel Stored in E:KU26E19.PTS

***** EXTERNAL STANDARD TABLE *****

********** 06-27-1995 13:55:45 Version 5.1.5 **********

* Sample Name: A1660 1PPM Data File: E:JU26E19 *
* Date: 06-27-1995 13:25:12 Method: M:APES-G 03-08-1995 15:02:41 # 359 *
* Interface: 1 Cycle#: 19 Operator JJK Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 10 Area Threshold: 1000 *
* Instrument Type: Perkin-Elmer 8500 Column Type: RTx-5 30m,.35mm *
* Solvent Description: 1.0u.df *
* Conditions: 180 for 4.0min then 4.0deg/min to 240, hold 30min *
* Detector 0: Detector 1: ECD *
* Misc. Information: *

Starting Delay: 0.00 Ending retention time: 30.00
Area reject: 1000 One sample per 1.002 sec.
Amount injected: 1.00 Dilution factor: 1.00
Sample Weight: 1.00000

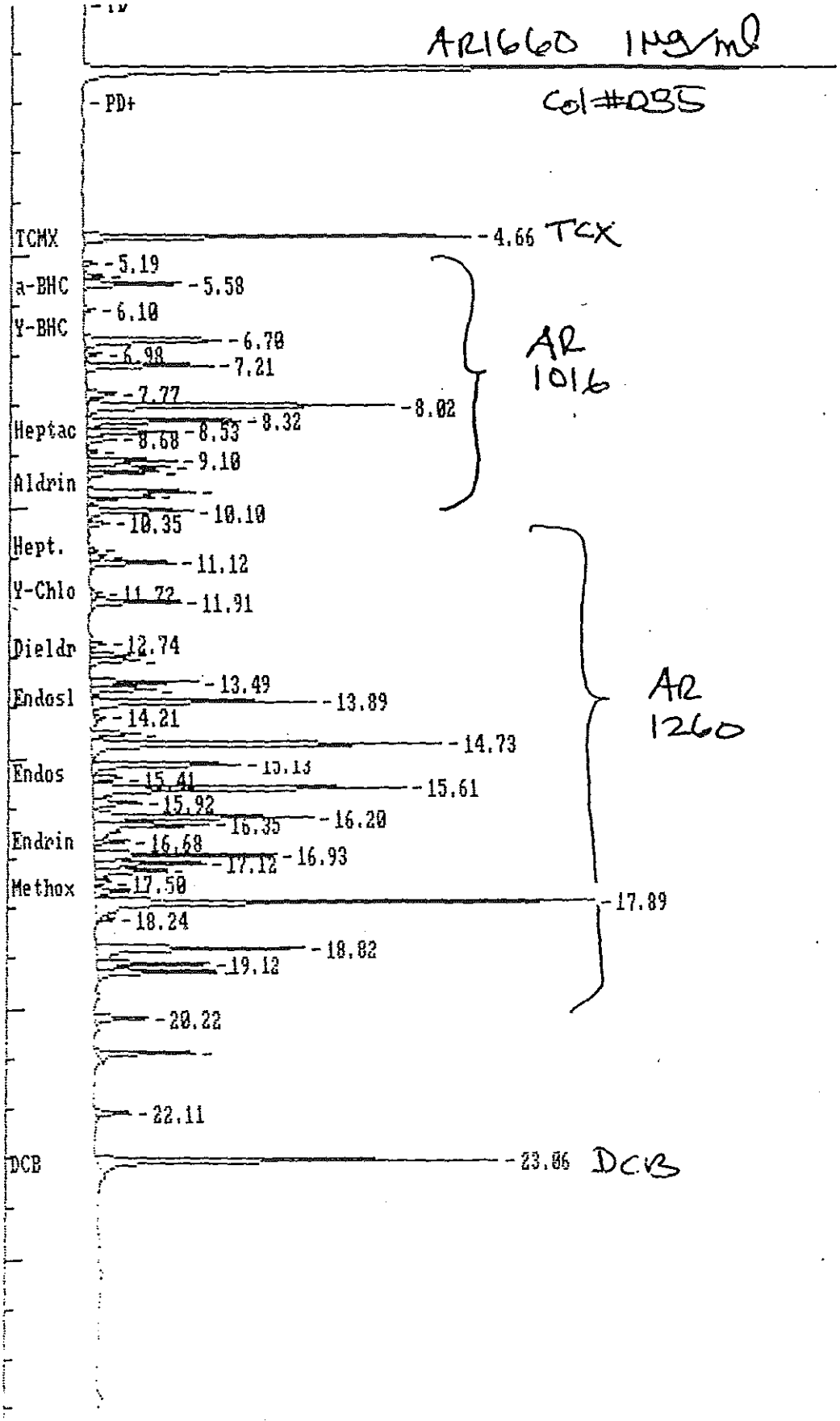
PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	4.659	TCMX	113.4516	25.5452%	217495	51389	4.2	1	0	-.3971	5.2163E-04
2	5.194		0.0000	0.0000%	8873	1806	4.9	2			1.0000E-09
3	5.444		0.0000	0.0000%	13696	2637	5.2	2			1.0000E-09
4	5.578	a-B-1	37.5137	8.4490%	61592	12767	4.8	2	0	0	6.0923E-04

	7.214		0.0001	0.0000%	76578	16762	4.6 1			
	7.766		0.0000	0.0000%	30335	4074	7.4 2			1.0000E-09
	8.016		0.0002	0.0001%	225329	40865	5.5 2			1.0000E-09
	8.317		0.0001	0.0000%	101896	20227	5.0 2			1.0000E-09
	8.534	Heptachlor	25.1973	5.6735%	57479	11902	4.8 2	0	.7889	4.3837E-04
	8.684		0.0000	0.0000%	18725	3836	4.9 2			1.0000E-09
	8.934		0.0000	0.0000%	6149	1333	4.6 2			1.0000E-09
	9.101		0.0001	0.0000%	56278	11722	4.8 2			1.0000E-09
	9.218		0.0000	0.0000%	49640	10803	4.6 2			1.0000E-09
	9.319	Aldrin	23.6158	5.3174%	52695	9306	5.7 2	0	-1.760	4.4816E-04
	9.719		0.0001	0.0000%	70168	14131	5.0 2			1.0000E-09
	9.820		0.0000	0.0000%	38524	8700	4.4 2			1.0000E-09
	10.103		0.0001	0.0000%	75279	13667	5.5 2			1.0000E-09
	10.354		0.0000	0.0000%	13307	2656	5.0 2			1.0000E-09
	10.872	Hept. epox.	2.5752	0.5798%	5798	1272	4.6 2	0	.9302	4.4420E-04
	10.989		0.0000	0.0000%	10324	2167	4.8 2			1.0000E-09
	11.122		0.0001	0.0000%	55931	11147	5.0 2			1.0000E-09
	11.723	Y-Chlordane	2.8680	0.6458%	7463	1244	6.0 2	0	.8620	3.8431E-04
	11.907	Endosulfan I	24.9090	5.6086%	57483	11534	5.0 2	0	0	4.3333E-04
7	12.742	Dieldrin	4.0748	0.9175%	10221	2087	4.9 2	0	-.1308	3.9866E-04
3	12.959	4,4-DDE	9.7940	2.2052%	24933	5354	4.7 2	0	.3880	3.9281E-04
9	13.076		0.0000	0.0000%	33936	6457	5.3 2			1.0000E-09
30	13.494	Endrin	33.2091	7.4775%	68441	14127	4.8 2	0	.4350	4.8522E-04
31	13.644	Endoslf II	18.7315	4.2177%	44216	8537	5.2 2	0	-.8495	4.2364E-04
2	13.894		0.0002	0.0000%	161847	29704	5.4 2			1.0000E-09
33	14.212	4'4-DDD	3.4582	0.7787%	5826	1456	4.0 1	0	-.4678	5.9361E-04
34	14.529	Endrin ald	15.5009	3.4902%	31170	6340	4.9 2	0	.8695	4.9730E-04
5	14.729		0.0003	0.0001%	268700	46457	5.8 2			1.0000E-09
36	15.130		0.0001	0.0000%	116502	19442	6.0 2			1.0000E-09
37	15.414	DDT	13.6723	3.0785%	23112	3871	6.0 2	0	-.6458	5.9158E-04
8	15.615		0.0003	0.0001%	256435	41555	6.2 2			1.0000E-09
9	15.915		0.0000	0.0000%	36742	6308	5.8 2			1.0000E-09
	16.199		0.0002	0.0000%	152981	29219	5.2 2			1.0000E-09
1	16.349		0.0001	0.0000%	102192	15030	6.8 2			1.0000E-09
2	16.683	Endrin ket.	9.8938	2.2277%	23409	4577	5.1 2	0	.2005	4.2265E-04
43	16.934		0.0001	0.0000%	122340	24095	5.1 2			1.0000E-09
44	17.117		0.0001	0.0000%	73995	14450	5.1 2			1.0000E-09
5	17.251		0.0001	0.0000%	63805	9479	6.7 2			1.0000E-09
6	17.502	Methoxychlor	13.6148	3.0656%	13283	2085	6.4 2	0	-.3802	1.0249E-03
47	17.669		0.0000	0.0000%	25483	4649	5.5 2			1.0000E-09
8	17.886		0.0004	0.0001%	379113	66152	5.7 3			1.0000E-09
9	18.236		0.0000	0.0000%	10289	2011	5.1 4			1.0000E-09
50	18.821		0.0002	0.0000%	168415	27736	6.1 2			1.0000E-09
51	19.121		0.0001	0.0000%	76764	14679	5.2 2			1.0000E-09
2	19.305		0.0001	0.0000%	88287	15612	5.7 2			1.0000E-09
53	20.224		0.0000	0.0000%	37217	6940	5.4 1			1.0000E-09
54	20.925		0.0001	0.0000%	67542	12727	5.3 1			1.0000E-09
55	22.111		0.0000	0.0000%	25516	4691	5.4 1			1.0000E-09
56	23.063	DCB	93.1767	18.7284%	284021	52933	5.4 1	0	-.1446	2.9285E-04

TOTAL AMOUNT = 444.1215

GROUP NUMBER GROUP AMOUNT GROUP PERCENT

Areas, times, and heights stored in: E:JU26E19.ATB
Data File = E:JU26E19.PTS Printed on 06-27-1995 at 13:56:03
Start time: 0.00 min. Stop time: 30.00 min. Offset: 1 mv.
Full Range: 100 millivolts



EXTERNAL STANDARD TABLE

06-27-1995 13:57:25 Version 5.1.5

Sample Name: A1660 1PPM Data File: E:KU26E19

Date: 06-27-1995 13:25:12 Method: M:BPES-G 03-31-1995 14:31:59 # 358

Interface: 1 Cycle#: 19 Operator JJK Channel#: 1 Vial#: N.A.

Starting Peak Width: 10 Threshold: 10 Area Threshold: 500

Instrument Type: Perkin-Elmer 8500 Column Type: RTx-5 30m,.35mm

Solvent Description: 1.0u df

Conditions: 180 for 4.0min then 4.0deg/min to 240, hold 30min

Detector 0: Detector 1: ECD

Misc. Information:

Starting Delay: 0.00 Ending retention time: 30.00

Area reject: 500 One sample per 1.002 sec.

Amount injected: 1.00 Dilution factor: 1.00

Sample Weight: 1.00000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	4.576	TCMX	112.3466	9.5725%	201669	51173	3.9	1	0	-.3636	5.5709E-04
2	5.060		0.0000	0.0000%	5736	1310	4.4	1			1.0000E-09
3	5.494		0.0000	0.0000%	8204	1774	4.6	1			1.0000E-09
4	5.912		0.0000	0.0000%	11987	2682	4.5	2			1.0000E-09
5	6.062		0.0001	0.0000%	56914	12654	4.5	2			1.0000E-09
6	6.697		0.0000	0.0000%	7225	1583	4.6	1			1.0000E-09
7	7.231		0.0001	0.0000%	107430	25084	4.3	2			1.0000E-09
8	7.582		0.0000	0.0000%	16927	2450	6.9	2			1.0000E-09
9	7.816		0.0000	0.0000%	30304	7329	4.1	2			1.0000E-09
10	7.949		0.0000	0.0000%	47250	10724	4.4	2			1.0000E-09
11	8.367	Y-BHC	16.3827	1.3959%	28347	5625	5.0	2	0	.4008	5.7793E-04
12	8.600		0.0002	0.0000%	198648	44896	4.4	2			1.0000E-09
13	9.035	Heptachlor	48.1251	4.1005%	91562	18440	5.0	2	0	1.691	5.2560E-04
14	9.352		0.0001	0.0000%	63103	10819	5.8	2			1.0000E-09
15	9.786	Aldrin	76.2184	6.4942%	142073	15604	9.1	1	0	1.034	5.3647E-04
16	10.554		0.0001	0.0000%	91250	16455	5.5	2			1.0000E-09
17	10.872	B-BHC	58.8491	5.0143%	73081	13344	5.5	2	0	-.9132	8.0526E-04
18	11.373		0.0000	0.0000%	12597	2755	4.6	2			1.0000E-09
19	11.506	d-BHC	5.1588	0.4396%	5843	1330	4.4	2	0	-1.005	8.8288E-04
20	11.890	Hept. epox.	31.5498	2.6882%	60771	11305	5.4	1	0	-1.365	5.1916E-04
21	12.358		0.0000	0.0000%	6105	1443	4.2	1			1.0000E-09
22	12.525		0.0001	0.0000%	52825	11554	4.6	1			1.0000E-09
23	13.377	a-Chlordane	0.8963	0.0764%	1902	430	4.4	1	0	-.2490	4.7127E-04
24	13.627		0.0000	0.0000%	9829	2093	4.7	2			1.0000E-09
25	13.761	4,4 DDE	11.9980	1.0223%	23084	5005	4.6	2	0	-.3024	5.1975E-04
26	14.028		0.0000	0.0000%	26525	5980	4.4	2			1.0000E-09
27	14.111	Dieldrin	39.0677	3.3288%	74227	12836	5.8	2	0	0	5.2633E-04
28	14.329		0.0000	0.0000%	24050	5210	4.6	2			1.0000E-09
29	14.596		0.0001	0.0000%	136099	27598	4.7	2			1.0000E-09
30	14.830	Endrin	15.4109	1.3131%	14720	2367	6.2	2	0	.4524	1.0470E-03
31	14.997		0.0000	0.0000%	21038	2944	7.1	2			1.0000E-09
32	15.164		0.0000	0.0000%	47729	7380	6.5	2			1.0000E-09
33	15.347		0.0002	0.0000%	223930	36591	6.1	2			1.0000E-09
34	15.715		0.0001	0.0000%	110462	19379	5.8	2			1.0000E-09
35	15.915		0.0001	0.0000%	103676	16989	6.1	3			1.0000E-09
36	16.282		0.0000	0.0000%	13806	1677	8.2	3			1.0000E-09
37	16.466	Endosulfan II	130.2538	11.0963%	241865	41509	5.8	2	0	0	5.3858E-04
38	16.760		0.2021	0.0000%	227713	33643	6.8	2			1.0000E-09

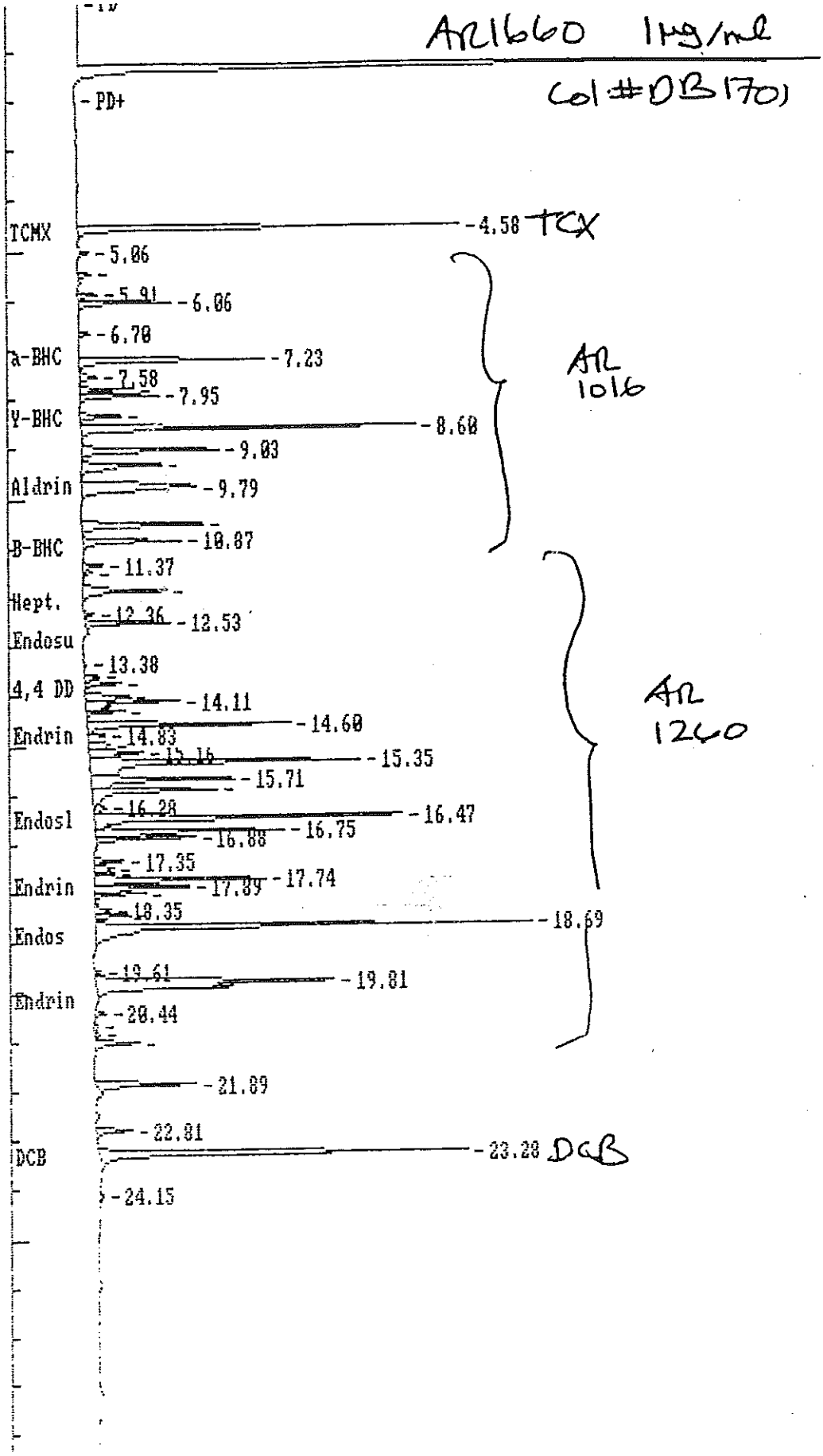
SDL 7/14/95

2	17.602		0.0000	0.0000%	13171	2791	4.7	2			
3	17.735		0.0001	0.0000%	109977	23116	4.8	2			1.0000E-09
4	17.886	Endrin ald	46.2331	3.9393%	65725	12899	5.1	2	0	.1402	7.0343E-04
5	18.019		0.0000	0.0000%	32060	6917	4.6	2			1.0000E-09
6	18.353		0.0000	0.0000%	12364	2192	5.6	2			1.0000E-09
7	18.470		0.0000	0.0000%	22809	4820	4.7	2			1.0000E-09
	18.687	Endos sulf	214.0080	18.2346%	318545	58337	5.5	2	0	-.7978	6.7183E-04
	19.606	Methoxychl	6.8080	0.5801%	4389	946	4.6	2	0	1.645	1.5511E-03
50	19.806	Endrin ket	191.5405	16.3203%	293335	32462	9.0	2	0	-1.495	6.5298E-04
51	20.441		0.0000	0.0000%	7376	1514	4.9	1			1.0000E-09
52	20.708		0.0000	0.0000%	3054	502	6.1	2			1.0000E-09
53	20.875		0.0000	0.0000%	4156	767	5.4	2			1.0000E-09
54	21.059		0.0000	0.0000%	30577	5956	5.1	2			1.0000E-09
55	21.894		0.0001	0.0000%	67527	13345	5.1	1			1.0000E-09
56	22.812		0.0000	0.0000%	25412	4847	5.2	1			1.0000E-09
57	23.280	DCB	115.0406	9.8021%	250738	49345	5.1	1	0	-.2147	4.5881E-04
58	24.148		0.0000	0.0000%	2780	449	6.2	1			1.0000E-09

TOTAL AMOUNT = 1173.6365

GROUP NUMBER	GROUP AMOUNT	GROUP PERCENT

Areas, times, and heights stored in: E:KU26E19.ATB
Data File = E:KU26E19.PTS Printed on 06-27-1995 at 13:58:01
Start time: 0.00 min. Stop time: 30.00 min. Offset: 1 mv.
Full Range: 100 millivolts



9

PESTICIDE/PCB STANDARDS SUMMARY

Lab Name: EMSL ANALYTICAL Contract: _____

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

Instrument ID: HP5890/SERP GC Column ID: DB5

DATE(S) OF ANALYSIS FROM: 6-26-95 TO: 16:50
TIME(S) OF ANALYSIS FROM: 6-26-95 TO: 22:01

DATE OF ANALYSIS 6-28-95
TIME OF ANALYSIS 14:20
EPA SAMPLE NO. (STANDARD) 1194262 / 1194263

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR	RT	CALIBRATION FACTOR	QNT Y/N	%D
alpha-BHC	5:56	5:51	5:61	1557	5:56	1489	Y	4
beta-BHC	6:25	6:20	6:30	1289	6:23	1241	Y	4
delta-BHC	7:03	6:98	7:08	1346	7:03	1319	Y	2
gamma-BHC	6:40	6:35	6:45	1723	6:40	1654	Y	4
Heptaclor	8:43	8:38	8:48	2399	8:43	2507	Y	5
Aldrin	9:47	9:42	9:52	2002	9:45	2029	Y	1
Hept. epoxide	10:75	10:70	10:80	2160	10:74	2228	Y	3
Endosulfan I	11:89	11:8	11:96	2210	11:87	2223	Y	1
Dieldrin	12:74	12:67	12:81	2015	12:74	2044	Y	1
4,4'-DDE	12:89	12:82	12:96	2118	12:88	2048	Y	3
Endrin	13:41	13:34	13:48	1845	13:41	1925	Y	4
Endosulfan II	13:73	13:66	13:80	2124	13:73	2142	Y	1
4,4'-DDD	14:26	14:19	14:33	1386	14:26	1329	Y	4
Endo.sulfate	15:18	15:11	15:25	1845	15:16	1898	Y	3
4,4'-DDT	15:50	15:43	15:57	1379	15:48	1470	Y	7
Methoxychlor	17:55	17:48	17:62	850	17:54	1087	N	28
Endrin ketone	16:63	16:56	16:70	2303	16:62	2370	Y	3
a. Chlordane	12:02	11:95	12:09	2419	12:02	2458	Y	2
g. Chlordane	11:62	11:45	11:59	2466	11:51	2538	Y	3
Toxaphene	18:40	15:33	15:47	39283				
Aroclor-1016	8:02	7:95	8:09	231326				
Aroclor-1221	5:58	5:51	5:65	88583				
Aroclor-1232	8:02	7:95	8:09	92663				
Aroclor-1242	8:02	7:95	8:09	183580				
Aroclor-1248	8:02	7:95	8:09	122492				
Aroclor-1254	13:08	13:01	13:15	179815				
Aroclor-1260	17:89	17:82	17:96	372656				
Endrin Aldehyde	14:38	14:31	14:45	1845	14:38	2059	Y	12

Under QNT Y/N: enter Y if quantitation was performed, N if not performed. %D must be less than or equal to 15.0% for quantitation, and less than or equal to 20.0% for confirmation.

Note: Determining that no compounds were found above the CRQL is a form of quantitation, and therefore at least one column must meet the 15.0% criteria.

For multicomponent analytes, the single largest peak that is characteristic of the component should be used to establish retention time and %D. Identification of such analytes is based primarily on pattern recognition

9

PESTICIDE/PCB STANDARDS SUMMARY

ab Name: EMSL ANALYTICAL Contract: _____

b Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

nstrument ID: HP5890/SIEP GC Column ID: DB1701

DATE(S) OF ANALYSIS FROM: 6-26-95 TO: 16:50
TIME(S) OF ANALYSIS FROM: 6-26-95 TO: 22:01

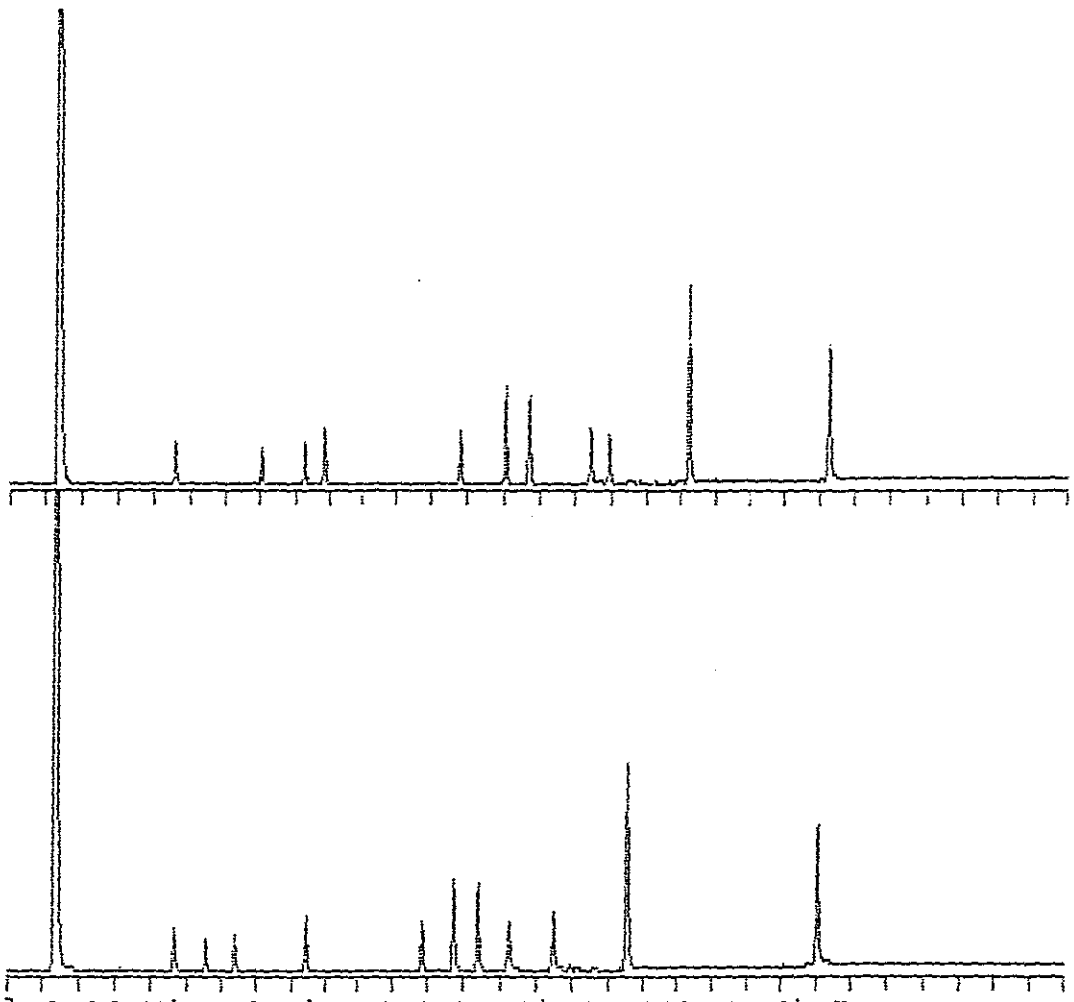
DATE OF ANALYSIS 6-28-95
TIME OF ANALYSIS 14:20
EPA SAMPLE NO. (STANDARD) 1194262 / 1194263

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR	RT	CALIBRATION FACTOR	QNT Y/N	%D
alpha-BHC	7:05	7:00	7:10	1612	7:05	1553	Y	4
beta-BHC	10:92	10:87	10:98	1408	10:92	1349	Y	4
delta-BHC	11:57	11:52	11:62	1429	11:57	1404	Y	2
gamma-BHC	8:28	8:23	8:33	1719	8:28	1658	Y	4
Heptaclor	8:85	8:80	8:90	2369	8:85	2400	Y	1
Aldrin	9:65	9:60	9:70	2040	9:64	1995	Y	2
Hept. epoxide	12:01	11:96	12:06	2312	12:01	2310	Y	0.1
Endosulfan I	12:83	12:76	12:90	2306	18:81	2269	Y	2
Dieldrin	14:06	13:99	14:13	2071	14:06	2054	Y	1
4,4'-DDE	13:76	13:69	13:83	2044	13:76	1890	Y	8
Endrin	14:71	14:64	14:78	1913	14:71	1926	Y	1
Endosulfan II	16:42	16:35	16:49	2191	16:42	2156	Y	2
4,4'-DDD	16:43	16:36	16:50	1344	16:43	1272	Y	5
Endo.sulfate	18:89	18:82	18:96	1898	18:89	1902	Y	0.2
4,4'-DDT	16:95	16:88	17:02	1045	16:95	1081	Y	3
Methoxychlor	19:24	19:17	19:31	808	19:24	927	Y	15
Endrin ketone	20:04	19:97	20:11	2111	20:04	2097	Y	1
a. Chlordane	13:36	13:29	13:43	2488	13:36	2454	Y	1
g. Chlordane	13:09	13:02	13:16	2533	13:09	2520	Y	1
Toxaphene	18:64	18:57	18:71	20967				
Aroclor-1016	8:60	8:53	8:67	213992				
Aroclor-1221	6:06	5:99	6:13	82927				
Aroclor-1232	8:60	8:53	8:67	87045				
Aroclor-1242	8:60	8:53	8:67	164431				
Aroclor-1248	8:60	8:53	8:67	109514				
Aroclor-1254	14:03	13:96	14:10	174261				
Aroclor-1260	18:69	18:62	18:76	336857				
Endrin Aldehyde	17:80	17:73	17:87	1748	17:79	1724	Y	1

nder QNT Y/N: enter Y if quantitation was performed, N if not performed.
D must be less than or equal to 15.0% for quantitation, and less than or equal to 20.0% for confirmation.

ote: Determining that no compounds were found above the CRQL is a form of uantitation, and therefore at least one column must meet the 15.0% criteria.

or multicomponent analytes, the single largest peak that is characteristic f the component should be used to establish retention time and %D. Identification of such analytes is based primarily on pattern recognition



[Interface 1] 0-30 Min Scale: 100 Mv Ch.A, 100 Mv Ch.B
INDA Processed: 06-28-1995 14:51:04, segment 3, cycle 28
RAW DATA SAVED IN FILE E:JU26E28.PTS Second Channel Stored in E:KU26E28.PTS

EXTERNAL STANDARD TABLE

06-28-1995 14:51:16 Version 5.1.5

Sample Name: INDA Data File: E:JU26E28

Date: 06-28-1995 14:20:45 Method: M:APES-G 03-08-1995 15:02:41 # 359

Interface: 1 Cycle#: 28 Operator JJK Channel#: 0 Vial#: N.A.

Starting Peak Width: 10 Threshold: 10 Area Threshold: 1000

Instrument Type: Perkin-Elmer 8500 Column Type: RTx-5 30m, .35mm

Solvent Description: 1.0u df

Conditions: 180 for 4.0min then 4.0deg/min to 240, hold 30min

Detector 0: Detector 1: ECD

Misc. Information:

Starting Delay: 0.00 Ending retention time: 30.00

Area reject: 1000 One sample per 1.002 sec.

Amount injected: 1.00 Dilution factor: 1.00

Sample Weight: 1.00000

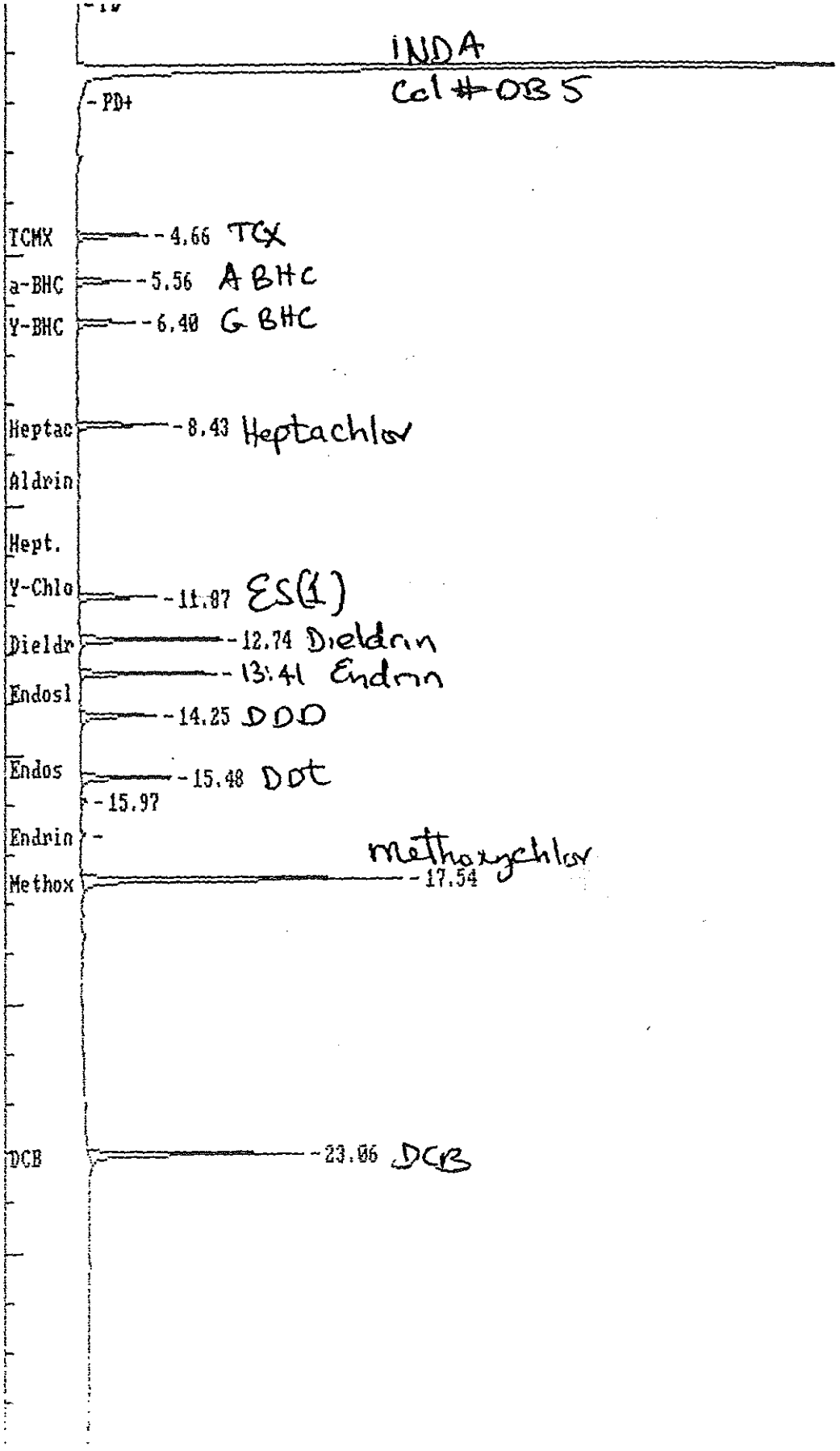
PAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT RL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	4.659	TCMX	32.7890	4.5049%	43688	9239	4.7 :	0	-.3571	5.21435E-04
2	5.561	a-BHC	28.1370	3.5853%	29770	6858	4.3 :	0	-.2994	4.9023E-04
3	5.996	Y-BHC	28.1177	3.5815%	30048	7598	4.4 :	0	-.3604	5.47[illegible]E-04

13.410 Endrin	37.3663	7.3865%	77509	17887	[illegible]				
14.245 4'4-DDD	31.5560	6.2379%	53159	10024	5.3	1	0	-.2339	5.9581E-04
15.481 DDT	34.7920	6.8776%	58812	11820	5.0	1	0	-.2152	5.9158E-04
15.965	0.0000	0.0000%	3470	753	4.6	1			1.0000E-09
16.616 Endrin ket.	1.5941	0.3151%	3772	712	5.3	1	0	-.2006	4.2265E-04
17.535 Methoxychlor	222.9232	44.0669%	217498	42266	5.1	1	0	-.1901	1.0249E-03
23.063 DCB	44.7584	8.8477%	152335	28786	5.3	1	0	-.1446	2.9285E-04

TOTAL AMOUNT = 505.8742

GROUP NUMBER	GROUP AMOUNT	GROUP PERCENT

as, times, and heights stored in: E:JU26E28.ATB
a File = E:JU26E28.PTS Printed on 06-28-1995 at 14:51:25
rt time: 0.00 min. Stop time: 30.00 min. Offset: 1 mv.
l Range: 100 millivolts



<***** EXTERNAL STANDARD TABLE *****>

********** 06-28-1995 14:51:36 Version 5.1.5 **********

ample Name: INDA Data File: E:KU26E28

ate: 06-28-1995 14:20:45 Method: M:BPES-G 03-31-1995 14:31:59 # 358

nterface: 1 Cycle#: 28 Operator JJK Channel#: 1 Vial#: N.A.

Starting Peak Width: 10 Threshold: 10 Area Threshold: 500

Instrument Type: Perkin-Elmer 8500 Column Type: RTx-5 30m,.35mm

Solvent Description: 1.0u df

Conditions: 180 for 4.0min then 4.0deg/min to 240, hold 30min

Detector 0: Detector 1: ECD

Misc. Information:

arting Delay: 0.00 Ending retention time: 30.00

ea reject: 500 One sample per 1.002 sec.

nount injected: 1.00 Dilution factor: 1.00

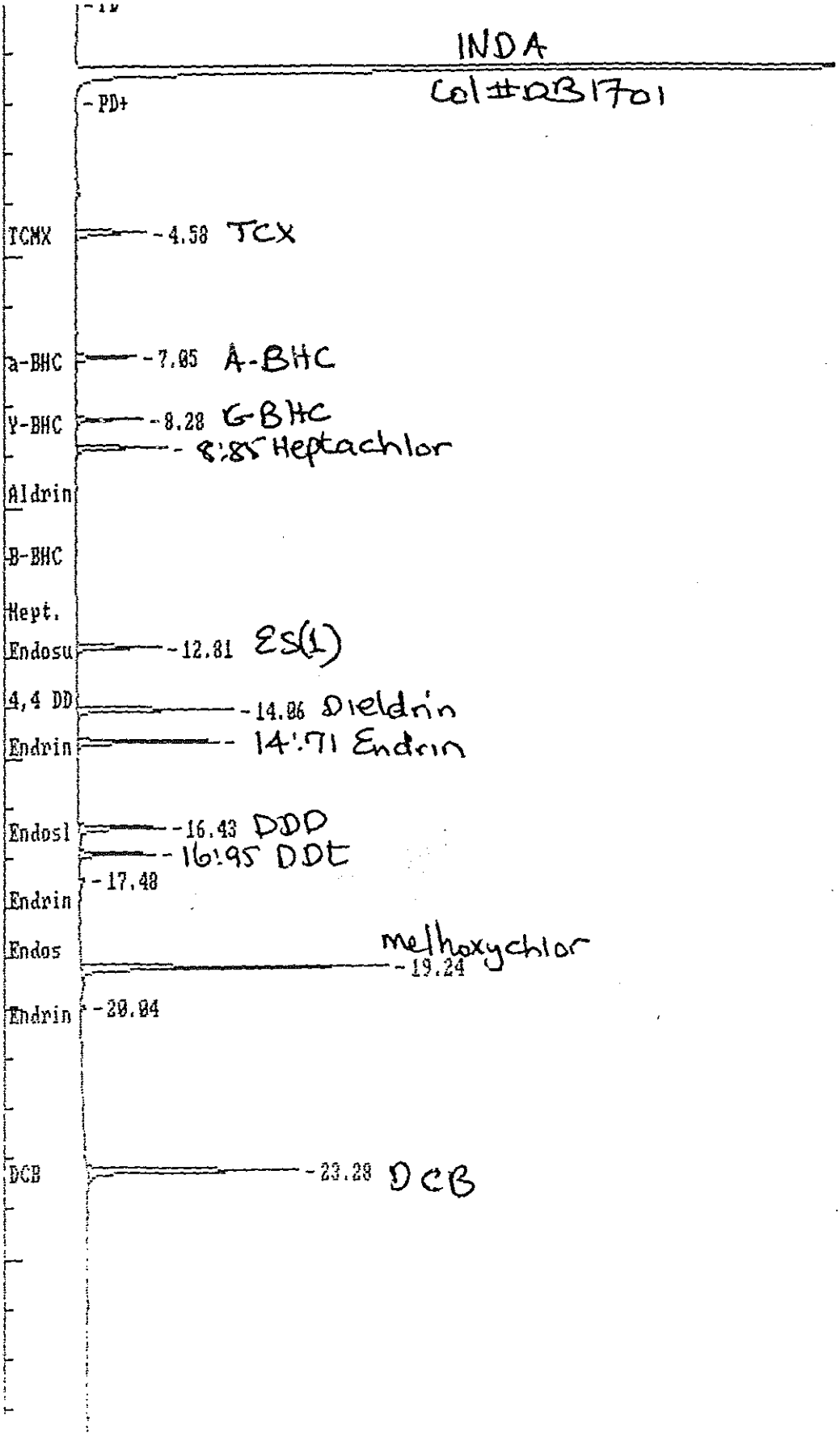
ample Weight: 1.00000

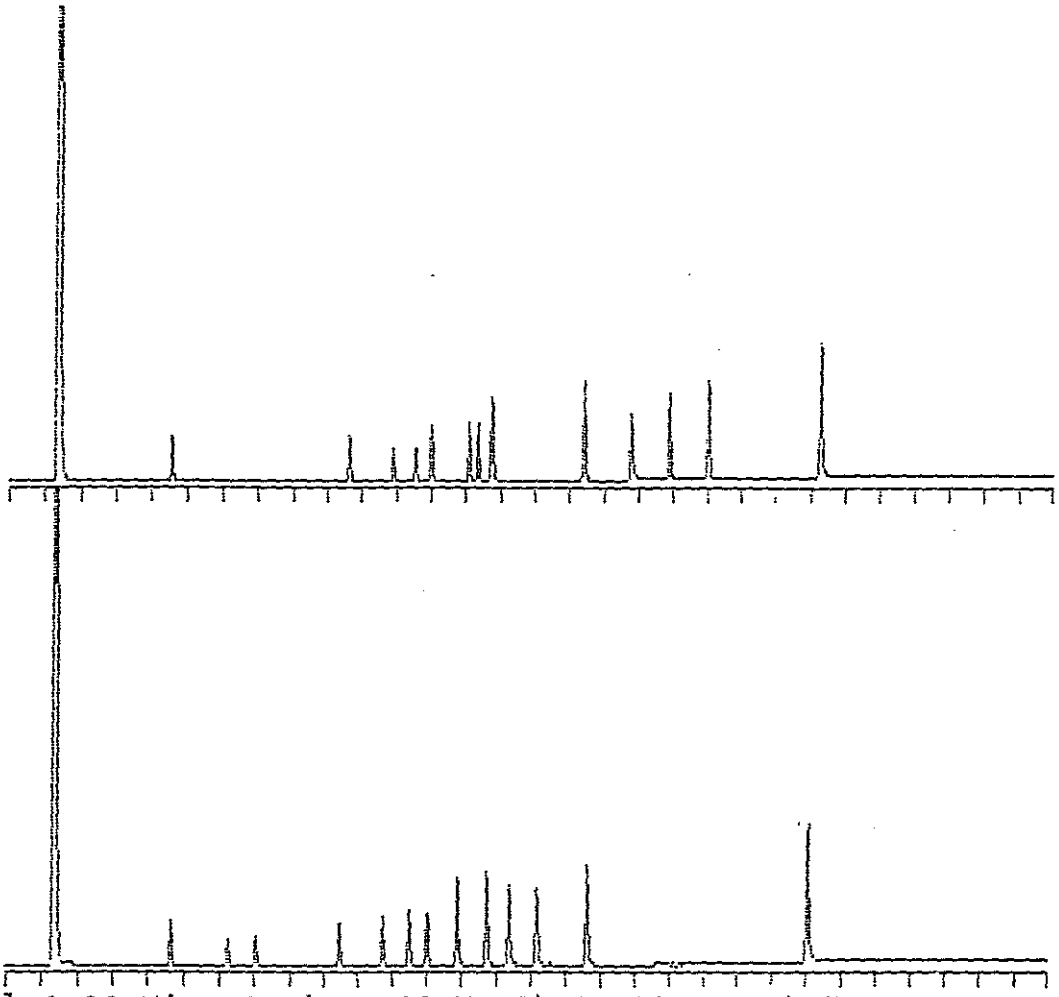
AK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	4.576	TCMX	24.0994	3.6861%	43260	9324	4.6	1	0	-.3636	5.5709E-04
2	7.047	a-BHC	19.5260	2.9866%	31059	7914	3.9	1	0	-.4716	6.2867E-04
3	8.283	Y-BHC	19.1676	2.9318%	33166	8760	3.8	1	0	-.6012	5.7793E-04
4	8.851	Heptachlor	25.2246	3.8582%	47992	11907	4.0	1	0	-.3759	5.2560E-04
5	12.809	Endosulf I	23.1290	3.5377%	45371	11033	4.1	1	0	-.3896	5.0978E-04
)	14.061	Dieldrin	43.2401	6.6137%	82154	20714	4.0	1	0	-.3550	5.2633E-04
7	14.713	Endrin	80.6647	12.3379%	77047	18673	4.1	1	0	-.3393	1.0470E-03
8	16.433	~~Endosulfii~~ DDD	27.4121	4.1928%	50899	11343	4.5	1	0	-.2534	5.3856E-04
9	16.950	4,4 DDT	37.1732	5.6858%	43255	9971	4.3	1	0	-.2946	8.5939E-04
10	17.485		0.0000	0.0000%	2633	613	4.3	1			1.0000E-09
11	19.238	Methoxychl	287.6690	43.9999%	185465	40765	4.5	1	0	-.2597	1.5511E-03
12	20.040	Endrin ket	1.8497	0.2829%	2833	627	4.5	1	0	-.3322	6.5298E-04
13	23.280	DCB	64.6394	9.8868%	140886	28251	5.0	1	0	-.2147	4.5881E-04

TOTAL AMOUNT = 653.7948

GROUP NUMBER GROUP AMOUNT GROUP PERCENT

eas, times, and heights stored in: E:KU26E28.ATB
ta File = E:KU26E28.PTS Printed on 06-28-1995 at 14:51:46
art time: 0.00 min. Stop time: 30.00 min. Offset: 1 mv.
ll Range: 100 millivolts





[Interface 1] 0-30 Min Scale: 100 Mv Ch.A, 100 Mv Ch.B
INDB Processed: 06-28-1995 15:25:14, segment 4, cycle 29
RAW DATA SAVED IN FILE E:JU26E29.PTS Second Channel Stored in E:KU26E29.PTS

***** EXTERNAL STANDARD TABLE *****

********** 06-28-1995 15:25:26 Version 5.1.5 **********

Sample Name: INDB Data File: E:JU26E29

Date: 06-28-1995 14:54:56 Method: M:APES-G 03-08-1995 15:02:41 # 359

Interface: 1 Cycle#: 29 Operator JJK Channel#: 0 Vial#: N.A.

Starting Peak Width: 10 Threshold: 10 Area Threshold: 1000

Instrument Type: Perkin-Elmer 8500 Column Type: RTx-5 30m,.35mm

Solvent Description: 1.0u df

Conditions: 180 for 4.0min then 4.0deg/min to 240. hold 30min

Detector 0: Detector 1: ECD

Misc. Information:

Starting Delay: 0.00 Ending retention time: 30.00

Area reject: 1000 One sample per 1.002 sec.

Amount injected: 1.00 Dilution Factor: 1.00

Sample Weight: 1.00000

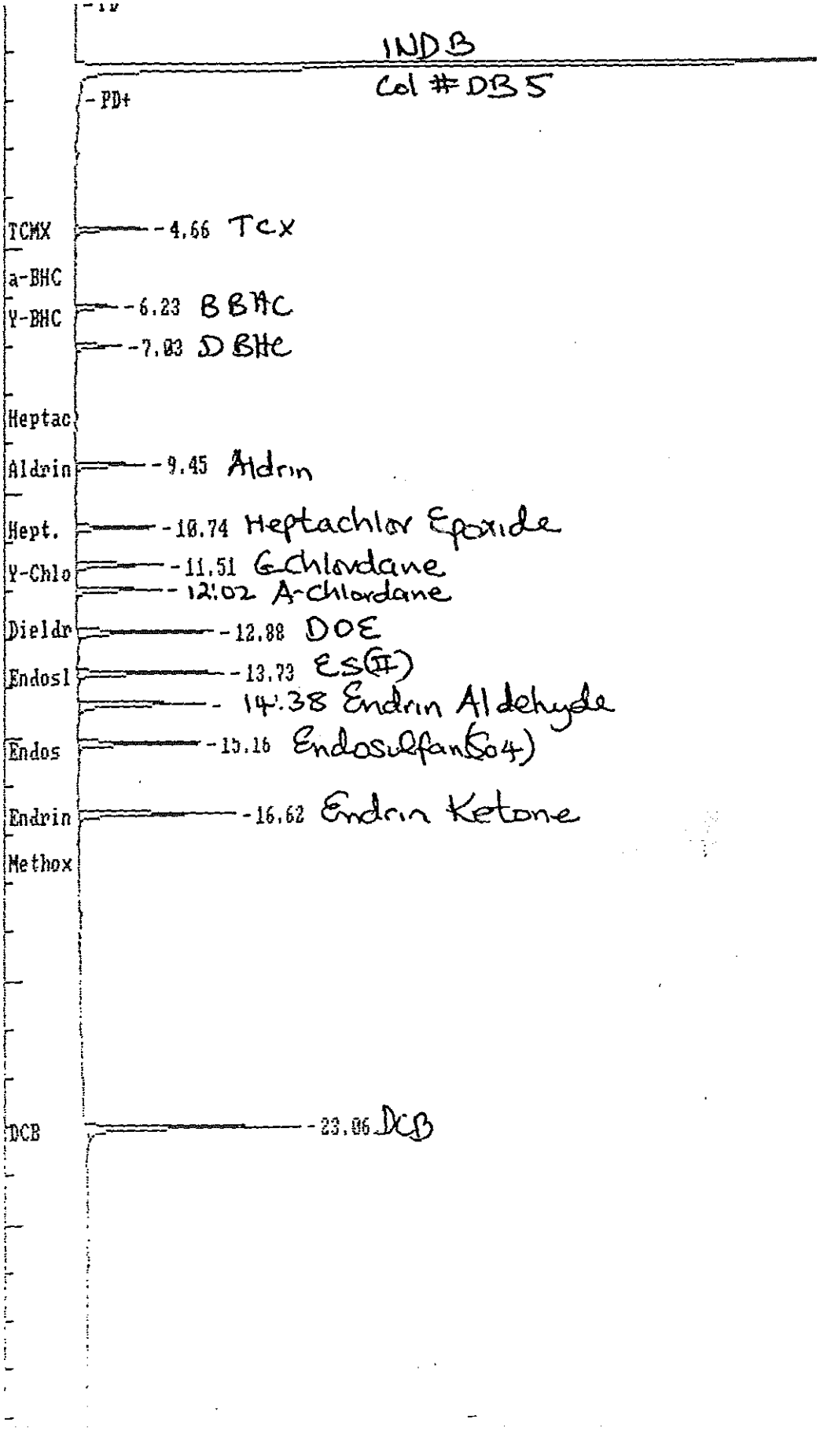
PK NM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	4.[illegible]	TCMX	21.5900	5.7564%	41393	9477	4.4	1	0	-.3571	5.2163E-04
2	6.22[illegible]	B-BHC	20.0904	5.3568%	24511	5359	4.[illegible]	1	0	-.2673	8.0226E-04
3	7.10[illegible]	D-BHC	21.1708	5.[illegible]4%	26383	5956	4.4	1	0	-.2369	8.0236E-04

.024	a-Chlordane	18.7454	4.9980%	49164	11051	4.4	1	0	-.2567	...
.876	4,4-DDE	32.1863	8.5816%	81939	17817	4.6	1	0	-.2567	...
.727	Endoslf II	36.3033	9.6793%	85695	19122	4.5	1	0	-.2427	4.2364E-04
.379	Endrin ald	40.9511	10.9185%	82347	16532	5.0	1	0	-.1739	4.9730E-04
5.164	Endos sulf	42.1064	11.2265%	75915	15872	4.8	1	0	-.7650	5.5466E-04
5.616	Endrin ket.	40.0694	10.6834%	94804	20520	4.6	1	0	-.2006	4.2265E-04
3.063	DCB	44.0628	11.7482%	150460	28481	5.3	1	0	-.1446	2.9285E-04

TOTAL AMOUNT = 375.0616

UP NUMBER	GROUP AMOUNT	GROUP PERCENT

as, times, and heights stored in: E:JU26E29.ATB
a File = E:JU26E29.PTS Printed on 06-28-1995 at 15:25:36
rt time: 0.00 min. Stop time: 30.00 min. Offset: 1 mv.
l Range: 100 millivolts



**** EXTERNAL STANDARD TABLE *****

********** 06-28-1995 15:25:47 Version 5.1.5 **********

Sample Name: IND8 Data File: E:KU26E29

Date: 06-28-1995 14:54:56 Method: M:BPES-G 03-31-1995 14:31:59 # 358

Interface: 1 Cycle#: 29 Operator JJK Channel#: 1 Vial#: N.A.

Starting Peak Width: 10 Threshold: 10 Area Threshold: 500

Instrument Type: Perkin-Elmer 8500 Column Type: RTx-5 30m,.35mm

Solvent Description: 1.0u df

Conditions: 180 for 4.0min then 4.0deg/min to 240, hold 30min

Detector 0: Detector 1: ECD

Misc. Information:

Starting Delay: 0.00 Ending retention time: 30.00

Area reject: 500 One sample per 1.002 sec.

Amount injected: 1.00 Dilution factor: 1.00

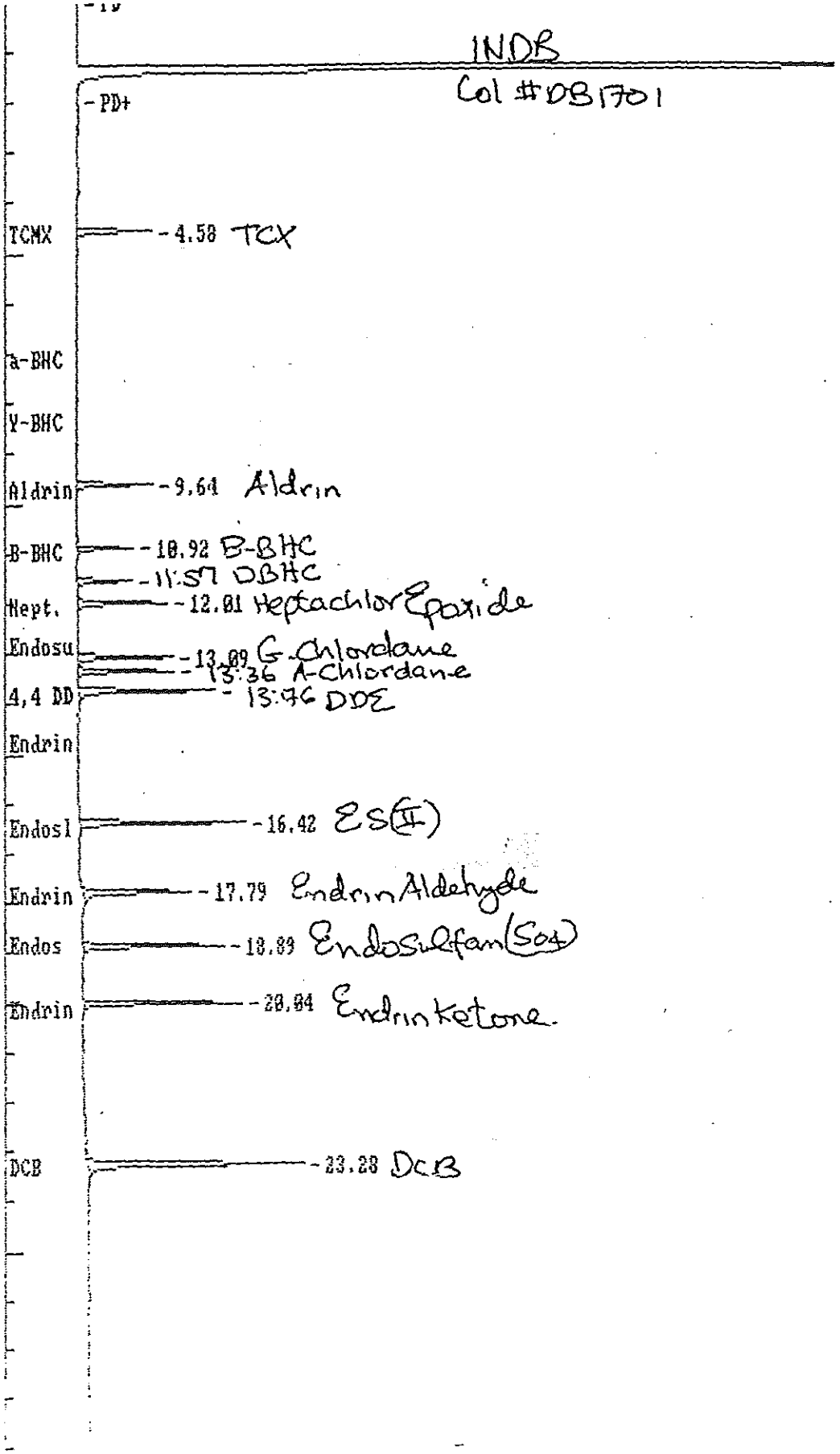
Sample Weight: 1.00000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	4.576	TCMX	22.7667	4.8880%	40868	9639	4.2	1	0	-.3636	5.5709E-04
2	9.636	Aldrin	21.4035	4.5953%	39897	9671	4.1	1	0	-.5172	5.3647E-04
3	10.922	B-BHC	21.7251	4.6643%	26979	7121	3.8	1	0	-.4566	8.0526E-04
4	11.573	d-BHC	24.7894	5.3223%	28078	6992	4.0	1	0	-.4310	8.8288E-04
5	12.007	Hept. epox.	23.9817	5.1488%	46194	11434	4.0	1	0	-.4155	5.1916E-04
6	13.093	Y-Chlordane	23.8802	5.1271%	50396	12182	4.1	2	0	-.3811	4.7386E-04
7	13.360	a-Chlordane	23.1276	4.9655%	49075	12169	4.0	2	0	-.3736	4.7127E-04
8	13.761	4,4 DDE	39.3007	8.4378%	75614	17398	4.3	1	0	-.3024	5.1975E-04
9	16.416	EndoslfII	46.4506	9.9729%	86249	21129	4.1	1	0	-.3547	5.3856E-04
10	17.785	Endrin ald	48.5128	10.4156%	68966	13928	5.0	1	0	-.4207	7.0343E-04
11	18.888	Endos sulf	51.1120	10.9737%	76079	17963	4.2	1	0	.2659	6.7183E-04
12	20.040	Endrin ket	54.7767	11.7605%	83888	20289	4.1	1	0	-.3322	6.5298E-04
13	23.280	DCB	63.9422	13.7283%	139366	28188	4.9	1	0	-.2147	4.5881E-04

TOTAL AMOUNT = 465.7693

GROUP NUMBER	GROUP AMOUNT	GROUP PERCENT

as, times, and heights stored in: E:KU26E29.ATB
a File = E:KU26E29.PTS Printed on 06-28-1995 at 15:25:57
rt time: 0.00 min. Stop time: 30.00 min. Offset: 1 mv.
l Range: 100 millivolts



9

PESTICIDE/PCB STANDARDS SUMMARY

Lab Name: EMSL ANALYTICAL Contract: _____

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

Instrument ID: HP5890/SERIES II GC Column ID: DB5

DATE(S) OF ANALYSIS FROM: 6-26-95 TO: 16:50
TIME(S) OF ANALYSIS FROM: 6-26-95 TO: 22:01

DATE OF ANALYSIS 6-28-95
TIME OF ANALYSIS 17:11
EPA SAMPLE NO. (STANDARD) 1194261

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR	RT	CALIBRATION FACTOR	QNT Y/N	%D
alpha-BHC	5:56	5:51	5:61	1567				
beta-BHC	6:25	6:20	6:30	1289				
delta-BHC	7:03	6:98	7:08	1346				
gamma-BHC	6:40	6:35	6:45	1723				
Heptaclor	8:43	8:38	8:48	2399				
Aldrin	9:47	9:42	9:52	2002				
Hept. epoxide	10:75	10:70	10:80	2160				
Endosulfan I	11:89	11:8	11:96	2210				
Dieldrin	12:74	12:67	12:81	2015				
4,4'-DDE	12:89	12:82	12:96	2118				
Endrin	13:41	13:34	13:48	1845				
Endosulfan II	13:73	13:66	13:80	2124				
4,4'-DDD	14:26	14:19	14:33	1386				
Endo.sulfate	15:18	15:11	15:25	1945				
4,4'-DDT	15:50	15:43	15:57	1379				
Methoxychlor	17:55	17:48	17:62	850				
Endrin ketone	16:63	16:56	16:70	2303				
a. Chlordane	12:02	11:95	12:09	2419				
g. Chlordane	11:82	11:45	11:89	2466				
Toxaphene	18:40	15:33	15:47	39283				
Aroclor-1016	8:02	7:95	8:09	231326	8:02	223426	Y	3
Aroclor-1221	5:58	5:51	5:65	88583				
Aroclor-1232	8:02	7:95	8:09	82663				
Aroclor-1242	8:02	7:95	8:09	183580				
Aroclor-1248	8:02	7:95	8:09	122492				
Aroclor-1254	13:08	13:01	13:15	179815				
Aroclor-1260	17:89	17:82	17:96	372656	17:89	387281	Y	4
Endrin Aldehyde	14:38	14:31	14:45	1845				

Under QNT Y/N: enter Y if quantitation was performed, N if not performed. %D must be less than or equal to 15.0% for quantitation, and less than or equal to 20.0% for confirmation.

Note: Determining that no compounds were found above the CRQL is a form of quantitation, and therefore at least one column must meet the 15.0% criteria.

For multicomponent analytes, the single largest peak that is characteristic of the component should be used to establish retention time and %D. Identification of such analytes is based primarily on pattern recognition

PESTICIDE/PCB STANDARDS SUMMARY

Lab Name: EMSL ANALYTICAL Contract: _____

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

Instrument ID: HP6890/SIIP GC Column ID: DB1701

DATE(S) OF ANALYSIS FROM: 6-26-95 TO: 6-26-95
TIME(S) OF ANALYSIS FROM: 16:50 TO: 22:01

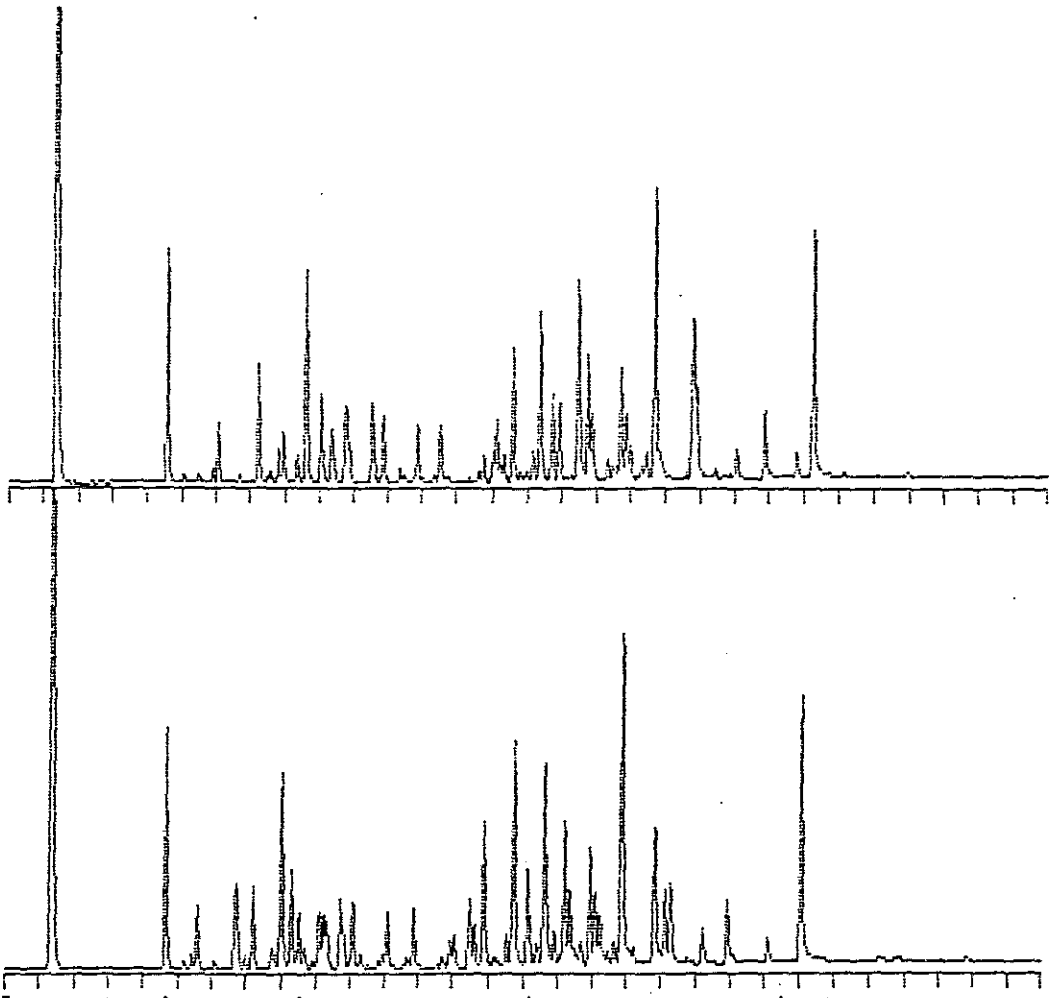
DATE OF ANALYSIS 6-28-95
TIME OF ANALYSIS 17:11
EPA SAMPLE NO. (STANDARD) 1194261

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR	RT	CALIBRATION FACTOR	QNT Y/N	%D
alpha-BHC	7:05	7:00	7:10	1612				
beta-BHC	10:92	10:87	10:98	1408				
delta-BHC	11:87	11:82	11:62	1429				
gamma-BHC	8:28	8:23	8:33	1719				
Heptaclor	8:85	8:80	8:90	2369				
Aldrin	9:65	9:60	9:70	2040				
Hept. epoxide	12:01	11:96	12:06	2312				
Endosulfan I	12:83	12:76	12:90	23306				
Dieldrin	14:06	13:99	14:13	2071				
4,4'-DDE	13:76	13:69	13:83	2044				
Endrin	14:71	14:64	14:78	1913				
Endosulfan II	16:42	16:35	16:49	2191				
4,4'-DDD	16:43	16:36	16:50	1344				
Endo.sulfate	18:89	18:82	18:96	1898				
4,4'-DDT	16:95	16:88	17:02	1045				
Methoxychlor	19:24	19:17	19:31	808				
Endrin ketone	20:04	19:97	20:11	2111				
a. Chlordane	13:36	13:29	13:43	2488				
g. Chlordane	13:09	13:02	13:16	2533				
Toxaphene	18:64	18:57	18:71	20967				
Aroclor-1016	8:60	8:53	8:67	213992	8:60	196689	Y	8
Aroclor-1221	6:06	5:99	6:13	82927				
Aroclor-1232	8:60	8:53	8:67	87045				
Aroclor-1242	8:60	8:53	8:67	164431				
Aroclor-1248	8:60	8:53	8:67	109514				
Aroclor-1254	14:03	13:96	14:10	174261				
Aroclor-1260	18:69	18:62	18:76	336857	18:69	325932	Y	3
Endrin Aldehyde	17:80	17:73	17:87	1748				

Under QNT Y/N: enter Y if quantitation was performed, N if not performed. %D must be less than or equal to 15.0% for quantitation, and less than or equal to 20.0% for confirmation.

Note: Determining that no compounds were found above the CRQL is a form of quantitation, and therefore at least one column must meet the 15.0% criteria.

For multicomponent analytes, the single largest peak that is characteristic of the component should be used to establish retention time and %D. Identification of such analytes is based primarily on pattern recognition



Interface 1] 0-30 Min Scale: 100 Mv Ch.A, 100 Mv Ch.B
A1660 1PPM Processed: 06-28-1995 17:41:51, segment 8, cycle 33
RAW DATA SAVED IN FILE E:JU26E33.PTS Second Channel Stored in E:KU26E33.PTS

***** EXTERNAL STANDARD TABLE *****

********** 06-28-1995 17:42:04 Version 5.1.5 **********

Sample Name: A1660 1PPM Data File: E:JU26E33

Date: 06-28-1995 17:11:31 Method: M:APES-G 03-08-1995 15:02:41 # 359

Interface: 1 Cycle#: 33 Operator JJK Channel#: 0 Vial#: N.A.

Starting Peak Width: 10 Threshold: 10 Area Threshold: 1000

Instrument Type: Perkin-Elmer 8500 Column Type: RTx-5 30m,.35mm

Solvent Description: 1.0u df

Conditions: 180 for 4.0min then 4.0deg/min to 240, hold 30min

Detector 0: Detector 1: ECD

Misc. Information:

Starting Delay: 0.00 Ending retention time: 31.00

Area reject: 1000 One sample per 1.002 sec.

Amount injected: 1.00 Dilution factor: 1.00

Sample Weight: 1.00000

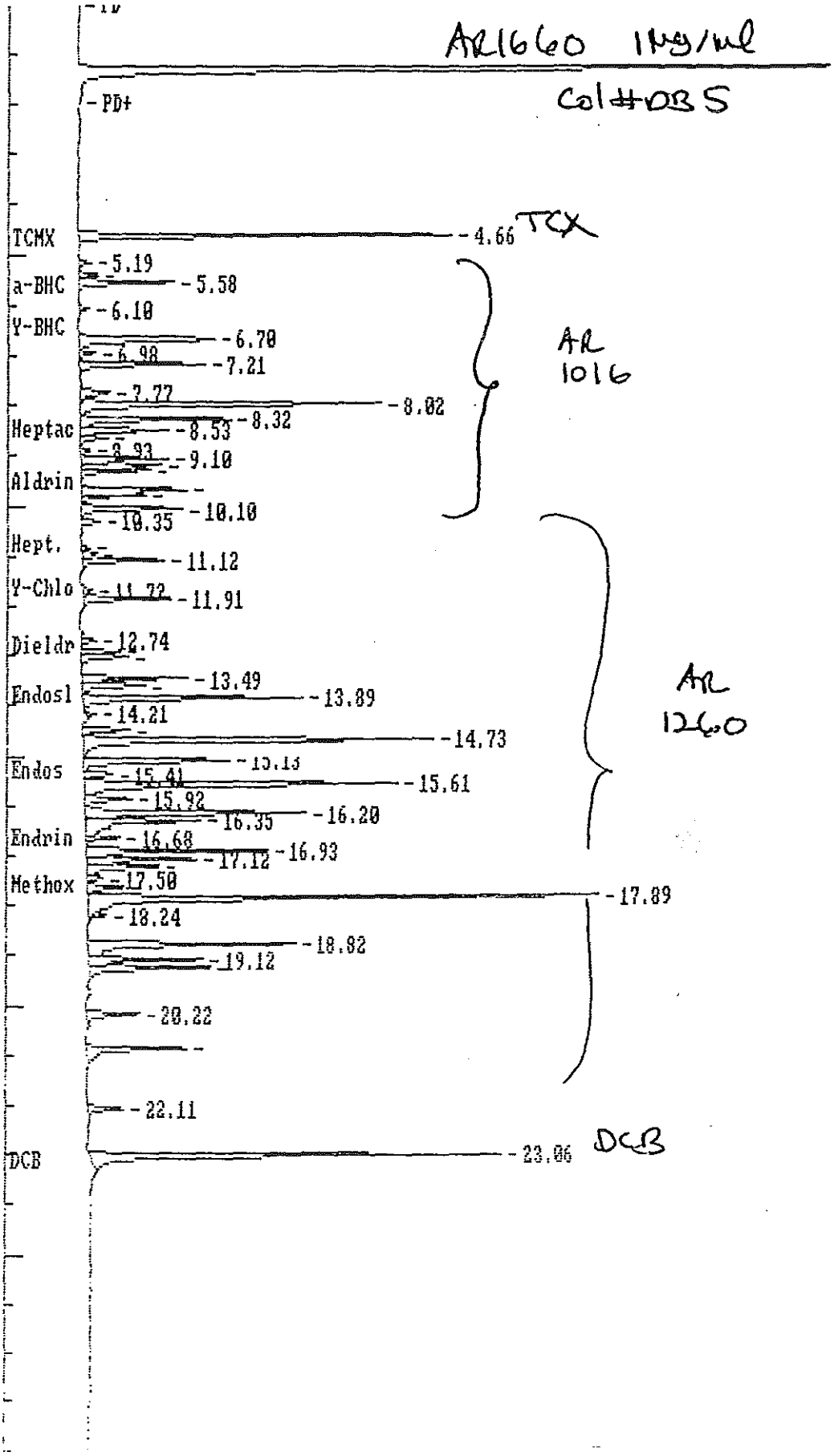
PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	UNC AREA
1	4.659	TCMX	112.4769	25.2057%	215626	49602	4.3	1	0	-.3571	5.2162E-04
2	5.194		0.0000	0.0000%	8721	1753	5.0	2			1.1102E-05
3	5.444		0.0000	0.0000%	13617	2568	5.3	2			1.1111E-03
4	5.578	a-BHC	37.3032	8.3565%	81075	11536	4.8	2	1	0	5.1111E-04

8	7.214		0.0001	0.0000%	79000	16555	4.8 2			1.0000E-09
9	7.766		0.0000	0.0000%	30400	4021	7.6 2			1.0000E-09
10	8.016		0.0002	0.0001%	223426	40291	5.5 2			1.0000E-09
11	8.317		0.0001	0.0000%	101213	19845	5.1 2			1.0000E-09
12	8.534	Heptachlor	24.9229	5.5851%	56853	11630	4.9 2	0	.7889	4.3837E-04
13	8.684		0.0000	0.0000%	18476	3778	4.9 2			1.0000E-09
14	8.934		0.0000	0.0000%	6115	1317	4.6 2			1.0000E-09
15	9.101		0.0001	0.0000%	55988	11553	4.8 2			1.0000E-09
16	9.218		0.0000	0.0000%	49365	10743	4.6 2			1.0000E-09
17	9.319	Aldrin	23.4873	5.2634%	52408	9273	5.7 2	0	-1.760	4.4816E-04
18	9.719		0.0001	0.0000%	69348	13923	5.0 2			1.0000E-09
19	9.820		0.0000	0.0000%	38008	8628	4.4 2			1.0000E-09
20	10.103		0.0001	0.0000%	74484	13519	5.5 2			1.0000E-09
21	10.354		0.0000	0.0000%	13129	2609	5.0 2			1.0000E-09
22	10.872	Hept. epox.	2.5598	0.5736%	5763	1270	4.5 2	0	.9302	4.4420E-04
23	10.989		0.0000	0.0000%	10253	2148	4.8 2			1.0000E-09
24	11.122		0.0001	0.0000%	55379	10968	5.0 2			1.0000E-09
25	11.723	Y-Chlordane	2.8556	0.6399%	7431	1237	6.0 2	0	.8620	3.8431E-04
26	11.907	Endosulfan I	24.7896	5.5553%	57208	11521	5.0 2	0	0	4.3333E-04
27	12.742	Dieldrin	4.0329	0.9038%	10116	2073	4.9 2	0	-.1308	3.9866E-04
28	12.959	4,4-DDE	9.6906	2.1716%	24670	5319	4.6 2	0	.3880	3.9281E-04
29	13.076		0.0000	0.0000%	33757	6455	5.2 2			1.0000E-09
30	13.494	Endrin	32.9630	7.3869%	67934	14147	4.8 2	0	.4350	4.8522E-04
31	13.644	Endoslf II	18.6490	4.1792%	44021	8497	5.2 2	0	-.8495	4.2364E-04
32	13.894		0.0002	0.0000%	160218	29369	5.5 2			1.0000E-09
33	14.212	4'4-DDD	3.3648	0.7540%	5668	1409	4.0 1	0	-.4678	5.9361E-04
34	14.529	Endrin ald	15.6013	3.4962%	31372	6391	4.9 2	0	.8695	4.9730E-04
35	14.729		0.0003	0.0001%	268844	46655	5.8 2			1.0000E-09
36	15.130		0.0001	0.0000%	116009	19269	6.0 2			1.0000E-09
37	15.414	DDT	13.5662	3.0401%	22932	3862	5.9 2	0	-.6458	5.9158E-04
38	15.615		0.0003	0.0001%	255887	41763	6.1 2			1.0000E-09
39	15.915		0.0000	0.0000%	37009	6336	5.8 2			1.0000E-09
40	16.199		0.0002	0.0000%	155048	29514	5.3 2			1.0000E-09
41	16.349		0.0001	0.0000%	102765	15240	6.7 2			1.0000E-09
42	16.683	Endrin ket.	9.9899	2.2387%	23636	4584	5.2 2	0	.2005	4.2265E-04
43	16.934		0.0001	0.0000%	121363	24037	5.0 2			1.0000E-09
44	17.117		0.0001	0.0000%	74184	14551	5.1 2			1.0000E-09
45	17.251		0.0001	0.0000%	64662	9653	6.7 2			1.0000E-09
46	17.502	Methoxychlor	13.9681	3.1302%	13628	2105	6.5 2	0	-.3802	1.0249E-03
47	17.669		0.0000	0.0000%	25841	4710	5.5 2			1.0000E-09
48	17.886		0.0004	0.0001%	387281	67910	5.7 3			1.0000E-09
49	18.236		0.0000	0.0000%	10606	2035	5.2 4			1.0000E-09
50	18.821		0.0002	0.0000%	169864	27732	6.1 2			1.0000E-09
51	19.121		0.0001	0.0000%	78496	15002	5.2 2			1.0000E-09
52	19.288		0.0001	0.0000%	91137	15951	5.7 2			1.0000E-09
53	20.224		0.0000	0.0000%	38113	7043	5.4 1			1.0000E-09
54	20.925		0.0001	0.0000%	82045	13308	6.2 1			1.0000E-09
55	22.111		0.0000	0.0000%	25422	4690	5.4 1			1.0000E-09
56	23.063	OCS	87.5044	19.6095%	298798	54531	5.5 1	0	-.1446	2.9285E-04

TOTAL AMOUNT = 446.2357

GROUP NUMBER	GROUP AMOUNT	GROUP PERCENT

Areas, times, and heights stored in: E:JU26E33.ATB
Data File = E:JU26E33.PTS Printed on 06-28-1995 at 17:42:22
Start time: 0.00 min. Stop time: 30.00 min. Offset: 1 mv.
Full Range: 100 millivolts



***** EXTERNAL STANDARD TABLE *****

********** 06-28-1995 17:43:42 Version 5.1.5 **********

Sample Name: A1660 1PPM Data File: E:KU26E33

Date: 06-28-1995 17:11:31 Method: M:BPES-G 03-31-1995 14:31:59 # 358

Interface: 1 Cycle#: 33 Operator JJK Channel#: 1 Vial#: N.A.

Starting Peak Width: 10 Threshold: 10 Area Threshold: 500

Instrument Type: Perkin-Elmer 8500 Column Type: RTx-5 30m,.35mm

Solvent Description: 1.0u df

Conditions: 180 for 4.0min then 4.0deg/min to 240, hold 30min

Detector 0: Detector 1: ECD

Misc. Information:

Starting Delay: 0.00 Ending retention time: 30.00

Area reject: 500 One sample per 1.002 sec.

Amount injected: 1.00 Dilution factor: 1.00

Sample Weight: 1.00000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	4.576	TCMX	111.2042	9.4285%	199618	48833	4.1	1	0	-.3636	5.5709E-04
2	5.060		0.0000	0.0000%	5696	1289	4.4	1			1.0000E-09
3	5.494		0.0000	0.0000%	8070	1746	4.6	1			1.0000E-09
4	5.912		0.0000	0.0000%	11972	2639	4.5	2			1.0000E-09
5	6.062		0.0001	0.0000%	56468	12501	4.5	2			1.0000E-09
	6.697		0.0000	0.0000%	7121	1547	4.6	1			1.0000E-09
	7.231		0.0001	0.0000%	106222	24536	4.3	2			1.0000E-09
8	7.582		0.0000	0.0000%	16535	2405	6.9	2			1.0000E-09
9	7.816		0.0000	0.0000%	30098	7213	4.2	2			1.0000E-09
10	7.949		0.0000	0.0000%	46753	10557	4.4	2			1.0000E-09
11	8.367	Y-BHC	16.3479	1.3861%	28287	5575	5.1	2	0	.4008	5.7793E-04
12	8.600		0.0002	0.0000%	196689	44330	4.4	2			1.0000E-09
13	9.035	Heptachlor	47.6343	4.0387%	90628	18175	5.0	2	0	1.691	5.2560E-04
14	9.352		0.0001	0.0000%	62388	10719	5.8	2			1.0000E-09
15	9.786	Aldrin	75.5709	6.4073%	140866	15447	9.1	1	0	1.034	5.3647E-04
16	10.554		0.0001	0.0000%	90498	16281	5.6	2			1.0000E-09
17	10.872	B-BHC	58.4656	4.9570%	72604	13273	5.5	2	0	-.9132	8.0526E-04
18	11.373		0.0000	0.0000%	12569	2733	4.6	2			1.0000E-09
19	11.506	d-BHC	5.1707	0.4384%	5857	1331	4.4	2	0	-1.005	8.8289E-04
20	11.890	Hept. epox.	31.4026	2.6625%	60488	11227	5.4	1	0	-1.385	5.1916E-04
21	12.358		0.0000	0.0000%	6108	1442	4.2	1			1.0000E-09
22	12.525		0.0001	0.0000%	52631	11524	4.6	1			1.0000E-09
23	13.377	a-Chlordane	0.9059	0.0768%	1922	435	4.4	1	0	-.2490	4.7127E-04
24	13.627		0.0000	0.0000%	9907	2111	4.7	2			1.0000E-09
25	13.761	4,4 DDE	12.2724	1.0405%	23612	5068	4.7	2	0	-.3024	5.1975E-04
26	14.028		0.0000	0.0000%	26513	6053	4.4	2			1.0000E-09
27	14.111	Dieldrin	39.5915	3.3568%	75222	12843	5.9	2	0	0	5.2633E-04
28	14.329		0.0000	0.0000%	25205	5254	4.8	2			1.0000E-09
29	14.596		0.0001	0.0000%	129794	27844	4.7	2			1.0000E-09
30	14.830	Endrin	12.0874	1.0248%	11545	2028	5.7	2	0	.4524	1.0470E-03
1	14.997		0.0000	0.0000%	10694	1943	5.5	2			1.0000E-09
	15.164		0.0000	0.0000%	28295	5907	4.8	2			1.0000E-09
	15.347		0.0002	0.0000%	171303	35185	4.9	2			1.0000E-09
34	15.715		0.0001	0.0000%	84231	17931	4.7	2			1.0000E-09
35	15.932		0.0001	0.0000%	77632	16032	4.8	2			1.0000E-09
36	16.239		0.0001	0.0000%	5273	1136	4.6	2			1.0000E-09
37	16.464	Dec[illegible]	116.4159	9.8736%	1384[illegible]	4[illegible]	[illegible]	2			[illegible]

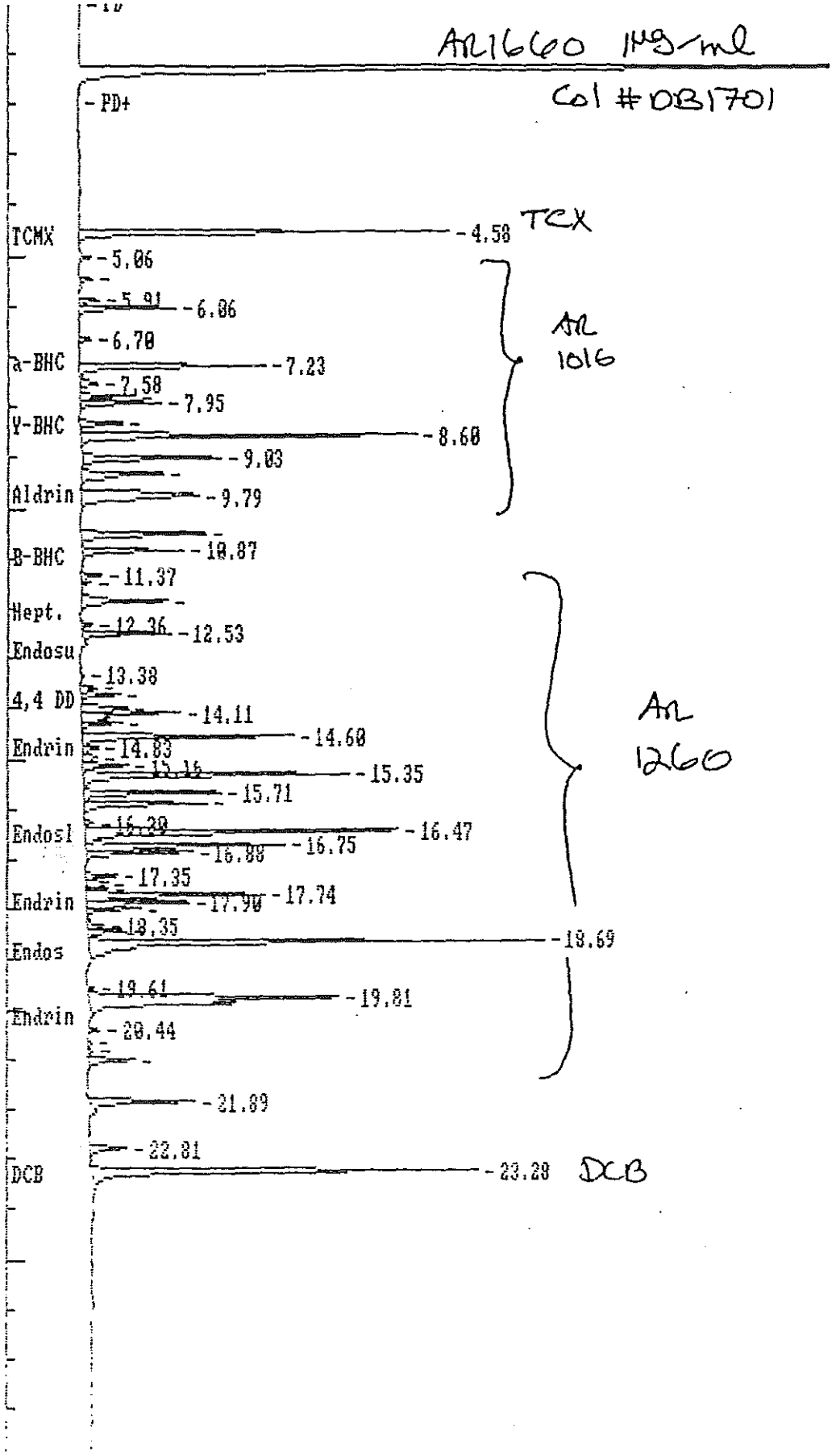
7/17/95

			0.0000	0.0000%	18958	4084	4.6 2			1.0000E-09
41	17.518		0.0000	0.0000%	14198	2796	5.1 2			1.0000E-09
42	17.602		0.0000	0.0000%	13646	2857	4.8 2			1.0000E-09
43	17.735		0.0001	0.0000%	113622	23410	4.9 2			1.0000E-09
44	17.902	Endrin ald	45.0891	3.8229%	64099	13235	4.8 2	0	.2337	7.0343E-04
45	18.019		0.0000	0.0000%	32991	6988	4.7 2			1.0000E-09
46	18.353		0.0000	0.0000%	12277	2154	5.7 2			1.0000E-09
47	18.470		0.0000	0.0000%	23666	4970	4.8 2			1.0000E-09
48	18.687	Endos sulf	218.9705	18.5655%	325932	60197	5.4 2	0	-.7978	6.7183E-04
49	19.606	Methoxychl	6.4653	0.5482%	4168	922	4.5 2	0	1.645	1.5511E-03
50	19.806	Endrin ket	195.5686	16.5814%	299504	33127	9.0 2	0	-1.495	6.5298E-04
51	20.441		0.0000	0.0000%	7496	1521	4.9 1			1.0000E-09
52	20.708		0.0000	0.0000%	2489	505	4.9 2			1.0000E-09
53	20.875		0.0000	0.0000%	3812	721	5.3 2			1.0000E-09
54	21.059		0.0000	0.0000%	30912	6047	5.1 2			1.0000E-09
55	21.894		0.0001	0.0000%	68175	13497	5.1 1			1.0000E-09
56	22.812		0.0000	0.0000%	25594	4832	5.3 1			1.0000E-09
57	23.280	DCB	119.1198	10.0996%	259629	50730	5.1 1	0	-.2147	4.5881E-04

TOTAL AMOUNT = 1179.4464

GROUP NUMBER	GROUP AMOUNT	GROUP PERCENT

Areas, times, and heights stored in: E:KU26E33.ATB
Data File = E:KU26E33.PTS Printed on 06-28-1995 at 17:44:20
Start time: 0.00 min. Stop time: 30.00 min. Offset: 1 mv.
Full Range: 100 millivolts



9

PESTICIDE/PCB STANDARDS SUMMARY

Lab Name: EMSL ANALYTICAL Contract: _____

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

Instrument ID: HP5890/SERP GC Column ID: DB5

DATE(S) OF ANALYSIS FROM: 6-26-95 TO: 16:50
TIME(S) OF ANALYSIS FROM: 6-26-95 TO: 22:01

DATE OF ANALYSIS 6-28-95
TIME OF ANALYSIS 19:27
EPA SAMPLE NO. (STANDARD) 119426

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR	RT	CALIBRATION FACTOR	QNT Y/N	%D
alpha-BHC	5:56	5:51	5:61	1557				
beta-BHC	6:25	6:20	6:30	1289				
delta-BHC	7:03	6:98	7:08	1346				
gamma-BHC	6:40	6:35	6:45	1723				
Heptaclor	8:43	8:38	8:48	2399				
Aldrin	9:47	9:42	9:52	2002				
Hept. epoxide	10:75	10:70	10:80	2160				
Endosulfan I	11:89	11:8	11:96	2210				
Dieldrin	12:74	12:67	12:81	2015				
4,4'-DDE	12:89	12:82	12:96	2118				
Endrin	13:41	13:34	13:48	1845				
Endosulfan II	13:73	13:66	13:80	8124				
4,4'-DDD	14:26	14:19	14:33	1586				
Endo.sulfate	15:18	15:11	15:25	1845				
4,4'-DDT	15:50	15:43	15:57	1379				
Methoxychlor	17:55	17:48	17:62	850				
Endrin ketone	16:63	16:56	16:70	2303				
a. Chlordane	12:02	11:95	12:09	2419				
g. Chlordane	11:62	11:45	11:59	2466				
Toxaphene	18:40	15:33	15:47	39283				
Aroclor-1016	8:02	7:95	8:09	231326	8:02	228149	Y	1
Aroclor-1221	5:58	5:51	5:65	88583				
Aroclor-1232	8:02	7:95	8:09	82663				
Aroclor-1242	8:02	7:95	8:09	183580				
Aroclor-1248	8:02	7:95	8:09	122492				
Aroclor-1254	13:08	13:01	13:15	179815				
Aroclor-1260	17:89	17:82	17:96	372656	17:89	403729	Y	8
Endrin Aldehyde	14:38	14:31	14:45	1845				

Under QNT Y/N: enter Y if quantitation was performed, N if not performed. %D must be less than or equal to 15.0% for quantitation, and less than or equal to 20.0% for confirmation.

Note: Determining that no compounds were found above the CRQL is a form of quantitation, and therefore at least one column must meet the 15.0% criteria.

For multicomponent analytes, the single largest peak that is characteristic of the component should be used to establish retention time and %D. Identification of such analytes is based primarily on pattern recognition

9

PESTICIDE/PCB STANDARDS SUMMARY

b Name: EMSL ANALYTICAL Contract: _____

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

nstrument ID: HP5890/SIIP GC Column ID: DB1701

DATE(S) OF ANALYSIS FROM: 6-26-95 TO: 16:50
TIME(S) OF ANALYSIS FROM: 6-26-95 TO: 22:01

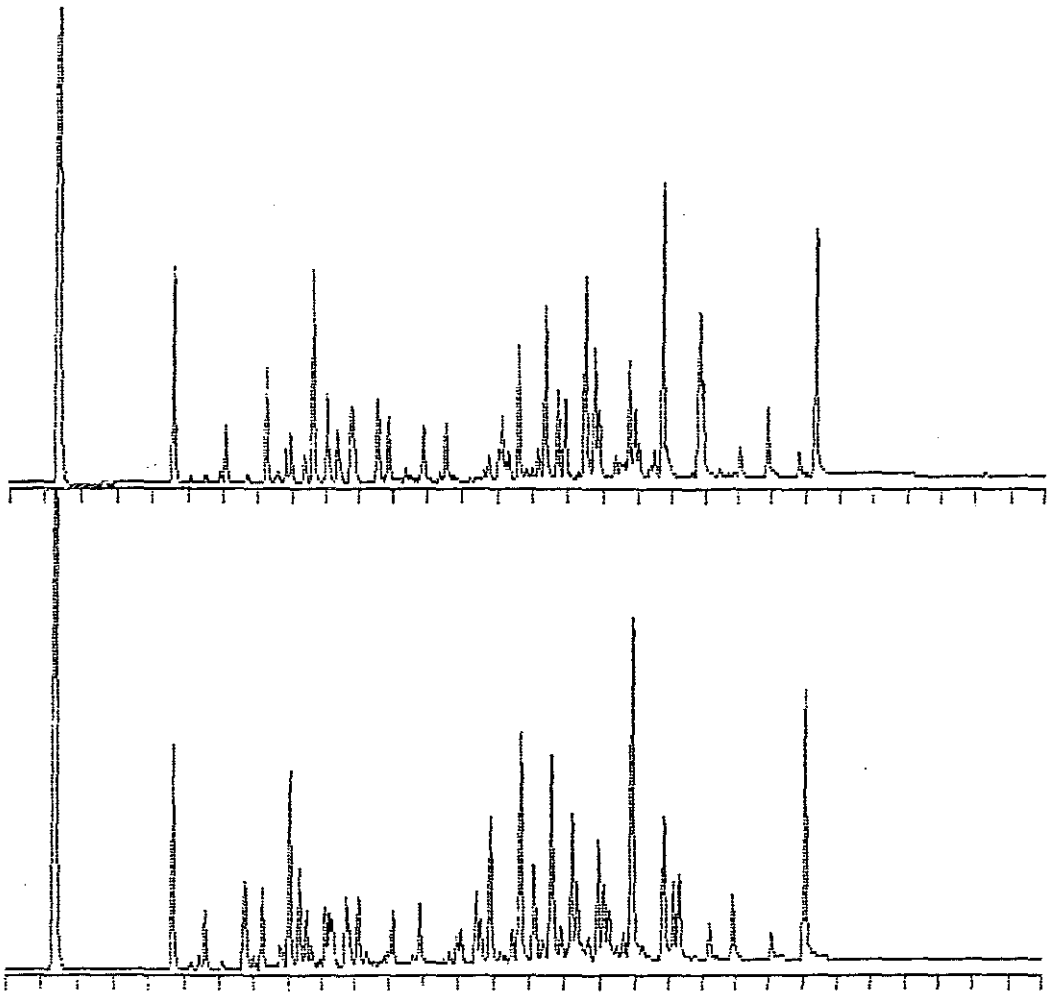
DATE OF ANALYSIS 6-28-95
TIME OF ANALYSIS 19:27
EPA SAMPLE NO. (STANDARD) 119426

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR	RT	CALIBRATION FACTOR	QNT Y/N	%D
alpha-BHC	7:05	7:00	7:10	1612				
beta-BHC	10:92	10:87	10:98	1408				
delta-BHC	11:87	11:82	11:62	1429				
gamma-BHC	8:28	8:23	8:33	1719				
Heptaclor	8:85	8:80	8:90	2369				
Aldrin	9:65	9:60	9:70	2040				
Hept. epoxide	12:01	11:96	12:06	2312				
Endosulfan I	12:83	12:76	12:90	2306				
Dieldrin	14:06	13:99	14:13	2071				
4,4'-DDE	13:76	13:69	13:83	2044				
Endrin	14:71	14:64	14:78	1913				
Endosulfan II	16:42	16:35	16:49	2191				
4,4'-DDD	16:43	16:36	16:50	1344				
Endo.sulfate	18:89	18:82	18:96	1898				
4,4'-DDT	16:95	16:88	17:02	1045				
Methoxychlor	19:24	19:17	19:31	808				
Endrin ketone	20:04	19:97	20:11	2111				
a. Chlordane	13:36	13:29	13:43	2488				
g. Chlordane	13:09	13:02	13:16	2533				
Toxaphene	18:64	18:57	18:71	20967				
Aroclor-1016	8:60	8:53	8:67	213992	8:60	200468	Y	6
Aroclor-1221	6:06	5:99	6:13	82927				
Aroclor-1232	8:60	8:53	8:67	87045				
Aroclor-1242	8:60	8:53	8:67	164431				
Aroclor-1248	8:60	8:53	8:67	109514				
Aroclor-1254	14:03	13:96	14:10	174261				
Aroclor-1260	18:69	18:62	18:76	336857	18:69	331690	Y	2
Endrin Aldehyde	17:80	17:73	17:87	1748				

Under QNT Y/N: enter Y if quantitation was performed, N if not performed. %D must be less than or equal to 15.0% for quantitation, and less than or equal to 20.0% for confirmation.

Note: Determining that no compounds were found above the CRQL is a form of quantitation, and therefore at least one column must meet the 15.0% criteria.

For multicomponent analytes, the single largest peak that is characteristic of the component should be used to establish retention time and %D. Identification of such analytes is based primarily on pattern recognition



[Interface 1] 0-30 Min Scale: 100 Mv Ch.A, 100 Mv Ch.B
A1660 1PPM Processed: 06-28-1995 19:58:17, segment 12, cycle 37
End of sequence file reached at cycle 37
RAW DATA SAVED IN FILE E:JU26E37.PTS Second Channel Stored in E:KU26E37.PTS

***** EXTERNAL STANDARD TABLE *****

********** 06-28-1995 19:58:30 Version 5.1.5 **********

Sample Name: A1660 1PPM Data File: E:JU26E37

Date: 06-28-1995 19:27:57 Method: M:APES-G 03-08-1995 15:02:41 # 359

Interface: 1 Cycle#: 37 Operator JJK Channel#: 0 Vial#: N.A.

Starting Peak Width: 10 Threshold: 10 Area Threshold: 1000

Instrument Type: Perkin-Elmer 8500 Column Type: RTx-5 30m,.35mm

Solvent Description: 1.0u df

Conditions: 180 for 4.0min then 4.0deg/min to 240, hold 30min

Detector 0: Detector 1: ECD

Misc. Information:

Starting Delay: 0.00 Ending retention time: 31.00

Area reject: 1000 One sample per 1.002 sec

Amount injected: 1.00 Dilution factor: 1.00

Sample Weight: 1.00000

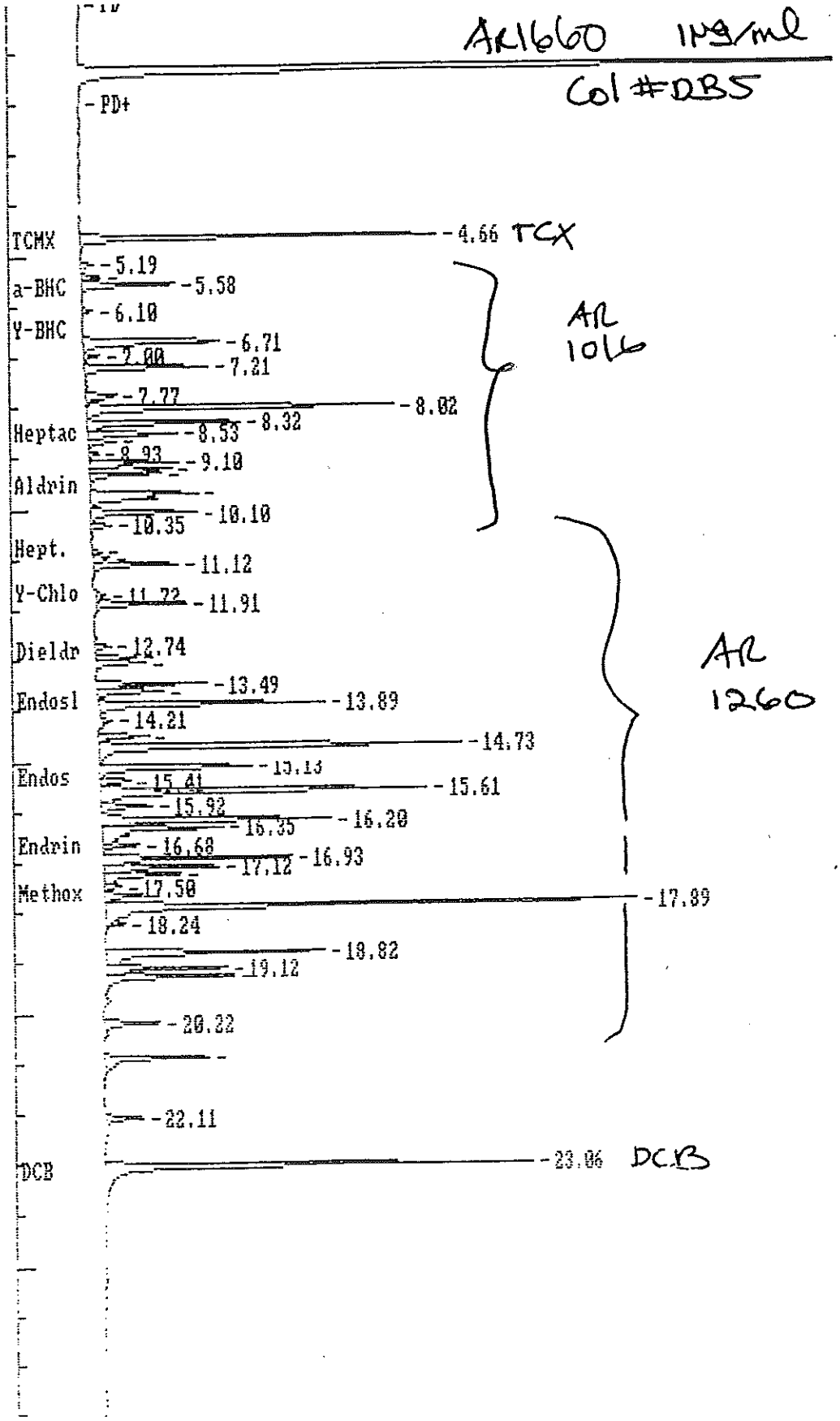
PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	AREA/ HEIGHT	HEIGHT RL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	4.263	TCNV	1.19	2.3514	21747	46604	4.7	0	-.3571	5.2163E-04

5	6.095		0.0000	0.0000%	7761	1500	5.2	1			1.0000E-09
6	6.713		0.0001	0.0000%	129638	17819	7.3	2			1.0000E-09
7	6.997	d-BHC	8.9529	1.9724%	11002	2156	5.1	2	0	-.7109	8.1376E-04
8	7.214		0.0001	0.0000%	77519	16169	4.8	1			1.0000E-09
9	7.766		0.0000	0.0000%	30745	4032	7.6	2			1.0000E-09
10	8.016		0.0002	0.0001%	228149	40404	5.6	2			1.0000E-09
11	8.317		0.0001	0.0000%	103445	20008	5.2	2			1.0000E-09
12	8.534	Heptachlor	25.5960	5.6390%	58389	11644	5.0	2	0	.7889	4.3837E-04
13	8.684		0.0000	0.0000%	19059	3764	5.1	2			1.0000E-09
14	8.934		0.0000	0.0000%	6347	1323	4.8	2			1.0000E-09
15	9.101		0.0001	0.0000%	56529	11671	4.8	2			1.0000E-09
16	9.218		0.0001	0.0000%	57035	10689	5.3	2			1.0000E-09
17	9.319	Aldrin	21.2537	4.6824%	47424	9401	5.0	2	0	-1.760	4.4816E-04
18	9.719		0.0001	0.0000%	109991	14032	7.8	2			1.0000E-09
19	10.103		0.0001	0.0000%	76599	13885	5.5	2			1.0000E-09
20	10.354		0.0000	0.0000%	13509	2666	5.1	2			1.0000E-09
21	10.872	Hept. epox.	2.5965	0.5720%	5845	1290	4.5	2	0	.9302	4.4420E-04
22	10.989		0.0000	0.0000%	10388	2157	4.8	2			1.0000E-09
23	11.122		0.0001	0.0000%	56718	11099	5.1	2			1.0000E-09
24	11.723	Y-Chlordane	2.9360	0.6468%	7640	1270	6.0	2	0	.8620	3.8431E-04
25	11.907	Endosulfan I	25.3256	5.5794%	58444	11777	5.0	2	0	0	4.3333E-04
26	12.742	Dieldrin	4.1292	0.9097%	10358	2110	4.9	2	0	-.1308	3.9866E-04
27	12.959	4,4-DDE	9.8530	2.1707%	25084	5430	4.6	2	0	.3880	3.9281E-04
28	13.076		0.0000	0.0000%	34571	6627	5.2	2			1.0000E-09
29	13.494	Endrin	33.8511	7.4576%	69764	14415	4.8	2	0	.4350	4.8522E-04
30	13.644	Endosulf II	19.1433	4.2174%	45188	8647	5.2	2	0	-.8495	4.2364E-04
31	13.894		0.0002	0.0000%	163861	29927	5.5	2			1.0000E-09
32	14.212	4'4-DDD	3.4927	0.7695%	5884	1468	4.0	1	0	-.4678	5.9361E-04
33	14.529	Endrin ald	16.0660	3.5395%	32307	6546	4.9	2	0	.8695	4.9730E-04
34	14.729		0.0003	0.0001%	-275408	47464	5.8	2			1.0000E-09
35	15.130		0.0001	0.0000%	119789	19886	6.0	2			1.0000E-09
5	15.414	DDT	14.1805	3.1241%	23971	3992	6.0	2	0	-.6458	5.9158E-04
37	15.615		0.0003	0.0001%	-263868	42731	6.2	2			1.0000E-09
38	15.915		0.0000	0.0000%	39059	6689	5.8	2			1.0000E-09
39	16.199		0.0002	0.0000%	-161218	30401	5.3	2			1.0000E-09
40	16.349		0.0001	0.0000%	107233	15819	6.8	2			1.0000E-09
41	16.683	Endrin ket.	10.6912	2.3553%	25295	4846	5.2	2	0	.2005	4.2265E-04
42	16.934		0.0001	0.0000%	125577	24858	5.1	2			1.0000E-09
43	17.117		0.0001	0.0000%	77007	15141	5.1	2			1.0000E-09
44	17.251		0.0001	0.0000%	67173	10057	6.7	2			1.0000E-09
45	17.502	Methoxychlor	15.1119	3.3293%	14744	2261	6.5	2	0	-.3802	1.0249E-03
46	17.669		0.0000	0.0000%	27811	4969	5.6	2			1.0000E-09
47	17.886		0.0004	0.0001%	-403726	70217	5.7	3			1.0000E-09
48	18.236		0.0000	0.0000%	11181	2143	5.2	4			1.0000E-09
49	18.821		0.0002	0.0000%	-176757	28948	6.1	2			1.0000E-09
50	19.121		0.0001	0.0000%	81970	15739	5.2	2			1.0000E-09
51	19.305		0.0001	0.0000%	95071	16657	5.7	2			1.0000E-09
52	20.224		0.0000	0.0000%	39649	7205	5.4	1			1.0000E-09
53	20.925		0.0001	0.0000%	84385	13747	6.2	1			1.0000E-09
54	22.111		0.0000	0.0000%	26119	4839	5.4	1			1.0000E-09
55	23.063	DCB	89.0306	19.6141%	304010	55703	5.5	1	0	-.1446	2.9295E-04

TOTAL AMOUNT = 453.9108

GROUP NUMBER	GROUP AMOUNT	GROUP PERCENT

Areas, times, and heights stored in: E:JU26E37.AT8
Data File = E:JU26E37.PTS Printed on 06-28-1995 at 19:58:48
Start time: 0.00 min. Stop time: 30.00 min. Offset: 1 mv.
Full Range: 100 millivolts



***** EXTERNAL STANDARD TABLE *****

********** 06-28-1995 20:00:10 Version 5.1.5 **********

Sample Name: A1660 1PPM Data File: E:KU26E37

Date: 06-28-1995 19:27:57 Method: M:BPES-G 03-31-1995 14:31:59 # 358

Interface: 1 Cycle#: 37 Operator JJK Channel#: 1 Vial#: N.A.

Starting Peak Width: 10 Threshold: 10 Area Threshold: 500

Instrument Type: Perkin-Elmer 8500 Column Type: RTx-5 30m,.35mm

Solvent Description: 1.0u df

Conditions: 180 for 4.0min then 4.0deg/min to 240, hold 30min

Detector 0: Detector 1: ECD

Misc. Information:

Starting Delay: 0.00 Ending retention time: 30.00

Area reject: 500 One sample per 1.002 sec.

Amount injected: 1.00 Dilution factor: 1.00

Sample Weight: 1.00000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	4.576	TCMX	112.0876	9.3615%	201204	45462	4.4	1	0	-.3636	5.5709E-04
2	5.060		0.0000	0.0000%	5983	1231	4.9	1			1.0000E-09
3	5.494		0.0000	0.0000%	8108	1655	4.9	1			1.0000E-09
4	5.912		0.0000	0.0000%	12023	2518	4.8	2			1.0000E-09
5	6.062		0.0001	0.0000%	57717	11984	4.8	2			1.0000E-09
6	6.697		0.0000	0.0000%	7191	1503	4.8	1			1.0000E-09
7	7.231		0.0001	0.0000%	108767	24205	4.5	2			1.0000E-09
8	7.582		0.0000	0.0000%	16998	2417	7.0	2			1.0000E-09
9	7.816		0.0000	0.0000%	30454	7121	4.3	2			1.0000E-09
10	7.949		0.0000	0.0000%	47875	10277	4.7	2			1.0000E-09
11	8.367	Y-BHC	16.5534	1.3825%	28643	5617	5.1	2	0	.4008	5.7793E-04
12	8.600		0.0002	0.0000%	200468	44183	4.5	2			1.0000E-09
13	9.035	Heptachlor	48.5738	4.0569%	92416	18232	5.1	2	0	1.691	5.2560E-04
14	9.352		0.0001	0.0000%	63529	10791	5.9	2			1.0000E-09
15	9.786	Aldrin	76.7226	6.4079%	143013	15645	9.1	1	0	1.034	5.3647E-04
16	10.554		0.0001	0.0000%	91504	16516	5.6	2			1.0000E-09
17	10.872	B-BHC	59.3695	4.9585%	77727	13397	5.5	2	0	-.9132	8.0526E-04
18	11.373		0.0000	0.0000%	12732	2719	4.7	2			1.0000E-09
19	11.506	d-BHC	5.2406	0.4377%	5916	1330	4.5	2	0	-1.005	8.8688E-04
20	11.890	Hept. epox.	31.7985	2.6558%	61260	11308	5.4	1	0	-1.365	5.1916E-04
21	12.358		0.0000	0.0000%	6139	1438	4.3	1			1.0000E-09
22	12.525		0.0001	0.0000%	53038	11478	4.6	1			1.0000E-09
23	13.377	a-Chlordane	0.9005	0.0752%	1911	431	4.4	1	0	-.2490	4.7127E-04
24	13.627		0.0000	0.0000%	10056	2135	4.7	2			1.0000E-09
25	13.761	4,4 DDE	12.4255	1.0378%	23937	5108	4.7	2	0	-.3024	5.1975E-04
26	14.028		0.0000	0.0000%	27142	6143	4.4	2			1.0000E-09
27	14.111	Dieldrin	40.1407	3.3525%	76146	12984	5.9	2	0	0	5.2633E-04
28	14.329		0.0000	0.0000%	25333	5353	4.8	2			1.0000E-09
29	14.596		0.0001	0.0000%	133540	29081	4.7	2			1.0000E-09
30	14.830	Endrin	12.2568	1.0237%	21717	2051	5.7	2	0	.4524	1.0473E-03
31	14.997		0.0000	0.0000%	11880	1965	5.5	2			1.0000E-09
32	15.164		0.0000	0.0000%	28677	5951	4.8	2			1.0000E-09
33	15.347		0.0002	0.0000%	174217	35660	4.9	2			1.0000E-09
34	15.715		0.0001	0.0000%	85134	18010	4.7	2			1.0000E-09
35	15.992		0.0001	0.0000%	79496	16137	4.9	2			1.0000E-09

S00 7/17/95

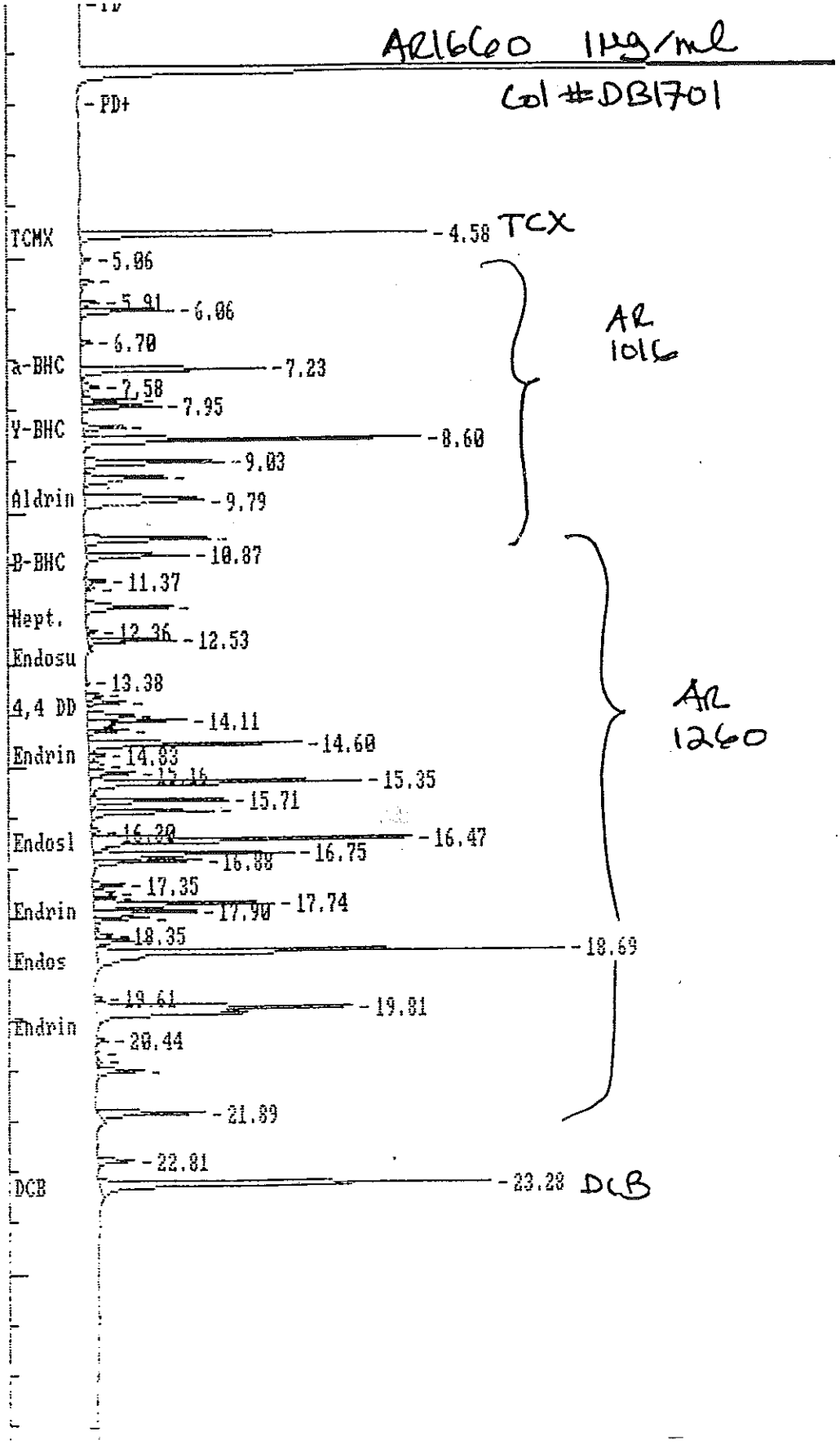
A1260 987000

39	16.884	4,4 DDT	55.8225	4.6623%	64956	14045	4.6 2	0	-.6876	8.5939E-04
40	17.351		0.0000	0.0000%	19128	4114	4.6 2			1.0000E-09
41	17.518		0.0000	0.0000%	14311	2816	5.1 2			1.0000E-09
42	17.602		0.0000	0.0000%	13762	2897	4.7 2			1.0000E-09
43	17.735		0.0001	0.0000%	112441	23722	4.7 2			1.0000E-09
44	17.902	Endrin ald	47.5974	3.9753%	67665	13372	5.1 2	0	.2337	7.0343E-04
45	18.019		0.0000	0.0000%	33189	7129	4.7 2			1.0000E-09
46	18.353		0.0000	0.0000%	12469	2185	5.7 2			1.0000E-09
47	18.470		0.0000	0.0000%	24042	5023	4.8 2			1.0000E-09
48	18.687	Endos sulf	222.8390	18.6115%	331690	61190	5.4 2	0	-.7978	6.7183E-04
49	19.606	Methoxychl	6.5543	0.5474%	4226	928	4.6 2	0	1.645	1.5511E-03
50	19.806	Endrin ket	198.7057	16.5959%	304308	33747	9.0 2	0	-1.495	6.5298E-04
51	20.441		0.0000	0.0000%	7552	1533	4.9 1			1.0000E-09
52	20.708		0.0000	0.0000%	2595	517	5.0 2			1.0000E-09
53	20.875		0.0000	0.0000%	3811	712	5.4 2			1.0000E-09
54	21.059		0.0000	0.0000%	31348	6120	5.1 2			1.0000E-09
55	21.894		0.0001	0.0000%	69186	13769	5.0 1			1.0000E-09
56	22.812		0.0000	0.0000%	25616	4840	5.3 1			1.0000E-09
57	23.280	DCB	119.3487	9.9680%	260128	51164	5.1 1	0	-.2147	4.5881E-04

TOTAL AMOUNT = 1197.3201

GROUP NUMBER	GROUP AMOUNT	GROUP PERCENT

Areas, times, and heights stored in: E:KU26E37.ATB
ta File = E:KU26E37.PTS Printed on 06-28-1995 at 20:00:46
art time: 0.00 min. Stop time: 30.00 min. Offset: 1 mv.
ull Range: 100 millivolts



9

PESTICIDE/PCB STANDARDS SUMMARY

Lab Name: EMSL ANALYTICAL Contract: _____

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

Instrument ID: HP5890/6IP GC Column ID: DB5

DATE(S) OF ANALYSIS FROM: 6-26-95 TO: 16:50
TIME(S) OF ANALYSIS FROM: 6-26-95 TO: 22:01
DATE OF ANALYSIS 6-29-95
TIME OF ANALYSIS 15:32
EPA SAMPLE NO. (STANDARD) 1194262 / 1194263

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR	RT	CALIBRATION FACTOR	QNT Y/N	%D
alpha-BHC	5:56	5:51	5:61	1557	5:56	1531	Y	2
beta-BHC	6:25	6:20	6:30	1289	6:25	1309	Y	2
delta-BHC	7:03	6:98	7:08	1346	7:03	1383	Y	3
gamma-BHC	6:40	6:35	6:45	1723	6:40	1708	Y	1
Heptaclor	8:43	8:38	8:48	2399	8:43	2548	Y	6
Aldrin	9:47	9:42	9:52	2002	9:47	2175	Y	9
Hept. epoxide	10:75	10:70	10:80	2160	10:76	2372	Y	10
Endosulfan I	11:89	11:8	11:96	2210	11:87	2304	Y	4
Dieldrin	12:74	12:67	12:81	3015	12:74	3150	Y	7
4,4'-DDE	12:89	12:82	12:96	2118	12:88	2216	Y	5
Endrin	13:41	13:34	13:48	1845	13:41	1976	Y	7
Endosulfan II	13:73	13:66	13:80	2124	13:73	2302	Y	8
4,4'-DDD	14:26	14:19	14:33	1386	14:26	1428	Y	3
Endo.sulfate	15:18	15:11	15:25	1845	15:18	1950	Y	6
4,4'-DDT	15:50	15:43	15:57	1379	15:50	1445	Y	5
Methoxychlor	17:55	17:48	17:62	850	17:55	1101	N	30
Endrin ketone	16:63	16:56	16:70	2303	16:62	2521	Y	9
a. Chlordane	12:02	11:95	12:09	2419	12:02	2643	Y	7
g. Chlordane	11:62	11:45	11:59	2466	11:51	2692	Y	9
Toxaphene	18:40	15:33	15:47	39283				
Aroclor-1016	8:02	7:95	8:09	231326				
Aroclor-1221	5:58	5:51	5:65	88583				
Aroclor-1232	8:02	7:95	8:09	82663				
Aroclor-1242	8:02	7:95	8:09	183580				
Aroclor-1248	8:02	7:95	8:09	122492				
Aroclor-1254	13:08	13:01	13:15	179815				
Aroclor-1260	17:89	17:82	17:96	372656				
Endrin Aldehyde	14:38	14:31	14:45	1845	14:38	2224	N	21

Under QNT Y/N: enter Y if quantitation was performed, N if not performed. %D must be less than or equal to 15.0% for quantitation, and less than or equal to 20.0% for confirmation.

Note: Determining that no compounds were found above the CRQL is a form of quantitation, and therefore at least one column must meet the 15.0% criteria.

For multicomponent analytes, the single largest peak that is characteristic of the component should be used to establish retention time and %D. Identification of such analytes is based primarily on pattern recognition

9

PESTICIDE/PCB STANDARDS SUMMARY

Lab Name: EMSL ANALYTICAL Contract: _____

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

Instrument ID: HP5890/SIIP GC Column ID: DB1701

DATE(S) OF ANALYSIS FROM: 6-26-95 TO: 16:50
TIME(S) OF ANALYSIS FROM: 6-26-95 TO: 22:01

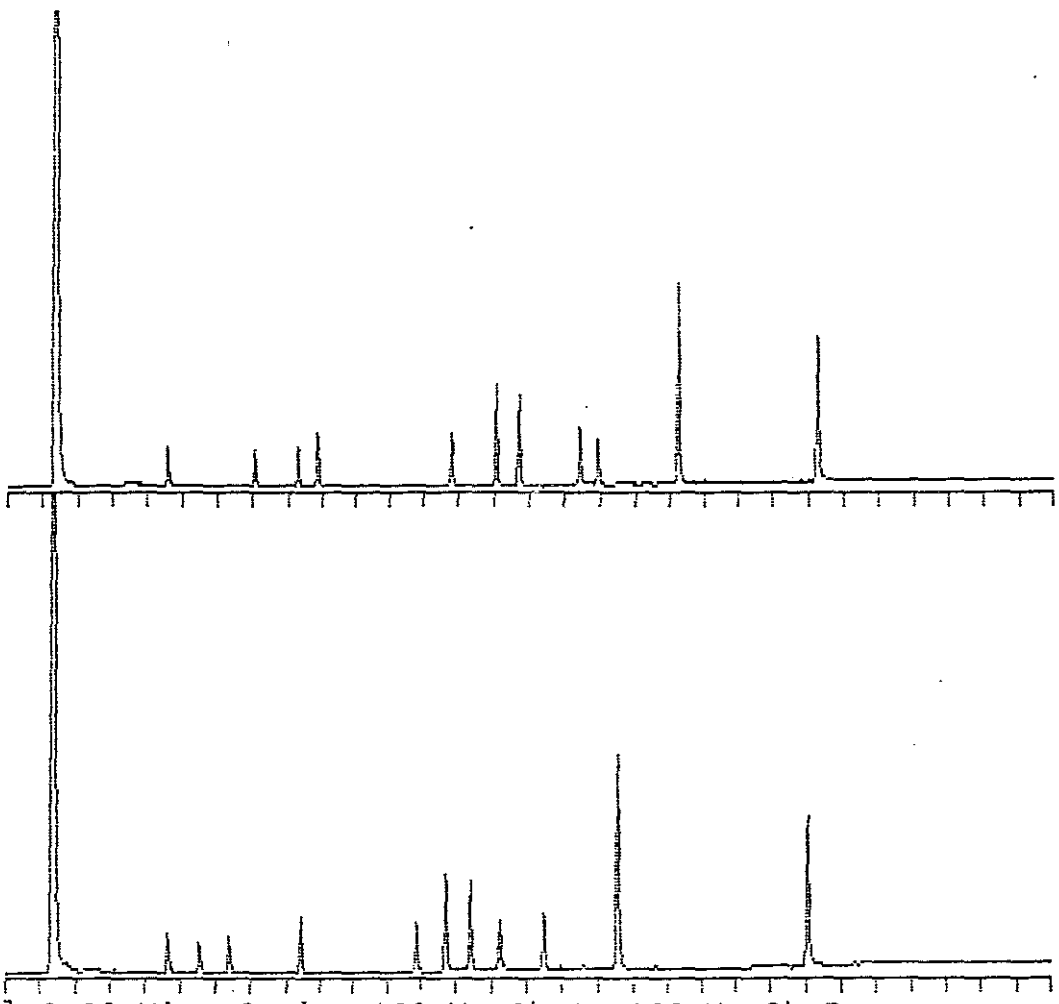
DATE OF ANALYSIS 6-29-95
TIME OF ANALYSIS 15:32
EPA SAMPLE NO. (STANDARD) 1194262 1194263

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR	RT	CALIBRATION FACTOR	QNT Y/N	%D
alpha-BHC	7:05	7:00	7:10	1612	7:05	1603	Y	1
beta-BHC	10:92	10:87	10:98	1408	10:92	1420	Y	2
delta-BHC	11:57	11:52	11:62	1429	11:57	1476	Y	3
gamma-BHC	8:28	8:23	8:33	1719	8:28	1728	Y	1
Heptaclor	8:85	8:80	8:90	2369	8:85	2433	Y	3
Aldrin	9:65	9:60	9:70	2040	9:65	2105	Y	3
Hept. epoxide	12:01	11:96	12:06	2312	12:01	2427	Y	5
Endosulfan I	12:83	12:76	12:90	2306	12:81	2345	Y	2
Dieldrin	14:06	13:99	14:13	2071	14:06	2134	Y	3
4,4'-DDE	13:76	13:69	13:83	2044	13:76	2008	Y	2
Endrin	14:71	14:64	14:78	1913	14:71	1960	Y	2
Endosulfan II	16:42	16:35	16:49	2191	16:42	2271	Y	4
4,4'-DDD	16:43	16:36	16:50	1344	16:43	1362	Y	1
Endo.sulfate	18:89	18:82	18:96	1898	18:89	1931	Y	2
4,4'-DDT	16:95	16:88	17:02	1045	16:95	1062	Y	2
Methoxychlor	19:24	19:17	19:31	808	19:24	927	Y	15
Endrin ketone	20:04	19:97	20:11	2111	20:04	2202	Y	4
a. Chlordane	13:36	13:29	13:43	2488	13:36	2576	Y	4
g. Chlordane	13:09	13:02	13:16	2533	13:09	2631	Y	4
Toxaphene	18:64	18:57	18:71	20967				
Aroclor-1016	8:60	8:53	8:67	213992				
Aroclor-1221	6:06	5:99	6:13	82927				
Aroclor-1232	8:60	8:53	8:67	87045				
Aroclor-1242	8:60	8:53	8:67	164431				
Aroclor-1248	8:60	8:53	8:67	109514				
Aroclor-1254	14:03	13:96	14:10	174261				
Aroclor-1260	18:69	18:62	18:76	336857				
Endrin Aldehyde	17:80	17:73	17:87	1748	17:80	1854	Y	6

Under QNT Y/N: enter Y if quantitation was performed, N if not performed. %D must be less than or equal to 15.0% for quantitation, and less than or equal to 20.0% for confirmation.

Note: Determining that no compounds were found above the CRQL is a form of quantitation, and therefore at least one column must meet the 15.0% criteria.

For multicomponent analytes, the single largest peak that is characteristic of the component should be used to establish retention time and %D. Identification of such analytes is based primarily on pattern recognition



Interface 1] 0-30 Min Scale: 100 Mv Ch.A, 100 Mv Ch.B
INDA Processed: 06-29-1995 16:08:51, segment 3, cycle 40
AW DATA SAVED IN FILE E:JU26E40.PTS Second Channel Stored in E:KU26E40.PTS

***** EXTERNAL STANDARD TABLE *****

********** 06-29-1995 16:09:03 Version 5.1.5 **********

Sample Name: INDA Data File: E:JU26E40

Date: 06-29-1995 15:32:29 Method: M:APES-G 03-08-1995 15:02:41 # 359

Interface: 1 Cycle#: 40 Operator JJK Channel#: 0 Vial#: N.A.

Starting Peak Width: 10 Threshold: 10 Area Threshold: 1000

Instrument Type: Perkin-Elmer 8500 Column Type: RTx-5 30m,.35mm

Solvent Description: 1.0u df

Conditions: 180 for 4.0min then 4.0deg/min to 240, hold 30min

Detector 0: Detector 1: ECD

Misc. Information:

Starting Delay: 0.00 Ending retention time: 30.00

Area reject: 1000 One sample per 1.002 sec.

Amount injected: 1.00 Dilution Factor: 1.00

Sample Weight: 1.00000

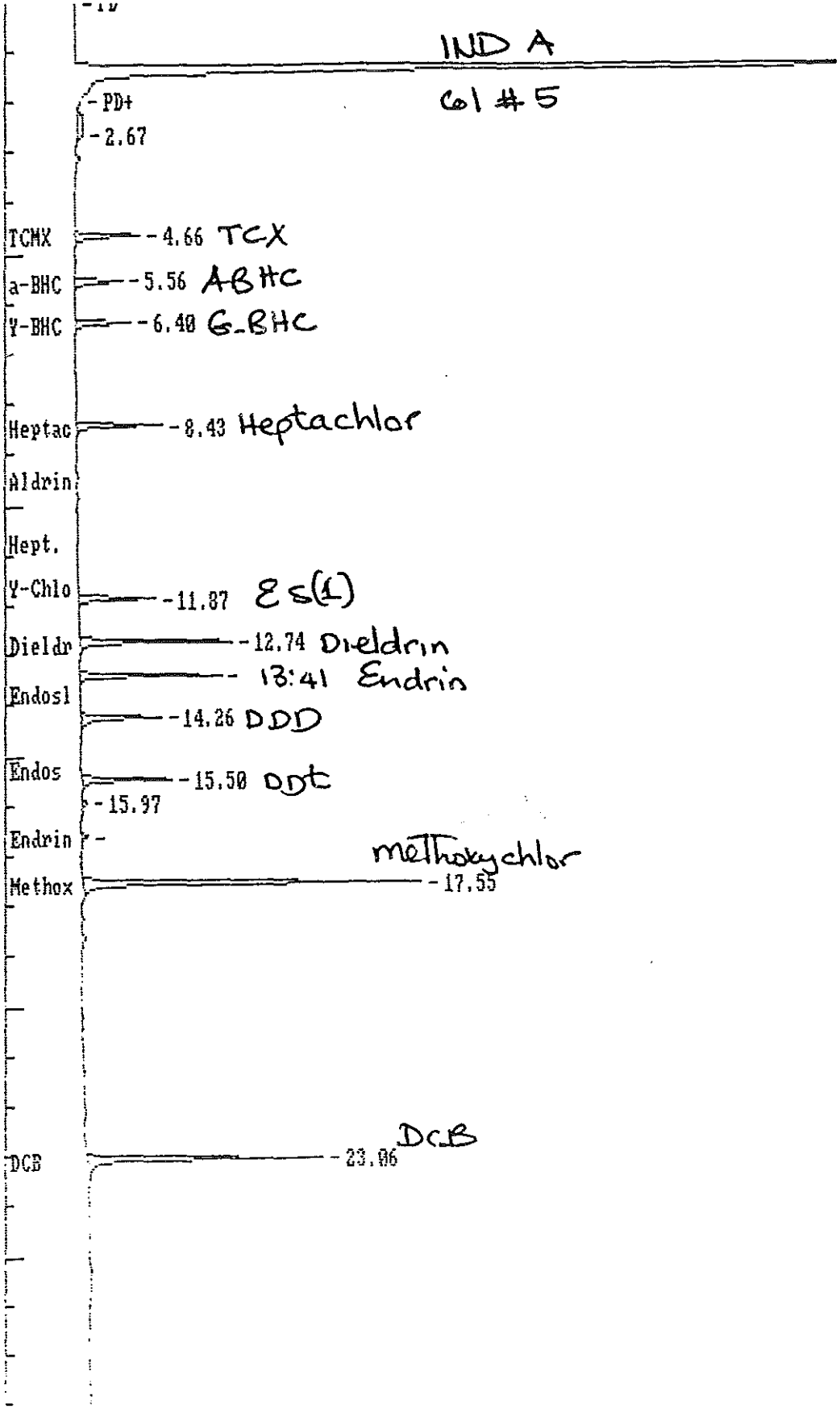
PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	APEX HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	2.671		0.0000	0.0000%	22365	933	17.1	:			1.0000E-09
									1	-.357	5.2162E-14

	8.433	Heptachlor	22.3398	4.3001%	50961	11218	4.5	1	0	340	-.3944	4.3837E-04
	11.874	Endosulfan I	19.9667	3.8433%	46077	10000	4.6	1	0		-.2805	4.3333E-04
7	12.742	Dieldrin	34.2798	6.5983%	85988	19904	4.3	1	0		-.1308	3.9866E-04
	13.410	Endrin	38.3538	7.3825%	79044	18366	4.3	1	0		-.1864	4.8522E-04
	14.262	4'4-DDD	33.9078	6.5267%	57121	10444	5.5	1	0		-.1169	5.9361E-04
10	15.498	DDT	34.1892	6.5809%	57793	11760	4.9	1	0		-.1076	5.9158E-04
	15.965		0.0000	0.0000%	3438	707	4.9	1				1.0000E-09
	16.633	Endrin ket.	2.1908	0.4217%	5183	971	5.3	1	0		-.1003	4.2265E-04
13	17.552	Methoxychlor	225.7890	43.4607%	220294	44348	5.0	1	0		0	1.0249E-03
14	23.063	DCB	47.7119	9.1838%	162920	30856	5.3	1	0		-.1446	2.9285E-04

TOTAL AMOUNT = 519.5241

GROUP NUMBER GROUP AMOUNT GROUP PERCENT

eas, times, and heights stored in: E:JU26E40.ATB
ta File = E:JU26E40.PTS Printed on 06-29-1995 at 16:09:13
Start time: 0.00 min. Stop time: 30.00 min. Offset: 1 mv.
Full Range: 100 millivolts



PD-

***** EXTERNAL STANDARD TABLE *****

********** 06-29-1995 16:09:28 Version 5.1.5 **********

Sample Name: INDA Data File: E:KU26E40

Date: 06-29-1995 15:32:29 Method: M:BPES-G 03-31-1995 14:31:59 # 358

Interface: 1 Cycle#: 40 Operator JJK Channel#: 1 Vial#: N.A.

Starting Peak Width: 10 Threshold: 10 Area Threshold: 500

Instrument Type: Perkin-Elmer 8500 Column Type: RTx-5 30m,.35mm

Solvent Description: 1.0u df

Conditions: 180 for 4.0min then 4.0deg/min to 240, hold 30min

Detector 0: Detector 1: ECD

Misc. Information:

Starting Delay: 0.00 Ending retention time: 30.00

Area reject: 500 One sample per 1.002 sec.

Amount injected: 1.00 Dilution factor: 1.00

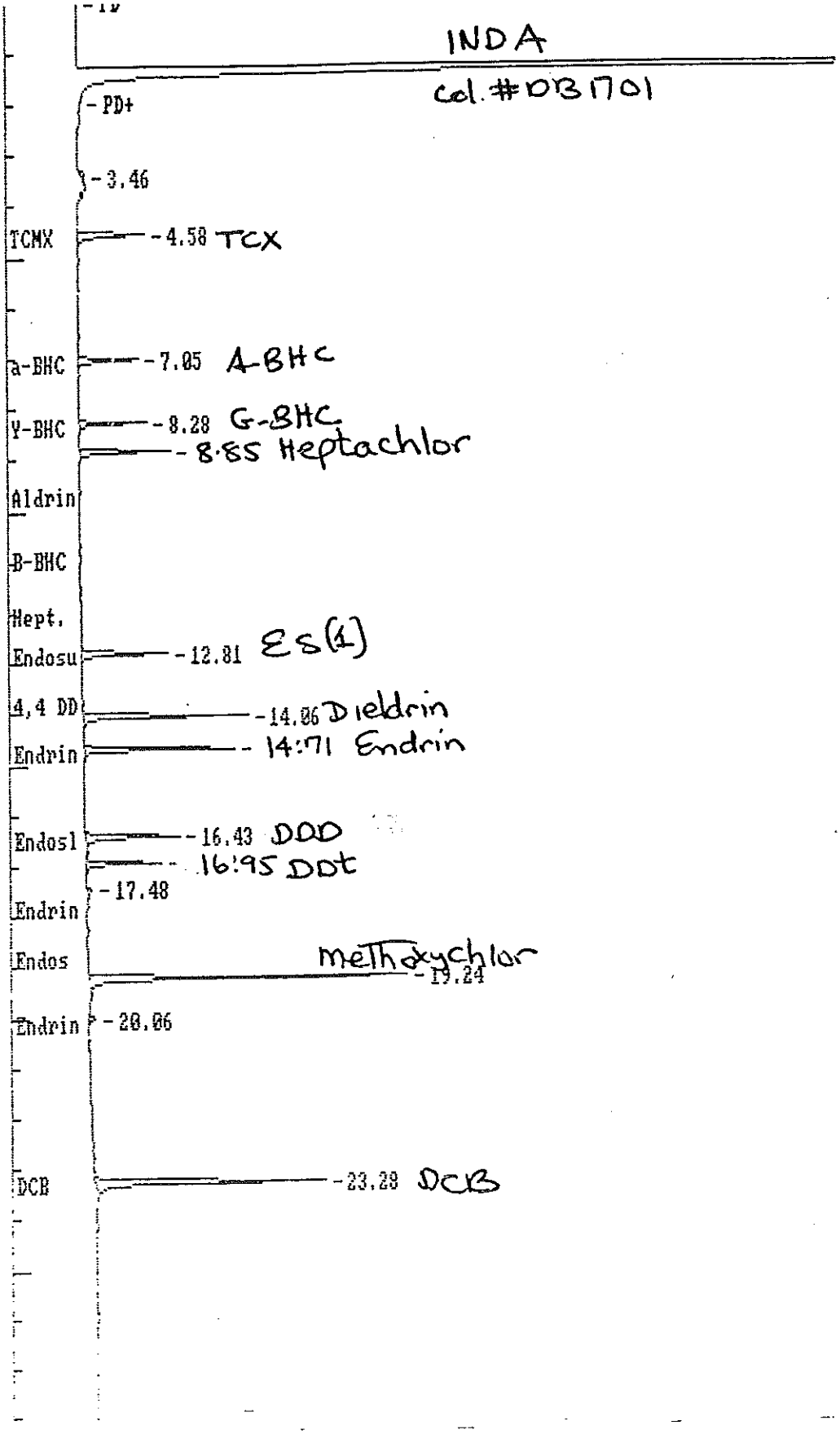
Sample Weight: 1.00000

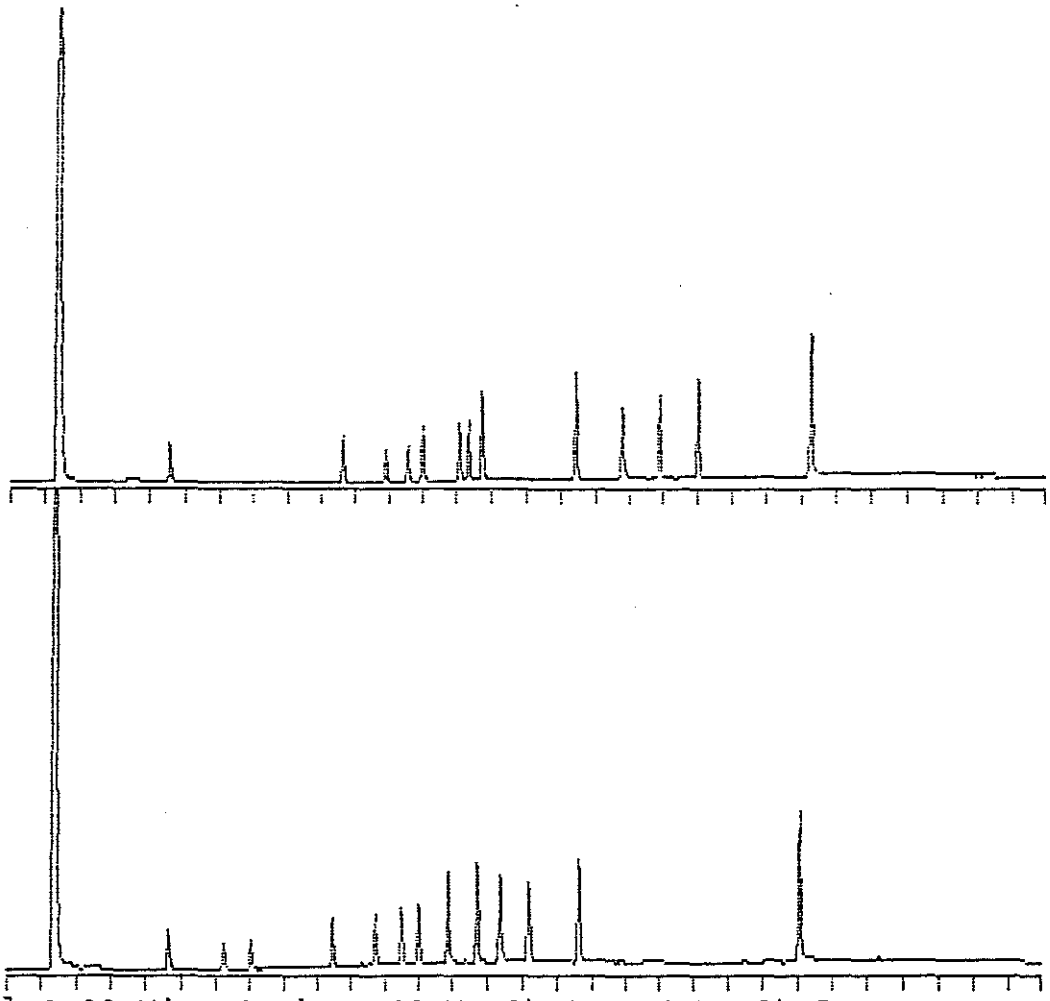
PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	3.457		0.0000	0.0000%	5218	327	15.9	1			1.0000E-09
2	4.576	TCMX	24.7827	3.7243%	44486	8395	5.3	1	0	-.3636	5.5709E-04
3	7.047	a-BHC	20.1509	3.0283%	32053	7493	4.3	1	0	-.4716	6.2867E-04
4	8.283	Y-BHC	19.9772	3.0022%	34567	8480	4.1	1	0	-.6012	5.7793E-04
5	8.851	Heptachlor	25.5706	3.8428%	48650	11404	4.3	1	0	-.3759	5.2560E-04
6	12.809	Endosulf I	23.9070	3.5927%	46897	10799	4.3	1	0	-.3896	5.0978E-04
7	14.061	Dieldrin	44.9227	6.7510%	85351	21165	4.0	1	0	-.3550	5.2633E-04
8	14.713	Endrin	82.0904	12.3366%	78409	19226	4.1	1	0	-.3393	1.0470E-03
9	16.433	~~Endosulfit~~ DDD	29.3354	4.4085%	54470	11777	4.6	1	0	-.2534	5.3856E-04
10	16.950	4,4 DDT	36.5162	5.4877%	42491	9378	4.5	1	0	-.2946	8.5939E-04
11	17.485		0.0000	0.0000%	2517	579	4.3	1			1.0000E-09
12	19.238	Methoxychl	287.4731	43.2016%	185339	41394	4.5	1	0	-.2597	1.5511E-03
13	20.057	Endrin ket	2.7293	0.4102%	4180	855	4.9	1	0	-.2491	6.5298E-04
14	23.280	DCB	67.9676	10.2142%	148140	29782	5.0	1	0	-.2147	4.5881E-04

TOTAL AMOUNT = 665.4229

GROUP NUMBER GROUP AMOUNT GROUP PERCENT

eas, times, and heights stored in: E:KU26E40.ATB
ta File = E:KU26E40.PTS Printed on 06-29-1995 at 16:09:43
art time: 0.00 min. Stop time: 30.00 min. Offset: 1 mv.
Full Range: 100 millivolts





[Interface 1] 0-30 Min Scale: 100 Mv Ch.A, 100 Mv Ch.B
INDB Processed: 06-29-1995 16:38:57, segment 4, cycle 41
End of sequence file reached at cycle 41
RAW DATA SAVED IN FILE E:JU26E41.PTS Second Channel Stored in E:KU26E41.PTS

EXTERNAL STANDARD TABLE

06-29-1995 16:39:09 Version 5.1.5

Sample Name: INDB Data File: E:JU26E41

Date: 06-29-1995 16:06:34 Method: M:APES-G 03-08-1995 15:02:41 # 359

Interface: 1 Cycle#: 41 Operator JJK Channel#: 0 Vial#: N.A.

Starting Peak Width: 10 Threshold: 10 Area Threshold: 1000

Instrument Type: Perkin-Elmer 8500 Column Type: RTx-5 30m,.35mm

Solvent Description: 1.0u df

Conditions: 180 for 4.0min then 4.0deg/min to 240, hold 30min

Detector 0: Detector 1: ECD

Misc. Information:

Starting Delay: 0.00 Ending retention time: 30.00

Area reject: 1000 One sample per 1.002 sec.

Amount injected: 1.00 Dilution factor: 1.00

Sample Weight: 1.00000

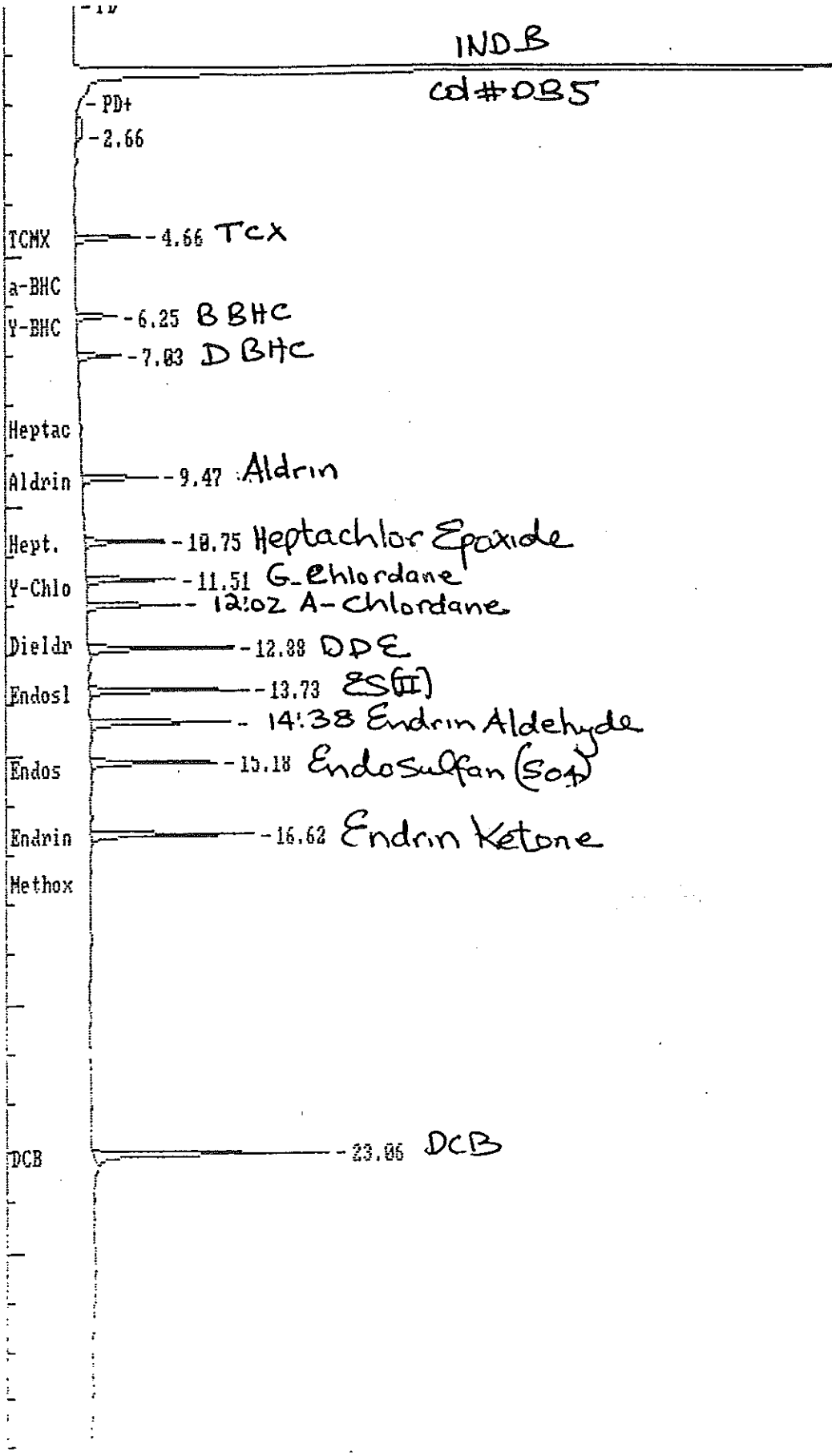
PK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	1.655		0.0000	0.0000%	19629	729	26.9 : 1			1.0000E-09
2	4.659	TCMX	22.3244	5.5972%	42797	8349	5.1 : 1	0	-.3571	5.2163E-04
3	6.246	a-BHC	21.1951	5.3115%	26179	5127	5.1 : 1	0	0	8.0926E-04
4	7.721	g-BHC	21.5151	5.3918%	27668	5537	5.0 : 1	0	-.2569	7.7776E-04

7	11.506	Y-Chlordane	20.6951	5.1887%	53849	11592	4.6	1	0	-.005	3.8431E-04
8	12.024	a-Chlordane	20.1559	5.0535%	52863	11970	4.4	1	0	-.2770	3.8129E-04
9	12.876	4,4-DDE	34.8218	8.7305%	88648	18678	4.7	1	0	-.2587	3.9281E-04
10	13.727	Endoslf II	39.0045	9.7792%	92071	20463	4.5	1	0	-.2427	4.2364E-04
11	14.379	Endrin ald	44.2343	11.0905%	88950	17995	4.9	1	0	-.1739	4.9730E-04
12	15.180	Endos sulf	43.2572	10.8455%	77989	16310	4.8	1	0	-.6557	5.5466E-04
	16.616	Endrin ket.	42.6226	10.6864%	100845	20919	4.8	1	0	-.2006	4.2265E-04
	23.063	DCB	47.4648	11.9004%	162077	30631	5.3	1	0	-.1446	2.9285E-04

TOTAL AMOUNT = 398.8507

ROUP NUMBER GROUP AMOUNT GROUP PERCENT

Areas, times, and heights stored in: E:JU26E41.ATB
ata File = E:JU26E41.PTS Printed on 06-29-1995 at 16:39:19
tart time: 0.00 min. Stop time: 30.00 min. Offset: 1 mv.
ll Range: 100 millivolts



***** EXTERNAL STANDARD TABLE *****

********** 06-29-1995 16:39:38 Version 5.1.5 **********

Sample Name: INDB Data File: E:KU26E41

Date: 06-29-1995 16:06:34 Method: M:BPES-G 03-31-1995 14:31:59 # 358

Interface: 1 Cycle#: 41 Operator JJK Channel#: 1 Vial#: N.A.

Starting Peak Width: 10 Threshold: 10 Area Threshold: 500

Instrument Type: Perkin-Elmer 8500 Column Type: RTx-5 30m,.35mm

Solvent Description: 1.0u df

Conditions: 180 for 4.0min then 4.0deg/min to 240, hold 30min

Detector 0: Detector 1: ECD

Misc. Information:

Starting Delay: 0.00 Ending retention time: 30.00

Area reject: 500 One sample per 1.002 sec.

Amount injected: 1.00 Dilution factor: 1.00

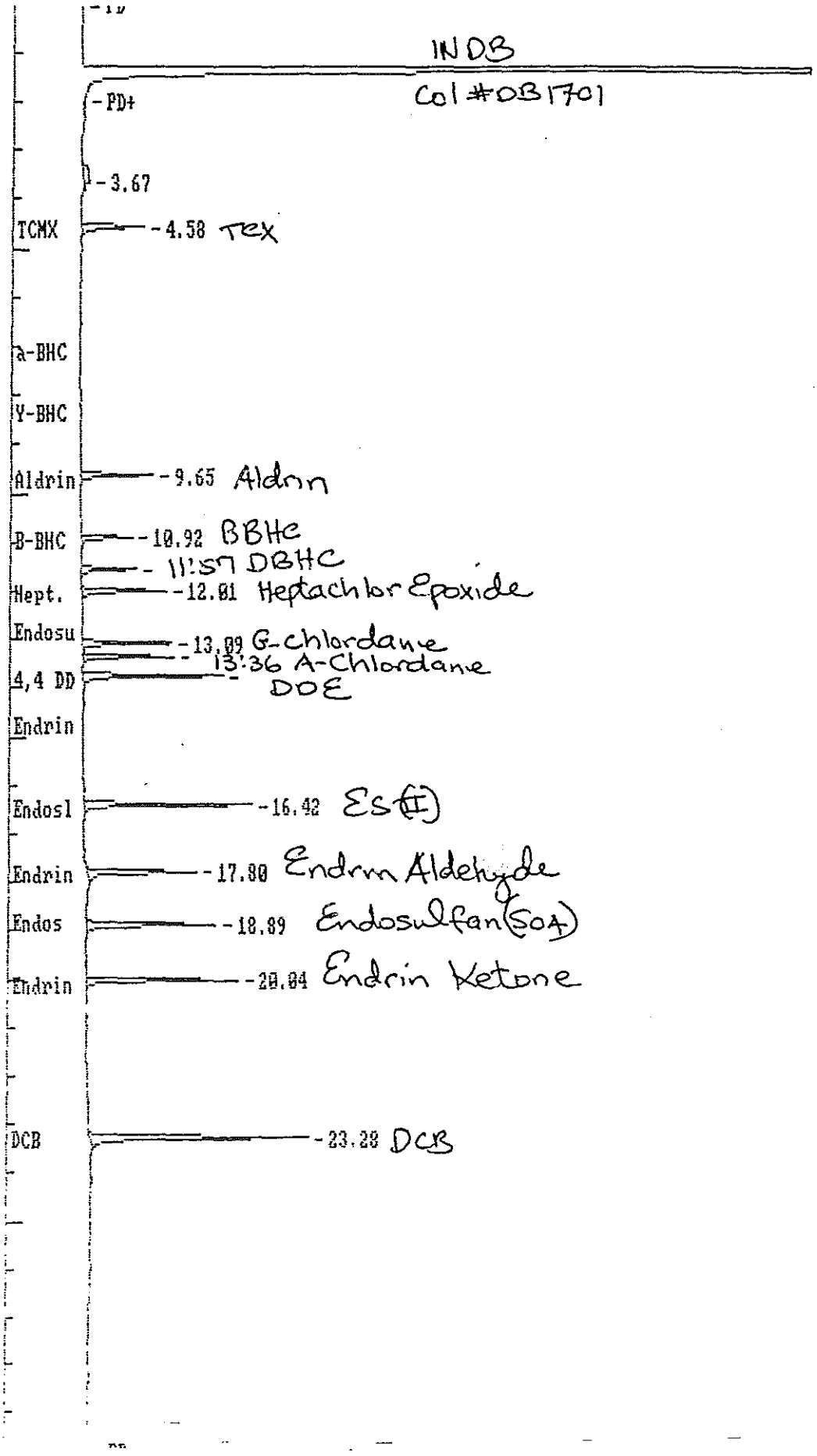
Sample Weight: 1.00000

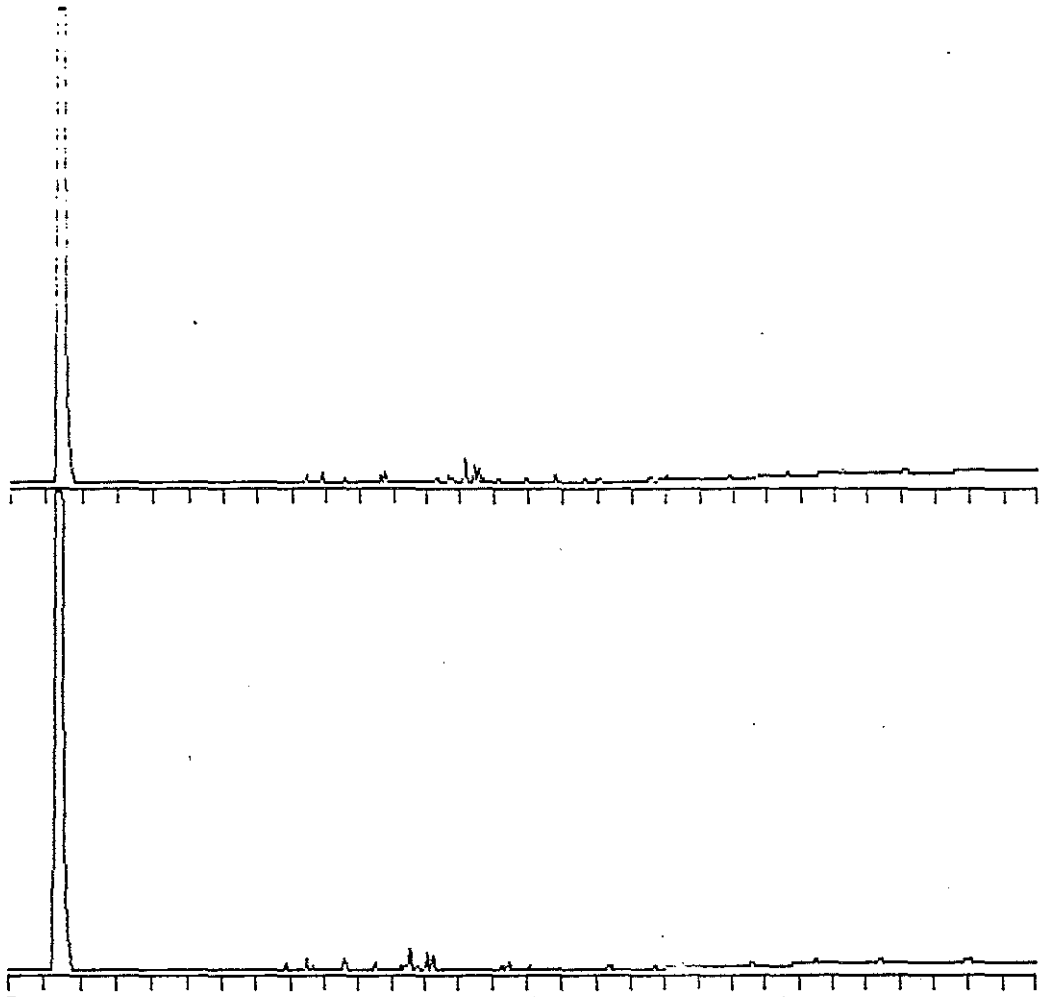
PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	3.674		0.0000	0.0000%	17360	733	23.7	1			1.0000E-09
2	4.576	TCMX	23.5917	4.8134%	42349	8410	5.0	1	0	-.3636	5.5709E-04
3	9.653	Aldrin	22.5823	4.6074%	42094	9830	4.3	1	0	-.3448	5.3647E-04
4	10.922	B-BHC	23.0282	4.6984%	28597	6810	4.2	1	0	-.4566	8.0526E-04
5	11.573	d-BHC	26.0580	5.3165%	29515	7392	4.0	1	0	-.4310	8.8288E-04
6	12.007	Hept. epox.	25.2019	5.1419%	48544	11409	4.3	1	0	-.4155	5.1916E-04
7	13.093	Y-Chlordane	24.9348	5.0874%	52621	12099	4.3	2	0	-.3811	4.7386E-04
8	13.360	a-Chlordane	24.2835	4.9545%	51528	12269	4.2	2	0	-.3736	4.7127E-04
9	13.761	4,4 DDE	41.7518	8.5185%	80330	18824	4.3	1	0	-.3024	5.1975E-04
10	16.416	EndoslfII	48.9243	9.9819%	90842	22593	4.0	1	0	-.3547	5.3856E-04
11	17.802	Endrin ald	52.1639	10.6428%	74157	14785	5.0	1	0	-.3272	7.0343E-04
12	18.888	Endos sulf	51.9043	10.5899%	77258	17414	4.4	1	0	.2659	6.7183E-04
13	20.040	Endrin ket	57.5035	11.7323%	88064	20481	4.3	1	0	-.3322	6.5298E-04
14	23.280	DCB	68.2025	13.9152%	148652	29630	5.0	1	0	-.2147	4.5881E-04

TOTAL AMOUNT = 490.1307

GROUP NUMBER	GROUP AMOUNT	GROUP PERCENT

Areas, times, and heights stored in: E:KU26E41.ATB
Data File = E:KU26E41.PTS Printed on 06-29-1995 at 16:39:55
Start time: 0.00 min. Stop time: 30.00 min. Offset: 1 mv.
Full Range: 100 millivolts





nterface 2] 0-30 Mi Scale: 100 Mv Ch.A, 100 Mv Ch.B
CHLORDANE Processed: 11-08-1994 17:53:29, segment 2, cycle 2
W DATA SAVED IN FILE F:NV09F2.PTS Second Channel Stored in F:0V09F2.PTS

***** EXTERNAL STANDARD TABLE *****

********** 11-08-1994 17:54:15 Version 5.1.5 **********
Sample Name: CHLORDANE 0.1 UG/ML Data File: F:NV09F2
Date: 11-08-1994 17:23:04 Method: M:APES-G 11-08-1994 12:17:09 # 345
Interface: 2 Cycle#: 2 Operator JJK Channel#: 0 Vial#: N.A.
Starting Peak Width: 10 Threshold: 10 Area Threshold: 1000

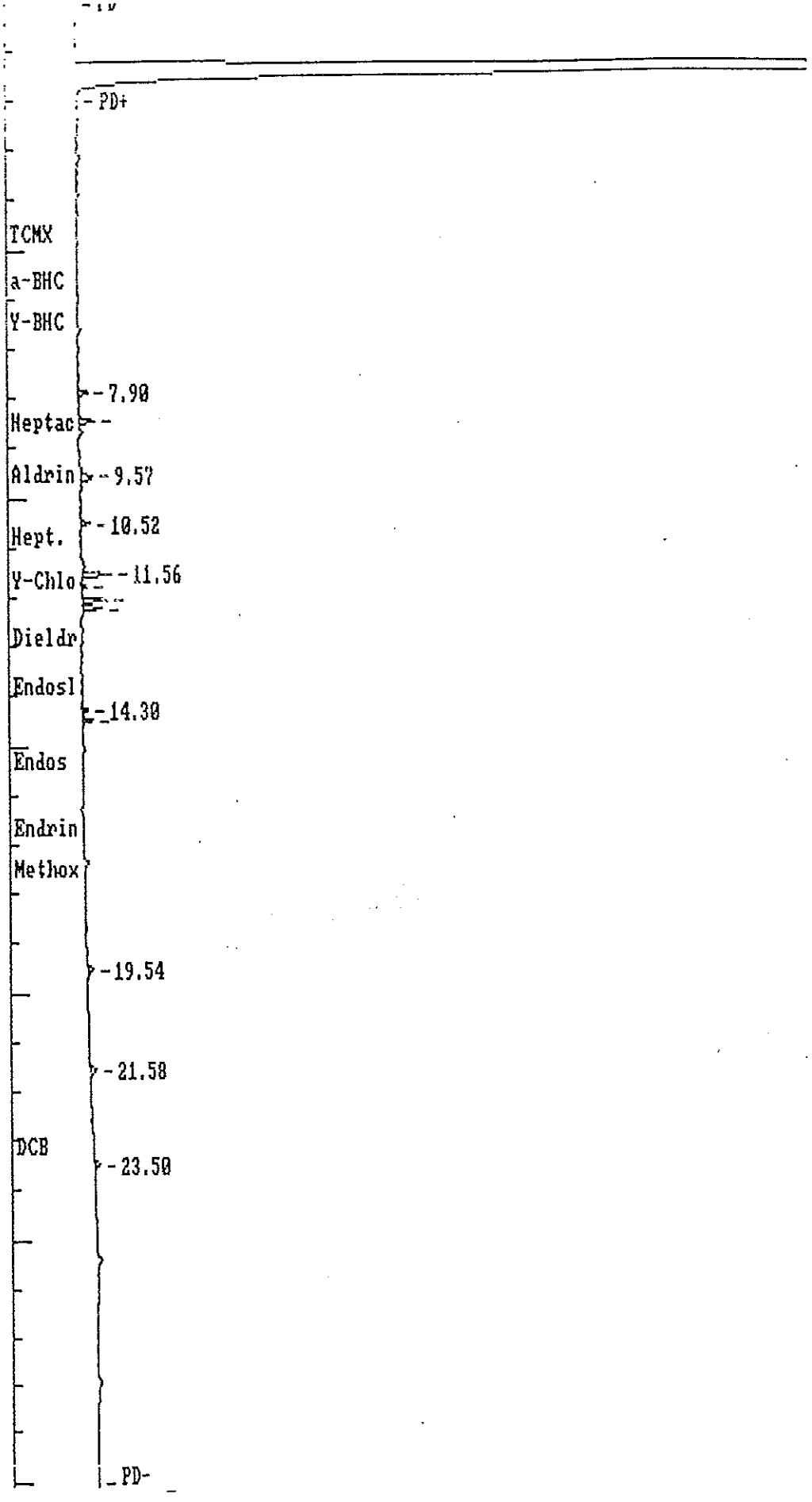
ating Delay: 0.00 Ending retention time: 30.00
e reject: 1000 One sample per 1.002 sec.
ount injected: 1.00 Dilution factor: 1.00
mple Weight: 1.00000

RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
.899		0.0000	0.0000%	5872	1248	4.7	1			1.0000E-09
8.467	Heptachlor	5.4551	15.5389%	10277	2086	4.9	1	0	0	5.3084E-04
.569	Aldrin	5.3395	15.2096%	11309	1569	7.2	1	0	.7029	4.7217E-04
.521		0.0000	0.0000%	5432	1198	4.5	1			1.0000E-09
11.556	Y-Chlordane	7.1608	20.3973%	16831	3887	4.3	1	0	-.6460	4.2546E-04
807	Endosulfan I	1.8976	5.4054%	3938	838	4.7	1	0	-.9803	4.8189E-04
057	a-Chlordane	7.0452	20.0680%	16648	3530	4.7	2	0	0	4.2319E-04
12.241		0.0000	0.0000%	11976	2717	4.4	2			1.0000E-09
14.295	4'4-DDD	2.7567	7.8523%	4493	789	5.7	2	0	.1169	6.1352E-04
.496	Endrin ald	3.7065	10.5578%	7032	1534	4.6	2	0	.5793	5.2710E-04
.539		0.0000	0.0000%	4974	746	6.7	1			1.0000E-09
21.576		0.0000	0.0000%	5843	850	6.9	1			1.0000E-09

TOTAL AMOUNT = 35.1365

GROUP NUMBER	GROUP AMOUNT	GROUP PERCENT

, times, and heights stored in: F:NV09F2.AT8
File = F:NV09F2.PT5 Printed on 11-08-1994 at 17:54:33
time: 0.00 min. Stop time: 30.00 min. Offset: 1 mv.
Range: 100 millivolts



EXTERNAL STANDARD TABLE

11-08-1994 17:54:38 Version 5.1.5

Sample Name: CHLORDANE 0.1 UG/ML Data File: F:0V09F2

Date: 11-08-1994 17:23:04 Method: M:BPES-G 11-08-1994 13:38:40 # 343

Rack#: 2 Cycle#: 2 Operator JJK Channel#: 1 Vial#: N.A.

Starting Peak Width: 10 Threshold: 10 Area Threshold: 500

Starting Delay: 0.00 Ending retention time: 30.00

Area reject: 500 One sample per 1.002 sec.

Amount injected: 1.00 Dilution factor: 1.00

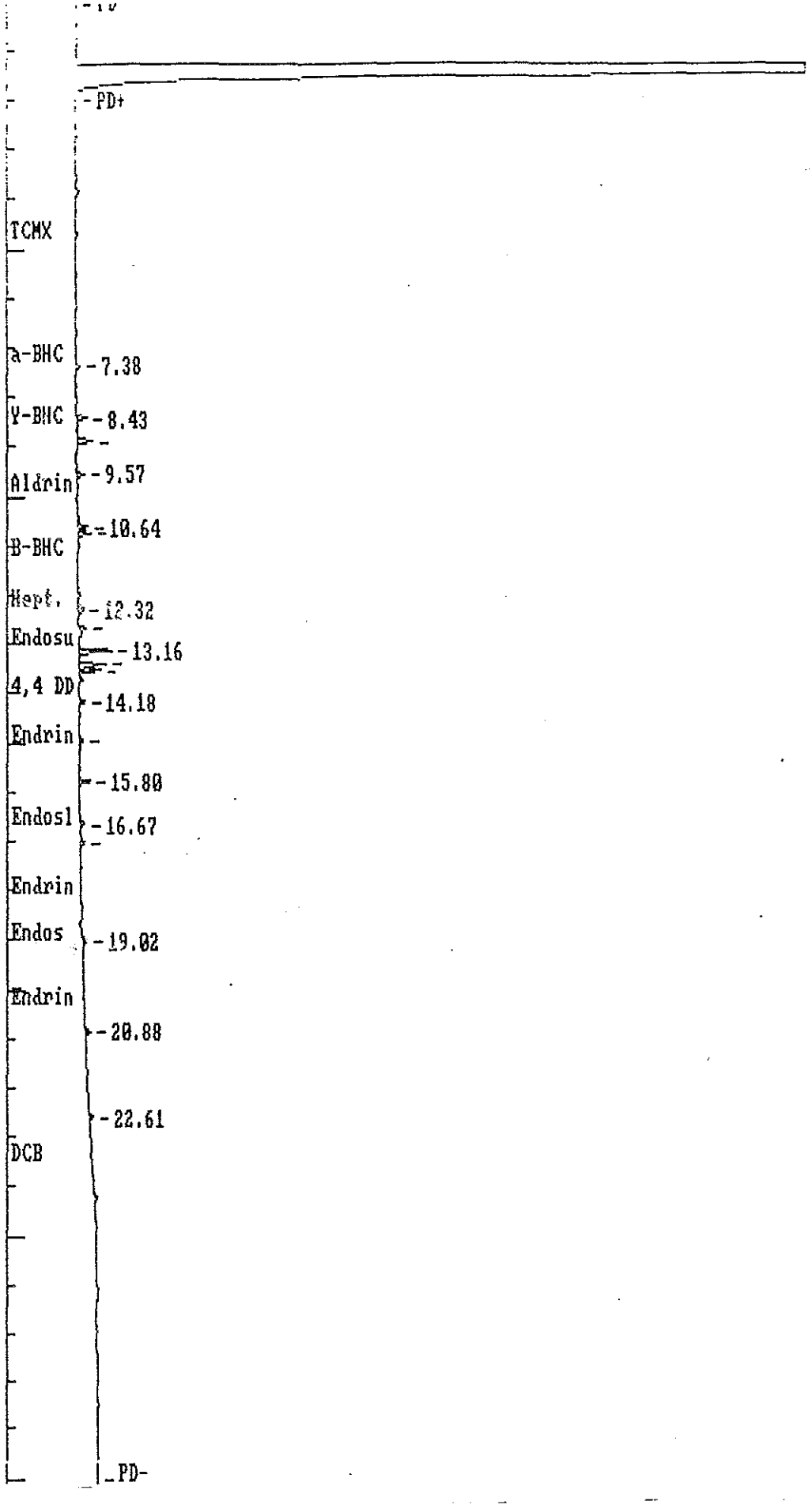
Sample Weight: 1.00000

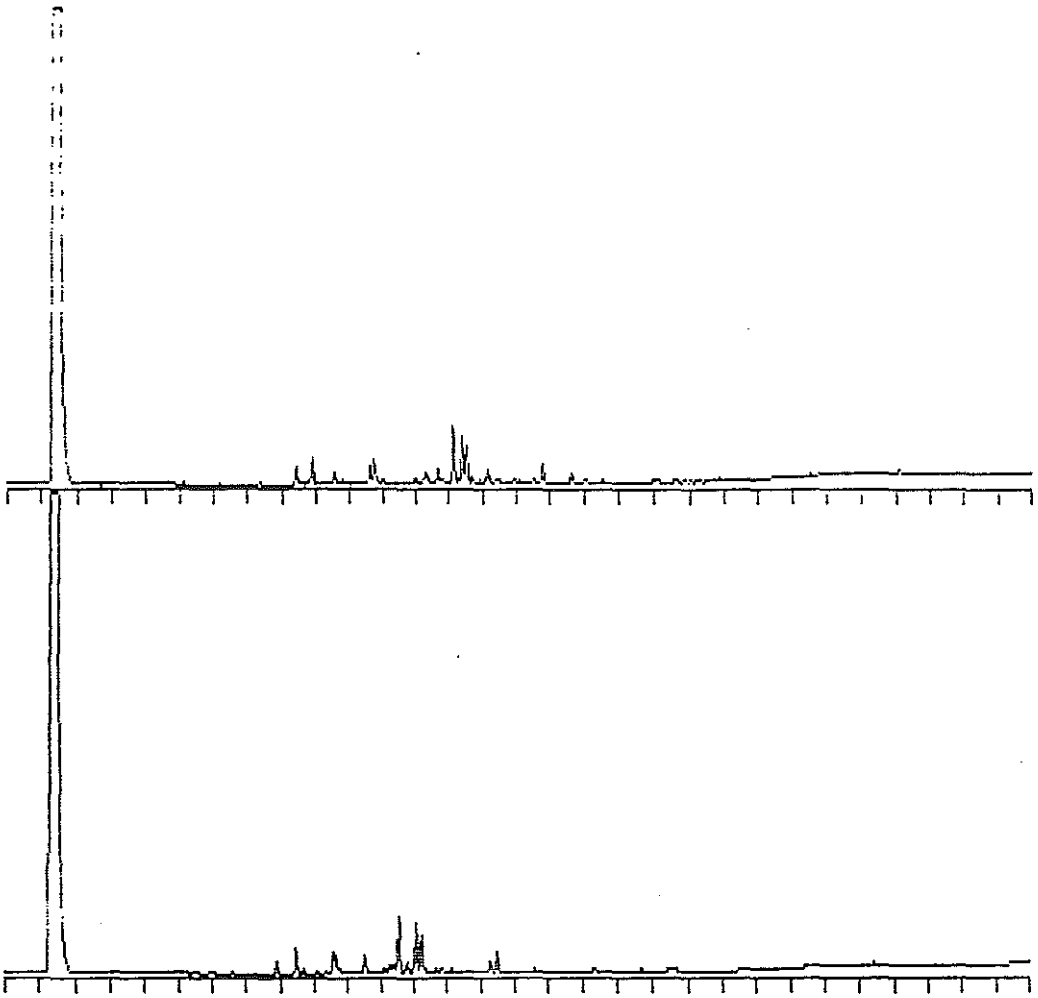
RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
7.381		0.0000	0.0000%	2572	549	4.7	1			1.0000E-09
8.433	Y-BHC	3.6370	7.7832%	6020	1377	4.4	1	0	1.202	6.0420E-04
9.901	Heptachlor	5.2589	11.2541%	9695	2199	4.4	1	0	0	5.4241E-04
9.569	Aldrin	2.5687	5.4971%	5096	1055	4.8	1	0	-1.206	5.0405E-04
10.638		0.0000	0.0000%	5644	1343	4.2	2			1.0000E-09
11.755		0.0000	0.0000%	7239	1720	4.2	2			1.0000E-09
11.825		0.0000	0.0000%	5759	742	7.8	1			1.0000E-09
12.692	Endosulf I	1.7111	3.6617%	3420	861	4.0	1	0	-1.298	5.0026E-04
13.160	Y-Chlordane	8.4181	18.0149%	18662	4425	4.2	2	0	.1270	4.5107E-04
13.427	a-Chlordane	6.9096	14.7866%	15359	3652	4.2	2	0	.1245	4.4986E-04
13.544	4,4 DDE	5.6683	12.1304%	12406	2873	4.3	2	0	-1.934	4.5691E-04
14.178	Dieldrin	1.6135	3.4530%	3252	790	4.1	1	0	.4733	4.9617E-04
14.963	Endrin	1.6426	3.5153%	2396	459	5.2	1	0	.6741	6.8564E-04
15.098		0.0000	0.0000%	6648	1469	4.5	1			1.0000E-09
15.367	4'4-DDD	2.3144	4.9529%	2957	681	4.3	1	0	1.009	7.8258E-04
16.051	4,4 DDT	4.0955	8.7645%	3494	584	6.0	1	0	.1471	1.1754E-03
16.021	Endos sulf	2.8907	6.1863%	3970	674	5.9	1	0	.9304	7.2807E-04
20.875		0.0000	0.0000%	3863	647	6.0	1			1.0000E-09
21.612		0.0000	0.0000%	2856	504	5.7	1			1.0000E-09

TOTAL AMOUNT = 46.7285

GROUP NUMBER GROUP AMOUNT GROUP PERCENT

, times, and heights stored in: F:0V09F2.ATB
a File = F:0V09F2.PTS Printed on 11-08-1994 at 17:54:58
Start time: 0.00 min. Stop time: 30.00 min. Offset: 1 mv.
Range: 100 millivolts





erface 2] 0-30 Min Scale: 100 Mv Ch.A, 100 Mv Ch.B
ORDANE Processed: 11-08-1994 18:27:[illegible], segment 3, cycle 3
DATA SAVED IN FILE F:NV09F3.PTS Second Channel Stored in F:0V09F3.PTS

EXTERNAL STANDARD TABLE

********** 11-08-1994 18:28:40 Version 5.1.5 **********
Sample Name: CHLORDANE 0.25 UG/ML Data File: F:NV09F3
ate: 11-08-1994 17:57:28 Method: M:APES-G 11-08-1994 12:17:09 # 345
nterface: 2 Cycle#: 3 Operator JJK Channel#: 0 Vial#: N.A.
Starting Peak Width: 10 Threshold: 10 Area Threshold: 1000

rting Delay: 0.00 Ending retention time: 30.00
ea reject: 1000 One sample per 1.002 sec.
nount injected: 1.00 Dilution factor: 1.00
ple Weight: 1.00000

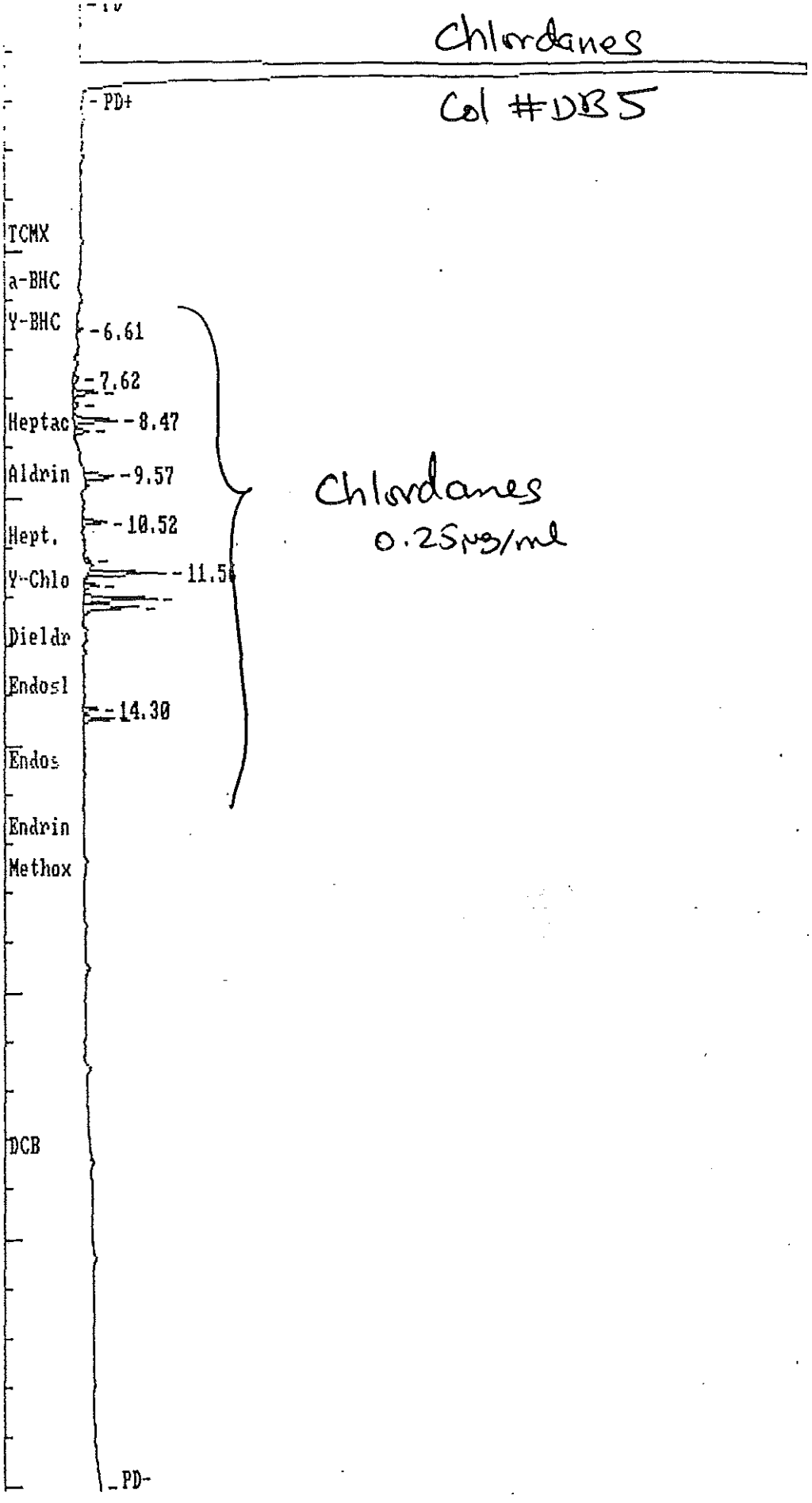
K	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
	6.613		0.0000	0.0000%	3742	898	4.2	1			1.0000E-09
	7.615		0.0000	0.0000%	5676	724	7.8	2			1.0000E-09
	7.899		0.0000	0.0000%	18416	3333	5.5	2			1.0000E-09
	8.150		0.0000	0.0000%	4330	696	6.2	2			1.0000E-09
	8.467	Heptachlor	16.4235	18.4703%	30939	5786	5.3	2	0	0	5.3084E-04
	:684		0.0000	0.0000%	10288	1913	5.4	2			1.0000E-09
	:569	Aldrin	13.2145	14.8613%	27987	3891	7.2	1	0	.7029	4.7217E-04
	10.521		0.0000	0.0000%	16436	3230	5.1	1			1.0000E-09
	11.289		0.0000	0.0000%	2901	623	4.7	1			1.0000E-09
	11.556	Y-Chlordane	18.4647	20.7658%	43399	10625	4.1	1	0	-.6460	4.2546E-04
	11.807	Endosulfan I	4.7986	5.3967%	9958	2027	4.9	2	0	-.9803	4.8189E-04
	12.057	a-Chlordane	19.5120	21.9436%	46107	9768	4.7	2	0	0	4.2319E-04

496 Erosion #3	3068	11.0399%	18635	4124	4.5 2	0	.5793	5.2710E-04

TOTAL AMOUNT = 38.9188

NUMBER GROUP AMOUNT GROUP PERCENT

...s, times, and heights stored in: F:NV09F3.ATB
...File = F:NV09F3.PTS Printed on 11-08-1994 at 18:28:58
... time: 0.00 min. Stop time: 30.00 min. Offset: 1 mv.
... 100 millivolts



EXTERNAL STANDARD TABLE

11-08-1994 [illegible] Version 5.1.5

Sample Name: CHLORDANE 0.25 UG/ML Data File: F:0V09F3

[illegible]: 11-08-1994 [illegible] Method: M:8PES-G 11-08-1994 13:38:40 # 343

[illegible]rface#: 2 Cycle#: 3 Operator: JJK Channel#: 1 Vial#: N.A.

Starting Peak Width: 10 Threshold: 10 Area Threshold: 500

Starting Delay: 0.00 Ending retention time: 30.00

Area reject: 500 One sample per 1.002 sec.

Amount injected: 1.00 Dilution factor: 1.00

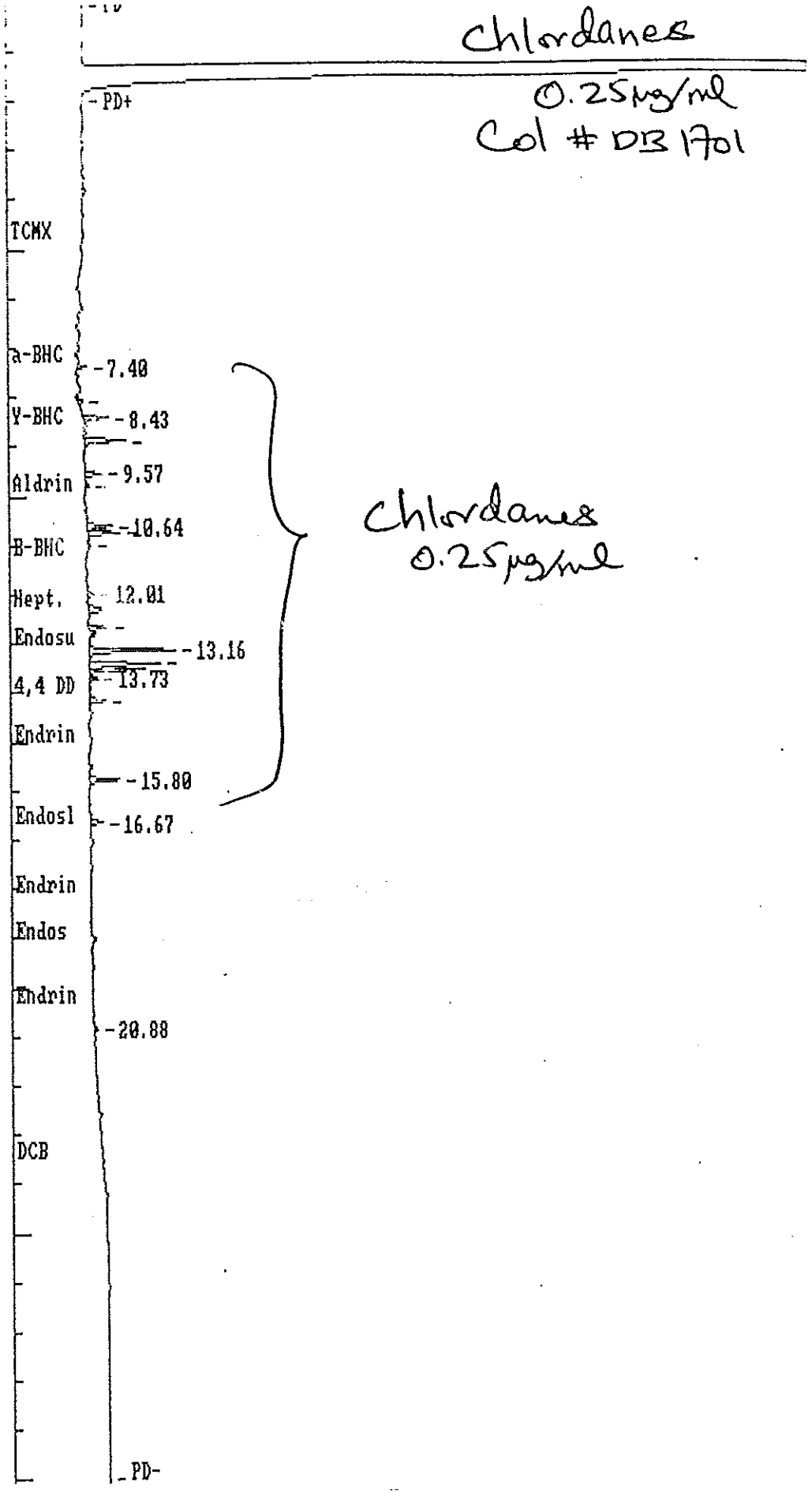
Sample Weight: 1.00000

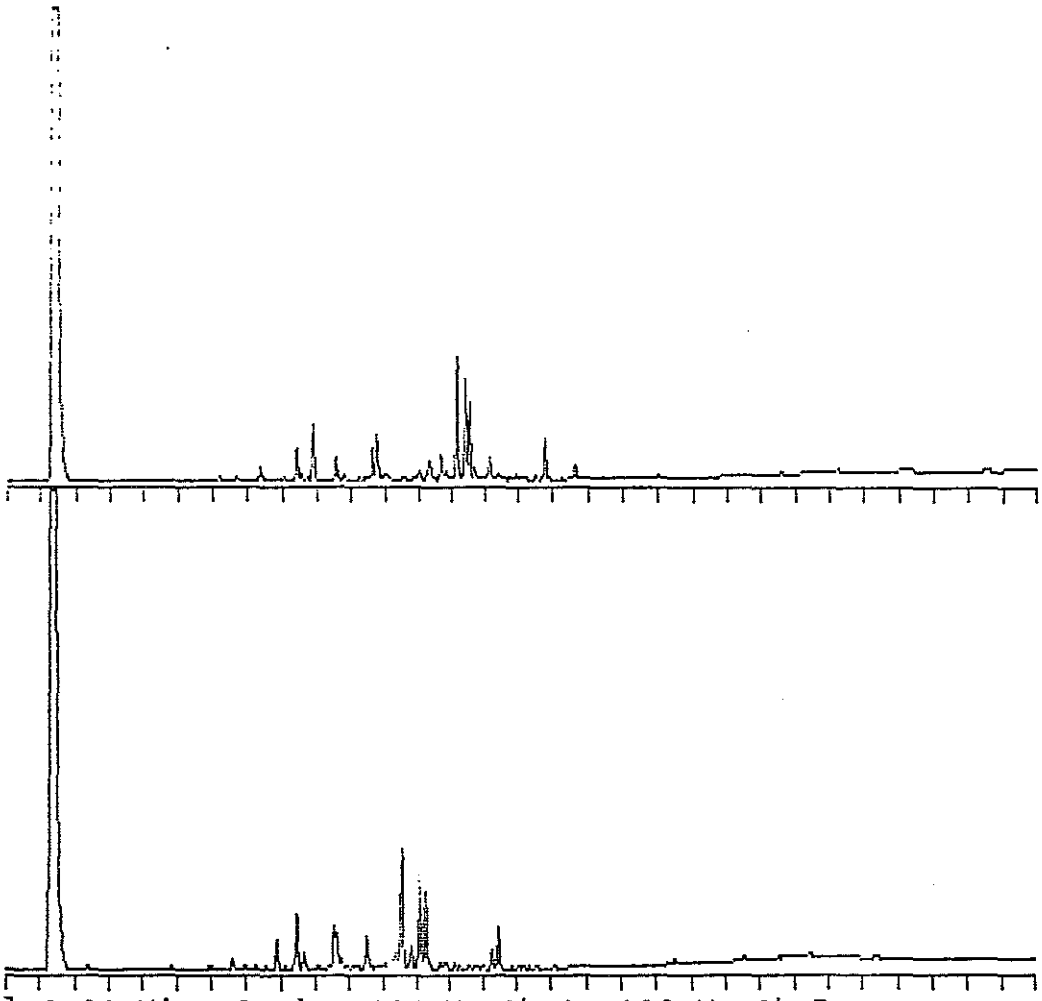
RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
7.398		0.0000	0.0000%	5407	1285	4.2	1			1.0000E-09
8.083		0.0000	0.0000%	3657	629	5.8	1			1.0000E-09
[illegible]433	Y-BHC	9.0173	10.1085%	14924	3408	4.4	1	0	1.202	6.0420E-04
[illegible]901	Heptachlor	13.1602	14.7527%	24262	5595	4.3	1	0	0	5.4241E-04
9.569	Aldrin	5.6921	6.3809%	11293	2396	4.7	2	0	-1.206	5.0405E-04
[illegible]803		0.0000	0.0000%	2510	528	4.8	2			1.0000E-09
[illegible]638		0.0000	0.0000%	15053	3461	4.3	2			1.0000E-09
10.755		0.0000	0.0000%	20478	4441	4.6	2			1.0000E-09
[illegible]022	B-BHC	1.9603	2.1976%	2579	467	5.5	2	0	.3039	7.6020E-04
[illegible]007	Hept. epox.	2.2011	2.4674%	4401	895	4.9	1	0	-.4155	5.0015E-04
12.325		0.0000	0.0000%	13951	1826	7.6	1			1.0000E-09
[illegible]692	Endosulf I	4.4948	5.0387%	8985	2371	3.8	1	0	-1.298	5.0026E-04
[illegible]160	Y-Chlordane	21.3170	23.8967%	47259	11689	4.0	2	0	.1270	4.5107E-04
[illegible]27	a-Chlordane	17.9728	20.1478%	39952	9617	4.2	2	0	.1245	4.4986E-04
[illegible]44		0.0000	0.0000%	32054	7574	4.2	2			1.0000E-09
[illegible]727	4,4 DDE	2.2140	2.4819%	4845	1187	4.1	2	0	-.6045	4.5691E-04
[illegible]178	Dieldrin	5.4111	6.0659%	10906	2206	4.9	1	0	.4733	4.9617E-04
15.798		0.0000	0.0000%	18190	4085	4.5	1			1.0000E-09
[illegible]667	4'4-DDD	5.7642	6.4618%	7366	1728	4.3	1	0	1.009	7.8258E-04
[illegible]875		0.0000	0.0000%	2489	451	5.5	1			1.0000E-09

TOTAL AMOUNT = 89.2050

OUP NUMBER GROUP AMOUNT GROUP PERCENT

..., times, and heights stored in: F:0V09F3.ATB
... File = F:0V09F3.PTS Printed on 11-08-1994 at 18:29:23
... time: 0.00 min. Stop time: 30.00 min. Offset: 1 mv.
... Range: 100 millivolts





terface 2] 0-30 Min Scale: 100 Mv Ch.A, 100 Mv Ch.B
ORDANE Processed: 11-08-1994 09:02:21, segment 4, cycle 4
W DATA SAVED IN FILE F:NV09F4.PTS Second Channel Stored in F:0V09F4.PTS

**** EXTERNAL STANDARD TABLE ****

********** 11-08-1994 19:03:07 Version 5.1.5 **********
Sample Name: CHLORDANE 0.5 UG/ML Data File: F:NV09F4 *
ate: 11-08-1994 18:31:55 Method: M:APES-G 11-08-1994 12:17:09 # 345 *
nterface: 2 Cycle#: 4 Operator JJK Channel#: 0 Vial#: N.A. *
Starting Peak Width: 10 Threshold: 10 Area Threshold: 1000 *
****

rting Delay: 0.00 Ending retention time: 30.00
ea reject: 1000 One sample per 1.002 sec.
unt injected: 1.00 Dilution factor: 1.00
ple Weight: 1.00000

K	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
	6.630		0.0000	0.0000%	9717	1986	4.9	1			1.0000E-09
	7.598		0.0000	0.0000%	3312	717	4.6	1			1.0000E-09
	7.899		0.0000	0.0000%	28208	6351	4.4	1			1.0000E-09
	8.467	Heptachlor	29.2483	15.0955%	55099	11288	4.9	2	0	0	5.3084E-04
	8.684		0.0000	0.0000%	14613	3023	4.8	2			1.0000E-09
	9.569	Aldrin	36.4913	18.8337%	77285	8818	8.8	3	0	.7029	4.7217E-04
	9.786		0.0000	0.0000%	6400	1335	4.8	4			1.0000E-09
	10.521		0.0000	0.0000%	31151	6496	4.8	1			1.0000E-09
	11.289		0.0000	0.0000%	10480	1936	5.4	2			1.0000E-09
	11.389		0.0000	0.0000%	14031	2612	5.4	2			1.0000E-09
	11.556	Y-Chlordane	43.9217	22.6687%	103233	24237	4.3	2	0	-.6460	4.2546E-04
	11.997	Endosulfan I	9.7633	5.0390%	20260	4196	4.8	2	0	-.9803	4.8189E-04

.709	Dieldrin	1.7878	0.9227%	3832	922	4.2	1	0	-.5228	4.6653E-04
.760		0.0000	0.0000%	3190	763	4.2	1			1.0000E-09
14.295	4'4-DDD	12.8019	6.6073%	20866	3760	5.5	2	0	.1169	6.1352E-04
.496	Endrin ald	19.3924	10.0092%	36793	8401	4.4	2	0	.3793	5.2710E-04
.539		0.0000	0.0000%	3645	560	6.5	1			1.0000E-09
21.576		0.0000	0.0000%	4402	668	6.6	1			1.0000E-09

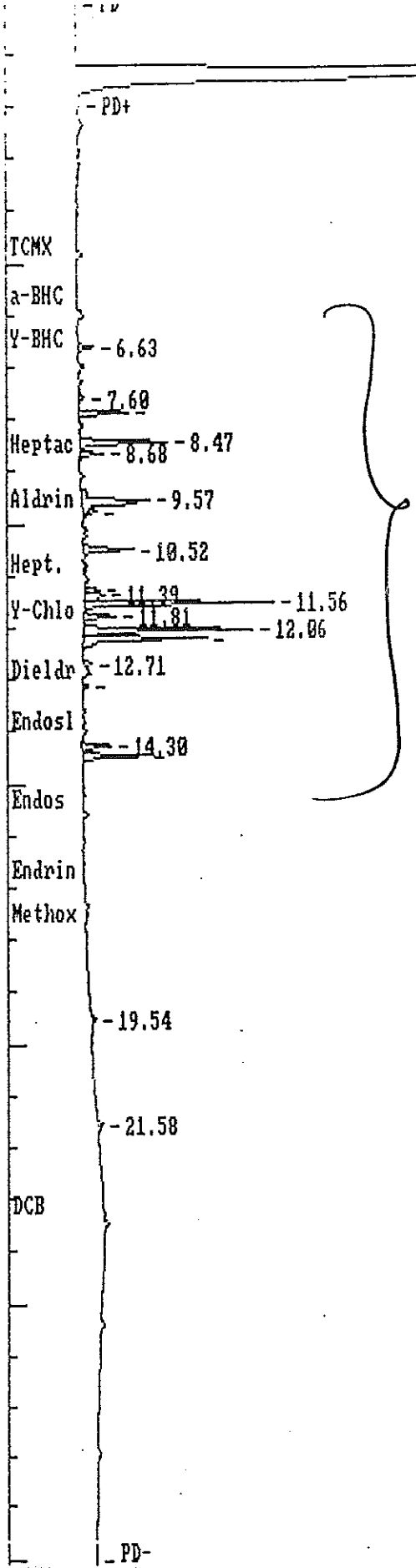
360

TOTAL AMOUNT = 193.7551

GROUP NUMBER GROUP AMOUNT GROUP PERCENT

...s, and heights stored in: F:NVOOF4.AT2
File : F:NVOOF4.PTS Printed on 11-08-1994 at 19:03:26
...t time: 0.00 min. Stop time: 30.00 min. Offset: 1 mv.
... Range: 100 millivolts

Chlordanes 0.5µg/ml
col #035



Chlordanes
0.5µg/ml

* * * EXTERNAL STANDARD TABLE ******

11-08-1994 19:03:32 Version 5.1.5

Sample Name: CHLORDANE 0.5 UG/ML Data File: F:0V09F4

: 11-08-1994 18:31:55 Method: M:8PES-G 11-08-1994 13:38:40 # 343

Face: 2 Cycle#: 4 Operator JJK Channel#: 1 Vial#: N.A.

Starting Peak Width: 10 Threshold: 10 Area Threshold: 500

Pulling Delay: 0.00 Ending retention time: 30.00

Area reject: 500 One sample per 1.002 sec.

Amount injected: 1.00 Dilution factor: 1.00

Sample Weight: 1.00000

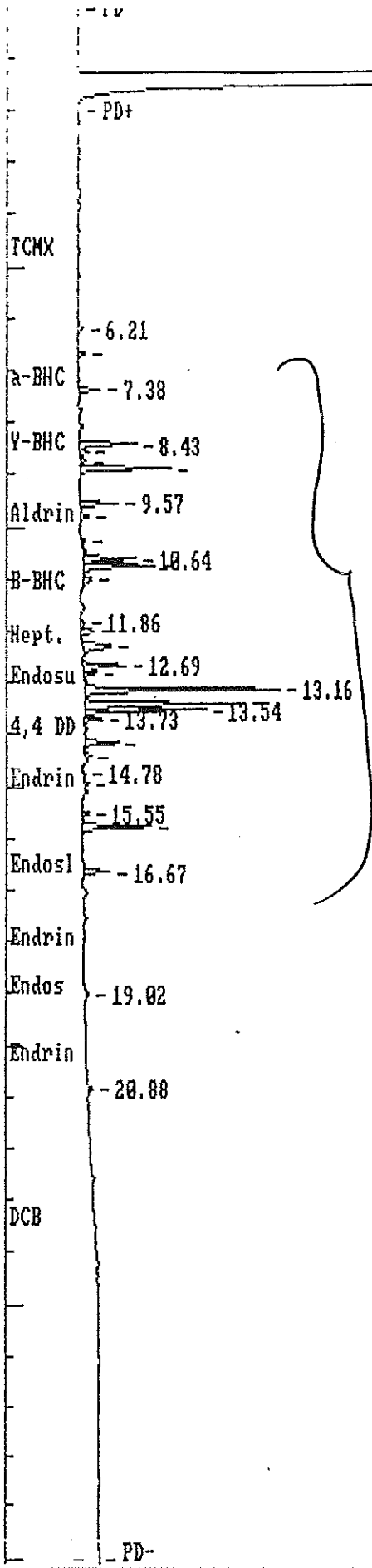
RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
6.212		0.0000	0.0000%	3108	622	5.0	1			1.0000E-09
.697		0.0000	0.0000%	4369	877	5.0	1			1.0000E-09
.381		0.0000	0.0000%	12222	2665	4.6	1			1.0000E-09
8.433	Y-BHC	19.5937	10.9201%	32429	7207	4.5	3	0	1.202	6.0420E-04
.567		0.0000	0.0000%	4537	1006	4.5	4			1.0000E-09
.751		0.0000	0.0000%	3960	909	4.4	2			1.0000E-09
8.901	Heptachlor	25.6776	14.3108%	47340	11451	4.1	2	0	0	5.4241E-04
9.569	Aldrin	11.4494	6.3811%	22715	4754	4.8	2	0	-1.206	5.0405E-04
.803		0.0000	0.0000%	5921	1075	5.5	2			1.0000E-09
.270		0.0000	0.0000%	1673	457	3.7	1			1.0000E-09
10.638		0.0000	0.0000%	27667	6591	4.2	2			1.0000E-09
.755		0.0000	0.0000%	39707	8925	4.4	2			1.0000E-09
.022	B-BHC	5.4707	3.0490%	7196	1048	6.9	2	0	.3039	7.6020E-04
57		0.0000	0.0000%	2488	485	5.1	2			1.0000E-09
.07	Hept. epox.	4.7014	2.6202%	9400	1704	5.5	2	0	-.4155	5.0015E-04
.325		0.0000	0.0000%	26879	3521	7.6	1			1.0000E-09
12.692		0.0000	0.0000%	22781	5349	4.3	2			1.0000E-09
12.826	Endosulf I	4.6971	2.6178%	9389	1663	5.6	2	0	-.2597	5.0026E-04
.160	Y-Chlordane	42.9554	23.9401%	95230	24920	3.8	2	0	.1270	4.5107E-04
.427	a-Chlordane	36.2998	20.2308%	80691	20537	3.9	2	0	.1245	4.4986E-04
13.544		0.0001	0.0000%	62374	15534	4.0	2			1.0000E-09
.727	4,4 DDE	4.1690	2.3235%	9124	2281	4.0	2	0	-.6045	4.5691E-04
.178	Dieldrin	10.4068	5.8000%	20974	4312	4.9	1	0	.4733	4.9617E-04
14.429		0.0000	0.0000%	3370	755	4.5	1			1.0000E-09
.779	Endrin	1.0992	0.6126%	1603	359	4.5	1	0	-.5618	6.8564E-04
.963		0.0000	0.0000%	2163	524	4.1	1			1.0000E-09
15.548		0.0000	0.0000%	3948	859	4.6	1			1.0000E-09
15.798		0.0000	0.0000%	36228	8572	4.2	1			1.0000E-09
.667	4'4-DDD	11.0451	6.1557%	14114	3308	4.3	1	0	1.009	7.8258E-04
.021	Endos sulf	1.8628	1.0382%	2559	509	5.0	1	0	.9304	7.2807E-04
20.875		0.0000	0.0000%	3354	579	5.8	1			1.0000E-09

TOTAL AMOUNT = 179.4283

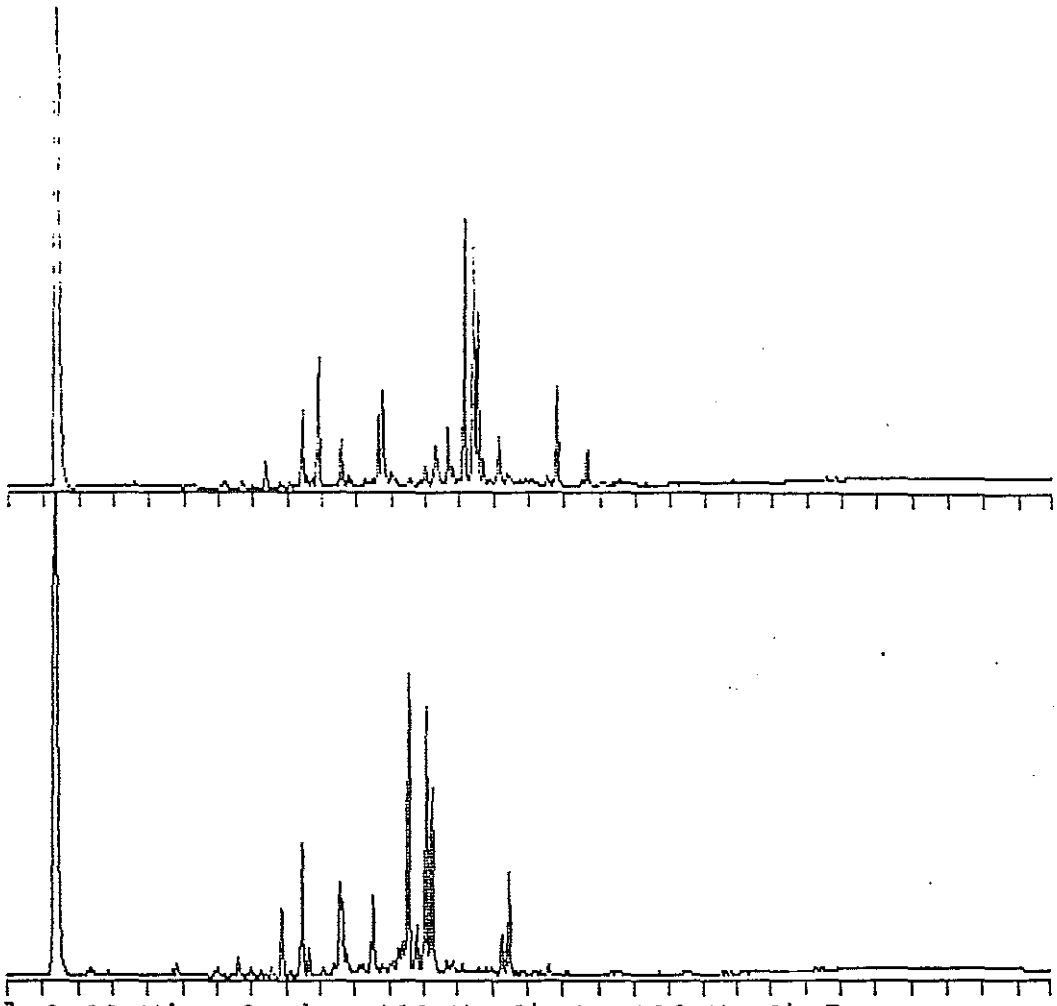
OUP NUMBER GROUP AMOUNT GROUP PERCENT

...s, times, and heights stored in: F:0V09F4.ATB
...a File - F:0V09F4.PTS Printed on 11-08-1994 at 19:03:53
...t time: 0.00 min. Stop time: 30.00 min. Offset: 1 mv.
...Range: 100 millivolts

Chlordane & 0.5ng/ml
Col # DB1701



Chlordane & 0.5ng/ml



rface 2] 0-30 Min Scale: 100 Mv Ch.A, 100 Mv Ch.B
DANE Processed: 11-08-1994 19:36:48, segment 5, cycle 5
DATA SAVED IN FILE F:NV09F5.PTS Second Channel Stored in F:0V09F5.PTS

EXTERNAL STANDARD TABLE

11-08-1994 19:37:34 Version 5.1.5

Sample Name: CHLORDANE 1.0 UG/ML Data File: F:NV09F5

Date: 11-08-1994 19:06:21 Method: M:APES-G 11-08-1994 12:17:09 # 345

Interface: 2 Cycle#: 5 Operator JJK Channel#: 0 Vial#: N.A.

Starting Peak Width: 10 Threshold: 10 Area Threshold: 1000

Starting Delay: 0.00 Ending retention time: 30.00

Area reject: 1000 One sample per 1.002 sec.

Count injected: 1.00 Dilution factor: 1.00

Sample Weight: 1.00000

RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
4.843		0.0000	0.0000%	10912	1948	5.6	1			1.0000E-09
.029		0.0000	0.0000%	13206	1551	8.5	1			1.0000E-09
.630		0.0000	0.0000%	17881	3854	4.6	1			1.0000E-09
6.997	d-BHC	4.2657	0.9409%	5104	1192	4.3	1	0	-.7109	8.3572E-04
7.298		0.0000	0.0000%	5624	1135	5.0	1			1.0000E-09
598		0.0000	0.0000%	9681	1652	5.9	1			1.0000E-09
099		0.0001	0.0000%	61864	14159	4.4	2			1.0000E-09
8.150		0.0000	0.0000%	7074	1318	5.4	2			1.0000E-09
.467	Heptachlor	64.8635	14.3069%	122191	26869	4.5	2	0	0	5.3084E-04
.684		0.0000	0.0000%	29003	6002	4.8	2			1.0000E-09
9.101		0.0000	0.0000%	5048	1106	4.6	1			1.0000E-09
9.419		0.0000	0.0000%	10977	1530	7.2	2			1.0000E-09

[illegible]		0.0000	0.0000%	6498	1363	4.8	2			1.0000E-09
10.184		0.0000	0.0000%	6666	1337	5.0	2			1.0000E-09
[illegible]		0.0001	0.0000%	67491	14913	4.5	1			1.0000E-09
[illegible]	Hept. epox.	1.7361	0.3940%	3571	977	3.7	1	0	.3100	5.0022E-04
[illegible]		0.0000	0.0000%	11440	1601	7.1	2			1.0000E-09
11.239		0.0000	0.0000%	25097	4322	5.8	2			1.0000E-09
[illegible]		0.0000	0.0000%	31179	5893	5.3	2			1.0000E-09
[illegible]	Y-Chlordane	107.4355	23.5970%	252515	61229	4.1	2	0	-.6460	4.2546E-04
[illegible]	Endosulfan I	21.3765	4.7150%	44359	9301	4.8	2	0	-.9803	4.8189E-04
12.057	a-Chlordane	97.4862	21.5025%	230360	54501	4.2	2	0	0	4.2319E-04
[illegible]	241	0.0002	0.0000%	165463	37593	4.4	2			1.0000E-09
12.709	Dieldrin	5.4544	1.2031%	11691	2380	4.9	2	0	-.5228	4.6653E-04
13.392	4,4-DDE	6.1180	1.3494%	15828	2025	7.8	2	0	-.1293	3.8653E-04
[illegible]	160	0.0000	0.0000%	7102	1718	4.1	1			1.0000E-09
13.627	Endoslf II	1.7179	0.3789%	3871	915	4.2	1	0	-.9708	4.4381E-04
14.011		0.0000	0.0000%	5163	1130	4.6	1			1.0000E-09
[illegible]	295 4'4-DDD	26.0165	5.7384%	42406	8035	5.3	2	0	.1169	6.1352E-04
[illegible]	496 Endrin ald	44.5444	9.8251%	84508	20416	4.1	2	0	.5793	5.2710E-04
15.615	DDT	6.0403	1.3323%	7388	1534	4.8	1	0	.6458	8.1755E-04

TOTAL AMOUNT = 453.3723

GROUP NUMBER GROUP AMOUNT GROUP PERCENT

, times, and heights stored in: F:NV09F5.ATB
File = F:NV09F5.PTS Printed on 11-08-1994 at 19:37:54
t time: 0.00 min. Stop time: 30.00 min. Offset: 1 mv.
Range: 100 millivolts

chlordane & 1pg/mL
Col #DB5

PD+

TCMX 4.84
a-BHC 6.03
Y-BHC 7.00
7.90
8.15
Heptac 8.47
8.68
Aldrin 9.57
9.79
10.52
Hept. 10.80
Y-Chlo 11.56
11.81
12.06
12.24
Dieldr 12.71
Endosl 13.63
14.50
Endos 15.61
Endrin
Methox

chlordane & 1pg/mL

DCB

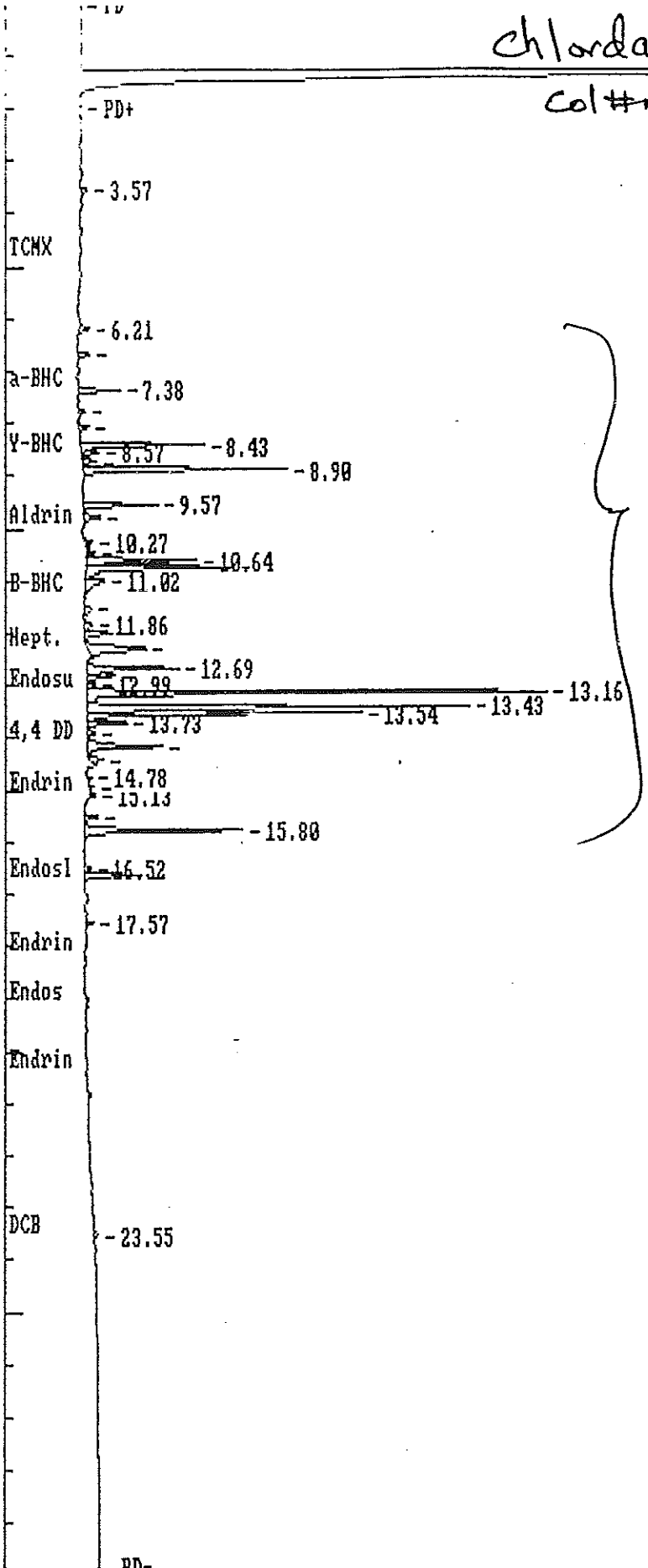
PD-

* * * EXTERNAL STANDARD TABLE *****

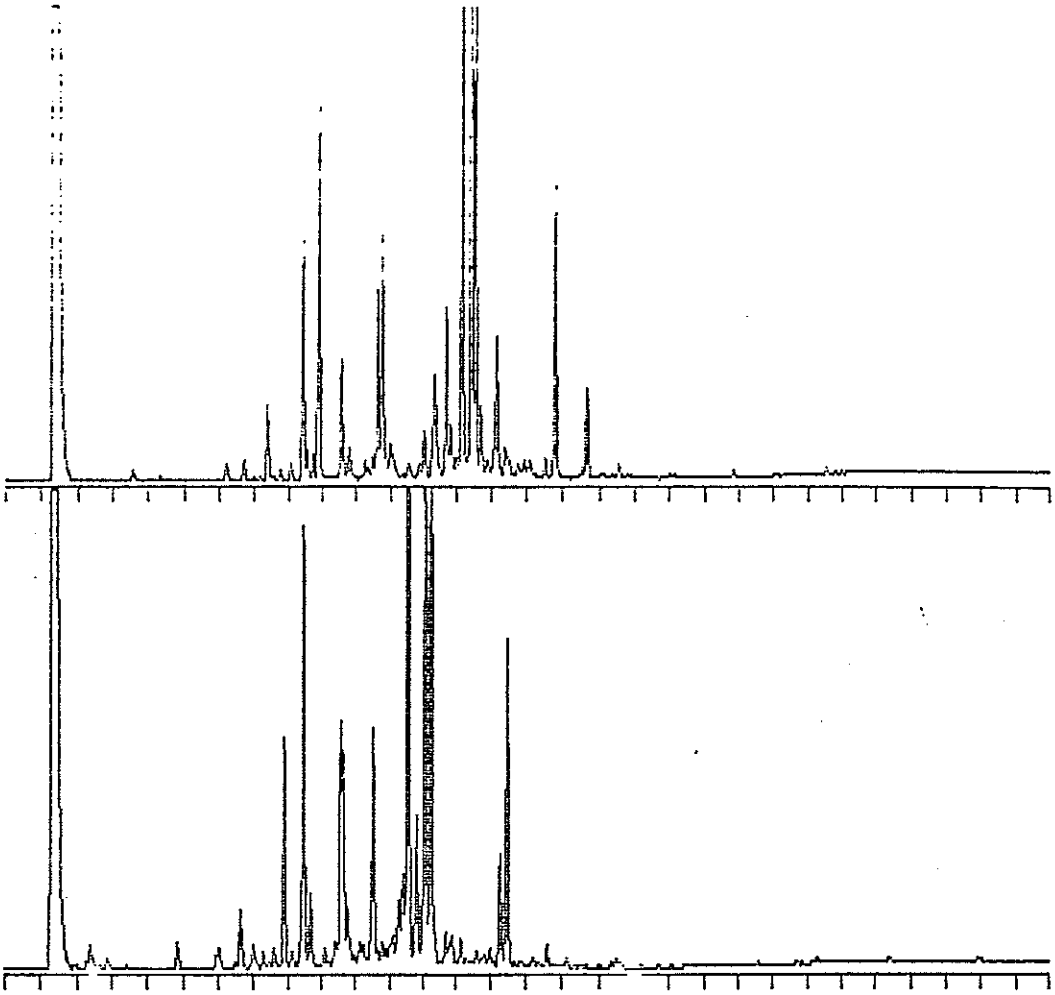
****

...s, times, and heights stored in: F:0V09F5.ATB
File = F:0V09F5.PTS Printed on 11-08-1994 at 19:38:47
Time: 0.00 min. Stop time: 30.00 min. Offset: 1 mv.
Range: 100 millivolts

Chlordanes 1ng/ml
Col#083701



chlordanes 1ng/ml



nterface 2] 0-30 Min Scale: 100 Mv Ch.A, 100 Mv Ch.B
LORDANE Processed: 11-08-1994 20:11:18, segment 6, cycle 6
W DATA SAVED IN FILE F:NV09F6.PTS Second Channel Stored in F:0V09F6.PTS

EXTERNAL STANDARD TABLE

********** 11-08-1994 20:12:04 Version 5.1.5 **********
Sample Name: CHLORDANE 2.5 UG/ML Data File: F:NV09F6 *
Date: 11-08-1994 19:40:51 Method: M:APES-G 11-08-1994 12:17:09 # 345 *
Interface: 2 Cycle#: 6 Operator JJK Channel#: 0 Vial#: N.A. *
Starting Peak Width: 10 Threshold: 10 Area Threshold: 1000 *
****

ating Delay: 0.00 Ending retention time: 30.00
area reject: 1000 One sample per 1.002 sec.
ount injected: 1.00 Dilution factor: 1.00
mple Weight: 1.00000

K	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
	2.388		0.0000	0.0000%	34001	4213	8.1	1			1.0000E-09
	.872		0.0000	0.0000%	11817	1992	5.9	1			1.0000E-09
	.843		0.0000	0.0000%	31697	5707	5.6	1			1.0000E-09
	6.029		0.0000	0.0000%	33159	3947	8.4	1			1.0000E-09
	.630		0.0001	0.0000%	53182	11537	4.6	1			1.0000E-09
	797	d-BHC	25.3291	1.7952%	30308	4490	6.8	2	0	-.7109	8.3572E-04
	.98		0.0000	0.0000%	13178	2793	4.7	2			1.0000E-09
	.598		0.0000	0.0000%	18884	3863	4.9	1			1.0000E-09
	.899		0.0002	0.0000%	185457	47209	3.9	2			1.0000E-09
	6.150		0.0000	0.0000%	13429	2716	4.9	2			1.0000E-09
	8.467	Heptachlor	204.4685	14.4915%	385182	90322	4.3	2	0	0	5.3084E-04

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.7029	4.7217E-04
9.786		0.0001	0.0000%	53775	10986	4.9	2			1.0000E-09
10.137		0.0000	0.0000%	17010	3640	4.7	2			1.0000E-09
[illegible]	254	0.0000	0.0000%	14586	3222	4.5	2			1.0000E-09
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]			1.0000E-09
10.905	Heot. epox.	6.2900	0.4453%	12575	3174	4.0	2	0	.3100	5.0022E-04
[illegible]	95	0.0000	0.0000%	13084	2321	4.3	2			1.0000E-09
[illegible]	35	0.0000	0.0000%	39645	4936	8.0	2			1.0000E-09
11.289		0.0001	0.0000%	68438	11941	5.7	2			1.0000E-09
[illegible]	389	0.0001	0.0000%	90975	17922	5.1	2			1.0000E-09
[illegible]	556	Y-Chlordane	349.9263	24.8007%	822461	198030	4.2	2	0	-.6460	4.2546E-04
11.807	Endosulfan I	63.8826	4.5276%	132566	30108	4.4	2	0	-.9803	4.8189E-04
12.057	a-Chlordane	307.8582	21.8192%	727469	174037	4.2	2	0	0	4.2319E-04
[illegible]	241	0.0005	0.0000%	507467	116154	4.4	2			1.0000E-09
12.709	Dieldrin	13.9700	0.9901%	29944	6292	4.8	2	0	-.5228	4.6653E-04
12.892	4,4-DDE	15.5163	1.0997%	40143	5235	7.7	2	0	-.1293	3.8653E-04
[illegible]	160	0.0000	0.0000%	18680	4672	4.0	1			1.0000E-09
[illegible]	327	Endrin	1.7253	0.1223%	2813	601	4.7	1	0	-.8079	6.1330E-04
13.627		0.0000	0.0000%	9832	2334	4.2	1			1.0000E-09
[illegible]	861	Endoslf II	6.0804	0.4309%	13700	1756	7.8	2	0	.7281	4.4381E-04
[illegible]	011	0.0000	0.0000%	17274	3163	5.5	2			1.0000E-09
14.295	4'4-DDD	70.3981	4.9894%	114745	22851	5.0	2	0	.1169	6.1352E-04
14.496	Endrin ald	140.3253	9.9454%	266221	66974	4.0	2	0	.5793	5.2710E-04
[illegible]	896	0.0000	0.0000%	5019	827	6.1	1			1.0000E-09
[illegible]	230	Endos sulf	4.7234	0.3348%	7750	1593	4.9	1	0	-.3278	6.0947E-04
15.615	DDT	15.3114	1.0852%	18728	4196	4.5	1	0	.6458	8.1755E-04
[illegible]	132	0.0000	0.0000%	6908	1475	4.7	1			1.0000E-09
[illegible]	385	0.0000	0.0000%	3345	707	4.7	1			1.0000E-09
17.518	Methoxychlor	3.3502	0.2374%	3138	873	3.6	1	0	.2868	1.0675E-03
[illegible]	313	DC8	2.0471	0.1451%	5803	1226	4.7	1	0	.9399	3.5275E-04

TOTAL AMOUNT = 1410.9526

GROUP NUMBER	GROUP AMOUNT	GROUP PERCENT

ks, times, and heights stored in: F:NVO?F%.ATB
File = F:NVO?F%.FIS Printed on 11-08-1994 at 20:12:27
time: 0.00 min. Stop time: 30.00 min. Offset: 1 mv.
range: 100 millivolts

Chlordanes 2.5 pg/ml
col # DB5

PD+
2.39
TCMX 4.84
a-BHC 6.03
Y-BHC 6.63
7.30
7.90
8.15
Heptac 8.47
8.68
9.10
Aldrin 9.57
9.79
10.25
Hept. 10.52
10.80
11.39
Y-Chlo 11.56
11.81
12.71
Dieldr
13.63
Endosl
14.30
14.50
15.23
Endos
16.13
Endrin
Methox 17.38
DCB 23.31
PD-

Chlordanes 2-5 pg/ml

EXTERNAL STANDARD TABLE

11-08-1994 19:13:51 Version 5.1.5

le Name CHLORDANE 2.5 UG/ML Data File: F:0V09F6

: 11-08-1994 19:40:51 Method: M:BPES-G 11-08-1994 13:38:40 # 343

Interface: 2 Cycle#: 6 Operator JJK Channel#: 1 Vial#: N.A.

rting Peak Width: 10 Threshold: 10 Area Threshold: 500

rting Delay: 0.00 Ending retention time: 30.00

ea reject: 500 One sample per 1.002 sec.

ut injected: 1.00 Dilution factor: 1.00

mple Weight: 1.00000

ET ME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
574		0.0000	0.0000%	13414	2237	6.0	1			1.0000E-09
342		0.0000	0.0000%	3904	733	5.3	1			1.0000E-09
6.212		0.0000	0.0000%	15827	3253	4.9	1			1.0000E-09
6.697		0.0000	0.0000%	21575	4387	4.9	1			1.0000E-09
198	a-BHC	1.6034	0.1383%	2328	514	4.5	1	0	1.411	6.8884E-04
7.381		0.0001	0.0000%	63534	15328	4.1	1			1.0000E-09
7.782		0.0000	0.0000%	11473	2332	4.9	1			1.0000E-09
083		0.0000	0.0000%	13115	2969	4.4	1			1.0000E-09
433	Y-B C	117.7391	10.1537%	194868	49450	3.9	3	0	1.202	6.0420E-04
8.567		0.0000	0.0000%	24854	5689	4.4	4			1.0000E-09
751		0.0000	0.0000%	21755	5025	4.3	2			1.0000E-09
901	Heptachlor	162.8923	14.0477%	300312	79587	3.8	2	0	0	5.4241E-04
69	Aldrin	55.0895	4.7505%	109293	24945	4.4	2	0	-1.206	5.0405E-04
03		0.0000	0.0000%	36745	6108	6.0	2			1.0000E-09
270		0.0000	0.0000%	16021	3417	4.7	2			1.0000E-09
9.371		0.0000	0.0000	10343	2288	4.5	2			1.0000E-09
10.488		0.0000	0.0000%	22445	4317	5.2	2			1.0000E-09
621		0.0002	0.0000%	158360	39865	4.0	2			1.0000E-09
755		0.0002	0.0000%	231255	50136	4.6	2			1.0000E-09
11.005	B-BHC	43.8264	3.7796%	57651	6953	8.3	2	0	.1519	7.6020E-04
11.556	d-BHC	22.8447	1.9701%	19730	2714	7.3	1	0	-.5747	1.1579E-03
857		0.0000	0.0000%	17615	3009	5.9	2			1.0000E-09
12.007	Hept. epox.	26.1314	2.2536%	52247	9716	5.4	2	0	-.4155	5.0015E-04
12.308		0.0002	0.0000%	179662	21280	8.4	2			1.0000E-09
692		0.0001	0.0000%	140366	34992	4.0	2			1.0000E-09
12.826	Endosulf I	30.9654	2.6704%	61899	10393	6.0	2	0	-.2597	5.0026E-04
12.993		0.0000	0.0000%	19163	3558	5.4	2			1.0000E-09
160	Y-Chlordane	306.8662	26.4639%	680306	181328	3.8	2	0	.1270	4.5107E-04
427	a-Chlordane	254.9880	21.9900%	566810	149020	3.8	2	0	.1245	4.4986E-04
13.544		0.0004	0.0000%	386624	103504	3.7	2			1.0000E-09
13.711	4,4 DDE	27.1676	2.3429%	59459	14620	4.1	2	0	-.7255	4.5691E-04
928		0.0000	0.0000%	20470	3205	6.4	2			1.0000E-09
14.178	Dieldrin	69.2142	5.9690%	139498	28671	4.9	2	0	.4733	4.9617E-04
14.429		0.0000	0.0000%	42826	5742	7.5	2			1.0000E-09
779		0.0000	0.0000%	8129	1751	4.6	1			1.0000E-09
14.946	Endrin	4.1695	0.3596%	6081	1940	3.1	1	0	.5617	6.8564E-04
15.130		0.0000	0.0000%	7591	2212	3.4	1			1.0000E-09
531		0.0000	0.0000%	20277	4505	4.5	2			1.0000E-09
798		0.0002	0.0000%	243947	62859	3.9	2			1.0000E-09
533	4'4-DDD	10.2706	0.8857%	13124	2555	5.1	2	0	.1999	7.8258E-04
650		0.0001	0.0000%	79717	19107	4.2	2			1.0000E-09
117	4,4 DDT	10.7755	0.9293%	9168	1124	8.2	1	0	.5394	1.1754E-03
17.385		0.0000	0.0000%	4009	979	4.1	2			1.0000E-09
17.568		0.0000	0.0000%	12990	2600	5.0	2			1.0000E-09

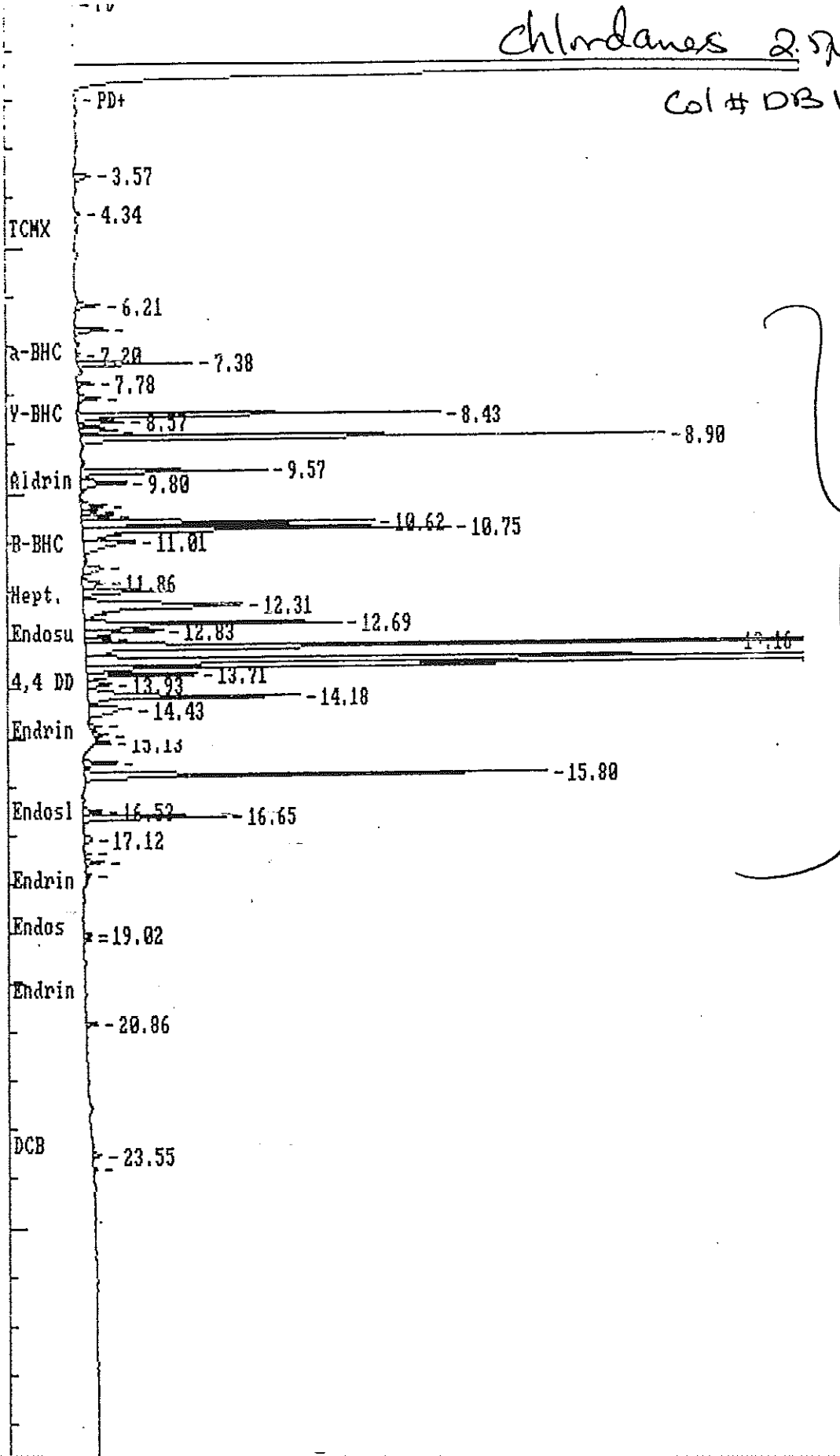
858	0.0000	0.0000%	7882	1547	5.1 :				1.0000E-09
859	1.7332	0.1497%	6226	1295	4.8 :	3	.9305		4.3897E-04
831	0.0000	0.0000%	2496	551	4.5 :				1.0000E-09

TOTAL AMOUNT = 1157.5637

NUMBER	GROUP AMOUNT	GROUP PERCENT

Chlordanes 2.5pg/ml

Col # DB1701



Chlordanes 2.5pg/ml

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO. 876.2 Field Blank

Lab Name: EMSL Contract:

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

Matrix: (soil/water) water Lab Sample ID: 95-26798

Sample wt/vol: 960 (g/mL) mL Lab File ID: E:JU20E42

% Moisture N/A decanted: (Y/N) N Date Received: 06/16/95

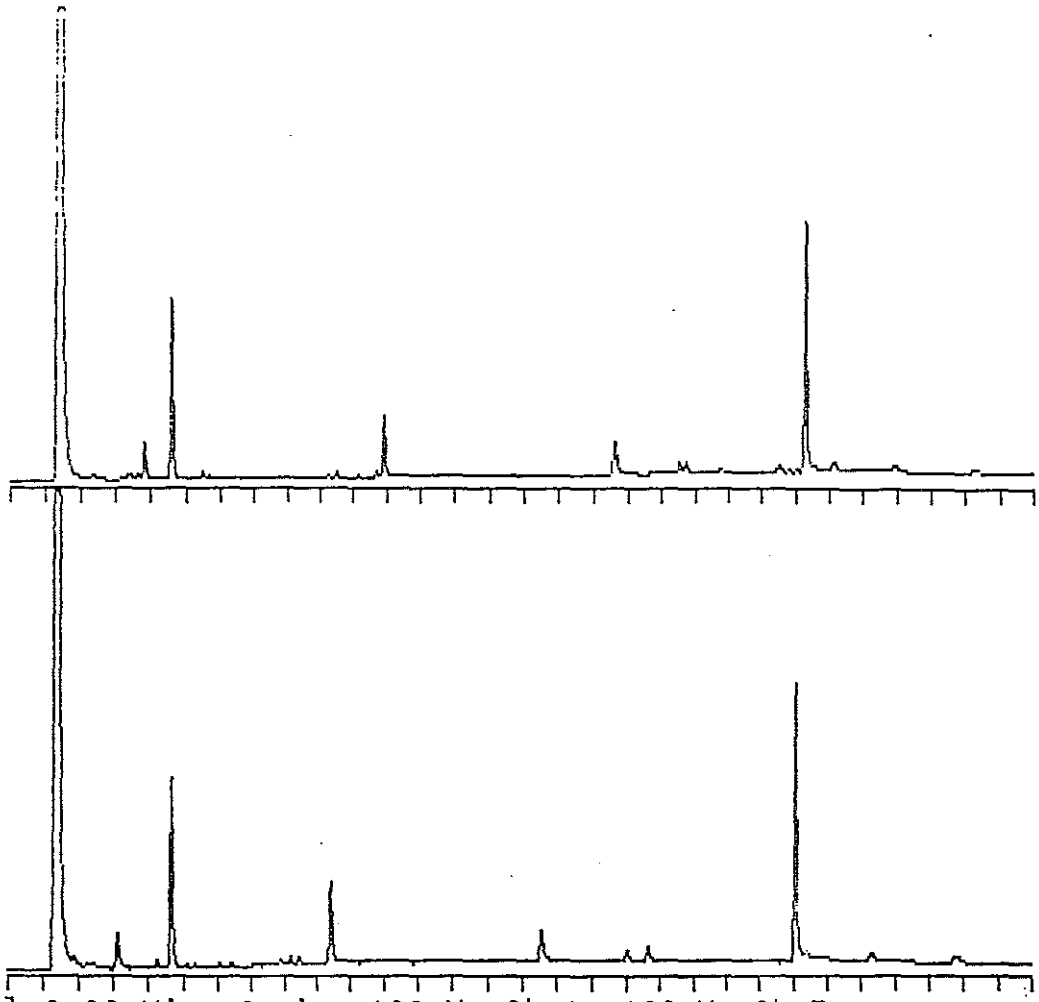
Extraction: (SepF/Cont/Sonc) SepF Date Extracted: 06/21/95

Concentrated Extract Volume: 10 (ml) Date Analyzed: 06/29/95

Injection Volume: 1 (uL) Dilution Factor 1

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
319-84-6	alpha-BHC	0.02	U
319-85-7	beta-BHC	0.04	U
319-86-8	delta-BHC	0.02	U
58-89-9	gamma-BHC (Lindane)	0.03	U
76-44-8	Heptachlor	0.02	U
309-00-2	Aldrin	0.04	U
1024-57-3	Heptachlor epoxide	0.04	U
959-98-8	Endosulfan I	0.02	U
60-57-1	Dieldrin	0.03	U
72-55-9	4,4'-DDE	0.04	U
72-20-8	Endrin	0.04	U
33213-65-9	Endosulfan II	0.04	U
72-54-8	4,4'-DDD	0.04	U
1031-07-8	Endosulfan sulfate	0.04	U
50-29-3	4,4'-DDT	0.04	U
7421-36-3	Endrin aldehyde	0.1	U
57-74-9	Chlordane	0.1	U
8001-35-2	Toxaphene	1	U
12674-11-2	Aroclor-1016	1	U
11104-28-2	Aroclor-1221	1	U
11141-16-5	Aroclor-1232	1	U
53469-21-9	Aroclor-1242	1	U
12672-29-6	Aroclor-1248	1	U
11097-69-1	Aroclor-1254	1	U
11096-82-5	Aroclor-1260	1	U



[Interface 1] 0-30 Min Scale: 100 Mv Ch.A, 100 Mv Ch.B
26798 P/P Processed: 06-29-1995 18:15:59, segment 1, cycle 42
End of sequence file reached at cycle 42
RAW DATA SAVED IN FILE E:JU26E42.PTS Second Channel Stored in E:KU26E42.PTS

***** EXTERNAL STANDARD TABLE *****

********** 06-29-1995 18:16:11 Version 5.1.5 **********
* Sample Name: 26798 P/P Data File: E:JU26E42 *
* Date: 06-29-1995 17:45:40 Method: M:APES-G 03-08-1995 15:02:41 # 359 *
* Interface: 1 Cycle#: 42 Operator JJK Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 10 Area Threshold: 1000 *
****
* Instrument Type: Perkin-Elmer 8500 Column Type: RTx-5 30m,.35mm *
* Solvent Description: 1.0u df *
* Conditions: 180 for 4.0min then 4.0deg/min to 240, hold 30min *
* Detector 0: Detector 1: ECD *
* Misc. Information: *
****

Starting Delay: 0.00 Ending retention time: 30.00
Area reject: 1000 One sample per 1.002 sec.
Amount injected: 1.00 Dilution factor: 1.00
Sample Weight: 1.00000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	2.371		0.0000	0.0000%	6653	567	11.7	1			1.0000E-09
2	3.140		0.0000	0.0000%	49486	7223	6.9	1			1.0000E-09
3	4.275		0.0000	0.0000%	7145	1281	5.6	1			1.0000E-09
4	4.659	TCMX	102.8597-	38.5458%	197190	38564	5.1	1	0	-.3571	5.2163E-04

8	9.419 Aldrin	45.7556	17.1465%	102096	16404	6.2	1	0	-.7042	4.4816E-04
9	15.548 DBT	27.2183	10.1999%	46010	6321	7.3	1	0	.2152	5.9158E-04
10	18.036	0.0000	0.0000%	13332	2069	6.4	1			1.0000E-09
11	18.654	0.0000	0.0000%	18021	2698	6.7	1			1.0000E-09
12	23.063 DCB	87.2914	32.7117%	298071	56543	5.3	1	0	-.1446	2.9285E-04
13	25.334	0.0000	0.0000%	11378	1277	8.9	1			1.0000E-09
14	27.822	0.0000	0.0000%	13769	1202	11.5	1			1.0000E-09

7/7/95

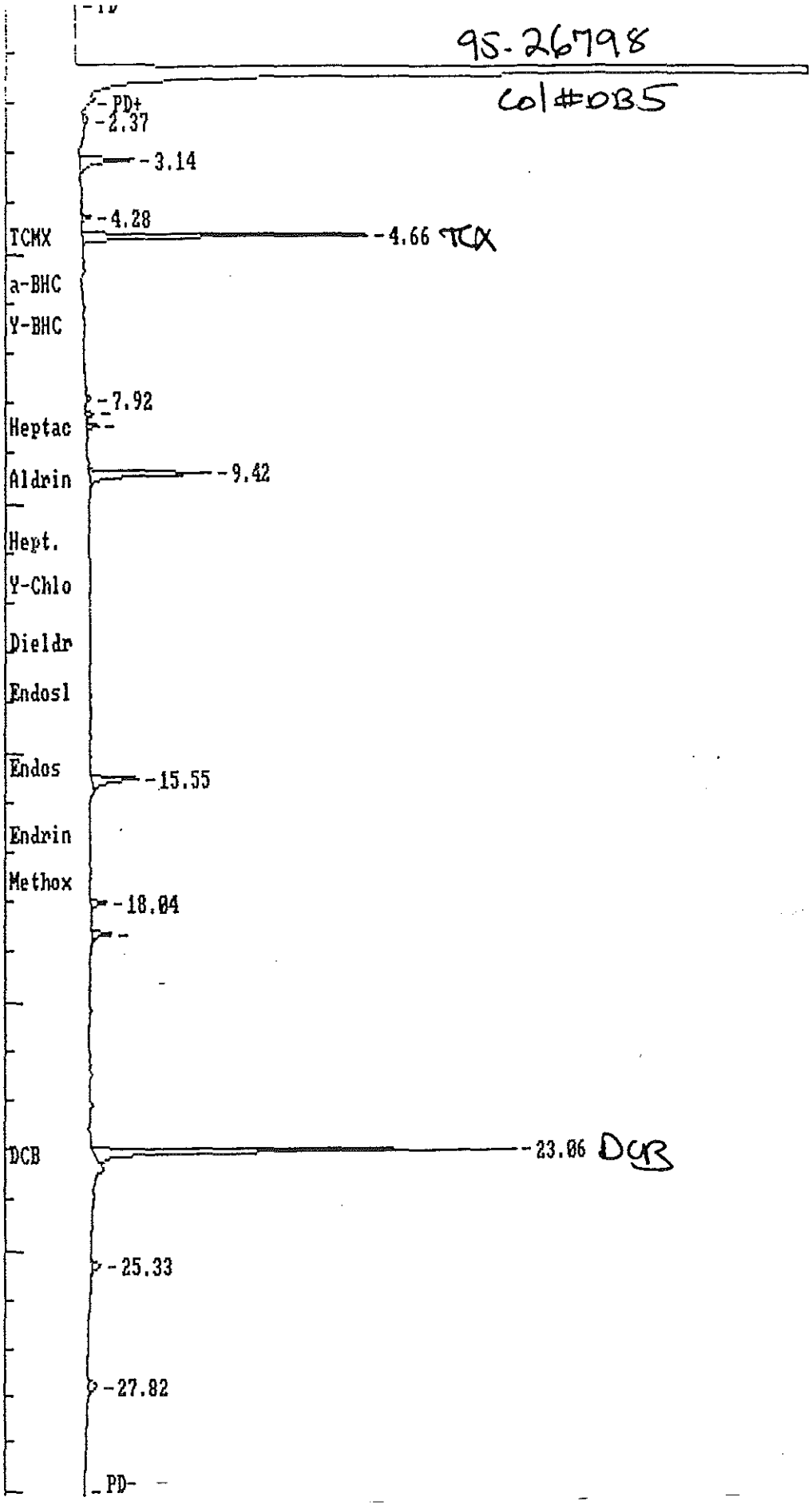
377

TOTAL AMOUNT = 266.8503

GROUP NUMBER	GROUP AMOUNT	GROUP PERCENT

Areas, times, and heights stored in: E:JU26E42.ATB
Data File = E:JU26E42.PTS Printed on 06-29-1995 at 18:16:21
Start time: 0.00 min. Stop time: 30.00 min. Offset: 1 mv.
Full Range: 100 millivolts

95-26798
Col #085



EXTERNAL STANDARD TABLE

06-29-1995 18:16:33 Version 5.1.5

Sample Name: 26798 P/P Data File: E:KU26E42

Date: 06-29-1995 17:45:40 Method: M:BPES-G 03-31-1995 14:31:59 # 358

Interface: 1 Cycle#: 42 Operator JJK Channel#: 1 Vial#: N.A.

Starting Peak Width: 10 Threshold: 10 Area Threshold: 500

Instrument Type: Perkin-Elmer 8500 Column Type: RTx-5 30m,.35mm

Solvent Description: 1.0u df

Conditions: 180 for 4.0min then 4.0deg/min to 240, hold 30min

Detector 0: Detector 1: ECD

Misc. Information:

Starting Delay: 0.00 Ending retention time: 30.00

Area reject: 500 One sample per 1.002 sec.

Amount injected: 1.00 Dilution factor: 1.00

Sample Weight: 1.00000

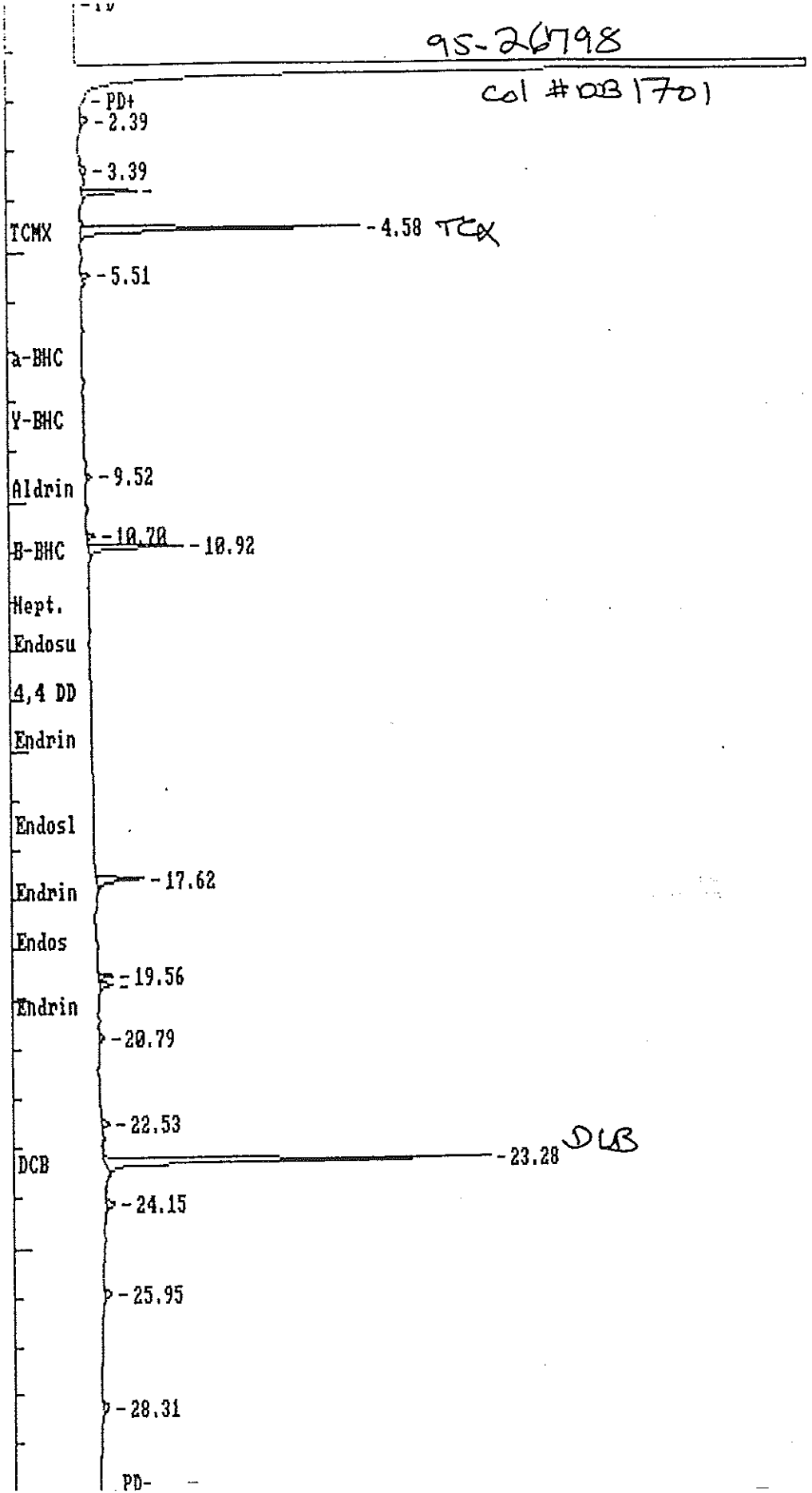
PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	2.388		0.0000	0.0000%	7030	928	7.6	1			1.0000E-09
2	3.390		0.0000	0.0000%	6946	687	10.1	1			1.0000E-09
3	3.824		0.0000	0.0000%	40128	7360	5.5	1			1.0000E-09
4	4.576	TCMX	101.5214	30.6557%	182237	37694	4.8	1	0	-.3636	5.5709E-04
5	5.511		0.0000	0.0000%	6521	1171	5.6	1			1.0000E-09
6	9.519	Aldrin	2.1050	0.6356%	3924	855	4.6	1	0	-1.724	5.3647E-04
7	10.705		0.0000	0.0000%	5207	1067	4.9	1			1.0000E-09
8	10.922	B-BHC	53.4779	16.1483%	66411	12752	5.2	1	0	-.4566	8.0526E-04
9	17.618	Endrin ald	27.9108	8.4280%	39678	6462	6.1	1	0	-1.355	7.0343E-04
10	19.556	Methoxychl	18.1584	5.4832%	11707	2021	5.8	2	0	1.385	1.5511E-03
11	19.739	Endrin ket	7.2071	2.1763%	11037	1815	6.1	2	0	-1.827	6.5298E-04
12	20.792		0.0000	0.0000%	4213	678	6.2	1			1.0000E-09
13	22.528		0.0000	0.0000%	7212	1041	6.9	1			1.0000E-09
14	23.280	DCB	120.7858	36.4728%	263260	51930	5.1	1	0	-.2147	4.5881E-04
15	24.148		0.0000	0.0000%	8940	1225	7.3	1			1.0000E-09
16	25.952		0.0000	0.0000%	8991	1024	8.8	1			1.0000E-09
17	28.306		0.0000	0.0000%	6349	640	9.9	1			1.0000E-09

TOTAL AMOUNT = 331.1666

GROUP NUMBER GROUP AMOUNT GROUP PERCENT

800 7/17/95

Areas, times, and heights stored in: E:KU26E42.ATB
Data File = E:KU26E42.PTS Printed on 06-29-1995 at 18:16:47
Start time: 0.00 min. Stop time: 30.00 min. Offset: 1 mv.
Full Range: 100 millivolts



***** EXTERNAL STANDARD TABLE *****

******************** 06-29-1995 18:16:33 Version 5.1.5 ********************

* Sample Name: 26798 P/P Data File: E:KU26E42 *

* Date: 06-29-1995 17:45:40 Method: M:BPES-G 03-31-1995 14:31:59 # 358 *

* Interface: 1 Cycle#: 42 Operator JJK Channel#: 1 Vial#: N.A. *

* Starting Peak Width: 10 Threshold: 10 Area Threshold: 500 *

* Instrument Type: Perkin-Elmer 8500 Column Type: RTx-5 30m,.35mm *

* Solvent Description: 1.0u df *

* Conditions: 180 for 4.0min then 4.0deg/min to 240, hold 30min *

* Detector 0: Detector 1: ECD *

* Misc. Information: *

Starting Delay: 0.00 Ending retention time: 30.00

Area reject: 500 One sample per 1.002 sec.

Amount injected: 1.00 Dilution factor: 1.00

Sample Weight: 1.00000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	2.388		0.0000	0.0000%	7030	928	7.6	1			1.0000E-09
2	3.390		0.0000	0.0000%	6946	687	10.1	1			1.0000E-09
3	3.824		0.0000	0.0000%	40128	7360	5.5	1			1.0000E-09
4	4.576	TCMX	101.5214	30.6557%	182237	37694	4.8	1	0	-.3636	5.5709E-04
5	5.511		0.0000	0.0000%	6521	1171	5.6	1			1.0000E-09
6	9.519	Aldrin	2.1050	0.6356%	3924	855	4.6	1	0	-1.724	5.3647E-04
7	10.705		0.0000	0.0000%	5207	1067	4.9	1			1.0000E-09
8	10.922	B-6	53.4779	16.1483%	66411	12752	5.2	1	0	-.4566	8.0526E-04
9	17.618	En[illegible]ald	27.9108	8.4280%	39678	6462	6.1	1	0	-1.355	7.0343E-04
10	19.556	Me[illegible]oxychl	18.1584	5.4832%	11707	2021	5.8	2	0	1.385	1.5511E-03
11	19.739	Endrin ket	7.2071	2.1763%	11037	1815	6.1	2	0	-1.827	6.5298E-04
12	20.792		0.0000	0.0000%	4213	678	6.2	1			1.0000E-09
13	22.528		0.0000	0.0000%	7212	1041	6.9	1			1.0000E-09
14	23.280	DCB	120.7858	36.4728%	263260	51930	5.1	1	0	-.2147	4.5881E-04
15	24.148		0.0000	0.0000%	8940	1225	7.3	1			1.0000E-09
16	25.952		0.0000	0.0000%	8991	1024	8.8	1			1.0000E-09
17	28.306		0.0000	0.0000%	6349	640	9.9	1			1.0000E-09

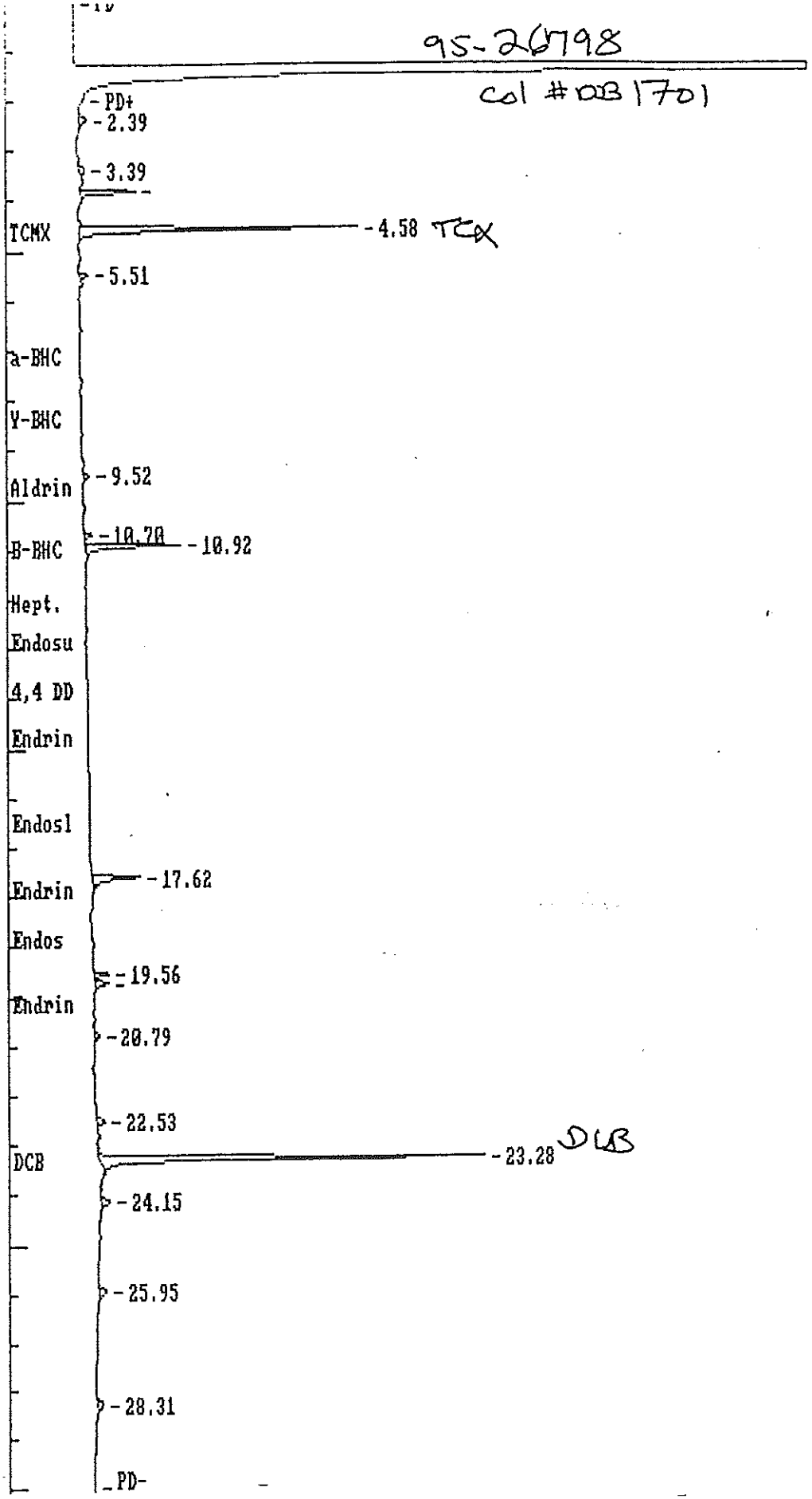
TOTAL AMOUNT = 331.1666

GROUP NUMBER GROUP AMOUNT GROUP PERCENT

Areas, times, and heights stored in: E:KU26E42.ATB
Data File = E:KU26E42.PTS Printed on 06-29-1995 at 18:16:47
Start time: 0.00 min. Stop time: 30.00 min. Offset: 1 mv.
Full Range: 100 millivolts

95-26798

col #DB1701



1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Bldg 697
1877-1
MW1-293(776

Lab Name: EMSL Contract:

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

Matrix: (soil/water) water Lab Sample ID: 95-26799

Sample wt/vol: 980 (g/mL) mL Lab File ID: E:JU20E44

% Moisture N/A decanted: (Y/N) N Date Received: 06/16/95

Extraction: (SepF/Cont/Sonc) SepF Date Extracted: 06/21/95

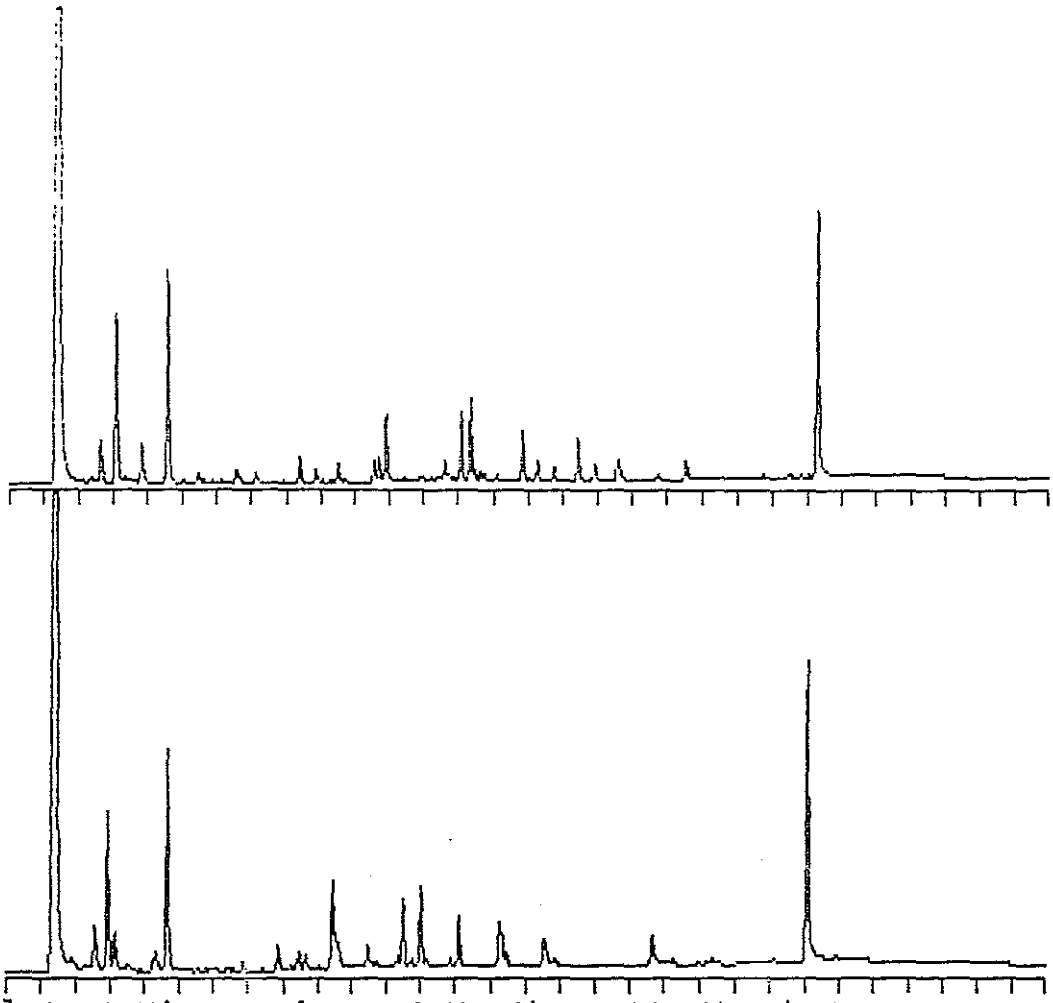
Concentrated Extract Volume: 10 (ml) Date Analyzed: 06/29/95

Injection Volume: 1 (uL) Dilution Factor 1

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
319-84-6	alpha-BHC	0.02	U
319-85-7	beta-BHC	0.04	U
319-86-8	delta-BHC	0.02	U
58-89-9	gamma-BHC (Lindane)	0.03	U
76-44-8	Heptachlor	0.02	U
309-00-2	Aldrin	0.04	U
1024-57-3	Heptachlor epoxide	0.04	U
959-98-8	Endosulfan I	0.02	U
60-57-1	Dieldrin	0.03	U
72-55-9	4,4'-DDE	0.04	U
72-20-8	Endrin	0.04	U
33213-65-9	Endosulfan II	0.04	U
72-54-8	4,4'-DDD	0.31	P
1031-07-8	Endosulfan sulfate	0.04	U
50-29-3	4,4'-DDT	0.12	P
7421-36-3	Endrin aldehyde	0.1	U
57-74-9	Chlordane	1.6	
8001-35-2	Toxaphene	1	U
12674-11-2	Aroclor-1016	1	U
11104-28-2	Aroclor-1221	1	U
11141-16-5	Aroclor-1232	1	U
53469-21-9	Aroclor-1242	1	U
12672-29-6	Aroclor-1248	1	U
11097-69-1	Aroclor-1254	1	U
11096-82-5	Aroclor-1260	1	U

Chlordane 1.6ng/L
DDD 0.31 P
DDT 0.12 P



[Interface 1] 0-30 Min Scale: 100 Mv Ch.A, 100 Mv Ch.B
26799 P/P Processed: 06-29-1995 19:28:52, segment 2, cycle 44
RAW DATA SAVED IN FILE E:JU26E44.PTS Second Channel Stored in E:KU26E44.PTS

****** EXTERNAL STANDARD TABLE ******

********** 06-29-1995 19:29:04 Version 5.1.5 **********
* Sample Name: 26799 P/P Data File: E:JU26E44 *
* Date: 06-29-1995 18:58:31 Method: M:APES-G 03-08-1995 15:02:41 # 359 *
* Interface: 1 Cycle#: 44 Operator JJK Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 10 Area Threshold: 1000 *
* Instrument Type: Perkin-Elmer 8500 Column Type: RTx-5 30m,.35mm *
* Solvent Description: 1.0u df *
* Conditions: 180 for 4.0min then 4.0deg/min to 240, hold 30min *
* Detector 0: Detector 1: ECD *
* Misc. Information: *

Starting Delay: 0.00 Ending retention time: 30.00
Area reject: 1000 One sample per 1.002 sec.
Amount injected: 1.00 Dilution factor: 1.00
Sample Weight: 1.00000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	2.305		0.0000	0.0000%	10501	986	10.7	2			1.0000E-09
2	2.555		0.0001	0.0000%	55544	8693	6.4	2			1.0000E-09
3	2.906		0.0002	0.0000%	151576	32249	4.7	2			1.0000E-09
4	3.140		0.0000	0.0000%	43736	7265	6.0	2			1.0000E-09
5	3.524		0.0000	0.0000%	8212	1230	6.7	1			1.0000E-09
			0.0000	0.0000%	32062	3524	9.1	2			1.0000E-09

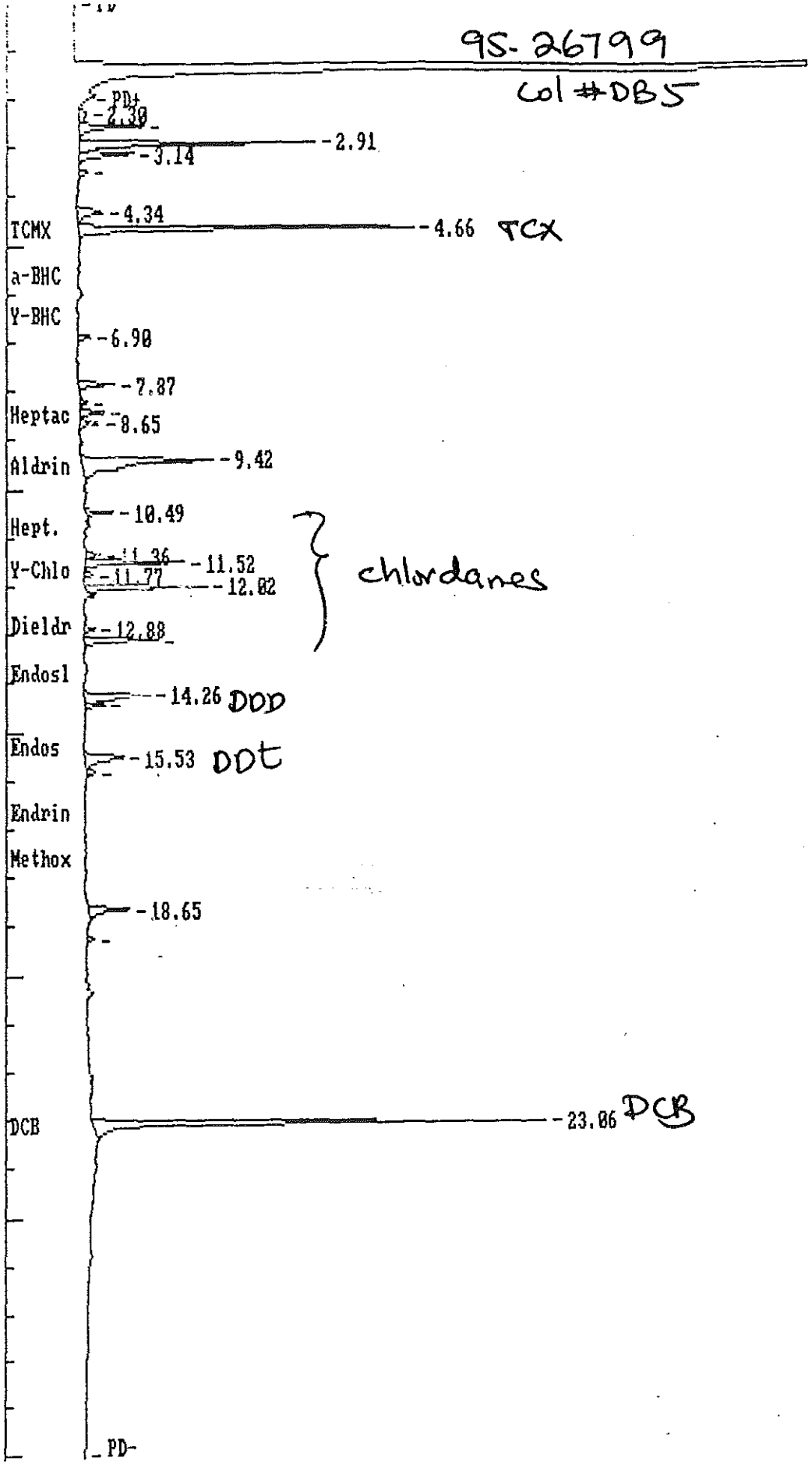
9	7.866		0.0000	0.0000%	24754	4902	5.0	1	Chlordane	385	1.0000E-09
10	8.233		0.0000	0.0000%	4658	943	4.9	2			1.0000E-09
11	8.450	Heptachlor part of Chlordane	8.9653	2.1366%	20451	3327	6.1	2	0	-.1972	4.3837E-04
12	8.651		0.0000	0.0000%	15926	2664	6.0	2			1.0000E-09
13	9.419	Aldrin	71.5864	17.0604%	159733	17927	8.9	1	0	-.7041	4.4816E-04
14	10.488		0.0000	0.0000%	16858	3743	4.5	1			1.0000E-09
15	11.356		0.0000	0.0000%	9366	1895	4.9	2			1.0000E-09
16	11.523	Y-Chlordane	23.6610	5.6389%	61567	13420	4.6	2	0	-.8620	3.8431E-04
17	11.773		0.0000	0.0000%	7633	1226	6.2	2			1.0000E-09
18	12.024	a-Chlordane	25.6848	6.1212%	67363	16210	4.2	1	0	-.2770	3.8129E-04
19	12.876	4,4'-DDE <DL	2.9516	0.7034%	7514	1427	5.3	1	0	-.2587	3.9281E-04
20	13.126		0.0000	0.0000%	47716	10060	4.7	1			1.0000E-09
21	14.262	4'4-DDD	41.1756	9.8130%	69364	8986	7.7	2	0	-.1169	5.9361E-04
22	14.462	Endraldehyde	7.2482	1.7274%	14575	2733	5.3	2	0	.4057	4.9730E-04
23	15.531	DDT	29.1793	6.9540%	49325	5260	9.4	2	0	.1076	5.9158E-04
24	15.832		0.0000	0.0000%	7751	1206	6.4	2			1.0000E-09
25	18.654		0.0000	0.0000%	38668	5567	6.9	1			1.0000E-09
26	19.272		0.0000	0.0000%	5339	1003	5.3	1			1.0000E-09
27	23.063	DCB	95.6050	22.7845%	326459	61076	5.3	1	0	-.1446	2.9285E-04

191000 / 121000 x 1.0 ng/mL x 10 mL / 0.980 L = 1.6 µg/L

TOTAL AMOUNT = 419.6048

GROUP NUMBER	GROUP AMOUNT	GROUP PERCENT

Areas, times, and heights stored in: E:JU26E44.ATB
Data File = E:JU26E44.PTS Printed on 06-29-1995 at 19:29:17
Start time: 0.00 min. Stop time: 30.00 min. Offset: 1 mv.
Full Range: 100 millivolts



EXTERNAL STANDARD TABLE

Oo-29-1995 19:29:32 Version 5.1.5

Sample Name: 26799 P/P Data File: E:KU26E44

Date: Oo-29-1995 18:58:31 Method: M:BPES-G 03-31-1995 14:31:59 # 358

Interface: 1 Cycle#: 44 Operator JJK Channel#: 1 Vial#: N.A.

Starting Peak Width: 10 Threshold: 10 Area Threshold: 500

Instrument Type: Perkin-Elmer 8500 Column Type: RTx-5 30m,.35mm

Solvent Description: 1.0u df

Conditions: 180 for 4.0min then 4.0deg/min to 240, hold 30min

Detector 0: Detector 1: ECD

Misc. Information:

Starting Delay: 0.00 Ending retention time: 30.00

Area reject: 500 One sample per 1.002 sec.

Amount injected: 1.00 Dilution factor: 1.00

Sample Weight: 1.00000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	2.371		0.0000	0.0000%	7911	1144	6.9	2			1.0000E-09
2	2.622		0.0000	0.0000%	49373	8920	5.5	2			1.0000E-09
3	3.073		0.0002	0.0000%	157954	35298	4.5	1			1.0000E-09
4	3.357		0.0000	0.0000%	3242	481	6.7	1			1.0000E-09
5	3.824		0.0000	0.0000%	41684	7626	5.5	1			1.0000E-09
6	4.576	TCMX	115.5001	20.7118%	207329	43932	4.7	1	0	-.3636	5.5709E-04
7	5.494		0.0000	0.0000%	8995	1672	5.4	1			1.0000E-09
8	6.596		0.0000	0.0000%	18785	2477	7.6	1			1.0000E-09
9	7.14?	a-BHC	5.6565	1.0143%	8997	1786	5.0	1	0	.9433	6.2867E-04
10	8.383	Y-BHC	13.5934	2.4376%	23521	5265	4.5	1	0	.6012	5.7793E-04
11	8.851	Heptachlor Part of Chlordane	6.2035	1.1124%	11803	2475	4.8	1	0	-.3759	5.2560E-04
12	9.519	Aldrin	10.4128	1.8673%	19410	4028	4.8	1	0	-1.724	5.3647E-04
13	10.588		0.0000	0.0000%	18589	4163	4.5	2	Chlordane		1.0000E-09
14	10.705		0.0000	0.0000%	27305	5143	5.3	2			1.0000E-09
15	10.922	B-BHC	61.6190	11.0497%	76520	13930	5.5	2		-.1566	8.0526E-04
16	12.007	Hept. epox.	3.9098	0.7011%	7531	946	8.0	1	183300 / 1035000 x 1.0 x 10 / 0.980 = 1.8mg	-.4155	5.1916E-04
17	12.258		0.0000	0.0000%	4464	754	5.9	2			1.0000E-09
18	12.441		0.0000	0.0000%	4633	560	8.3	2			1.0000E-09
19	12.625	Endosulf I	13.6757	2.4524%	26827	4213	6.4	2	0	-1.818	5.0978E-04
20	13.093	Y-Chlordane	27.8890	5.0011%	58855	14208	4.1	1	0	-.3811	4.7386E-04
21	13.360	a-Chlordane	29.1427	5.2260%	61838	16351	3.8	1	0	-.3736	4.7127E-04
22	13.661		0.0000	0.0000%	8879	2146	4.1	2			1.0000E-09
23	13.761	4,4 DDE	3.0402	0.5452%	5849	1282	4.6	2	0	-.3024	5.1975E-04
24	14.111	Dieldrin	3.3230	0.5959%	6314	1184	5.3	1	0	0	5.2633E-04
25	14.830	Endrin	45.2551	8.1153%	43225	10064	4.3	1		.4524	1.0470E-03
26	15.247		0.0000	0.0000%	20865	4201	5.0	1	DDD 30 x 10/980 = 0.31		1.0000E-09
27	15.748		0.0000	0.0000%	11887	2598	4.6	1			1.0000E-09
28	16.433	Endosulfll DDD 30.	21.6563	3.8835%	40211	8867	4.5	1	0	-.2534	5.3856E-04
29	16.950	4,4 DDT	11.4730	2.0574%	13350	2821	4.7	1	DDT	-.2946	8.5939E-04
30	17.618	Endrin ald	17.9867	3.2254%	25570	3947	6.5	1	11.5 x 10/980 = 0.12	-1.355	7.0343E-04
31	18.754	Endo sulf	2.7674	0.4963%	4119	820	5.0	1		-.4432	6.7183E-04
32	19.556	Methoxychl	36.8944	6.6160%	23786	3847	6.2	1	0	1.385	1.5511E-03
33	22.478		0.0000	0.0000%	4121	776	5.3	1			1.0000E-09
34	23.280	DC8	127.6541	22.8913%	278230	55871	5.0	1	0	-.2147	4.5881E-04

TOTAL AMOUNT = 557.6529

GROUP NUMBER	GROUP AMOUNT	GROUP PERCENT

Areas, times, and heights stored in: E:KU26E44.AT8
Data File = E:KU26E44.PTS Printed on 06-29-1995 at 19:30:25
Start time: 0.00 min. Stop time: 30.00 min. Offset: 1 mv.
Full Range: 100 millivolts

95-26799

Col#DB1701

PD+
2.37
3.07
3.36
TCMX 4.58 TCX
5.49
6.60
a-BHC
Y-BHC 8.38
Aldrin 9.52
B-BHC 10.59 10.92
Hept. 12.01
Endosu 13.09
4,4 DD 13.66
Endrin 14.83
15.25
Endosl 16.43 DDD
DDT
Endrin 17.62
Endos 18.75
19.56
Endrin
22.48
DCB 23.28 DCB
PD-

chlordanes

2F

SOIL PESTICIDE SURROGATE RECOVERY

Lab Name: EMSL Analytical Contract: _____

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

GC Column(1): DB5 ID: 0.32 (mm) GC Column(2): DB1701 ID: 0.32 (mm)

EPA SAMPLE NO.	TCX 1 %REC	#	TCX 2 %REC	#	DCB 1 %REC	#	DCB 2 %REC	#	OTHER (1)	OTHER (2)	TOT OUT
MB739-2	79		76		97		85				0
95-26798	84		77		83		76				0
95-26799	93		88		91		81				0
95-24206	80		81		55		48				2
95-24205MS	79		80		160		51				2

	ADVISORY QC LIMITS
TXC = Tetrachloro-m-xylene	(20-150)
DCB = Decachlorobiphenyl	(20-150)

\# Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogate diluted out

METHOD BLANK SUMMARY

EPA SAMPLE NO. 390

ab Name: EMSL ANALytical Contract:

ab Code: Case No.: SAS No.: SDG No.:

ample ID: MB 739-1 Lab File ID:

atrix: (soil/water) Water Extraction: (SepF/Cont/Sonc) Cont

ul ur Cleanup: (Y/N) N Date Extracted: 6-1-95

at Analyzed (1): 6-8-95 Date Analyzed (2): 6-8-95

ime Analyzed (1): 22:01 Time Analyzed (2): 22:01

n rument ID (1): HP5890/SFP Instrument ID (2): HP5890/SFP

C Column(1): DB5 ID: 0.32 (mm) GC Column(2): DB1701 ID: 0.32 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01		95-24198	6-8-95	6-8-95
02		95-24196	6-8-95	6-8-95
03		95-24205	6-8-95	6-8-95
04		95-24205MS	6-8-95	6-8-95
05		95-24205MSD	6-8-95	6-8-95
06				
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				

OMMENTS:

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE ID.

METHOD BLANK

Lab Name: EMSL ANALYTICAL Contract:

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

Matrix: (soil/water water Lab Sample ID: 739-1

Sample wt/vol: 1000 (g/mL) mL Lab File ID: E:JU06E62

% Moisture N/A decanted: (Y/N) N Date Received:

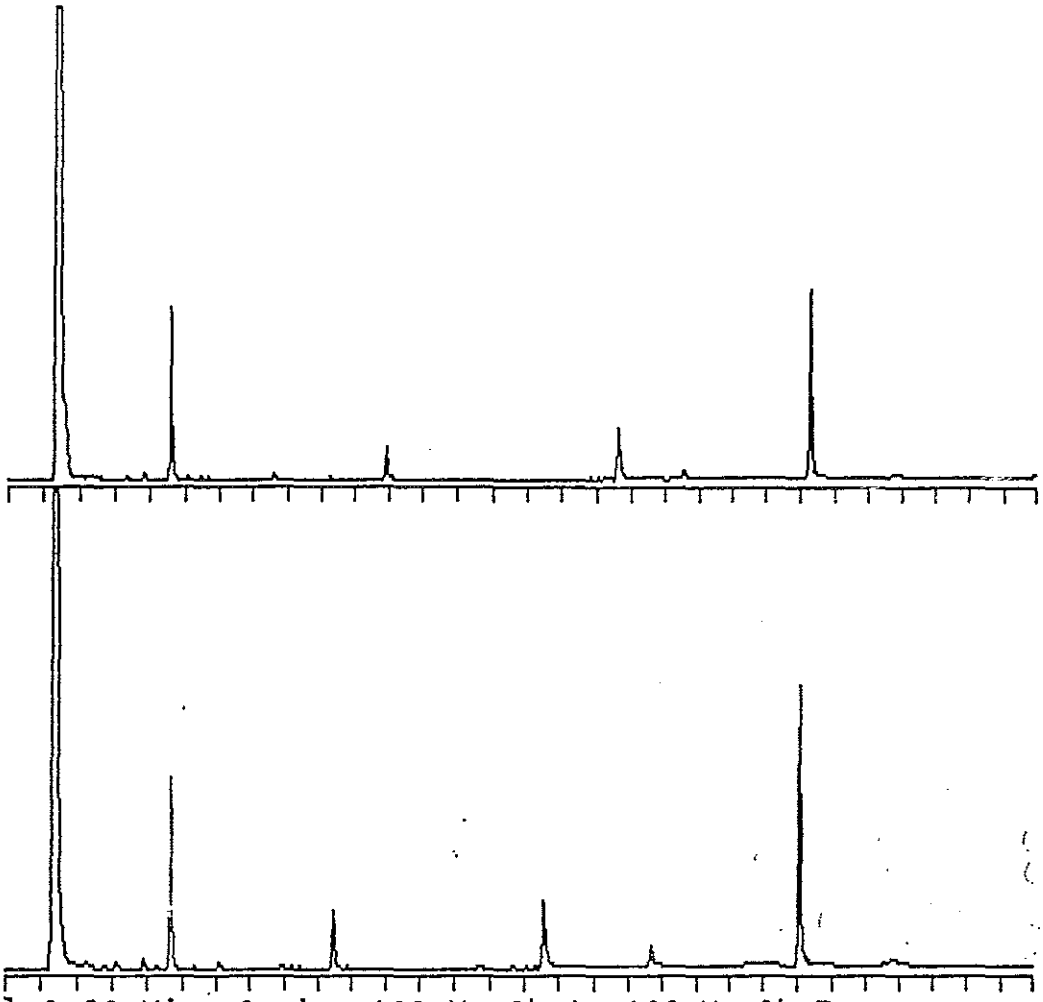
Extraction: (SepF/Cont/Sonc) Cont Date Extracted: 06/01/95

Concentrated Extract Volume: 10 (ml) Date Analyzed: 06/09/95

Injection Volume: 1 (uL) Dilution Factor 1

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
12674-11-2	Aroclor-1016	1	U
11104-28-2	Aroclor-1221	1	U
11141-16-5	Aroclor-1232	1	U
53469-21-9	Aroclor-1242	1	U
12672-29-6	Aroclor-1248	1	U
11097-69-1	Aroclor-1254	1	U
11096-82-5	Aroclor-1260	1	U



[Interface 1] 0-30 Min Scale: 100 Mv Ch.A, 100 Mv Ch.B
MB 739-1 Processed: 06-08-1995 22:01:36, segment 4, cycle 62
RAW DATA SAVED IN FILE E:JU06E62.PTS Second Channel Stored in E:KU06E62.PTS

****** EXTERNAL STANDARD TABLE ******

********** 06-08-1995 22:01:46 Version 5.1.5 **********

* Sample Name: MB 739-1 Data File: E:JU06E62 *
* Date: 06-08-1995 21:31:18 Method: M:APES-G 03-08-1995 15:02:41 # 359 *
* Interface: 1 Cycle#: 62 Operator JJK Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 10 Area Threshold: 1000 *

* Instrument Type: Perkin-Elmer 8500 Column Type: RTx-5 30m,.35mm *
* Solvent Description: 1.0u df *
* Conditions: 180 for 4.0min then 4.0deg/min to 240, hold 30min *
* Detector 0: Detector 1: ECD *
* Misc. Information: *

Starting Delay: 0.00 Ending retention time: 30.00
Area reject: 1000 One sample per 1.002 sec.
Amount injected: 1.00 Dilution factor: 1.00
Sample Weight: 1.00000

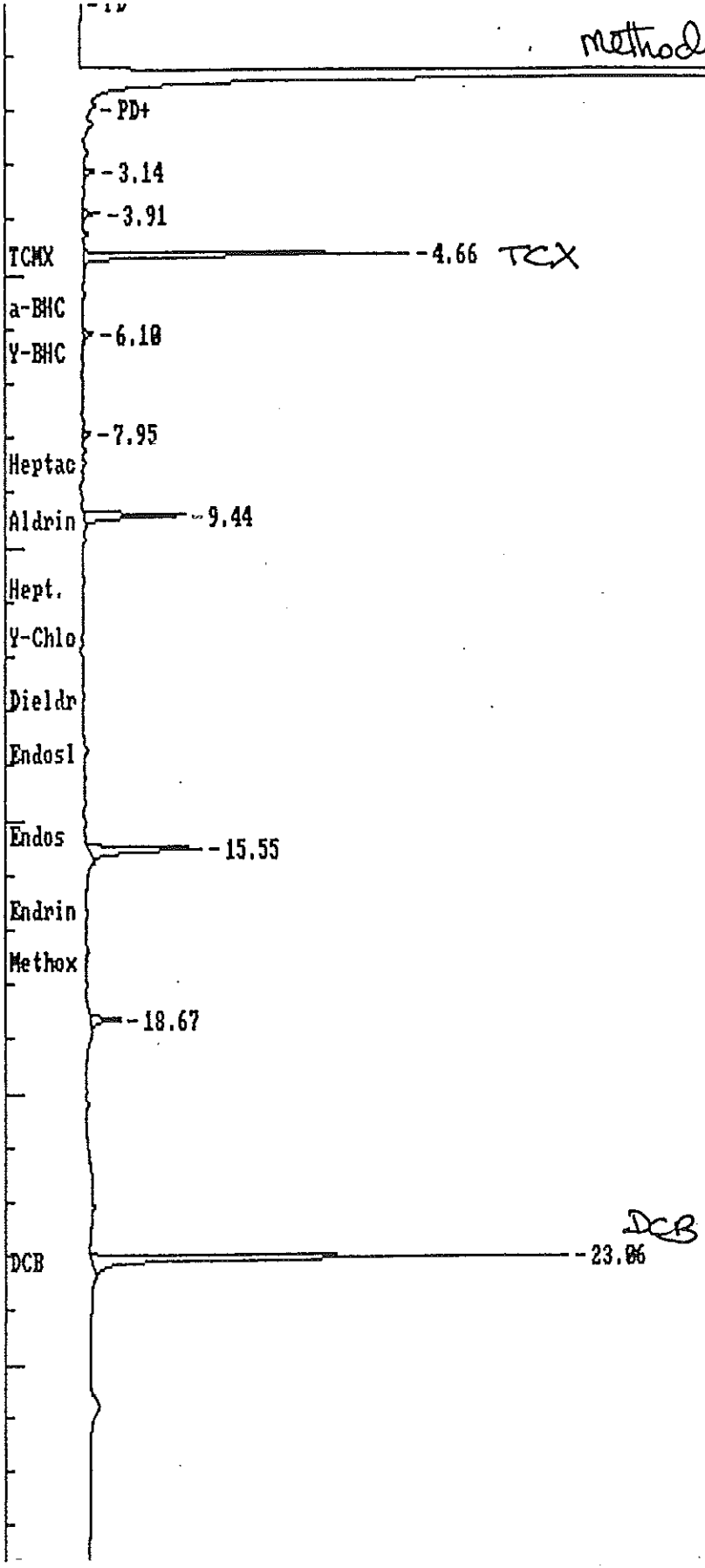
PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	3.140		0.0000	0.0000%	7078	1251	5.7	1			1.0000E-09
2	3.908		0.0000	0.0000%	10300	2002	5.1	1			1.0000E-09
3	4.650	TOMX	99.7910	33.3270%	170201	29635	4.3	1	0	-.3571	5.2163E-04

6	9.436 Aldrin	32.3887	12.3040%	72270	12234	5.9	1	0	393 -.5281	4.4816E-04
7	15.548 DDT	53.2660	20.2350%	90041	13749	6.5	1	0	.2152	5.9158E-04
8	18.671	0.0000	0.0000%	23424	3528	6.6	1			1.0000E-09
9	23.063 DCB	88.8002	33.7340%	303223	57546	5.3	1	0	-.1446	2.9285E-04

TOTAL AMOUNT = 263.2367

ROUP NUMBER GROUP AMOUNT GROUP PERCENT

Areas, times, and heights stored in: E:JU06E62.ATB
Data File = E:JU06E62.PTS Printed on 06-08-1995 at 22:01:54
Start time: 0.00 min. Stop time: 30.00 min. Offset: 1 mv.
Full Range: 100 millivolts



***** EXTERNAL STANDARD TABLE *****

********** 06-08-1995 22:02:03 Version 5.1.5 **********

* Sample Name: MB 739-1 Data File: E:KU06E62 *
* Date: 06-08-1995 21:31:18 Method: M:BPES-G 03-31-1995 14:31:59 # 358 *
* Interface: 1 Cycle#: 62 Operator JJK Channel#: 1 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 10 Area Threshold: 500 *

* Instrument Type: Perkin-Elmer 8500 Column Type: RTx-5 30m,.35mm *
* Solvent Description: 1.0u df *
* Conditions: 180 for 4.0min then 4.0deg/min to 240, hold 30min *
* Detector 0: Detector 1: ECD *
* Misc. Information: *

Starting Delay: 0.00 Ending retention time: 30.00
Area reject: 500 One sample per 1.002 sec.
Amount injected: 1.00 Dilution factor: 1.00
Sample Weight: 1.00000

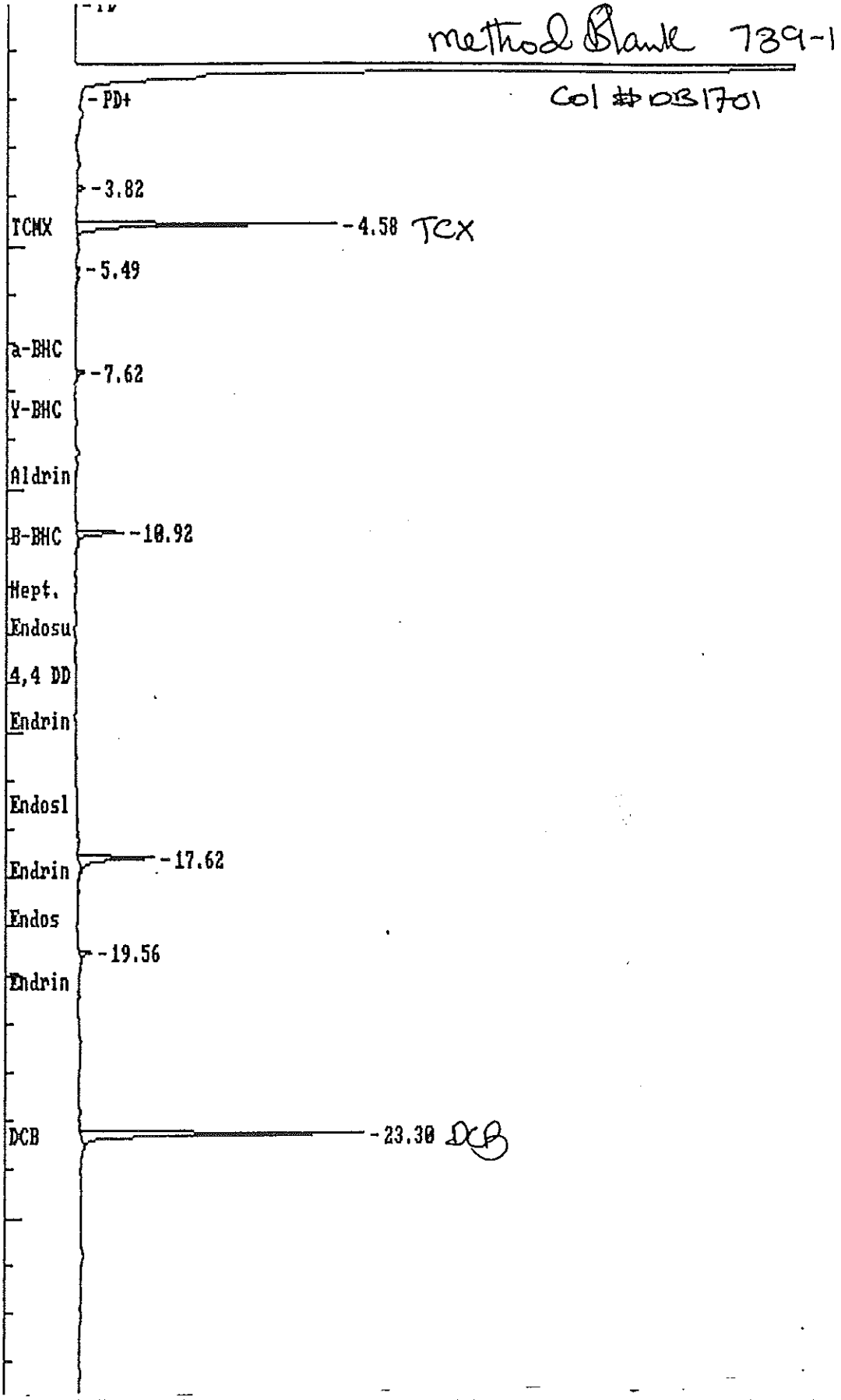
PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	3.824		0.0000	0.0000%	5209	1085	4.8	1			1.0000E-09
2	4.576	TCMX	88.7124	33.1530%	159244	36207	4.4	1	0	-.3636	5.5709E-04
3	5.494		0.0000	0.0000%	2523	492	5.1	1			1.0000E-09
4	7.615		0.0000	0.0000%	6421	1144	5.6	1			1.0000E-09
5	10.922	B-BHC	27.3893	10.2358%	34013	6485	5.2	1	0	-.4566	8.0526E-04
6	17.618	Endrin ald	45.8003	17.1162%	65110	10452	6.2	1	0	-1.355	7.0343E-04
7	19.556	Methoxychl	14.7941	5.5288%	9538	1662	5.7	1	0	1.385	1.5511E-03
8	23.296	DCB	90.8885	33.9663%	198097	39173	5.1	1	0	-.1431	4.5881E-04

TOTAL AMOUNT = 267.5846

GSM 8/26/95

GROUP NUMBER GROUP AMOUNT GROUP PERCENT

Areas, times, and heights stored in: E:KU06E62.ATB
Data File = E:KU06E62.PTS Printed on 06-08-1995 at 22:02:12
Start time: 0.00 min. Stop time: 30.00 min. Offset: 1 mv.
Full Range: 100 millivolts



4C

METHOD BLANK SUMMARY

EPA SAMPLE NO. 397

Lab Name: EMSL ANALYTICAL Contract: _____

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

Lab Sample ID: MB 739-2 Lab File ID: E:JU26E31

Matrix: (soil/water) water Extraction: (SepF/Cont/Sonc) Cont

Sulfur Cleanup: (Y/N) N Date Extracted: 6-21-95

Date Analyzed (1): 6-28-95 Date Analyzed (2): 6-28-95

Time Analyzed (1): 16:03 Time Analyzed (2): 16:03

Instrument ID (1): HP5890/SIP Instrument ID (2): HP5890/SIP

GC Column(1): DB5 ID: 0.32 (mm) GC Column(2): DB1701 ID: 0.32 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01		9526798	6.29.95	6-29-95
02		95-26799	6-29-95	6-29-95
03		95-26800	6-29-95	6-29-95
04				
05				
06				
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				

COMMENTS: _____

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE ID. METHOD BLANK

Lab Name: EMSL ANALYTICAL Contract:

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

Matrix: (soil/water WATER Lab Sample ID: 739-2

Sample wt/vol: 1000 (g/mL) ML Lab File ID: E:JU26E31

% Moisture 100 decanted: (Y/N) N Date Received:

Extraction: (SepF/Cont/Sonc) Sonc Date Extracted: 06/21/95

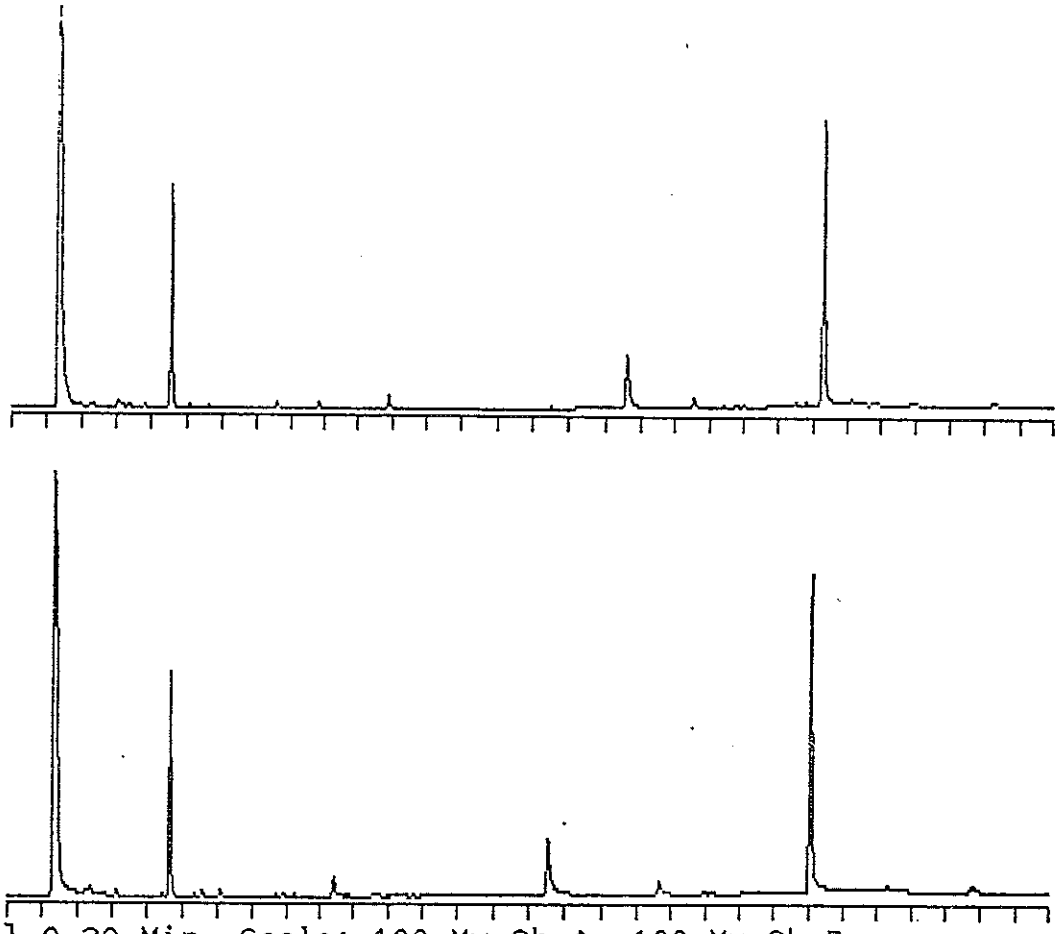
Concentrated Extract Volume: 10 (ml) Date Analyzed: 06/28/95

Injection Volume: 1 (uL) Dilution Factor 1

GPC Cleanup: (Y/N) N pH: Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg	Q
12674-11-2	Aroclor-1016	30	U
11104-28-2	Aroclor-1221	30	U
11141-16-5	Aroclor-1232	30	U
53469-21-9	Aroclor-1242	30	U
12672-29-6	Aroclor-1248	30	U
11097-69-1	Aroclor-1254	30	U
11096-82-5	Aroclor-1260	30	U

SEQUENCE RECORDED IN E:JU26E.SEQ



[Interface 1] 0-30 Min Scale: 100 Mv Ch.A, 100 Mv Ch.B
MB 737-3 Processed: 06-28-1995 16:33:35, segment 6, cycle 31
RAW DATA SAVED IN FILE E:JU26E31.PTS Second Channel Stored in E:KU26E31.PTS

***** EXTERNAL STANDARD TABLE *****

********** 06-28-1995 16:33:47 Version 5.1.5 **********
* Sample Name: MB ~~737-3~~ 739-2 Data File: E:JU26E31 *
* Date: 06-28-1995 16:03:16 Method: M:APES-G 03-08-1995 15:02:41 # 359 *
* Interface: 1 Cycle#: 31 Operator JJK Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 10 Area Threshold: 1000 *
****
* Instrument Type: Perkin-Elmer 8500 Column Type: RTx-5 30m,.35mm *
* Solvent Description: 1.0u df *
* Conditions: 180 for 4.0min then 4.0deg/min to 240, hold 30min *
* Detector 0: Detector 1: ECD *
* Misc. Information: *
****

Starting Delay: 0.00 Ending retention time: 30.00
Area reject: 1000 One sample per 1.002 sec.
Amount injected: 1.00 Dilution factor: 1.00
Sample Weight: 1.00000

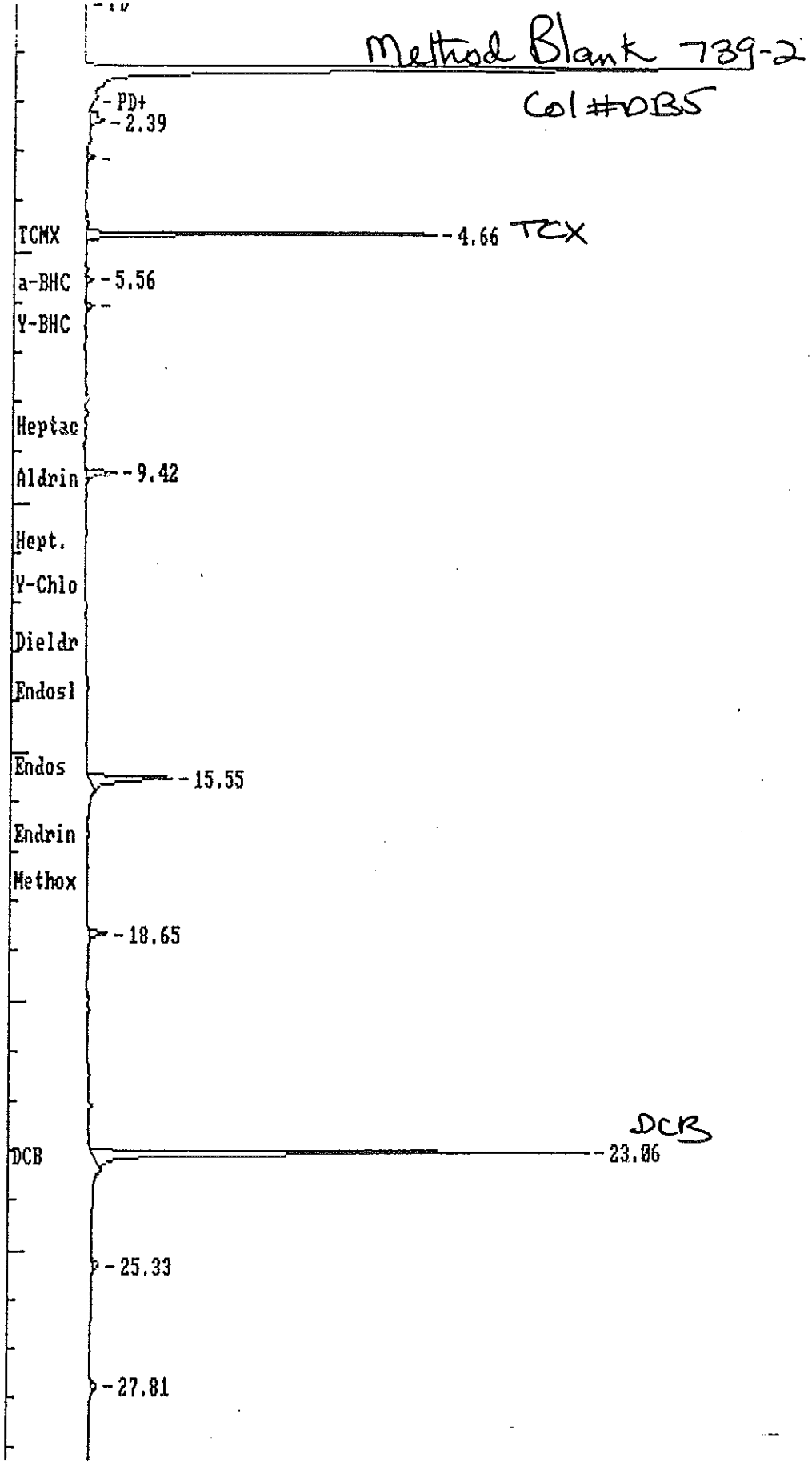
PK JH	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	2.388		0.0000	0.0000%	18562	1835	10.1	1			1.0000E-09
2	3.140		0.0000	0.0000%	4602	904	5.1	1			1.0000E-09
3	4.659	TCMX	97.0951	37.6953%	186139	45949	4.1	1	0	-.3571	5.2163E-04
4	5.561	a-BHC	3.3715	1.3089%	5534	1027	5.4	1	0	-.2994	6.0923E-04

7	13.348 DDT	45.6994	17.7419%	77250	10765	7.2	1	0	400	.2152	5.9158E-04
8	18.654	0.0000	0.0000%	16367	2428	6.7	1				1.0000E-09
9	23.063 DC8	101.4070	39.3693%	346271	65148	5.3	1	0		-.1446	2.9285E-04
10	25.334	0.0000	0.0000%	6272	786	8.0	1				1.0000E-09
11	27.806	0.0000	0.0000%	6573	687	9.6	1				1.0000E-09

TOTAL AMOUNT = 257.5788

GROUP NUMBER GROUP AMOUNT GROUP PERCENT

Areas, times, and heights stored in: E:JU26E31.ATB
Data File = E:JU26E31.PTS Printed on 06-28-1995 at 16:33:56
Start time: 0.00 min. Stop time: 30.00 min. Offset: 1 mv.
Full Range: 100 millivolts



***** EXTERNAL STANDARD TABLE *****

********** 06-28-1995 16:34:07 Version 5.1.5 **********

Sample Name: MB ~~737~~ 739-2 Data File: E:KU26E31 *

* Date: 06-28-1995 16:03:16 Method: M:BPES-G 03-31-1995 14:31:59 # 358 *

* Interface: 1 Cycle#: 31 Operator JJK Channel#: 1 Vial#: N.A. *

* Starting Peak Width: 10 Threshold: 10 Area Threshold: 500 *

****

* Instrument Type: Perkin-Elmer 8500 Column Type: RTx-5 30m,.35mm *

* Solvent Description: 1.0u df *

* Conditions: 180 for 4.0min then 4.0deg/min to 240, hold 30min *

* Detector 0: Detector 1: ECD *

* Misc. Information: *

****

Starting Delay: 0.00 Ending retention time: 30.00

Area reject: 500 One sample per 1.002 sec.

Amount injected: 1.00 Dilution factor: 1.00

Sample Weight: 1.00000

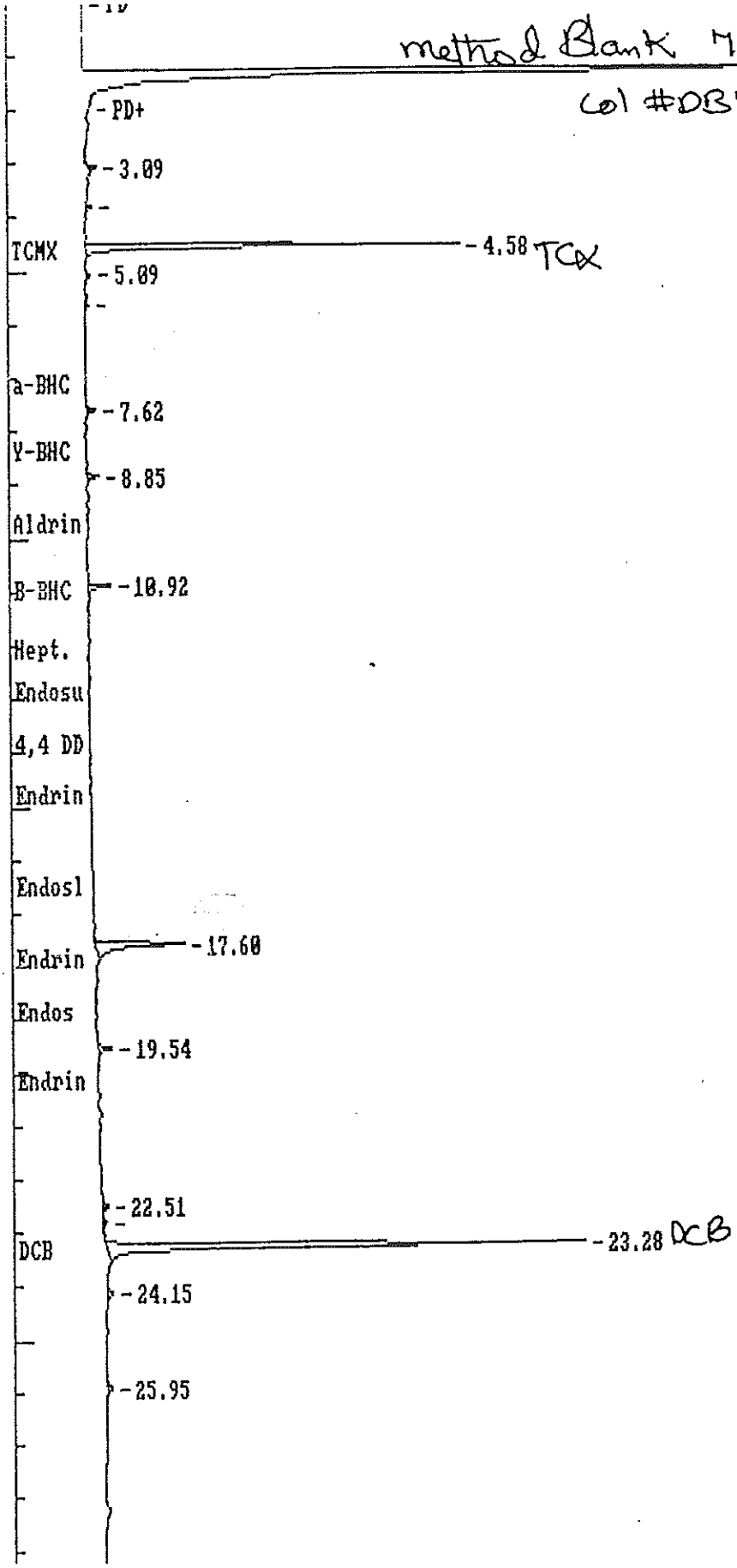
PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	3.090		0.0000	0.0000%	6399	1109	5.8	1			1.0000E-09
2	3.808		0.0000	0.0000%	3299	766	4.3	1			1.0000E-09
3	4.576	TCMX	99.9060	31.7315%	179337	46100	3.9	1	0	-.3636	5.5709E-04
4	5.093		0.0000	0.0000%	2958	639	4.6	1			1.0000E-09
5	5.661		0.0000	0.0000%	1752	443	4.0	1			1.0000E-09
6	7.615		0.0000	0.0000%	7038	1273	5.5	1			1.0000E-09
7	8.851	Heptachlor	3.7940	1.2050%	7218	1472	4.9	1	0	-.3759	5.2560E-04
8	10.922	B-BHC	11.4592	3.6396%	14230	2760	5.2	1	0	-.4566	8.0526E-04
9	17.602	Endrin ald	49.1073	15.5972%	69811	10906	6.4	1	0	-1.449	7.0343E-04
10	19.539	Methoxychl	15.5549	4.9405%	10029	1685	6.0	1	0	1.298	1.5511E-03
11	22.512		0.0000	0.0000%	3975	654	6.1	1			1.0000E-09
12	22.812		0.0000	0.0000%	2240	465	4.8	1			1.0000E-09
13	23.280	DCB	135.0262	42.8862%	294298	58923	5.0	1	0	-.2147	4.5881E-04
14	24.148		0.0000	0.0000%	4912	760	6.5	1			1.0000E-09
15	25.952		0.0000	0.0000%	4286	581	7.4	1			1.0000E-09

TOTAL AMOUNT = 314.8477

GOOD 7/17/95

GROUP NUMBER GROUP AMOUNT GROUP PERCENT

Areas, times, and heights stored in: E:KU26E31.ATB
Data File = E:KU26E31.PTS Printed on 06-28-1995 at 16:34:17
Start time: 0.00 min. Stop time: 30.00 min. Offset: 1 mv.
Full Range: 100 millivolts



Water PESTICIDE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

404

Lab Name: EMSL Analytical Contract: _____

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

Matrix Spike - EPA Sample No.: 95-24205

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
gamma-BHC(Lindane)	1.5	U	1.7	113	46-127
Heptachlor	1.5	U	1.7	113	35-130
Aldrin	1.5	U	1.4	93	34-132
Dieldrin	3.0	U	3.1	103	31-134
Endrin	3.0	U	3.4	113	42-139
4,4'-DDT	3.0	U	3.4	113	23-134

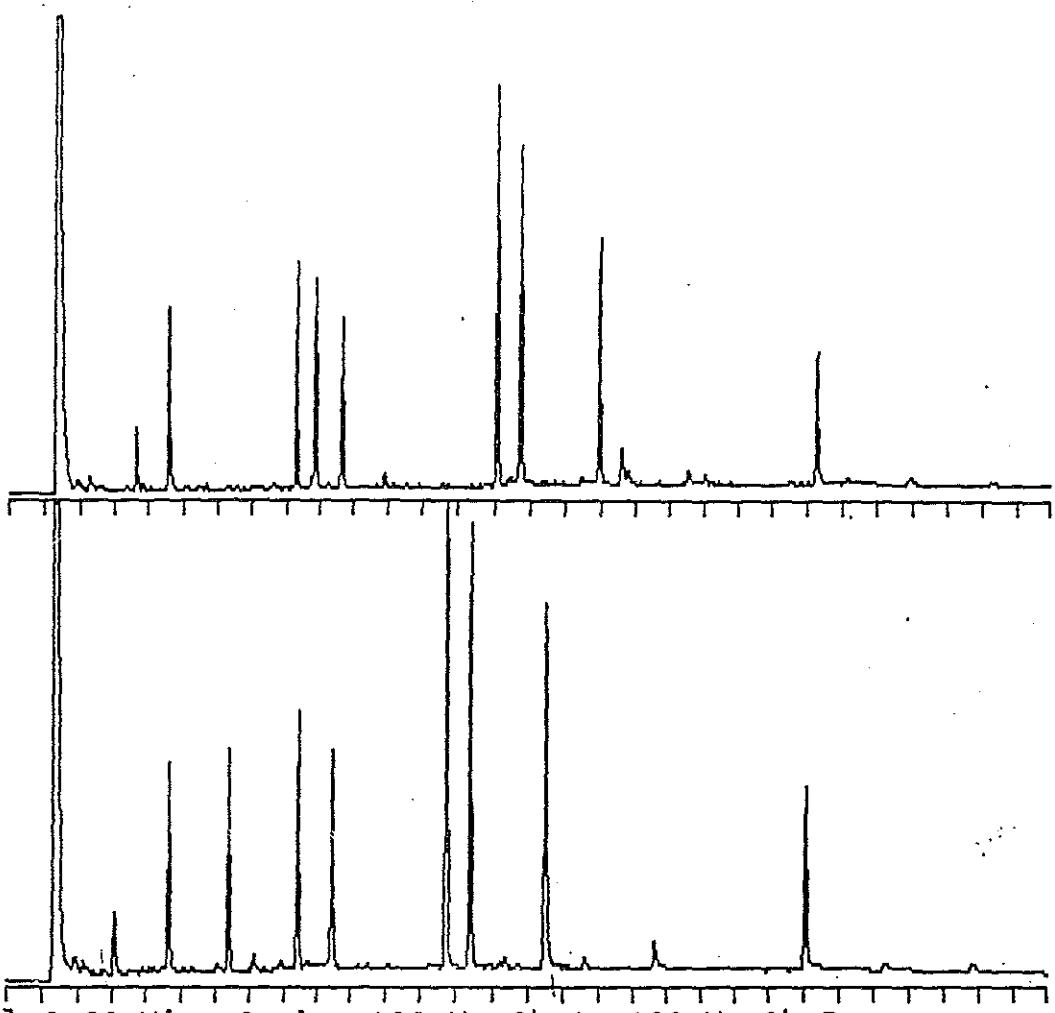
COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
gamma-BHC(Lindane)	1.5	1.6	107	5	50	46-127
Heptachlor	1.5	1.6	107	5	31	35-130
Aldrin	1.5	1.4	93	0	43	34-132
Dieldrin	3.0	3.2	107	4	38	31-134
Endrin	3.0	3.4	113	0	45	42-139
4,4'-DDT	3.0	3.4	113	0	50	23-134

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 6 outside limits
Spike Recovery: 0 out of 12 outside limits

COMMENTS: _____



[Interface 1] 0-30 Min Scale: 100 Mv Ch.A, 100 Mv Ch.B
24205 P/P Processed: 06-08-1995 20:19:11, segment 1, cycle 59
RAW DATA SAVED IN FILE E:JU06E59.PTS Second Channel Stored in E:KU06E59.PTS

****** EXTERNAL STANDARD TABLE ******

********** 06-08-1995 20:19:21 Version 5.1.5 **********
* Sample Name: 24205 P/P MS Data File: E:JU06E59 *
* Date: 06-08-1995 19:48:56 Method: M:APES-G 03-08-1995 15:02:41 # 359 *
* Interface: 1 Cycle#: 59 Operator JJK Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 10 Area Threshold: 1000 *
****
* Instrument Type: Perkin-Elmer 8500 Column Type: RTx-5 30m,.35mm *
* Solvent Description: 1.0u df *
* Conditions: 180 for 4.0min then 4.0deg/min to 240, hold 30min *
* Detector 0: Detector 1: ECD *
* Misc. Information: *
****

Starting Delay: 0.00 Ending retention time: 30.00
Area reject: 1000 One sample per 1.002 sec.
Amount injected: 1.00 Dilution factor: 1.00
Sample Weight: 1.00000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	2.171		0.0000	0.0000%	7489	1937	3.9	1			1.0000E-09
2	3.073		0.0001	0.0000%	62457	12531	5.0	1			1.0000E-09
3	3.908		0.0000	0.0000%	5804	846	6.9	1			1.0000E-09
4	4.459	TCMX	95.8220	9.7832%	142992	42227	3.4	1	0	-.3571	6.7163E-04

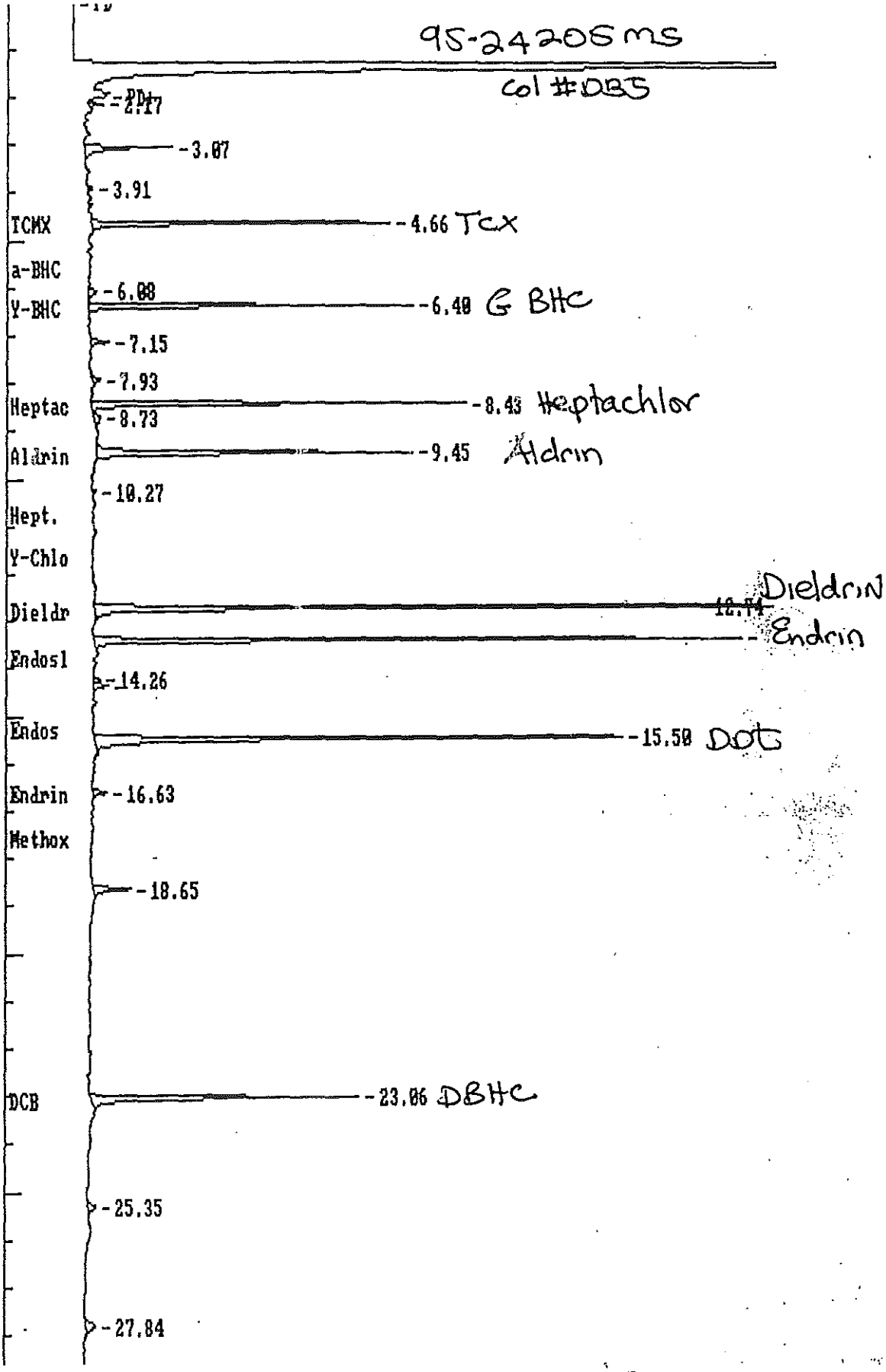
7	7.148	d-BHC	10.4883	1.0835%	12889	2667	4.8	1	0		1.0000E-09
8	7.932		0.0000	0.0000%	6614	1128	5.9	1			
9	8.433	Heptachlor	86.4228	8.9279%	197144	52920	3.7	2	0	-.3944	4.3837E-04
10	8.734		0.0000	0.0000%	9643	800	12.0	2			1.0000E-09
11	9.452	Aldrin	89.1016	9.2046%	198815	44765	4.4	1	0	-.3521	4.4816E-04
12	10.270		0.0000	0.0000%	2348	562	4.2	1			1.0000E-09
13	12.742	Dieldrin	156.5511	16.1724%	392696	99924	3.9	1	0	-.1308	3.9866E-04
14	13.410	Endrin	171.0924	17.6746%	352606	91692	3.8	1	0	-.1864	4.8522E-04
15	14.262	4'4-DDD	3.0057	0.3105%	5063	976	5.2	2	0	-.1169	5.9361E-04
16	14.379	Endrin ald	5.1905	0.5362%	10437	2062	5.1	2	0	-.1739	4.9730E-04
17	15.498	DDT	214.3900	22.1475%	362404	74835	4.8	1	0	-.1076	5.9158E-04
18	16.633	Endrin ket.	4.3995	0.4545%	10409	2019	5.2	1	0	-.1003	4.2265E-04
19	18.654		0.0000	0.0000%	32987	5357	6.2	1			1.0000E-09
20	23.063	DCB	55.6703	5.7510%	190095	37877	5.0	1	0	-.1446	2.9285E-04
21	25.351		0.0000	0.0000%	8285	1028	8.1	1			1.0000E-09
22	27.839		0.0000	0.0000%	15512	1408	11.0	1			1.0000E-09

1.72
1.78
3.1
3.4
4.3

TOTAL AMOUNT = 968.0112

GROUP NUMBER	GROUP AMOUNT	GROUP PERCENT

reas, times, and heights stored in: E:JU06E59.ATB
Data File = E:JU06E59.PTS Printed on 06-08-1995 at 20:19:32
tart time: 0.00 min. Stop time: 30.00 min. Offset: 1 mv.
ull Range: 100 millivolts



***** EXTERNAL STANDARD TABLE *****

********** 06-08-1995 20:20:14 Version 5.1.5 **********

* Sample Name: 24205 P/P MS Data File: E:KU06E59 *
* Date: 06-08-1995 19:48:56 Method: M:BPES-G 03-31-1995 14:31:59 # 358 *
* Interface: 1 Cycle#: 59 Operator JJK Channel#: 1 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 10 Area Threshold: 500 *
* Instrument Type: Perkin-Elmer 8500 Column Type: RTx-5 30m,.35mm *
* Solvent Description: 1.0u df *
* Conditions: 180 for 4.0min then 4.0deg/min to 240, hold 30min *
* Detector 0: Detector 1: ECD *
* Misc. Information: *

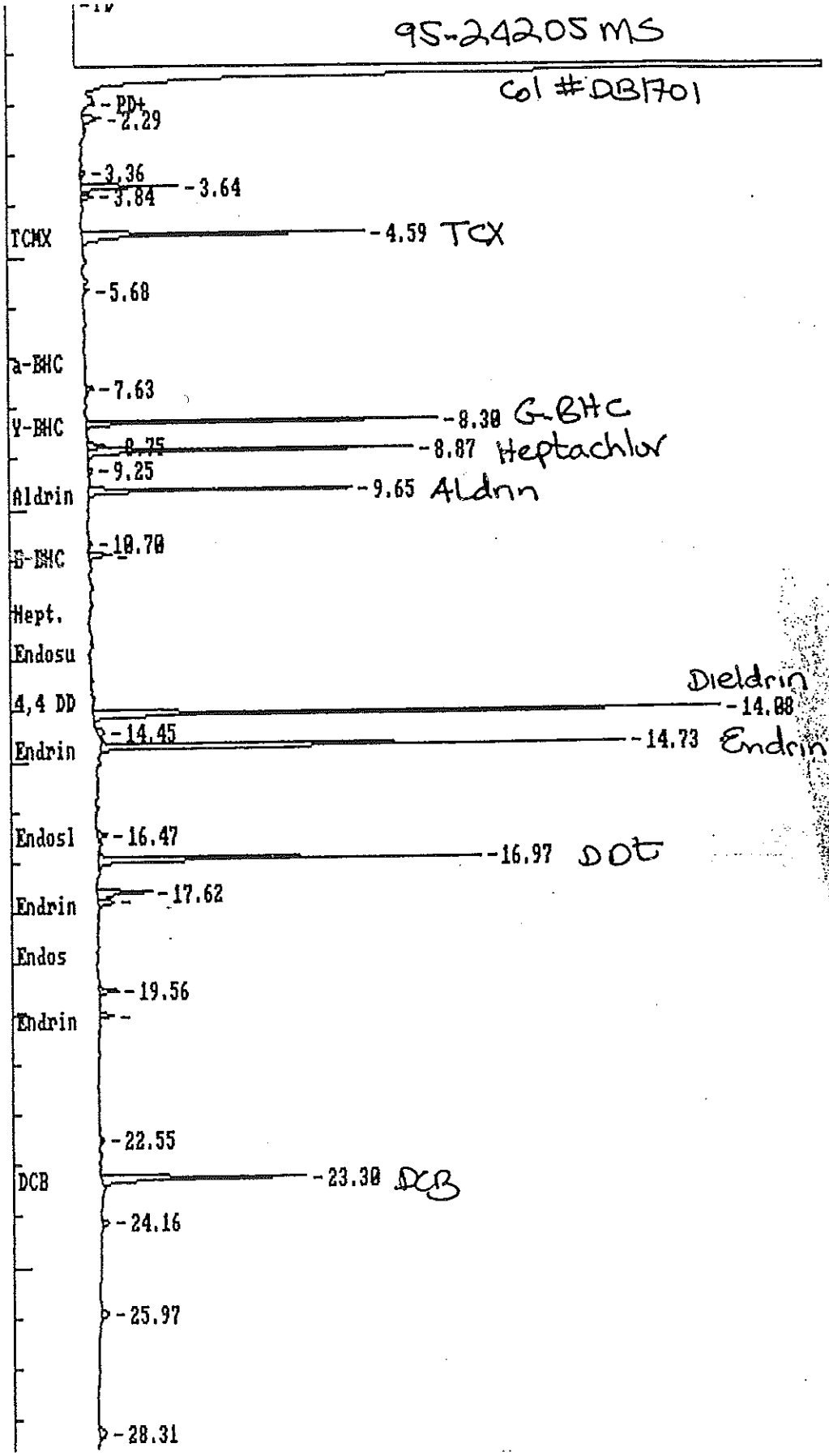
Starting Delay: 0.00 Ending retention time: 30.00
Area reject: 500 One sample per 1.002 sec.
Amount injected: 1.00 Dilution factor: 1.00
Sample Weight: 1.00000

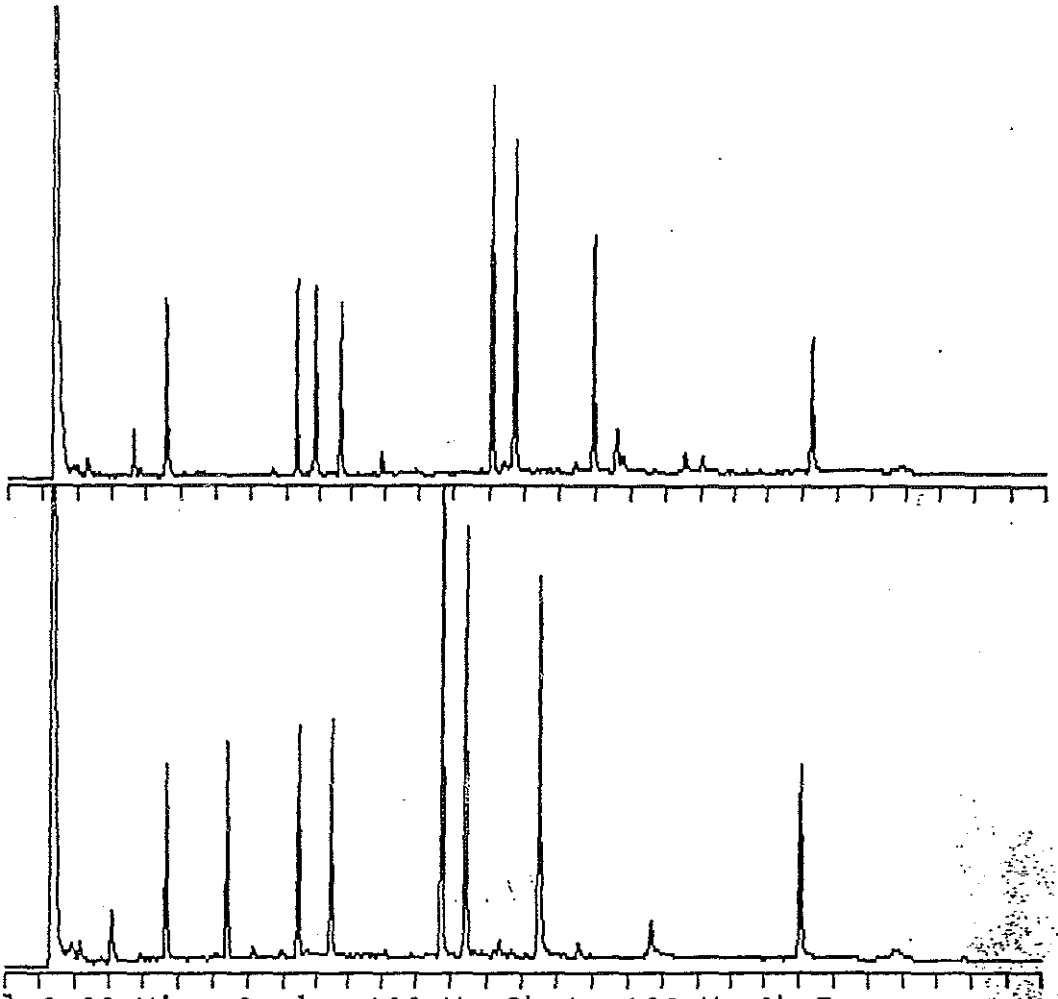
PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK		% DELTA RET TIME	CONC/AREA
1	2.288		0.0000	0.0000%	15694	2510	6.3	1				1.0000E-09
2	3.357		0.0000	0.0000%	4397	590	7.5	2				1.0000E-09
3	3.641		0.0000	0.0000%	49756	13126	3.8	2				1.0000E-09
4	3.841		0.0000	0.0000%	7564	1611	4.7	2				1.0000E-09
5	4.592	TCMX	87.5804	8.3631%	157212	38081	4.1	1	0		0	5.5709E-04
6	5.678		0.0000	0.0000%	3303	788	4.2	1				1.0000E-09
7	7.632		0.0000	0.0000%	4835	969	5.0	1				1.0000E-09
8	8.300	Y-BHC	83.8361	8.0056%	145064	46933	3.1	1	0	1.7	-.4008	5.7793E-04
9	8.751		0.0000	0.0000%	9669	2305	4.2	2				1.0000E-09
10	8.868	Heptachlor	82.5402	7.8818%	157039	43564	3.6	2	0	1.7	-.1879	5.2560E-04
11	9.252		0.0000	0.0000%	3405	582	5.9	1				1.0000E-09
12	9.653	Aldrin	72.4795	6.9211%	135104	35541	3.8	1	0	1.4	-.3448	5.3647E-04
13	10.705		0.0000	0.0000%	2636	543	4.9	1				1.0000E-09
14	10.939	B-BHC	12.3488	1.1792%	15335	3042	5.0	1	0		-.3044	8.0526E-04
15	14.078	Dieldrin	158.9966	15.1827%	302087	83340	3.6	1	0	3.2	-.2366	5.2633E-04
16	14.445		0.0000	0.0000%	6730	902	7.5	1				1.0000E-09
17	14.729	Endrin	274.2421	26.1876%	261942	69851	3.8	1	0	5.5	-.2262	1.0470E-03
18	16.466	EndoslfII	4.0635	0.3880%	7545	1270	5.9	1	0		0	5.3856E-04
19	16.967	4,4 DDT	171.8426	16.4094%	199959	50976	3.9	1	0	3.4	-.1964	8.5939E-04
20	17.618		0.0000	0.0000%	40886	7372	5.5	2				1.0000E-09
21	17.802	Endrin ald	11.1966	1.0692%	15917	2246	7.1	2	0		-.3272	7.0343E-04
22	19.556	Methoxychl	22.4982	2.1484%	14505	2542	5.7	1	0		1.385	1.5511E-03
23	20.057	Endrin ket	5.5074	0.5259%	8434	1937	4.4	1	0		-.2491	6.5298E-04
24	22.545		0.0000	0.0000%	3490	570	6.1	1				1.0000E-09
25	23.296	DCB	60.0892	5.7380%	130968	27614	4.7	1	0		-.1431	4.5881E-04
26	24.165		0.0000	0.0000%	6786	990	6.9	1				1.0000E-09
27	25.969		0.0000	0.0000%	9136	1039	8.8	1				1.0000E-09
28	28.306		0.0000	0.0000%	10011	933	10.7	1				1.0000E-09

TOTAL AMOUNT = 1047.2213

GROUP NUMBER GROUP AMOUNT GROUP PERCENT

Areas, times, and heights stored in: E:KU06E59.ATB
Data File = E:KU06E59.PTS Printed on 06-08-1995 at 20:20:49
Start time: 0.00 min. Stop time: 30.00 min. Offset: 1 mv.
Full Range: 100 millivolts





[Interface 1] 0-30 Min Scale: 100 Mv Ch.A, 100 Mv Ch.B
24205 P/P Processed: 06-08-1995 20:53:24, segment 2, cycle 60
RAW DATA SAVED IN FILE E:JU06E60.PTS Second Channel Stored in E:KU06E60.PTS

****** EXTERNAL STANDARD TABLE ******

******************** 06-08-1995 20:53:34 Version 5.1.5 ********************

* Sample Name: 24205 P/P MSD Data File: E:JU06E60 *

* Date: 06-08-1995 20:23:06 Method: M:APES-G 03-08-1995 15:02:41 # 359 *

* Interface: 1 Cycle#: 60 Operator JJK Channel#: 0 Vial#: N.A. *

* Starting Peak Width: 10 Threshold: 10 Area Threshold: 1000 *

* Instrument Type: Perkin-Elmer 8500 Column Type: RTx-5 30m,.35mm *

* Solvent Description: 1.0u df *

* Conditions: 180 for 4.0min then 4.0deg/min to 240, hold 30min *

* Detector 0: Detector 1: ECD *

* Misc. Information: *

Starting Delay: 0.00 Ending retention time: 30.00
Area reject: 1000 One sample per 1.002 sec.
Amount injected: 1.00 Dilution factor: 1.00
Sample Weight: 1.00000

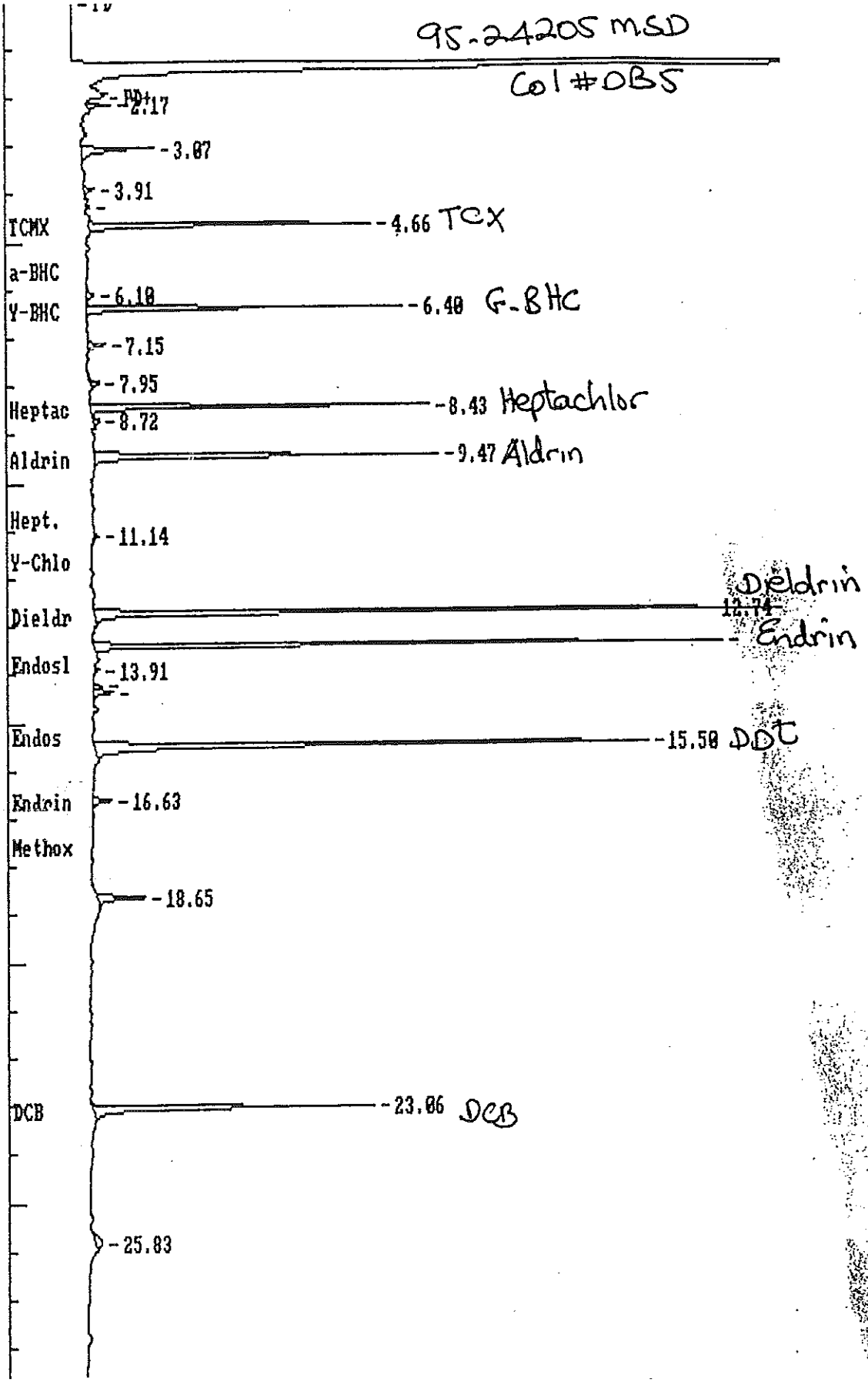
PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	2.171		0.0000	0.0000%	13841	3187	4.3	1			1.0000E-09
2	3.073		0.0001	0.0000%	55811	10048	5.6	1			1.0000E-09
3	3.808		0.0000	0.0000%	8059	1449	5.6	1			1.0000E-09

6	6.095	0.0000	0.0000%	8124	1040	7.8	2				1.0000E-09
7	6.396 Y-BHC	84.4732	8.5083%	154248	44319	3.5	2	0	1.7	-.2604	5.4764E-04
8	7.148 d-BHC	9.8189	0.9890%	12066	2367	5.1	1	0		1.421	8.1376E-04
9	7.949	0.0000	0.0000%	7660	1181	6.5	1				1.0000E-09
10	8.433 Heptachlor	85.0667	8.5680%	194051	47515	4.1	1	0	1.7	-.3944	4.3837E-04
11	8.717	0.0000	0.0000%	6230	764	8.2	1				1.0000E-09
12	9.469 Aldrin	96.4832	9.7179%	215286	48241	4.5	1	0	1.9	-.1760	4.4816E-04
13	11.139	0.0000	0.0000%	3412	777	4.4	1				1.0000E-09
14	12.742 Dieldrin	159.7948	16.0948%	400833	104796	3.8	1	0	3.2	-.1308	3.9866E-04
15	13.410 Endrin	172.2401	17.3483%	354972	88430	4.0	1	0	3.4	-.1864	4.8522E-04
16	13.911 Endosif II	1.4725	0.1483%	3476	687	5.1	1	0		1.092	4.2364E-04
17	14.262 4'4-DDD	3.4685	0.3494%	5843	1189	4.9	2	0		-.1169	5.9361E-04
18	14.395 Endrin ald	7.0018	0.7052%	14080	2684	5.2	2	0		-.0579	4.9730E-04
19	15.498 DDT	222.3513	22.3956%	375862	78063	4.8	1	0	4.4	-.1076	5.9158E-04
20	16.633 Endrin ket.	6.1113	0.6155%	14459	2652	5.5	1	0		-.1003	4.2265E-04
21	18.654	0.0000	0.0000%	42371	6714	6.3	1				1.0000E-09
22	23.063 DCB	60.5399	6.0977%	206724	39701	5.2	1	0		-.1446	2.9285E-04
23	25.835	0.0000	0.0000%	12770	874	14.6	1				1.0000E-09

TOTAL AMOUNT = 992.8363

GROUP NUMBER	GROUP AMOUNT	GROUP PERCENT

Areas, times, and heights stored in: E:JU06E60.ATB
Data File = E:JU06E60.PTS Printed on 06-08-1995 at 20:53:46
Start time: 0.00 min. Stop time: 30.00 min. Offset: 1 mv.
Full Range: 100 millivolts



**** EXTERNAL STANDARD TABLE *****

********** 06-08-1995 20:54:24 Version 5.1.5 **********

* Sample Name: 24205 P/P MSD Data File: E:KU06E60 *
* Date: 06-08-1995 20:23:06 Method: M:BPES-G 03-31-1995 14:31:59 # 358 *
* Interface: 1 Cycle#: 60 Operator JJK Channel#: 1 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 10 Area Threshold: 500 *

* Instrument Type: Perkin-Elmer 8500 Column Type: RTx-5 30m,.35mm *
* Solvent Description: 1.0u df *
* Conditions: 180 for 4.0min then 4.0deg/min to 240, hold 30min *
* Detector 0: Detector 1: ECD *
* Misc. Information: *

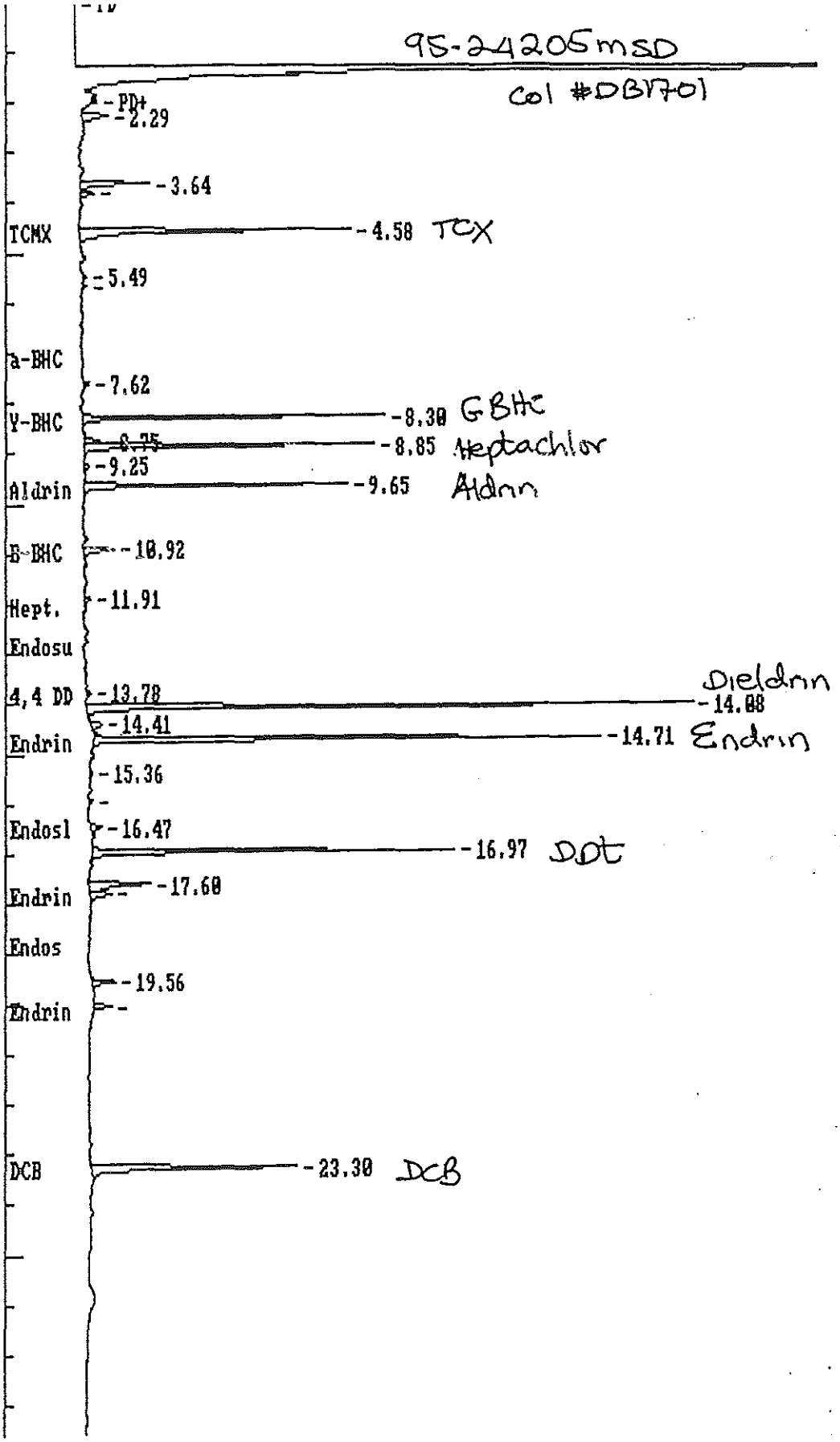
Starting Delay: 0.00 Ending retention time: 30.00
Area reject: 500 One sample per 1.002 sec.
Amount injected: 1.00 Dilution factor: 1.00
Sample Weight: 1.00000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK		% DELTA RET TIME	CONC/AREA
1	2.288		0.0000	0.0000%	20999	3558	5.9	1				1.0000E-09
2	3.641		0.0000	0.0000%	41449	9551	4.3	2				1.0000E-09
3	3.824		0.0000	0.0000%	8907	1862	4.8	2				1.0000E-09
4	4.576	TCMX	87.0275	8.1194%	156219	36952	4.2	1	0		-.3636	5.5709E-04
5	5.494		0.0000	0.0000%	3084	632	4.9	2				1.0000E-09
6	5.678		0.0000	0.0000%	3022	679	4.5	2				1.0000E-09
7	7.615		0.0000	0.0000%	4344	864	5.0	1				1.0000E-09
8	8.300	Y-BHC	81.2436	7.5798%	140578	40872	3.4	1	0	1.6	-.4008	5.7793E-04
9	8.751		0.0000	0.0000%	7713	2044	3.8	2				1.0000E-09
10	8.851	Heptachlor	81.6222	7.6151%	155293	39298	4.0	2	0	1.6	-.3759	5.2560E-04
11	9.252		0.0000	0.0000%	4174	670	6.2	1				1.0000E-09
12	9.653	Aldrin	72.0097	6.7183%	134228	35924	3.7	1	0	1.4	-.3448	5.3647E-04
13	10.922	B-BHC	17.0876	1.5942%	21220	4135	5.1	1	0		-.4566	8.0526E-04
14	11.907	Hept. epox.	1.7723	0.1654%	3414	756	4.5	1	0		-1.246	5.1916E-04
15	13.777	4,4 DDE	1.3218	0.1233%	2543	550	4.6	1	0		-.1814	5.1975E-04
16	14.078	Dieldrin	162.6316	15.1730%	308994	81232	3.8	1	0	3.2	-.2366	5.2633E-04
17	14.412		0.0000	0.0000%	10288	1549	6.6	1				1.0000E-09
18	14.713	Endrin	274.1393	25.5763%	261844	68325	3.8	1	0	5.4	-.3393	1.0470E-03
19	15.364		0.0000	0.0000%	2035	473	4.3	1				1.0000E-09
20	15.948		0.0000	0.0000%	3040	604	5.0	1				1.0000E-09
21	16.466	EndoslfII	4.9328	0.4602%	9159	1521	6.0	1	0		0	5.3856E-04
22	16.967	4,4 DDT	173.5855	16.1950%	201987	48938	4.1	1	0	3.4	-.1964	8.5939E-04
23	17.602		0.0000	0.0000%	48060	8411	5.7	2				1.0000E-09
24	17.802	Endrin ald	13.9095	1.2977%	19774	2918	6.8	2	0		-.3272	7.0343E-04
25	19.556	Methoxychl	28.7475	2.6820%	18534	3238	5.7	1	0		1.385	1.5511E-03
26	20.057	Endrin ket	7.2213	0.6737%	11059	2514	4.4	1	0		-.2491	6.5298E-04
27	23.296	DCB	64.5955	6.0266%	140790	28346	5.0	1	0		-.1431	4.5881E-04

TOTAL AMOUNT = 1071.8477

GROUP NUMBER GROUP AMOUNT GROUP PERCENT

Areas, times, and heights stored in: E:KU06E60.ATB
Data File = E:KU06E60.PTS Printed on 06-08-1995 at 20:55:01
Start time: 0.00 min. Stop time: 30.00 min. Offset: 1 mv.
Full Range: 100 millivolts



Water PESTICIDE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: EMSL Analytical Contract: _____

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

Matrix Spike - EPA Sample No.: 95-24205

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
gamma-BHC(Lindane)	1.5	U	1.7	113	46-127
Heptachlor	1.5	U	1.7	113	35-130
Aldrin	1.5	U	1.4	93	34-132
Dieldrin	3.0	U	3.1	103	31-134
Endrin	3.0	U	3.4	113	42-139
4,4'-DDT	3.0	U	3.4	113	23-134

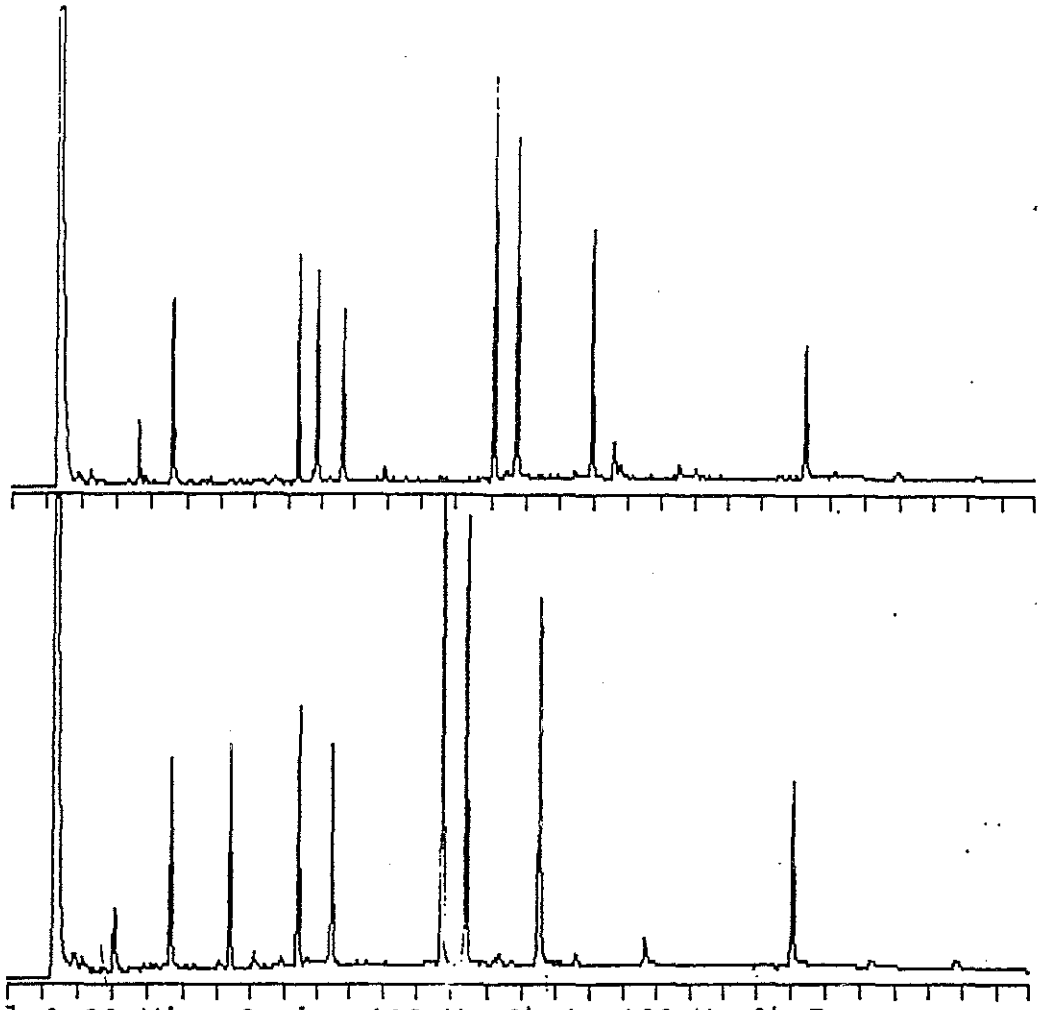
COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
gamma-BHC(Lindane)	1.5	1.6	107	5	50	46-127
Heptachlor	1.5	1.6	107	5	31	35-130
Aldrin	1.5	1.4	93	0	43	34-132
Dieldrin	3.0	3.2	107	4	38	31-134
Endrin	3.0	3.4	113	0	45	42-139
4,4'-DDT	3.0	3.4	113	0	50	23-134

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 6 outside limits
Spike Recovery: 0 out of 12 outside limits

COMMENTS: _____



[Interface 1] 0-30 Min Scale: 100 Mv Ch.A, 100 Mv Ch.B
24205 P/P Processed: 06-08-1995 20:19:11, segment 1, cycle 59
RAW DATA SAVED IN FILE E:JU06E59.PTS Second Channel Stored in E:KU06E59.PTS

****** EXTERNAL STANDARD TABLE ******

********** 06-08-1995 20:19:21 Version 5.1.5 **********
* Sample Name: 24205 P/P MS Data File: E:JU06E59 *
* Date: 06-08-1995 19:48:56 Method: M:APES-G 03-08-1995 15:02:41 # 359 *
* Interface: 1 Cycle#: 59 Operator JJK Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 10 Area Threshold: 1000 *
****
* Instrument Type: Perkin-Elmer 8500 Column Type: RTx-5 30m,.35mm *
* Solvent Description: 1.0u df *
* Conditions: 180 for 4.0min then 4.0deg/min to 240, hold 30min *
* Detector 0: Detector 1: ECD *
* Misc. Information: *
****

Starting Delay: 0.00 Ending retention time: 30.00
Area reject: 1000 One sample per 1.002 sec.
Amount injected: 1.00 Dilution factor: 1.00
Sample Weight: 1.00000

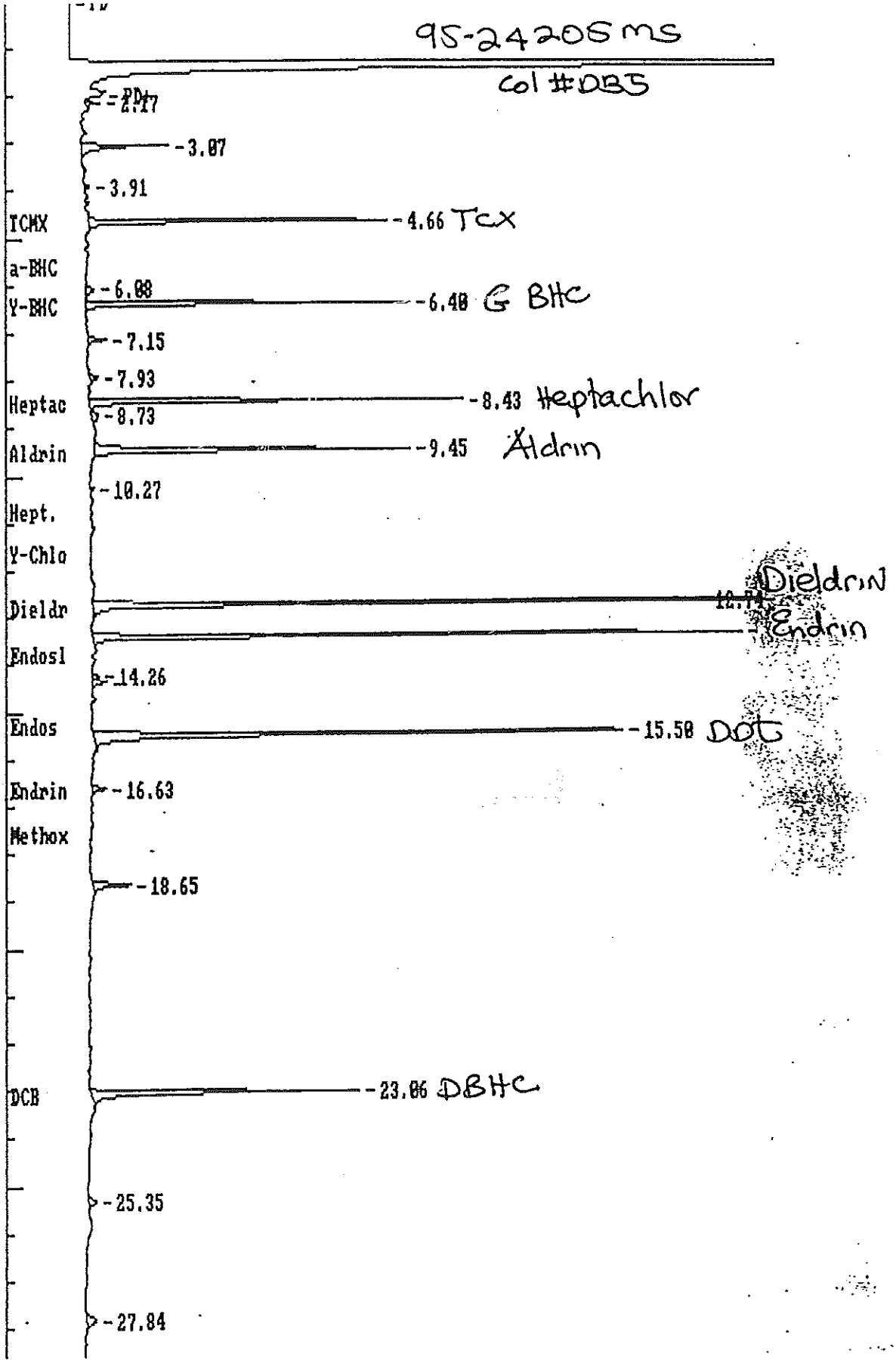
PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	2.171		0.0000	0.0000%	7489	1937	3.9	1			1.0000E-09
2	3.073		0.0001	0.0000%	62457	12531	5.0	1			1.0000E-09
3	3.908		0.0000	0.0000%	5804	846	6.9	1			1.0000E-09
4	4.659	TCMX	85.0220	9.7832%	162993	42227	3.9	1	A	-.3571	5.2162E-04

8	7.932		0.0000	0.0000%	6614	1128	5.9	1			1.0000E-09
9	8.433	Heptachlor	86.4228	8.9279%	197144	52920	3.7	2	0	1.72 -.3944	4.3837E-04
10	8.734		0.0000	0.0000%	9643	800	12.0	2			1.0000E-09
11	9.452	Aldrin	89.1016	9.2046%	198815	44765	4.4	1	0	1.78 -.3521	4.4816E-04
12	10.270		0.0000	0.0000%	2348	562	4.2	1			1.0000E-09
13	12.742	Dieldrin	156.5511	16.1724%	392696	99924	3.9	1	0	3.1 -.1308	3.9866E-04
14	13.410	Endrin	171.0924	17.6746%	352606	91692	3.8	1	0	3.4 -.1864	4.8522E-04
15	14.262	4'4-DDD	3.0057	0.3105%	5063	976	5.2	2	0	-.1169	5.9361E-04
16	14.379	Endrin ald	5.1905	0.5362%	10437	2062	5.1	2	0	-.1739	4.9730E-04
17	15.498	DDT	214.3900	22.1475%	362404	74835	4.8	1	0	4.3 -.1076	5.9158E-04
18	16.633	Endrin ket.	4.3995	0.4545%	10409	2019	5.2	1	0	-.1003	4.2265E-04
19	18.654		0.0000	0.0000%	32987	5357	6.2	1			1.0000E-09
20	23.063	DCB	55.6703	5.7510%	190095	37877	5.0	1	0	-.1446	2.9285E-04
21	25.351		0.0000	0.0000%	8285	1028	8.1	1			1.0000E-09
22	27.839		0.0000	0.0000%	15512	1408	11.0	1			1.0000E-09

TOTAL AMOUNT = 968.0112

GROUP NUMBER GROUP AMOUNT GROUP PERCENT

Areas, times, and heights stored in: E:JU06E59.ATB
Data File = E:JU06E59.PTS Printed on 06-08-1995 at 20:19:32
Start time: 0.00 min. Stop time: 30.00 min. Offset: 1 mv.
Full Range: 100 millivolts



***** EXTERNAL STANDARD TABLE *****

********** 06-08-1995 20:20:14 Version 5.1.5 **********

* Sample Name: 24205 P/P MS Data File: E:KU06E59 *
* Date: 06-08-1995 19:48:56 Method: M:8PES-G 03-31-1995 14:31:59 # 358 *
* Interface: 1 Cycle#: 59 Operator JJK Channel#: 1 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 10 Area Threshold: 500 *
* Instrument Type: Perkin-Elmer 8500 Column Type: RTx-5 30m,.35mm *
* Solvent Description: 1.0u df *
* Conditions: 180 for 4.0min then 4.0deg/min to 240, hold 30min *
* Detector 0: Detector 1: ECD *
* Misc. Information: *

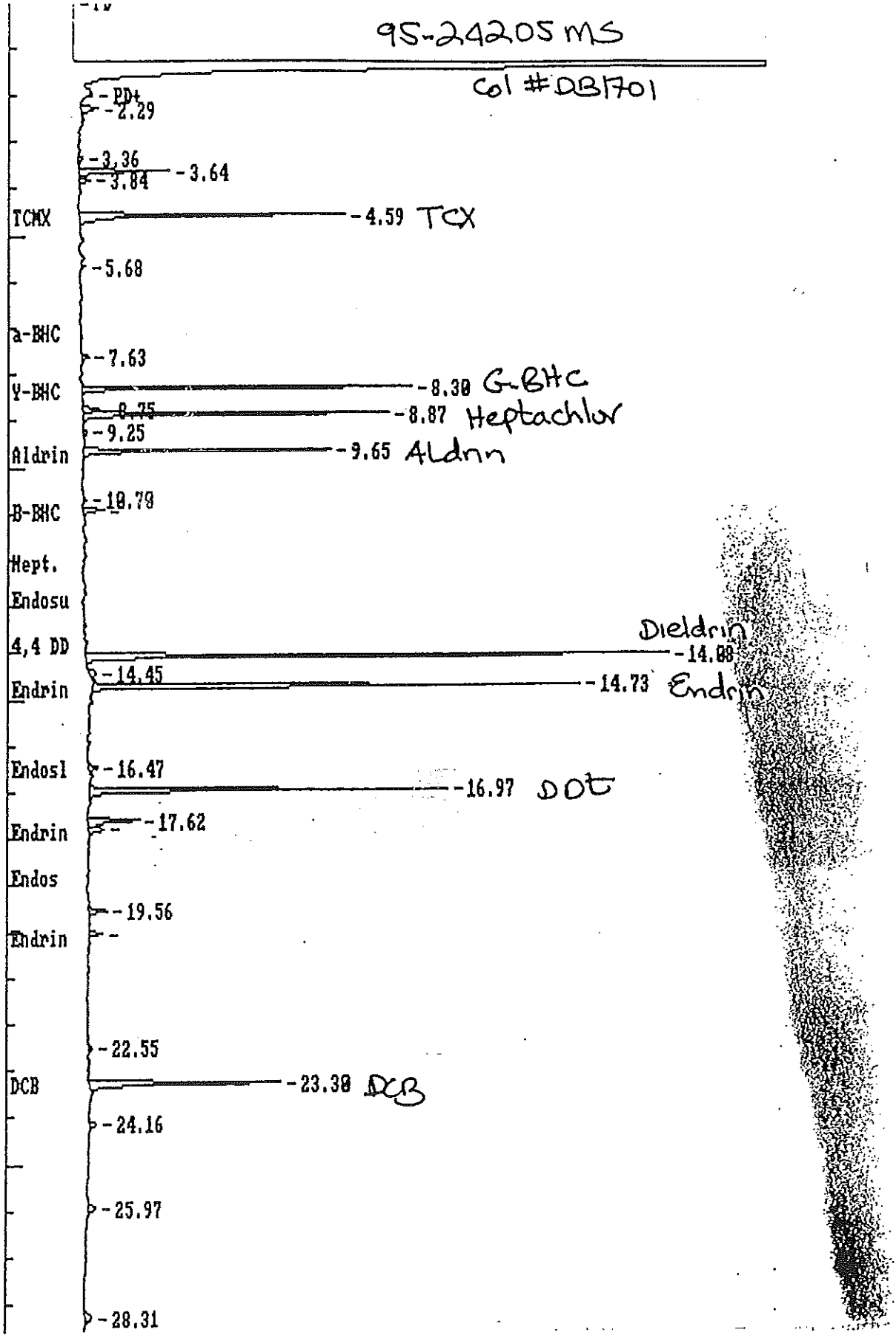
Starting Delay: 0.00 Ending retention time: 30.00
Area reject: 500 One sample per 1.002 sec.
Amount injected: 1.00 Dilution factor: 1.00
Sample Weight: 1.00000

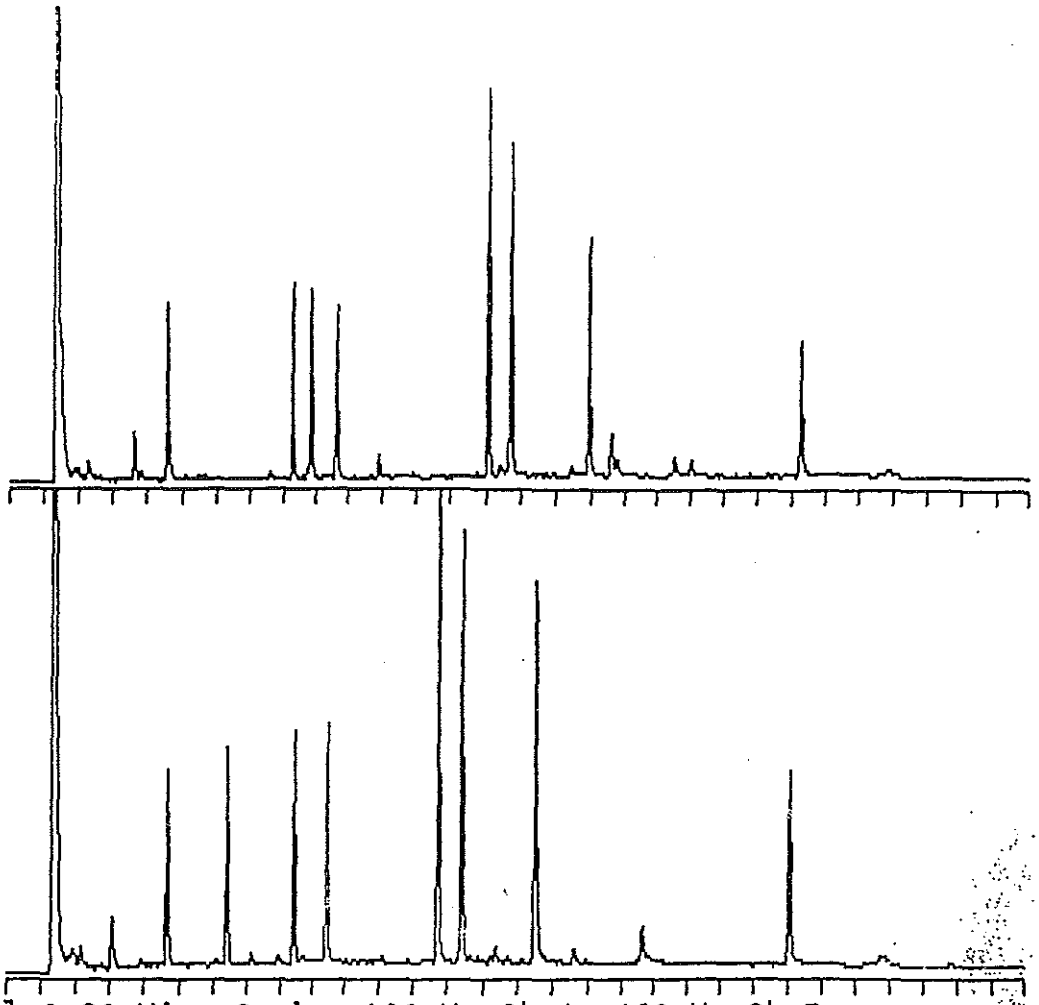
PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK		% DELTA RET TIME	CONC/AREA
1	2.288		0.0000	0.0000%	15694	2510	6.3	1				1.0000E-09
2	3.357		0.0000	0.0000%	4397	590	7.5	2				1.0000E-09
3	3.641		0.0000	0.0000%	49756	13126	3.8	2				1.0000E-09
4	3.841		0.0000	0.0000%	7564	1611	4.7	2				1.0000E-09
5	4.592	TCMX	87.5804	8.3631%	157212	38081	4.1	1	0		0	5.5709E-04
6	5.678		0.0000	0.0000%	3303	788	4.2	1				1.0000E-09
7	7.632		0.0000	0.0000%	4835	969	5.0	1				1.0000E-09
8	8.300	Y-BHC	83.8361	8.0056%	145064	46933	3.1	1	0	1.7	-.4008	5.7793E-04
9	8.751		0.0000	0.0000%	9669	2305	4.2	2				1.0000E-09
10	8.868	Heptachlor	82.5402	7.8818%	157039	43564	3.6	2	0	1.7	-.1879	5.2560E-04
11	9.252		0.0000	0.0000%	3405	582	5.9	1				1.0000E-09
12	9.653	Aldrin	72.4795	6.9211%	135104	35541	3.8	1	0	1.4	-.3448	5.3647E-04
13	10.705		0.0000	0.0000%	2636	543	4.9	1				1.0000E-09
14	10.939	B-BHC	12.3488	1.1792%	15335	3042	5.0	1	0		-.3044	8.0526E-04
15	14.078	Dieldrin	158.9966	15.1827%	302087	83340	3.6	1	0	3.2	-.2366	5.2633E-04
16	14.445		0.0000	0.0000%	6730	902	7.5	1				1.0000E-09
17	14.729	Endrin	274.2421	26.1876%	261942	69851	3.8	1	0	5.5	-.2262	1.0470E-03
18	16.466	EndoslfII	4.0635	0.3880%	7545	1270	5.9	1	0		0	5.3856E-04
19	16.967	4,4 DDT	171.8426	16.4094%	199959	50976	3.9	1	0	3.4	-.1964	8.5939E-04
20	17.618		0.0000	0.0000%	40886	7372	5.5	2				1.0000E-09
21	17.802	Endrin ald	11.1966	1.0692%	15917	2246	7.1	2	0		-.3272	7.0343E-04
22	19.556	Methoxychl	22.4982	2.1484%	14505	2542	5.7	1	0		1.385	1.5511E-03
23	20.057	Endrin ket	5.5074	0.5259%	8434	1937	4.4	1	0		-.2491	6.5298E-04
24	22.545		0.0000	0.0000%	3490	570	6.1	1				1.0000E-09
25	23.296	DCB	60.0892	5.7380%	130968	27614	4.7	1	0		-.1431	4.5881E-04
26	24.165		0.0000	0.0000%	6786	990	6.9	1				1.0000E-09
27	25.969		0.0000	0.0000%	9136	1039	8.8	1				1.0000E-09
28	28.306		0.0000	0.0000%	10011	933	10.7	1				1.0000E-09

TOTAL AMOUNT = 1047.2213

GROUP NUMBER GROUP AMOUNT GROUP PERCENT

Areas, times, and heights stored in: E:KU06E59.ATB
Data File = E:KU06E59.PTS Printed on 06-08-1995 at 20:20:49
Start time: 0.00 min. Stop time: 30.00 min. Offset: 1 mv.
Full Range: 100 millivolts





[Interface 1] 0-30 Min Scale: 100 Mv Ch.A, 100 Mv Ch.B
24205 P/P Processed: 06-08-1995 20:53:24, segment 2, cycle 60
RAW DATA SAVED IN FILE E:JU06E60.PTS Second Channel Stored in E:KU06E60.PTS

****** EXTERNAL STANDARD TABLE ******

********** 06-08-1995 20:53:34 Version 5.1.5 **********
* Sample Name: 24205 P/P MSD Data File: E:JU06E60 *
* Date: 06-08-1995 20:23:06 Method: M:APES-G 03-08-1995 15:02:41 A:359 *
* Interface: 1 Cycle#: 60 Operator JJK Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 10 Area Threshold: 1000 *
****
* Instrument Type: Perkin-Elmer 8500 Column Type: RTx-5 30m,.35mm *
* Solvent Description: 1.0u df *
* Conditions: 180 for 4.0min then 4.0deg/min to 240, hold 30min *
* Detector 0: Detector 1: ECD *
* Misc. Information: *
****

Starting Delay: 0.00 Ending retention time: 30.00
Area reject: 1000 One sample per 1.002 sec.
Amount injected: 1.00 Dilution factor: 1.00
Sample Weight: 1.00000

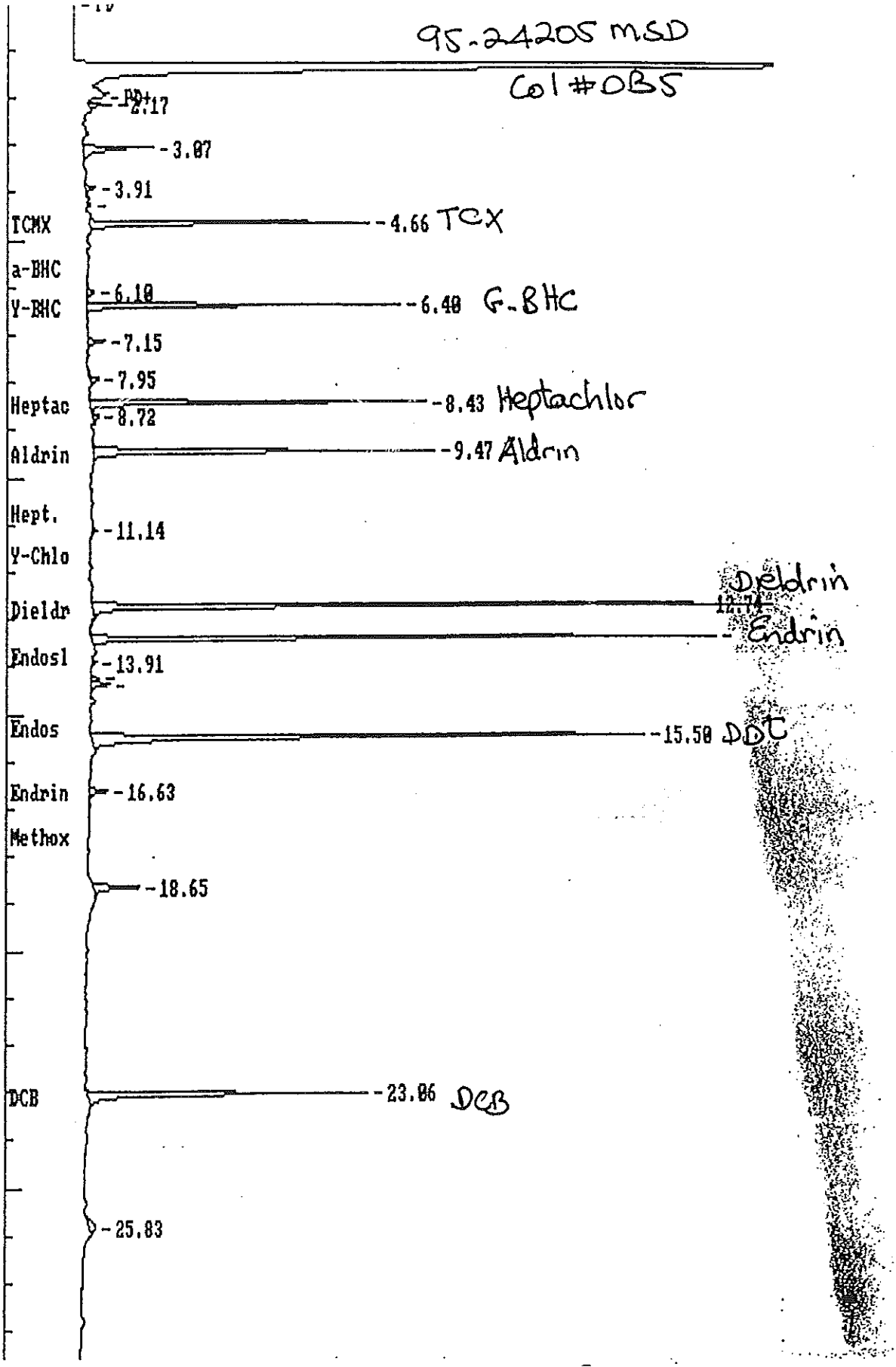
PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
1	2.171		0.0000	0.0000%	13841	3187	4.3	1			1.0000E-09
2	3.073		0.0001	0.0000%	55811	10048	5.6	1			1.0000E-09
3	3.900		0.0000	0.0000%	8059	1449	5.6	1			1.0000E-09

7	6.396	Y-BHC	84.4732	8.5083%	154248	44319	3.5	2	0	1.1	-.2604	5.4764E-04
8	7.148	d-BHC	9.8189	0.9890%	12066	2367	5.1	1	0		1.421	8.1376E-05
9	7.949		0.0000	0.0000%	7660	1181	6.5	1				1.0000E-09
10	8.433	Heptachlor	85.0667	8.5680%	194051	47515	4.1	1	0	1.7	-.3944	4.3837E-04
11	8.717		0.0000	0.0000%	6230	764	8.2	1				1.0000E-09
12	9.469	Aldrin	96.4832	9.7179%	215286	48241	4.5	1	0	1.9	-.1760	4.4816E-04
13	11.139		0.0000	0.0000%	3412	777	4.4	1				1.0000E-09
14	12.742	Dieldrin	159.7948	16.0948%	400833	104796	3.8	1	0	3.2	-.1308	3.9866E-04
15	13.410	Endrin	172.2401	17.3483%	354972	88430	4.0	1	0	3.4	-.1864	4.8522E-04
16	13.911	Endoslf II	1.4725	0.1483%	3476	687	5.1	1	0		1.092	4.2364E-04
17	14.262	4'4-DDD	3.4685	0.3494%	5843	1189	4.9	2	0		-.1169	5.9361E-04
18	14.395	Endrin ald	7.0018	0.7052%	14080	2684	5.2	2	0		-.0579	4.9730E-04
19	15.498	DDT	222.3513	22.3956%	375862	78063	4.8	1	0	4.4	-.1076	5.9158E-04
20	16.633	Endrin ket.	6.1113	0.6155%	14459	2652	5.5	1	0		-.1003	4.2265E-04
21	18.654		0.0000	0.0000%	42371	6714	6.3	1				1.0000E-09
22	23.063	DC8	60.5399	6.0977%	206724	39701	5.2	1	0		-.1446	2.9285E-04
23	25.835		0.0000	0.0000%	12770	874	14.6	1				1.0000E-09

TOTAL AMOUNT = 992.8363

GROUP NUMBER	GROUP AMOUNT	GROUP PERCENT

Areas, times, and heights stored in: E:JU06E60.ATB
Data File = E:JU06E60.PTS Printed on 06-08-1995 at 20:53:46
Start time: 0.00 min. Stop time: 30.00 min. Offset: 1 mv.
Full Range: 100 millivolts



***** EXTERNAL STANDARD TABLE *****

********** 06-08-1995 20:54:24 Version 5.1.5 **********

* Sample Name: 24205 P/P MSD Data File: E:KU06E60 *
* Date: 06-08-1995 20:23:06 Method: M:BPES-G 03-31-1995 14:31:59 # 358 *
* Interface: 1 Cycle#: 60 Operator JJK Channel#: 1 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 10 Area Threshold: 500 *
* Instrument Type: Perkin-Elmer 8500 Column Type: RTx-5 30m,.35mm *
* Solvent Description: 1.0u df *
* Conditions: 180 for 4.0min then 4.0deg/min to 240, hold 30min *
* Detector 0: Detector 1: ECD *
* Misc. Information: *

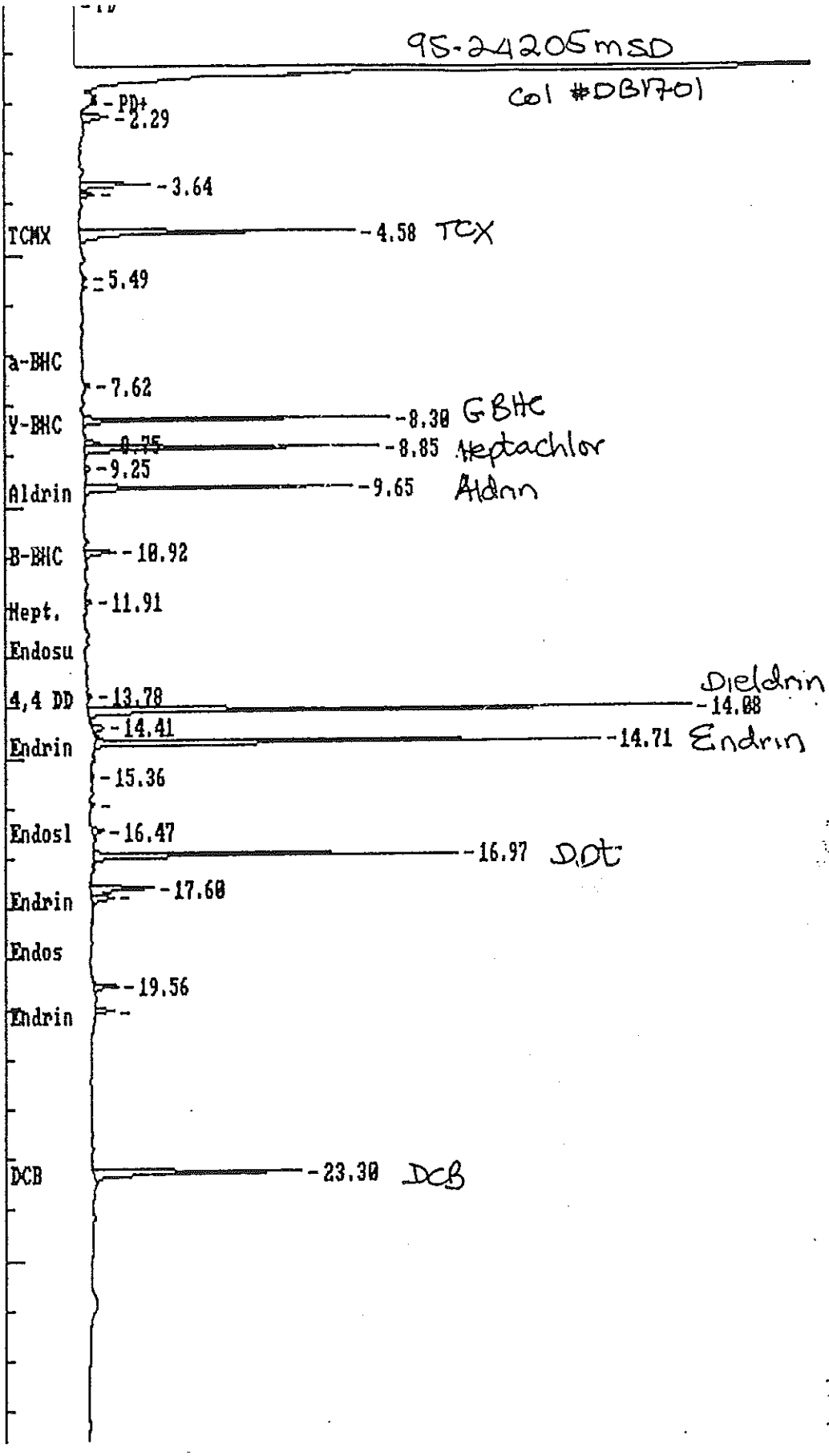
Starting Delay: 0.00 Ending retention time: 30.00
Area reject: 500 One sample per 1.002 sec.
Amount injected: 1.00 Dilution factor: 1.00
Sample Weight: 1.00000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in ppb	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK		% DELTA RET TIME	CONC/AREA
1	2.288		0.0000	0.0000%	20999	3558	5.9	1				1.0000E-09
2	3.641		0.0000	0.0000%	41449	9551	4.3	2				1.0000E-09
3	3.824		0.0000	0.0000%	6907	1862	4.8	2				1.0000E-09
4	4.576	TCMX	87.0275	8.1194%	156219	36952	4.2	1	0		-.3636	5.5709E-04
5	5.494		0.0000	0.0000%	3084	632	4.9	2				1.0000E-09
6	5.678		0.0000	0.0000%	3022	679	4.5	2				1.0000E-09
7	7.615		0.0000	0.0000%	4344	864	5.0	1				1.0000E-09
8	8.300	Y-BHC	81.2436	7.5798%	140578	40872	3.4	1	0	1.6	-.4008	5.7793E-04
9	8.751		0.0000	0.0000%	7713	2044	3.8	2				1.0000E-09
10	8.851	Heptachlor	81.6222	7.6151%	155293	39298	4.0	2	0	1.6	-.3759	5.2560E-04
11	9.252		0.0000	0.0000%	4174	670	6.2	1				1.0000E-09
12	9.653	Aldrin	72.0097	6.7183%	134228	35924	3.7	1	0	1.4	-.3448	5.3647E-04
13	10.922	B-BHC	17.0876	1.5942%	21220	4185	5.1	1	0		-.4566	8.0526E-04
14	11.907	Hept. epox.	1.7723	0.1654%	3414	756	4.5	1	0		-1.246	5.1916E-04
15	13.777	4,4 DDE	1.3218	0.1233%	2543	550	4.6	1	0		-.1814	5.1975E-04
16	14.078	Dieldrin	162.6316	15.1730%	308994	81232	3.8	1	0	3.2	-.2366	5.2633E-04
17	14.412		0.0000	0.0000%	10288	1549	6.6	1				1.0000E-09
18	14.713	Endrin	274.1393	25.5763%	261844	68325	3.8	1	0	5.4	-.3393	1.0470E-03
19	15.364		0.0000	0.0000%	2035	473	4.3	1				1.0000E-09
20	15.948		0.0000	0.0000%	3040	604	5.0	1				1.0000E-09
21	16.466	EndoslfII	4.9328	0.4602%	9159	1521	6.0	1	0		0	5.3856E-04
22	16.967	4,4 DDT	173.5855	16.1950%	201987	48938	4.1	1	0	3.4	-.1964	8.5939E-04
23	17.602		0.0000	0.0000%	48060	8411	5.7	2				1.0000E-09
24	17.802	Endrin ald	13.9095	1.2977%	19774	2918	6.8	2	0		-.3272	7.0343E-04
25	19.556	Methoxychl	28.7475	2.6820%	18534	3238	5.7	1	0		1.385	1.5511E-03
26	20.057	Endrin ket	7.2213	0.6737%	11059	2514	4.4	1	0		-.2491	6.5298E-04
27	23.296	DCB	64.5955	6.0266%	140790	28346	5.0	1	0		-.1431	4.5881E-04

TOTAL AMOUNT = 1071.8477

GROUP NUMBER GROUP AMOUNT GROUP PERCENT

Areas, times, and heights stored in: E:KU06E60.ATB
Data File = E:KU06E60.PTS Printed on 06-08-1995 at 20:55:01
Start time: 0.00 min. Stop time: 30.00 min. Offset: 1 mv.
Full Range: 100 millivolts



METALS DATA PACKAGE

EMSL

COVER PAGE - METALS ANALYSES DATA PACKAGE

Lab Name: **EMSL ANALYTICAL, INC.** Contract: _____

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

SOW No.: _____

Client Sample ID	Lab Sample ID
Field Blank	**95-26798**
Bldg. 697, MW1-2931776	**95-26799**

Were ICP interelement corrections applied? Yes/No **YES**

Were ICP background corrections applies? Yes/No **YES**

If yes - were raw data generated before application of background correction? Yes/No **NO**

Comments: **ICP was used**

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: Paul Laraia Name: Paul V. Laraia

Date: 07-17-95 Title: Laboratory Manager

Attention: Charles Appleby
U.S. Army - Fort Monmouth
SELFM-PW-EV
Building 173
Fort Monmouth, NJ 07703

Project #: 95064013
Date Received: 06/16/95 18:10

The following results are for Ag-CLP

Lab #	Conc.	Unit	Client Designation
95 0026798	<0.050	mg/l	Field Blank
95 0026799	<0.050	mg/l	Bldg.697,MW1-2931776

The following results are for Aluminum-CLP

Lab #	Conc.	Unit	Client Designation
95 0026798	<0.20	mg/l	Field Blank
95 0026799	0.20	mg/l	Bldg.697,MW1-2931776

The following results are for Arsenic-CLP

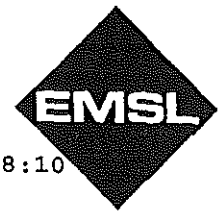
Lab #	Conc.	Unit	Client Designation
95 0026798	<0.0050	mg/l	Field Blank
95 0026799	<0.0050	mg/l	Bldg.697,MW1-2931776

The following results are for Barium-CLP

Lab #	Conc.	Unit	Client Designation
95 0026798	<0.020	mg/l	Field Blank
95 0026799	0.029	mg/l	Bldg.697,MW1-2931776

The following results are for Beryllium-CLP

Lab #	Conc.	Unit	Client Designation
95 0026798	<0.0050	mg/l	Field Blank
95 0026799	<0.0050	mg/l	Bldg.697,MW1-2931776



Attention: Charles Appleby
U.S. Army - Fort Monmouth
SELFM-PW-EV
Building 173
Fort Monmouth, NJ 07703

Project #: 95064013
Date Received: 06/16/95 18:10

The following results are for Calcium-CLP

Lab #	Conc.	Unit	Client Designation
95 0026798	<0.40	mg/l	Field Blank
95 0026799	14	mg/l	Bldg.697,MW1-2931776

The following results are for Cadmium-CLP

Lab #	Conc.	Unit	Client Designation
95 0026798	<0.010	mg/l	Field Blank
95 0026799	<0.010	mg/l	Bldg.697,MW1-2931776

The following results are for Cobalt-CLP

Lab #	Conc.	Unit	Client Designation
95 0026798	<0.050	mg/l	Field Blank
95 0026799	<0.050	mg/l	Bldg.697,MW1-2931776

The following results are for Chromium-CLP

Lab #	Conc.	Unit	Client Designation
95 0026798	<0.050	mg/l	Field Blank
95 0026799	<0.050	mg/l	Bldg.697,MW1-2931776

The following results are for Copper-CLP

Lab #	Conc.	Unit	Client Designation
95 0026798	<0.050	mg/l	Field Blank
95 0026799	<0.050	mg/l	Bldg.697,MW1-2931776

Attention: Charles Appleby
U.S. Army - Fort Monmouth
SELFM-PW-EV
Building 173
Fort Monmouth, NJ 07703

Project #: 95064013
Date Received: 06/16/95 18:10

The following results are for Iron-CLP

Lab #	Conc.	Unit	Client Designation
95 0026798	<0.10	mg/l	Field Blank
95 0026799	3.5	mg/l	Bldg.697,MW1-2931776

The following results are for Mercury, CLP

Lab #	Conc.	Unit	Client Designation
95 0026798	<0.0010	mg/l	Field Blank
95 0026799	<0.0010	mg/l	Bldg.697,MW1-2931776

The following results are for Potassium-CLP

Lab #	Conc.	Unit	Client Designation
95 0026798	<3.0	mg/l	Field Blank
95 0026799	<3.0	mg/l	Bldg.697,MW1-2931776

The following results are for Magnesium-CLP

Lab #	Conc.	Unit	Client Designation
95 0026798	<0.10	mg/l	Field Blank
95 0026799	5.4	mg/l	Bldg.697,MW1-2931776

The following results are for Manganese-CLP

Lab #	Conc.	Unit	Client Designation
95 0026798	<0.020	mg/l	Field Blank
95 0026799	0.023	mg/l	Bldg.697,MW1-2931776

EMSL

Attention: Charles Appleby
U.S. Army - Fort Monmouth
SELFM-PW-EV
Building 173
Fort Monmouth, NJ 07703

Project #: 95064013
Date Received: 06/16/95 18:10

The following results are for Sodium-CLP

Lab #	Conc.	Unit	Client Designation
95 0026798	<0.40	mg/l	Field Blank
95 0026799	23	mg/l	Bldg.697,MW1-2931776

The following results are for Nickel-CLP

Lab #	Conc.	Unit	Client Designation
95 0026798	<0.050	mg/l	Field Blank
95 0026799	<0.050	mg/l	Bldg.697,MW1-2931776

The following results are for Lead-CLP

Lab #	Conc.	Unit	Client Designation
95 0026798	<0.0025	mg/l	Field Blank
95 0026799	<0.0025	mg/l	Bldg.697,MW1-2931776

The following results are for Antimony-CLP

Lab #	Conc.	Unit	Client Designation
95 0026798	<0.0050	mg/l	Field Blank
95 0026799	<0.0050	mg/l	Bldg.697,MW1-2931776

The following results are for Selenium-CLP

Lab #	Conc.	Unit	Client Designation
95 0026798	<0.0050	mg/l	Field Blank
95 0026799	<0.0050	mg/l	Bldg.697,MW1-2931776

Attention: Charles Appleby
U.S. Army - Fort Monmouth
SELFM-PW-EV
Building 173
Fort Monmouth, NJ 07703

Project #: 95064013
Date Received: 06/16/95 18:10

The following results are for Thallium-CLP

Lab #	Conc.	Unit	Client Designation
95 0026798	<0.0050	mg/l	Field Blank
95 0026799	<0.0050	mg/l	Bldg.697,MW1-2931776

The following results are for Vanadium-CLP

Lab #	Conc.	Unit	Client Designation
95 0026798	<0.050	mg/l	Field Blank
95 0026799	<0.050	mg/l	Bldg.697,MW1-2931776

The following results are for Zinc-CLP

Lab #	Conc.	Unit	Client Designation
95 0026798	<0.020	mg/l	Field Blank
95 0026799	<0.020	mg/l	Bldg.697,MW1-2931776

EMSL

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: **EMSL Analytical** Contract: _____

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

Initial Calibration Source: **Inorganic Ventures**

Continuing Calibration Source: **SPEX**

Concentration Units: **mg/l**

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R (1)	True	Found	%R (1)	Found	%R (1)	
Aluminum-CLP	2.0	2.08	104	2.0	2.09	104.5			P
Antimony-CLP	0.05	0.0528	106	0.05	0.0538	108			F
Arsenic-CLP	0.05	0.05071	101	0.05	0.05137	103			F
Barium-CLP	2.0	2.07	103.5	2.0	2.05	102.5			P
Beryllium-CLP	2.0	2.08	104	2.0	2.02	101			P
Cadmium-CLP	2.0	2.06	103	2.0	2.03	101.5			P
Calcium-CLP	2.0	1.94	97	2.0	1.91	95.5			P
Chromium-CLP	2.0	2.06	103	2.0	2.02	101			P
Cobalt-CLP	2.0	2.06	103	2.0	2.03	101.5			P
Copper-CLP	2.0	2.07	103.5	2.0	2.05	102.5			P
Iron-CLP	2.0	2.02	101	2.0	1.87	93.5			P
Lead-CLP	0.025	0.02486	99	0.025	0.02473	99			F
Magnesium-CLP	2.0	1.99	99.5	2.0	2.04	102			P
Manganese-CLP	2.0	2.06	103	2.0	2.02	101			P
Mercury-CLP	0.003	0.00295	98	0.003	0.00279	93			CV
Nickel-CLP	2.0	2.06	103	2.0	2.02	101			P
Potassium-CLP	2.0	1.97	98.5	2.0	1.97	98.5			P
Selenium-CLP	0.05	0.0525	105	0.05	0.0518	104			F
Silver-CLP	2.0	1.99	99.5	2.0	1.98	99			P
Sodium-CLP	2.0	1.80	90	2.0	2.07	103.5			P
Thallium-CLP	0.05	0.05003	100	0.05	0.05233	105			F
Vanadium-CLP	2.0	2.07	103.5	2.0	2.03	101.5			P
Zinc-CLP	2.0	2.07	103.5	2.0	2.01	100.5			P
Cyanide									

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

EMSL

BLANKS

Lab Name: **EMSL ANALYTICAL** Contract: _____

Lab Code: _____ Case No.: _____ AS No.: _____ SDG No.: _____

Preparation Blank Matrix (soil/water): **Water**

Preparation Blank Concentration Units (mg/l or mg/kg): **mg/l**

	Inital Calibration Blank		Continuing Calibration Blank (ug/l)						Preparation Blank		
Analyte	(ug/l)	C	1	C	2	C	3	C		C	M
Aluminum	**0.2**		**13**						**<0.200**		**P**
Antimony	**0.3**		**0.6**						**<0.005**		**F**
Arsenic	**0.82**		**1.60**						**<0.005**		**F**
Barium	**1**		**2**						**<0.020**		**P**
Beryllium	**1**		**1**						**<0.005**		**P**
Cadmium	**1**		**2**						**<0.010**		**P**
Calcium	**4**		**11**						**<0.400**		**P**
Chromium	**2**		**4**						**<0.050**		**P**
Cobalt	**3**		**5**						**<0.050**		**P**
Copper	**2**		**4**						**<0.050**		**P**
Iron	**6**		**15**						**<0.100**		**P**
Lead	**90**		**40**						**<40.0**		**F**
Magnesium	**24**		**23**						**<0.100**		**P**
Manganese	**1**		**2**						**<0.020**		**P**
Mercury	**0.02**		**0.07**						**<0.001**		**CV**
Nickel	**2**		**4**						**<0.050**		**P**
Potassium	**79**		**219**						**<3.0**		**P**
Selenium	**3.5**		**2.6**						**<0.005**		**F**
Silver	**7**		**20**						**<0.050**		**P**
Sodium	**38**		**30**						**<0.400**		**P**
Thallium	**0.15**		**0.54**						**<0.005**		**F**
Vanadium	**2**		**2**						**<0.050**		**P**
Zinc	**1**		**0.2**						**<0.020**		**P**
Cyanide											

SPIKE SAMPLE RECOVERY

Lab Name: **EMSL Analytical** Contract: _____ Lab Sample No.: **95-26586, 95-27255, 95-27025**

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

Matrix (soil/water): **Water** Level (low/med) : **Low**

% Solids for Sample: _____

Concentration Units (mg/l or mg/kg dry weight): **mg/l**

	Control Limit	Spiked Sample		Sample Result		Spike Added			
Analyte	%R	Result (SSR)	C	(SR)	C	(SA)	%R	Q	M
Aluminum-CLP	75-125	5.15		<0.2		5.00	102		p
Antimony-CLP	75-125	0.0579		<0.005		0.050	116		F
Arsenic-CLP	75-125	0.049		<0.005		0.050	98		F
Barium-CLP	75-125	4.84		<0.02		5.00	97		P
Beryllium-CLP	75-125	5.10		<0.005		5.00	102		P
Cadmium-CLP	75-125	4.67		<0.01		5.00	93		P
****Calcium-CLP**		48.0		50.2		5.00	2		P
Chromium-CLP	75-125	4.71		<0.05		5.00	94		P
Cobalt-CLP	75-125	4.69		<0.05		5.00	94		P
Copper-CLP	75-125	5.02		<0.05		5.00	100		P
Iron-CLP	75-125	5.01		0.108		5.00	98		P
Lead-CLP	75-125	1.17		<0.0025		1.00	117		F
****Magnesium-CLP**		26.1		22.5		5.00	72		P
Manganese-CLP	75-125	4.86		<0.02		5.00	97		P
Mercury-CLP	75-125	0.00292		<0.001		0.003	95		CV
Nickel-CLP	75-125	4.60		<0.05		5.00	92		P
Potassium-CLP	75-125	8.2		3.8		5.00	88		P
Selenium-CLP	75-125	0.0491		<0.005		0.050	98		F
***Silver-CLP**		2.07		<0.05		5.00	41		P
Sodium-CLP	75-125	53.3		47.3		5.00	120		P
Thallium-CLP	75-125	0.0529		<0.005		0.050	106		F
Vanadium-CLP	75-125	4.89		<0.05		5.00	98		P
Zinc-CLP	75-125	4.89		0.046		5.00	97		P
Cyanide									

Comments *** Note: QC limits do not apply to Silver Recovery.**
**** Note: Sample >5x's Spike Concentration.**

DUPLICATES

Lab Name: **EMSL ANALYTICAL** Contract: _____ Lab Sample No.: **95-26586, 95-27255, 95-27025**

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

Matrix (soil/water): **Water** :Level (low/med.): **Low**

% Solids for Sample: _____ % Solids for Duplicate: _____

Concentration units (mg/l or mg/kg dry weight): **mg/l**

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum-CLP	+/-20%	0.054		0.054		0.0		P
Antimony-CLP	+/-20%	0.0		0.0		0.0		F
Arsenic-CLP	+/-20%	0.0001		0.0001		0.0		F
Barium-CLP	+/-20%	0.009		0.009		0.0		P
Beryllium-CLP	+/-20%	0.004		0.004		0.0		P
Cadmium-CLP	+/-20%	0.004		0.004		0.0		P
Calcium-CLP	+/-20%	50.2		49.3		2		P
Chromium-CLP	+/-20%	0.021		0.021		0.0		P
Cobalt-CLP	+/-20%	0.005		0.005		0.0		P
Copper-CLP	+/-20%	0.036		0.036		0.0		P
Iron-CLP	+/-20%	0.108		0.108		0.0		P
Lead-CLP	+/-20%	0.0006		0.0006		0.0		F
Magnesium-CLP	+/-20%	22.5		22.6		0.4		P
Manganese-CLP	+/-20%	0.007		0.007		0.0		P
Mercury-CLP	+/-20%	0.0		0.0		0.0		CV
Nickel-CLP	+/-20%	0.02		0.02		0.0		P
Potassium-CLP	+/-20%	3.8		3.9		3		P
Selenium-CLP	+/-20%	0.0013		0.0013		0.0		F
Silver-CLP	+/-20%	0.025		0.025		0.0		P
Sodium-CLP	+/-20%	47.3		47.9		1		P
Thallium-CLP	+/-20%	0.0014		0.0014		0.0		F
Vanadium-CLP	+/-20%	0.003		0.003		0.0		P
Zinc-CLP	+/-20%	0.046		0.041		11		P
Cyanide								

LABORATORY CONTROL SAMPLE

Lab Name: **EMSL Analytical** Contract: _____

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

Solid LCS Source: _____

Aqueous LCS Source: **Inorganic Ventures**

Analyte	Aqueous (mg/l) True	Found	% R	Solid (mg/kg) True	Found	C	Limits	% R
Aluminum	5.00	4.58	92				80-120%	
Antimony	0.05	0.06	120				80-120%	
Arsenic	0.05	0.0481	96				80-120%	
Barium	5.00	4.78	96				80-120%	
Beryllium	5.00	5.30	106				80-120%	
Cadmium	5.00	5.11	93				80-120%	
Calcium	5.00	5.33	107				80-120%	
Chromium	5.00	5.15	103				80-120%	
Cobalt	5.00	5.13	103				80-120%	
Copper	5.00	4.74	95				80-120%	
Iron	5.00	5.10	102				80-120%	
Lead	1.00	1.06	106				80-120%	
Magnesium	5.00	4.94	99				80-120%	
Manganese	5.00	5.24	105				80-120%	
Mercury	0.003	0.0029	97				80-120%	
Nickel	5.00	5.14	103				80-120%	
Potassium	5.0	4.5	90				80-120%	
Selenium	0.05	0.0492	98				80-120%	
Silver	5.00	4.40	88				80-120%	
Sodium	5.00	4.6	92				80-120%	
Thallium	0.05	0.0506	101				80-120%	
Vanadium	5.00	5.09	102				80-120%	
Zinc	5.00	5.17	103				80-120%	
Cyanide								

U.S. EPA - CLP

11A
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: EMSL Contract: _____

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

ICP ID Number: _____ Date: _____

Analyte	Wavelength (nm)	Interelement Correction Factors for: Al	Ca	Fe	Mg	V
Aluminum	308.20					0.0082
Antimony	206.84				0.0022	-0.0099
Arsenic	193.70	0.0058				0.0120
Barium	493.4					
Beryllium	313.04					0.0019
Cadmium	228.80					
Calcium	317.93					
Chromium	267.72					0.0293
Cobalt	228.62					
Copper	224.75					
Iron	259.94			-0.0017		
Lead	220.30	0.0011				-0.0037
Magnesium	279.08					
Manganese	257.61					
Mercury						
Nickel	231.68					
Potassium	766.					
Selenium	196.03			0.0002		-0.0022
Silver	328.07					
Sodium	588.99			0.0012		
Thallium	190.80					0.0038
Vanadium	292.40					
Zinc	213.86					

Comments:

11B
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: EMSL Contract: _____

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

ICP ID Number: _____ Date: _____

Analyte	Wavelength (nm)	Interelement Correction Factors for: Mn	Mo	Ni	Cr	Cu
Aluminum			0.0155			
Antimony				0.0008	0.0158	
Arsenic			0.0013	0.0007	0.0016	0.0003
Barium						
Beryllium						
Cadmium						
Calcium						
Chromium				0.0003		
Cobalt						
Copper			0.0005	0.0109		
Iron					0.0037	
Lead		+0.0024	0.0013			-0.0002
Magnesium		-0.003				
Manganese						
Mercury						
Nickel			-0.0018			
Potassium						
Selenium			-0.0168			
Silver		0.001				
Sodium						
Thallium		0.0021				
Vanadium			0.0014			
Zinc				0.0035		0.0035

Comments:

_____

_____

_____

_____

11B
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

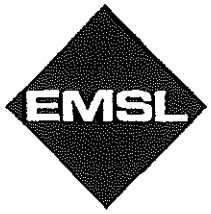
Lab Name: EMSL Contract: _____

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

ICP ID Number: _____ Date: _____

Analyte	Wavelength (nm)	Interelement Correction Factors for: Ba	Pb	Co	_	_
Aluminum				0.0002		
Antimony						
Arsenic						
Barium			0.0025			
Beryllium						
Cadmium						
Calcium						
Chromium						
Cobalt		0.0011				
Copper				0.0001		
Iron						
Lead				0.0010		
Magnesium						
Manganese						
Mercury						
Nickel				0.0004		
Potassium						
Selenium				-0.0067		
Silver						
Sodium						
Thallium				0.0094		
Vanadium						
Zinc						

Comments:



GENERAL CHEMISTRY ANALYSIS DATA PACKAGE

Attention: Charles Appleby
U.S. Army - Fort Monmouth
SELFM-PW-EV
Building 173
Fort Monmouth, NJ 07703

Project #: 95064013
Date Received: 06/16/95 18:10

The following results are for Total Cyanide

Lab #	Conc.	Unit	Client Designation
95 0026798	<0.010	mg/l	Field Blank
95 0026799	<0.010	mg/l	Bldg.697,MW1-2931776

BLANKS

Lab Name: **EMSL Analytical** Contract: _____

Lab Code: _____ Case No.: _____ AS No.: _____ SDG No.: _____

Preparation Blank Matrix (Soil/Water): **Water**

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

Analyte	Initial Calib. Blank (ug/l)	C	Continuing Calibration Blank (ug/l) 1	C	2	C	3	C	Preparation Blank	C	M
T. Cyanide									**<0.01**		

EMSL

SPIKE SAMPLE RECOVERY

Lab Name: **EMSL Analytical** Contract: _____ Lab Sample No.: **95-25996**

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

Matrix (soil/water): **Water** Level (low/med) : _____

% Solids for Sample: _____

Concentration Units (mg/l or mg/kg dry weight): mg/l

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
T. Cyanide	**75-125**	**0.166**		**0.003**		**0.204**	**80**		

Comments: _____

DUPLICATES

Lab Name: **EMSL ANALYTICAL** Contract: _____ Lab Sample No.: **95-25684**

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

Matrix (soil/water): **Water** :Level (low/med.): _____

% Solids for Sample: _____ % Solids for Duplicate: _____

Concentration units (mg/l or mg/kg dry weight): **mg/l**

Analyte	Control Limit	Sample(S) C	Duplicate(D) C	RPD	Q	M
T. Cyanide	**+/-20%**	**<0.01**	**<0.01**	**NC**		

LABORATORY CONTROL SAMPLE

Lab Name: **EMSL Analytical** Contract: _____

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

Solid LCS Source: _____

Aqueous LCS Source: **Various**

Analyte	Aqueous (mg/l)			Solid (mg/kg)				
	True	Found	%R	True	Found	C	Limits	%R
T. Cyanide	**0.204**	**0.171**	**84**				**80-120%**	

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 Faraia

Laboratory Manager (as defined in N.J.A.C. 7:18)